электронное периодическое издание

ЭКОНОМИКА и социум

ISSN 2225-1545

№1(116)-2024

ЭЛЕКТРОННОЕ НАУЧНО-ПРАКТИЧЕСКОЕ ПЕРИОДИЧЕСКОЕ ИЗДАНИЕ

«Экономика и социум»

iupr.ru

ISSN 2225-1545

УДК 004.02:004.5:004.9

ББК 73+65.9+60.5

Свидетельство о регистрации средства массовой коммуникации
Эл № ФС77 - 45777 от 07 июля 2011г.
Эл № ФС77 - 80454 от 01 марта 2021г.

Журнал включен в систему НЭБ (e-library) № 594-09/2013 от 26.09.2013

Тематика журнала: актуальные вопросы современной экономики и социологии - от теоретических и экспериментальных исследований до непосредственных результатов управленческой и производственной деятельности. Публикации в журнале учитываются как опубликованные работы при защите диссертаций на соискание ученых степеней России и зарубежья.

РАЗДЕЛЫ НОМЕРА:

- Основной раздел: социально-экономические аспекты развития современного государства;
- Современные технологии управления организацией;
- Актуальные вопросы политики и права;
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- Информационные и коммуникативные технологии;
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Выпуск №1(116) (январь, 2024). Сайт: http://www.iupr.ru

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INTERAKTIV TA'LIM MODELI VA UNI IQTISOD GURUHLARIDA QO'LLASHNING O'ZIGA XOS XUSUSIYATLARI

Annotatsiya. Ushbu maqolada interaktiv ta'lim mdellari va ularning iqtisod guruhlariga qo'llashning o'ziga xos xususiyatlari va ahamiyati haqida so'z boradi.

Kalit so'zlar. Ta'lim, iqtisod, talaba, pedagog, metod, zamonaviy texnologiyalar, o'qituvchi, bilim.

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INTERACTIVE EDUCATIONAL MODEL AND ITS CHARACTERISTICS OF ITS APPLICATION IN ECONOMIC GROUPS

Abstract. This article talks about the specific features and importance of interactive educational models and their application to economic groups.

Key words. Education, economy, student, pedagogue, method, modern technologies, teacher, knowledge.

Bugungi kunda ta'lim jarayonida interaktiv metodlar, innovatsion texnologiyalar, pedogagik va axborot texnologiyalarni o'quv jarayonida qo'llashga bo'lgan qiziqish va e'tibor kundan-kunga kuchayib bormoqda, bunday bo'lishning sabablaridan biri, shu vaqtgacha an'anaviy ta'limda o'quvchi, talabalarga faqat tayyor bilimlar berib kelingan bo'lsa, zamonaviy texnologiyalar ularni egallayotgan bilimlarini o'zlari qidirib topib, mustaqil ravishda o'rganib va tahlil qilib, ushbu qilingan ishlardan xulosalar keltirib chiqarishlariga undaydi. O'qituvchi bu jarayonda shaxsni rivojlanishi, shakllanishi, bilim olishi va tarbiyalanishiga sharoit yaratadi, shu bilan birgalikda boshqaruvchilik funksiyasini bajaradi.

Ta'lim – inson bilish faoliyatining eng murakkab turlaridan biri bo'lib, individual psixik rivojlanishni va bilimlarni o'zlashtirishni ancha tezlashtiradi. O'qituvchi ta'lim jarayonida faqat bilim berish bilan chegaralanmaydi, bu jarayonda u ta'lim oluvchiga ta'sir ko'rsatadi, bu esa bilim olishlarini yanada faollashtiradi, natijada ta'lim oluvchi ta'lim jarayonining faol ishtirokchisiga aylanadi. Ta'lim jarayonida ta'lim oluvchilar ongiga singdirilayotgan nazariy

bilimlar amaliy faoliyat yordamida yanada mustahkamlanadi. Inson tevarak – atrofdagi voqealik, narsa va hodisalarning mohiyatini amaliy hayotda ularga to‘qnash kelish yo‘li bilan bilib oladi, ularni o‘zlashtiradi. Inson amaliy faoliyat tufayligina ijtimoiy ishlab chiqarish faoliyati jarayonini tashkil etuvchi munosabatlar, shuningdek, tabiat hodisalari sirini o‘zlashtirib oladi.

Maktabgacha ta'lim muassasalarida, maktablarda, universitetlarda o'qitish metodikasi ikkita katta guruhga bo'linadi - passiv va faol. Passiv modeli darslikdagi materialni ma'ruza va o'rganish yo'li bilan bilimlarni o'qituvchidan o'quvchiga o'tkazishni o'z ichiga oladi. Ma'lumotni sinash so'rovlar, testlar, nazorat va boshqa tekshirish ishlari bilan amalga oshiriladi. Passiv usulning asosiy kamchiliklari quyidagilardir:

▪ talabalar tomonidan zaif fikrlar;

▪ shaxsiylashtirishning past darajasi - talabalar shaxslar emas, balki guruh tomonidan qabul qilinadi;

▪ murakkab baholashni talab qiluvchi ijodiy vazifalarning etishmasligi.

Ta'lim berishning faol usullari talabalarning bilim olish va ijodiy qobiliyatlarini rag'batlantiradi. Bu holda talaba o'quv jarayonining faol ishtirokchisi, lekin u asosan faqat o'qituvchi bilan hamkorlik qiladi. Faol uslublar mustaqillikni rivojlantirish, o'z-o'zini tarbiyalash uchun juda muhimdir, biroq ular amalda guruhda ishlashni o'rgatmaydi.

Interaktiv ta'lim - faol o'qitish uslubining turlaridan biri. Interaktiv o'rganish bilan o'zaro munosabat nafaqat o'qituvchi va talaba o'rtasida, balki barcha tinglovchilar bilan aloqa qilish va birgalikda ishlash (yoki guruhlar) o'rtasida amalga oshiriladi. Interaktiv ta'lim usullari har doim shovqin, hamkorlik, qidirish, muloqot, odamlar yoki odamlar o'rtasidagi o'yin va axborot muhiti hisoblanadi. O'qituvchining mashg'ulotlarda faol va interaktiv usullarini qo'llash orqali o'qituvchi tomonidan o'rganilgan materialning miqdori 90 foizga etadi.

Mamlakatdagi iqtisodiy o'zgarishlar, bozor munosabatlarini shakllantirish, buxgalteriya hisobi va soliq va boshqa qonunchilikka cheksiz tuzatishlar iqtisodiy sohada mutaxassislarni oliy o'quv yurtlarida tayyorlash jarayonida eng yangi usullarni joriy etish muammosini dolzarbligini oshiradi. Iqtisodiyot sohasidagi zamonaviy mutaxassis o'z ixtisoslashuvi bo'yicha ham, uning profili bilan chambarchas bog'liq bo'lgan boshqa sohalarda ham bilim zaxirasiga ega bo'lishi kerak. Bundan tashqari, ushbu talablar rahbar va ijro etuvchi bo'lim mutaxassislariga nisbatan qo'llaniladi. Shuni alohida ta'kidlash kerakki, so'nggi yillarda ish beruvchilarning iqtisodiy xodimlarni tayyorlash darajasiga munosabati sezilarli darajada o'zgardi. Amaliyot shuni ko'rsatadiki, bu holda xodimlarning iqtisodiy Qonunchilik bilan bog'liq huquq sohalarida harakat qilish qobiliyati muhim rol o'ynaydi. Hozirgi vaqtda mamlakatimizda oliy, kasb-hunar ta'limi tizimida amaliyotchilarni o'qitish faoliyatiga jalb qilish tendentsiyasi mavjud bo'lib, bu ta'lim sifatiga ijobiy ta'sir ko'rsatmoqda. Iqtisodiy mutaxassisliklar bo'yicha tahsil olayotgan talabalar bundan mustasno emas. Mamlakatimizda iqtisodiy ta'limga talab sezilarli darajada oshdi. O'zbekistonda

iqtisodiy hayotda va shunga mos ravishda iqtisodiy soha mutaxassislarining kasbiy faoliyatida sifatli o'zgarishlar ro'y bermoqda. Binobarin, oliy kasb-hunar ta'limi tizimini modernizatsiya qilish talabalarning kelajakdagi kasbiy faoliyatining o'ziga xos xususiyatlarini hisobga olgan holda ham sinf, ham ilmiy - tadqiqot ishlarini tashkil etishning yangi shakllari va usullarini joriy etishga qaratilgan. Ma'ruza o'qish va namunaviy muammolarni hal qilish kabi faqat standart ta'lim shakllaridan foydalanish hozirgi vaqtda talabaning ehtiyojlarini qondira olmaydi. O'qitishning yangi shakllari va usullarini, shuningdek ilmiy-tadqiqot faoliyatini ishlab chiqish, joriy etish talabalarda o'quv dasturiga kiritilgan fanlarni o'rganish zarurligi to'g'risida aniq tasavvurni shakllantirishga imkon beradi. Bozor iqtisodiyoti nafaqat har bir insonning erkin harakati uchun qulay shart – sharoitlarni yaratadi, balki unga ma'lum talablarni qo'yadi-mustaqil ravishda tanlash, oldindan aytib bo'lmaydigan vaziyatlarga tayyor bo'lish qobiliyati. Insonni ongli ravishda professional o'z taqdirini o'zi belgilashga tayyorlash muammolarini hal qilish juda muhimdir. Iqtisodiy sohaning doimiy o'zgarishi munosabati bilan, ushbu soha ishtirokchilari o'rtasidagi munosabatlarning murakkablashishi, iqtisodiy me'yorlar va qoidalarning o'zgarishi nuqtai nazaridan, yuqoridagi o'zgarishlarga moslashishga tayyor bo'lgan iqtisodchilarning kasbiy tayyorgarligiga qiziqish rivojlanmoqda. Natijada, iqtisodiyot va menejment sohasida ishlash uchun yuqori malakali kadrlar tayyorlashning yangi yondashuvlari va usullari paydo bo'lmoqda. Bitiruvchining vakolatlarini shakllantirish asosida ta'limning namunasi o'quv modellashtirish korxonalari yoki korxonalarning modellashtirish dasturlari bo'lishi mumkin.

Interaktiv ta'lim modeli, o'quvchilar bilan o'qituvchilar o'rtasidagi o'zaro murojaatni oshirish uchun qo'llaniladigan o'qish uslubi. Bu modelda o'quvchi o'zini birinchi o'rinlarda faol sayohatga olib boradigan, ma'lumotlarni o'zlashtirish va amaliyotni bajarish imkoniyatiga ega bo'ladi. Bu modelda qo'llaniladigan interaktiv tadqiqotlardan, o'quv usullaridan va texnologiyalardan foydalangan holda ta'lim olib boriladi.

Interaktiv ta'limning iqtisod guruhlarda qo'llanishiga quydagilarni misol qilib keltirish mumkin:

1. Iqtisodiy mavzular o'quvchilarga o'zlarining real hayot bilan bog'liq misollar va mashg'ulotlar orqali ta'lim beriladi.

2. O'quvchilarning o'zlashtirishini oshirish uchun ma'lumotlar va vazifalar ulkan guruhlar bilan baham yoki yagona shaxsga beriladi.

3. Iqtisodiy qonunlar, savdo, marketing va boshqalar kabi mavzularning misollar orqali tushuntirilishi va amaliyotga o'tkazilishi ko'plab qo'llaniladigan usullardan biridir.

4. O'quvchilar guruhdagi aloqalarini rivojlantirishi, hamkorlik qilishni o'rgatish va jamoalar bilan ishlashni o'rganish kabi ko'nikmalarni oshirishga imkoniyat beradi.

5. Online platformalar, interaktiv darslar va qo'llangan elektron ta'lim materiallari orqali o'quvchi va o'qituvchilar ma'lumotlarni joylashtirishi va almashishlarga imkoniyat beradi.

Bular faqat ba'zi misollar bo'lib, interaktiv ta'limning iqtisod guruhlarda qo'llashning o'ziga xos xususiyatlari murakkablik bilan olinadi. Xuddi shunday, bu usulda o'zgarishlarni amalga oshirish, izlanishni oshirish va talabalar uchun qiziqarli, samarali o'quv muhitini yaratish olish mumkin.

Foydalanilgan adabiyotlar:

1. O‘zbekiston Respublikasi Prezidentining 2017-yil 7-fevraldagi “O‘zbekiston Respublikasini yanada rivojlantirish bo‘yicha Harakatlar strategiyasi to‘g‘risida” gi PF-4947-son Farmoni. – O‘zbekiston Respublikasi qonun hujjatlari to‘plami, 2017- y., 6-son
2. Ergasheva G.S. O‘quv materiallarini loyihalashga yangi pedagogik texnologiyalar asosida yondashish // Xalq ta’limi. – Toshkent, 2004, 3-son.
3. Roziqov O., Ogayev S., Maxmudova M., Adizov B. Didaktika. - T.: Fan, 1997.
4. Milliy iqtisodda axborot tizimlari va texnologiyalari: Oliy o‘quv yurtlari talabalari uchun o‘quv qo‘llanma // Mualliflar: R.X.Alimov,B.Yu.Xodiyev, B.A.Begalov va boshqalar.; S.S.G‘ulomovning umumiy taxriri ostida. – T.:”Sharq”, 2004.
5. Qosimov S.S. Axborot texnologiyalari: Oliy o‘quv yurtlari uchun darslik. – T.: “Aloqachi”, 2006.
6. Toshboltayeva T., Xalimova F. TA’RIX SAN’ATI //Interpretation and researches. – 2023. – T. 1. – №. 1.
7. Zohidova D., Xo‘jayeva S. ALISHER NAVOIYNING “NAZM UL-JAVOHIR” ASARIDA MUALLIF BADIIY KONSEPSIYASINING IFODALANISHI //Scienceweb academic papers collection. – 2023.

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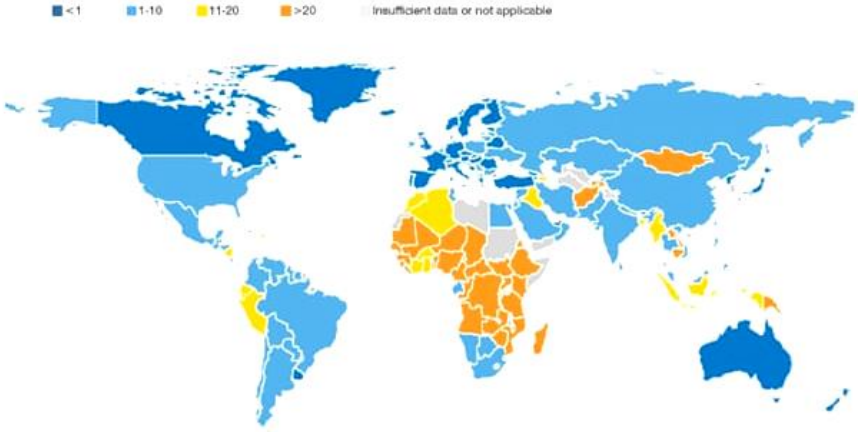
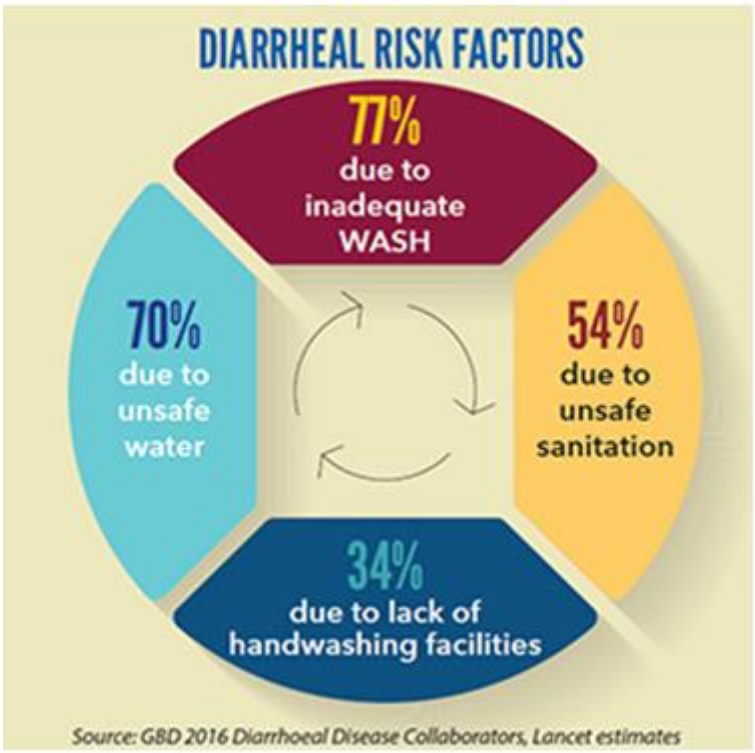
PROBLEMS OF PROVIDING SAFE DRINKING WATER TO DEVELOPING COUNTRIES AND SUGGESTIONS FOR THEIR SOLUTION

Abstract. This article examines a number of problems in the world, including in developing countries, in providing the population with quality drinking water. At the same time, several practical solutions to the existing problems are proposed in a social, political and technical approach.

Key words: Safe drinking water, Safe drinking water, developing countries, waterborne diseases, sanitation, water scarcity, human rights.

Access to safe and clean drinking water is a fundamental human right, yet millions of people across the globe, especially in developing countries, struggle to obtain this essential resource. Around 2 billion people around the world do not have access to clean and safe drinking water, and approximately 3.6 billion people – 46% of the world's population – lack adequate sanitation services, according to a new United Nations World Water Development Report. According to the CDC, 50 countries worldwide have drinkable tap water. But look closer, and the picture is more nuanced. The challenges associated with ensuring safe drinking water in these regions are complex and multifaceted, stemming from a combination of social, economic, environmental, and infrastructural factors.

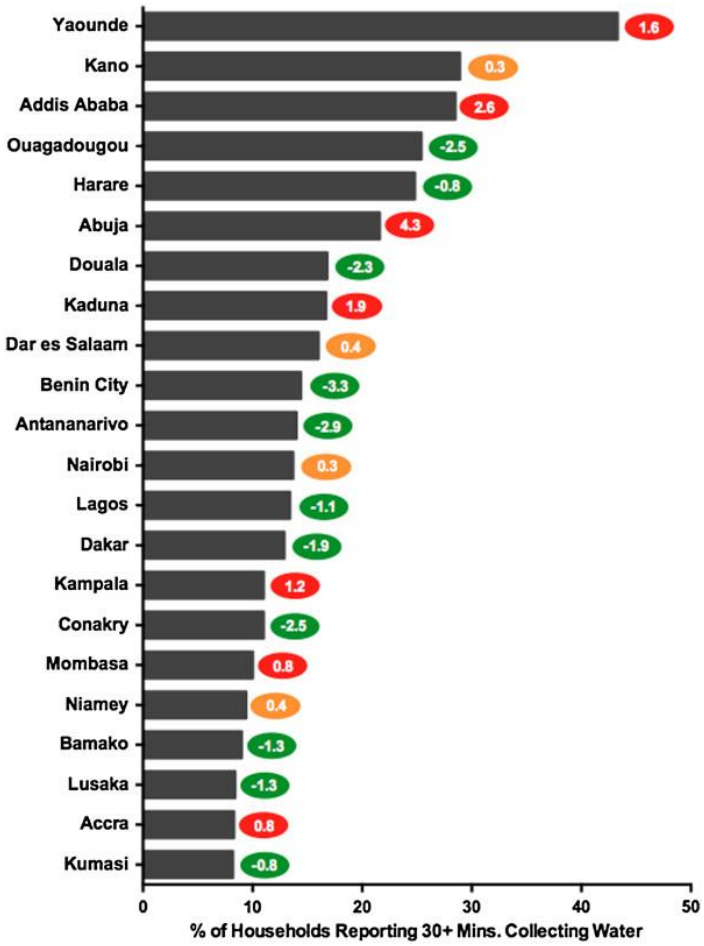




One of the foremost challenges in providing safe drinking water in developing countries is the lack of adequate infrastructure for water treatment and distribution. Many communities in these regions do not have access to reliable water treatment facilities, leading to the consumption of contaminated water, which results in a myriad of waterborne diseases, including cholera, dysentery, and typhoid fever. According to information in webpage cdc.gov many waterborne infections cause diarrhea and loss of body fluids, resulting too often in severe dehydration and death. Diarrhea is the fifth-leading cause of death among children under the age of 5. Frequent and recurring diarrhea can reduce children's growth and cognitive development and increase their susceptibility to other infectious diseases.

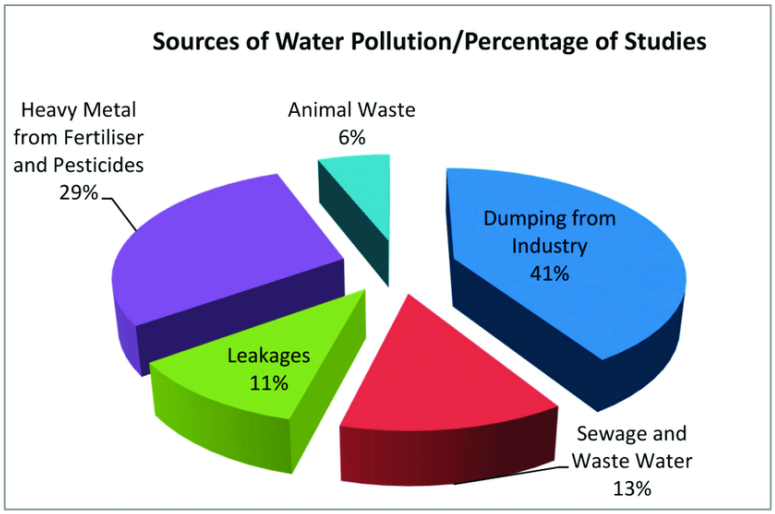
About 88% of diarrhea-associated deaths are due to unsafe water, inadequate sanitation, and insufficient hygiene. Inadequate infrastructure also contributes to water scarcity, making it difficult for communities to meet their daily water needs. For information, during the years of independence in Uzbekistan, 21,210 kilometers of water networks were built in rural areas, and their total length increased by 2.3 times compared to the period of the Soviets. This led to an increase in the provision of drinking water to rural residents from 56 percent in 1992 to 78.1 percent as of January 1, 2003.

Moreover, the issue is compounded by the presence of pollutants and contaminants in water sources, often due to industrial activities, agricultural runoff, and inadequate waste management systems. Addressing such contamination requires significant investments in advanced water treatment technologies and strict enforcement of environmental regulations, both of which



pose challenges in resource-constrained settings. According to costs in owlshall.co.uk webpage for the sewage treatment plant itself – A six-person domestic sewage treatment plant will cost approximately £1,700-£3,000. For an eight-person plant, this will be around £2,500-£4,500. Installation can cost between £5,300-£8,500.

In many developing countries, socio-economic disparities exacerbate the unequal access to safe drinking water. Marginalized communities, including those living in remote rural areas and urban slums, are disproportionately affected by water insecurity. Women and children often bear the brunt of this burden, as they are frequently tasked with fetching water over long distances, contributing to reduced educational and economic opportunities. According to usaid.gov, women and girls in developing countries carry an average of 20 liters (about 42 pounds/20 kg) of water per day to walk 6 kilometers (about 3.5 miles). In some areas, it is common for this travel to take more than 15 hours per week. And according to UNICEF, women and girls spend 200 million hours each day fetching water, far more than men and boys. Collecting water is tedious and adds to the unpaid domestic and care work that is at the heart of gender inequalities.



Furthermore, climate change presents a growing threat to water security in many developing countries. Shifts in precipitation patterns, rising temperatures, and extreme weather events pose challenges to maintaining adequate water supplies. Droughts, floods, and erratic rainfall not only diminish water quality and availability but also disrupt agricultural productivity, further intensifying the water crisis.

Efforts to address these challenges require a multifaceted approach that encompasses infrastructural development, community engagement, technological innovation, and policy reform. Investment in robust water treatment and distribution systems is essential to provide communities with a reliable supply of clean water. This necessitates collaboration between governments, non-governmental organizations, and the private sector to mobilize resources and expertise for large-scale infrastructure projects.

Here are some solutions to the above problems:

- Community participation and education are equally vital components of ensuring sustainable access to safe drinking water. Empowering local residents to manage their water resources, promoting hygienic practices, and raising awareness about the detrimental effects of water contamination can help prevent waterborne diseases and improve overall public health.
- Technological innovations, such as point-of-use water purification devices and low-cost filtration systems, offer promising solutions to mitigate water contamination at the household level, particularly in areas with limited access to centralized water treatment facilities. These innovations can be tailored to suit the unique needs and resource constraints of different communities, fostering greater resilience against water-related challenges.
- Importantly, policy reforms are crucial for addressing the systemic issues underlying water insecurity in developing countries. Governments must prioritize investments in water infrastructure, enact and enforce regulations to safeguard water quality, and promote equitable distribution of water resources. International cooperation and assistance play a pivotal role in supporting these efforts, providing financial and technical aid to facilitate sustainable water management practices.

In conclusion, the challenges of providing safe drinking water in developing countries are daunting, but not insurmountable. By adopting a comprehensive and collaborative approach that integrates infrastructure development, community engagement, technological innovation, and policy reform, progress can be made towards ensuring universal access to clean and safe drinking water. Addressing these challenges is not only a moral imperative but also a catalyst for improved public health, economic development, and environmental sustainability in the long term.

References:

1.Abdukarimov J.A(2023), Quvurlarda uzunlik bo'yicha napor(solishtrma energiya) yo'qolishini aniqlashda Gidravlik ishqalanish koeffitsienti(Darsi

koeffitsienti)ni hisoblash shartlari tahlili Educational Research in Universal Sciences, 2(13), 363–367.
2.Abdukarimov J.A(2023), Yer osti suvlarini ortiqcha iste'mol qilish: xavflar va yechimlar international conference,TAQU
3. Mansurova Sh. P. (2023). ISSUES OF PRESSURE REGULATION IN HEATING NETWORKS. B INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY (Volume 3, Issue 10, October. 510–516).
4. Tashmatov, N.U., & Mansurova, S.P. (2022). Some Features of Heat and Moisture Exchange in Direct Contact of Air with a Surface of a Heated Liquid. International Journal of Innovative Analyses and Emerging Technology, 2(1), 26–31.
5. Karimovich, T. M., & Obidovich, S. A. (2021). To increase the effectiveness of the use of Information Systems in the use of water. Development issues of innovative economy in the agricultural sector, 222-225.
6. Sattorov, A., & Karimov, E. (2023). QURILISH MATERIALINI ISHLAB CHIQARUVCHI SANOAT PECHLARIDA GAZ YOQILG‘ISI YONUV ISSIQLIQ MIQDORLARINING NAZARIY TENGLAMALARINI TUZISH. Educational Research in Universal Sciences, 2(13), 313–317.
7. Sultonov, A. (2019). Water use planning: a functional diagram of a decision-making system and its mathematical model. International Finance and Accounting, 2019(5), 19.
8. Sultonov, A., & Turdiqulov, B. (2022). SUV QABUL QILISH INSHOOTLARINING ISHLASH SAMARADORLIGINI OSHIRISHDA FILTRLARNING O‘RNI. Евразийский журнал академических исследований, 2(11), 12-19.
9. Turdiqulov, B., Nazirov, S., & Karimov, Y. (2022). ATOM VA MOLEKULALARNING YORUG’LIKNI YUTISHI VA NURLANISHI. Евразийский журнал академических исследований, 2(13), 1252-1258.
10. Turdiqulov, B. (2022). GAZ YONDIRGICHLARNING ISHLASH JARAYONINI TAKOMILLASHTIRISH. Евразийский журнал академических исследований, 2(11), 4-11.
11. Sh. P. Mansurova. (2021). Application of renewable energy sources in buildings. Galaxy International Interdisciplinary Research Journal, 9(12), 1218–1224.
12. Sattorov, A., & Karimov, E. (2023). HAVO ALMASHINUV TIZIMIDA UYNI ISITISHGA SARFLANADIGAN ISSIQLIK QIYMATINI XISOBLASH. Educational Research in Universal Sciences, 2(13), 318–321.
13. Toshmatov N. U., & Mansurova Sh. P. (2022). Efficiency of use of heat pumps. International Journal of Innovations in Engineering Research and Technology, 9(10), 1–5.
14. Turdiqulov, B., Ismoilov, A., & Shahobiddin, H. (2023). The Role of Ventilation in the Production of Various Clothing Materials. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(4), 124-133.

15. Nazirov, S. O. o‘g‘li. (2023). GLOBAL SUV TANQISLIGI DAVRIDA SUV TA’MINOTI TIZIMLARINI TAKOMILLASHTIRISH MASALALARI. Educational Research in Universal Sciences, 2(13), 109–115.
16. Turdiqulov, B. (2023). Improvement of the Operation Process of Gas Burners. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(3), 1-5.
17. Karimov, Y. N. (2022). Aholini ichimlik suvi bilan ta’minlash muammolari. Science and Education, 3(12), 369-375.
18. Mansurova, S. (2023). SOLAR HEATING SYSTEMS FOR BUILDINGS. International Bulletin of Applied Science and Technology, 3(11), 311–315.
19. Каримов, Э. Т. ў. (2023). МАМАЛАКАТИМИЗДА ЕНГИЛ АВТОМОБИЛ ЮВИШ ШАХОБЧАЛАРИНИНГ ОҚОВА СУВЛАРИНИ ОҚИЗИШДА ЯНГИ ТИЗИМЛАРНИ ИШЛАБ ЧИҚИШ. Educational Research in Universal Sciences, 2(13), 263–267.
20. Nazirov Sanjar, & Karimov Yusuf. (2023). YER OSTI MUHANDISLIK TARMOQLARINI JOYLASHTIRISH VA ULARNING MUSTAHKAMLIK PARAMETRLARINI ANIQLASH. Innovations in Technology and Science Education, 2(9), 402–408.

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TURIZM XIZMATLARI ISTE`MOLCHILARI BO`LGAN JISMONIY SHAXSLARNI SOLIQQA TORTISH MEXANIZMLARINI RIVOJLANTIRISH

Annotatsiya: Ushbu maqolada turizm sohasida soliqlarning ahamiyati, soliq imtiyozlari berish orqali turizm bozorida tadbirkorlarga raqobatbardosh muhit yaratish va bu orqali mamlakat iqtisodiyotiga ijobiy samara berishning muhim ekanligi, yo`llari tushuntirildi. Turizm iqtisodiyotimizdagi eng ko`p foyda olib kelishi mumkin bo`lgan soha ekanligi sababli ham turizm sohasida soliq yengilliklarini yaratishning imkoniyatlari keltirildi.

Kalit so`zlar: turizm, turistlar, soliq imtiyozlari, ish bilan bandlik, iqtisodiy foyda, marketing strategiyasi.

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DEVELOPMENT OF MECHANISMS OF TAXATION OF NATURAL PERSONS WHO ARE CONSUMERS OF TOURISM SERVICES

Abstract. This article explained the importance of taxes in the field of tourism, the importance of creating a competitive environment for entrepreneurs in the tourism market by giving tax incentives, and thereby having a positive effect on the economy of the country. Due to the fact that tourism is the most profitable sector in our economy, the possibilities of creating tax reliefs in the tourism sector were also presented.

Key words: tourism, tourists, tax benefits, employment, economic benefits, marketing strategy.

Kirish:

Turizm – iqtisodiyotning rivojlanishida eng muhim sohalardan biri hisoblanadi. Turizm xizmatlarida iste`molchi sifatida sayyohlar va turistlarni tushunishimiz mumkin. Turizm xizmatlari o`z ichiga bir qancha xizmat turlarini jalb qiladi, bu esa o`z navbatida mamlakat iqtisodiyotida yalpi ichki mahsulot hajmining o`sishiga olib keladi. Iqtisodiyot rivojlanishida soliq tushumlarining ahamiyatini tushunish va bu bo`yicha sohalar kesimida yangi islohotlarni amalga oshirishga e`tibor qaratilishi kerak. Soliq davlatning moliyaviy yuragi hisoblanadi. Soliq tushumlari sohalar rivojlanishiga va aholining ijtimoiy

himoyasiga sarf qilinadi. Turizm qadim o`tmishdan beri mavjud bo`lib kelgan soha hisoblanib, uning asosiy rivojlanish davrlari ikkinchi jahon urushidan keying davrlarga to`g`ri keldi.

Adabiyotlar tahlili va metodologiya:

Turizm korxonalarini soliqqa tortishda yangi mexanizmlarni qo`llash bo`yicha qo`llanilgan ishlar va bu bo`yicha yozilgan fikrlar, izlanishlarni ko`rib chiqish orqali natijalarni tahlil qila olamiz va muammoga yangicha yechim taklif qilamiz.

Xaridorlarga berilayotgan keshbek summalari to`g`ri hisoblanishi va byudjet mablag`laridan oqilona foydalanish maqsadida, shubhali keshbek summalarini aniqlash tahlika-tahlil mexanizmlarini ishlab chiqish. Bunda, katta son va miqdordagi cheklarni ro`yxatdan o`tkazish, chek ro`yhatdan o`tkazilgandan so`ng uni bekor qilish yoki soliq hisobotlarini aks ettirmagan holatlarni avtomatlashtirilgan tizimlar orqali aniqlash va ushbu keshbek summalarini bekor qilish choralarini ko`rish.1

Mavzu doirasida o`rganishlar natijasida berilgan takliflarni ko`rib chiqadigan bo`lsak turizm korxonalarida amalda mavjud bo`lgan keshbek summalari tizimini avtomatlashtirish to`grisida fikr berilgan. Avtomatlashtirilgan ravishda keshbek summalarini nazorat qilingan holatlarida soliq nazorati yanada osonlashadi va bu bo`yicha noqonuniy holatlar yuzaga kelmaydi.

Soliqlar – davlat va jamiyatning pul mablag`lariga bo`lgan ehtiyojini qondirish maqsadida qonun tomonidan belgilab qo`yilgan hajmda va o`rnatilgan muddatda jismoniy va huquqiy shaxslardan davlat ixtiyoriga majburiy ravishda undirib olinadigan to`lovlardir.2

Natijalar:

Soliqqa solishda davlat tomonidan tabaqalashgan soliq solish tizimini shakllantirish orqali adolatli soliq mexanizmini yaratishi mumkin. Yuqori daromadlilarni yuqori stavkalarda soliq to`lashini joriy qilish orqali oqilona taqsimlash siyosatini olib borsa bo`ladi. Ushbu yondashuv daromadlar tengsizligini kamaytirish va ijtimoiy adolatni riivojlantirishga qaratilgan. Davlatimiz tomonidan soliq bo`yicha tadbirkorlarga berilyapgan sharoitlarni ko`rishimiz mumkin.

Turizm korxonalari uchun ijtimoiy soliq va aylanma soliq stavkalari 1 foiz etib belgilandi, yer solig`i va mol-mulk soliq stavkalari 90 foizga kamaytirildi.3

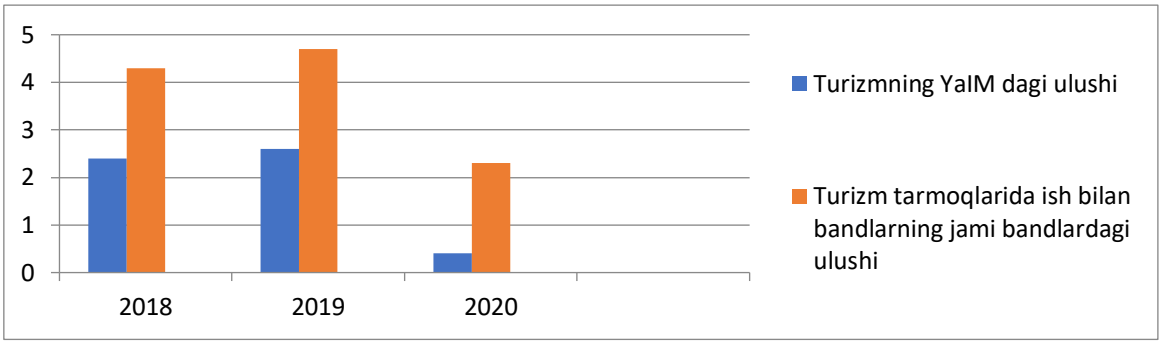
Turizmning YaIM va ish bilan bandlik darajasini ta`minlashdagi ulushi4

1 Turabov Ulug`bek Olimjonovich, Turizmni rivojlantirishda soliq imtiyozlaridan foydalanishning samaradorligi tahlili, Journal of new century innovations,105-111-betlar,www.newjournal.org/ Volume-13_Issue-2_september_2022

2 Olimjonov O, Bozor iqtisodiyotiga o`tish davrida soliq siyosati. „ Hayot va iqtisod ‘’, 1992

3 Shavkat Mirziyoyevning 2022 yil 19-sentyabrdagi Mamlakatimizning ichki va tashqi turizm salohiyatini oshirsh chora tadbirlari yuzasidan o`tkazga vidoselektoridagi so`zlagan nutqidan.

4 O`zbekiston Respublikasi Davlat statistikasi qo`mitasi m`lumotlari asosida muallif tomonidan tayyorlangan.



Yuqoridagi tahlillardan ko`rinadiki, 2018-2019-yillarda YaIM ning turizm sohasidagi o`sishi yuqori bo`lib kelgan, lekin 2020-yilga kelib bu ko`rsatkich ancha tushib ketganini ko`rish mumkin. Bu aynan ana shu yillardagi COVID-19 ning iqtisodiyotga ta`sir etganligi belgisi. Ushbu izlanish turizmda band bo`lgan aholi haqida statistik ma`lumotlarni ko`rib chiqqan holda ularning faoliyatini nazoratga olish kerakligini ko`rsatib o`tadi.

Muhokama:

Turistik faoliyatda alohida soliqlarning yangi turlarini ishlab chiqish orqali turizm sohasni yanada takomillashtirishga erishish mumkin. Yuqorida turizm sohasining ish bilan ta`minlash quvvatini ko`rib chiqdik. Bundan kelib chiqadiki turizmga o`ziga xos soliq tizimini yaratib, soliq yengilliklarini berish orqali turizm va unga yondosh sohalar bo`lgan xizmatlarni ham bozordagi muvaffaqiyatsizliklardan himoya qila olgan bo`lamiz.

Soliq ma`murchiligi jarayonlariga raqamli texnologiyalarni joriy etish katta hajmdagi ma`lumotlarni qayta ishlash, unga kamroq vaqt sarflash va ma`lum bir soliq to`lovchiga kerakli dolzarb ma`lumotlarni tezroq olish imkonini beradi.5

Yuqorida izlanuvchilarning axborotlashtiri takliflari hozirda olib qaraladigan bo`lsa kerakli takliflar hisoblanadi. Takomillashgan hisob tizimi vaqtning tejalishi imkonini berishi va axborotlarning aniqligida ahamiyati yuqori.

XULOSA VA TAKLIFLAR:

Soliq tayinlashda quyidagicha imtiyozlarning qo`llanilishini taklif qilish mumkin:

- Turistik xizmatlarda QQS bo`yicha imtiyozlar belgilanishi sayyohlar uchun sayohatni yanada qulayroq qilishi va turistlar oqimining oshishiga olib kelishi mumkin;

- Turistik dam olish zonasini tashkillash bilan birgalikda mamlakat tabiatini, tarixiy me`rosini asrab-avaylash bo`yicha turistlarga tushuncha bera olgan va shu bo`yicha harakatlar amalga oshirgan tadbirkorlarga soliq imtiyozlari belgilanishi turizmning rivojlanishiga va mamlakatdagi tarixiy obidalarga bo`lgan e`tiborni kuchaytirishga ham hissa qo`shadi;

5 Nodir Tohirovich Qudbiyev, Dilshodbek Muzaffar o`g`li No`monov, Umidjon Rahimjon o`g`li Raximjonov, Durdona Adashboy qizi Razzaqova, Soliq organlarida raqamli texnologiyalarning rolini oshirish ahamiyati/ SCIENTIFIC PROGRESS jurnali, 927-931-betlar.

- Mavsumiy faoliyat yurutuvchi tadbirkorlarga mavsumdan tashqari vaqtlarda ham qo`shimcha xizmatlarni tashkil qila olsa ulrga ham yengillik yaratish;

- Sayohat va ko`rsatilyapgan xizmatlar sifatini oshirish maqsadida xodimlarini o`qitish kurslarini tashkillagan va o`quv treninglarini o`tkaza olgan tadbirkorlarga imtiyozlarning qo`llanilishi;

- Mehmonxonada ham turar joy jihozlarini yoki qo`shimcha maydonga ega bo`lish harakatlarida soliq vositasi bilan ularga yengillik berish;

Amaliy o`rganish va kuzatishlar natijasida soliq yengillklari ushbu sohaning rivojlanishida o`zining ijobiy samarasini bera oladi.

Foydalanilgan adabiyotlar ro`yxati:

1. Turabov Ulug`bek Olimjonovich, Turizmni rivojlantirishda soliq imtiyozlaridan foydalanishning samaradorligi tahlili, Journal of new century innovations,105-111-betlar,www.newjournal.org/Volume-13_Issue 2_september_2022

2. Olimjonov O, Bozor iqtisodiyotiga o`tish davrida soliq siyosati. «Hayot va iqtisod», 1992

3. Shavkat Mirziyoyevning 2022 yil 19-sentyabrdagi Mamlakatimizning ichki va tashqi turizm salohiyatini oshirsh chora tadbirlari yuzasidan o`tkazga vidoselektoridagi so`zlagan nutqidan.

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5. Nodir Tohirovich Qudbiyev, Dilshodbek Muzaffar o`g`li No`monov, Umidjon Rahimjon o`g`li Raximjonov, Durdona Adashboy qizi Razzaqova, Soliq organlarida raqamli texnologiyalarning rolini oshirish ahamiyati/ SCIENTIFIC PROGRESS jurnali, 927-931-betlar.

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SOME EFFECTIVE METHODS OF TEACHING FOREIGN LANGUAGES

Abstract. This article explores effective methods of teaching foreign languages. It discusses various strategies that language teachers can employ to enhance language acquisition and promote learner engagement. The article highlights the importance of differentiated instruction, error correction, authentic materials, language learning strategies, cultural competence, assessment for learning, continuous professional development, motivation and engagement, and reflective practice. It emphasizes the need for a dynamic and adaptable approach to language teaching and provides practical suggestions for implementing these methods in the classroom. By utilizing these effective methods, language teachers can create a supportive and stimulating learning environment that facilitates language learning and promotes intercultural competence.

Keywords: foreign language teaching, language acquisition, differentiated instruction, error correction, authentic materials, language learning strategies, cultural competence, assessment for learning, professional development, motivation and engagement, reflective practice.

Introduction:

Teaching foreign languages is a complex and rewarding endeavor that requires careful consideration of effective instructional methods. Language teachers play a critical role in facilitating language acquisition, fostering cultural understanding, and promoting communicative competence among learners. This article aims to explore and discuss some of the most effective methods of teaching foreign languages.

The methods discussed in this article are based on research findings, best practices, and the collective wisdom of experienced language educators. The goal is to provide language teachers with practical strategies and approaches that can enhance their teaching effectiveness and maximize learners' language learning potential [1].

The article will delve into various aspects of language teaching, including differentiated instruction, error correction, authentic materials, language learning strategies, cultural competence, assessment for learning, continuous professional development, motivation and engagement, and reflective practice. Each method will be examined in terms of its theoretical foundations, practical applications, and potential benefits for language learners [2].

By exploring these effective methods, language teachers can gain insights into innovative instructional approaches and adapt their teaching practices to meet

the diverse needs of learners. The article emphasizes the importance of creating a dynamic and inclusive learning environment that promotes active engagement, meaningful interactions, and the development of language proficiency.

It is important to note that while these methods have proven to be effective, there is no one-size-fits-all approach to language teaching. The success of these methods depends on factors such as learners' age, proficiency level, cultural background, and individual learning styles. Therefore, language teachers are encouraged to adapt and modify these methods to suit the specific needs of their learners.

In the following sections of this article, we will explore each of these effective methods in detail, providing practical insights, examples, and recommendations for implementation. By incorporating these methods into their teaching practice, language educators can create a stimulating and supportive learning environment that enables learners to develop linguistic proficiency and cultural competence [3].

Ultimately, the aim of this article is to inspire language teachers to reflect on their instructional practices, explore new approaches, and continually strive for excellence in teaching foreign languages. By embracing these effective methods, language teachers can make a lasting impact on their students' language learning journey and equip them with the skills and knowledge needed for successful communication in a globalized world.

Literature Analysis:

To explore effective methods of teaching foreign languages, it is important to examine relevant literature and research in the field of language education. This literature analysis section will provide an overview of key studies, theories, and approaches that inform our understanding of effective language teaching methods [4].

1. Differentiated Instruction: Differentiated instruction is a widely recognized approach in language education. Tomlinson (2001) emphasizes the importance of tailoring instruction to meet the diverse needs of learners. By considering learners' proficiency levels, learning styles, and interests, teachers can provide individualized support and adapt teaching materials and activities. This approach has been shown to enhance learner engagement, motivation, and language acquisition (Hall, 2011).

2. Error Correction: Error correction is a crucial aspect of language teaching. Research suggests that providing targeted and timely error correction improves learners' accuracy and language proficiency (Sheen, 2007). However, it is important to balance error correction with maintaining learners' motivation and confidence. Feedback that focuses on meaningful communication and encourages self-correction has been found to be more effective in facilitating language development (Ellis, 2009).

3. Authentic Materials: The use of authentic materials in language teaching exposes learners to real-life language use and cultural contexts. Authentic

materials, such as newspapers, magazines, and audiovisual resources, provide learners with exposure to natural language, idiomatic expressions, and cultural insights (Peacock, 1997). Research suggests that incorporating authentic materials enhances learners' motivation, engagement, and language proficiency (Breen, 1985).

4. Language Learning Strategies: Language learning strategies refer to the techniques and approaches that learners use to facilitate language acquisition. Oxford's taxonomy of language learning strategies (1990) categorizes strategies into cognitive, metacognitive, and social/affective dimensions. Research indicates that the explicit teaching of language learning strategies improves learners' autonomy, self-regulation, and language proficiency (Chamot & O'Malley, 1994).

5. Cultural Competence: Cultural competence is an essential component of language teaching. By integrating cultural content and fostering intercultural understanding, teachers can enhance learners' communicative competence and sensitivity to cultural norms (Byram, 1997). Research supports the notion that cultural competence positively impacts learners' language acquisition and their ability to communicate effectively in diverse cultural contexts (Fantini, 2000).

Methods:

Building upon the literature analysis, this section will outline specific methods that language teachers can employ to enhance their instruction and promote effective language learning. These methods are based on the theoretical foundations and empirical evidence discussed in the literature analysis.

1. Differentiated Instruction: Teachers can implement differentiated instruction by assessing learners' proficiency levels, learning styles, and interests. This can involve grouping learners based on their proficiency level for targeted instruction, providing varied materials and tasks to cater to different learning styles, and offering choice in learning activities to promote learner autonomy [5].

2. Error Correction: Teachers can adopt a balanced approach to error correction by providing timely and constructive feedback. This can include a combination of direct correction, clarification requests, and elicitation of self-correction. Teachers can also create a supportive classroom environment where learners feel comfortable taking risks and learning from their mistakes.

3. Authentic Materials: Incorporating authentic materials into language teaching can involve using real-world texts, multimedia resources, and cultural artifacts. Teachers can scaffold and adapt authentic materials to match learners' proficiency levels and provide tasks that promote meaningful interaction with the materials. This allows learners to develop their language skills in authentic contexts and gain cultural insights.

4. Language Learning Strategies: Teachers can explicitly teach language learning strategies and provide opportunities for learners to practice and reflect on their use. This can involve teaching specific strategies for vocabulary acquisition, reading comprehension, listening comprehension, and oral

production. Teachers can also guide learners in setting language learning goals and monitoring their progress.

5. Cultural Competence: Teachers can integrate cultural content throughout their language instruction, incorporating cultural materials, activities, and discussions. This includes exploring cultural perspectives, customs, and practices related to the target language. Teachers can also encourage learners to engage in intercultural exchanges, such as virtual exchanges with native speakers or cultural events within the community. In the following sections of this article, we will provide further details and practical examples of how these methods can be implemented in the language classroom. By employing these effective methods, language teachers can create a dynamic and inclusive learning environment that fosters language acquisition, cultural understanding, and learner engagement [6].

Discussion:

The discussion section of this article provides an opportunity to reflect on the effective methods of teaching foreign languages presented earlier and explore their implications for language education. It delves deeper into the benefits, challenges, and considerations related to implementing these methods in the language classroom.

1. Benefits of Effective Methods:

The effective methods discussed in this article have several benefits for language learners. Differentiated instruction allows teachers to address individual learner needs, promoting personalized learning experiences and optimizing language acquisition. Providing timely and constructive error correction helps learners improve accuracy and language proficiency while maintaining motivation and confidence. Authentic materials expose learners to real-life language use and cultural contexts, enhancing their motivation, engagement, and cultural competence. Teaching language learning strategies equips learners with metacognitive tools to become more independent and effective language learners. Integrating cultural content fosters intercultural competence and prepares learners for communication in diverse cultural contexts.

2. Challenges and Considerations:

While these methods are effective, their implementation may present challenges. Differentiated instruction requires careful planning, resource allocation, and assessment strategies to ensure equitable learning opportunities for all learners. Error correction needs to strike a balance between promoting accuracy and maintaining learners' motivation and self-esteem. Integrating authentic materials may require additional preparation and adaptation to suit learners' proficiency levels. Teaching language learning strategies may require explicit instruction and ongoing support to ensure learners effectively utilize them. Incorporating cultural content necessitates sensitivity to diverse cultural perspectives and ensuring accurate representation [7].

3. Contextual Factors:

The effectiveness of these methods can also be influenced by contextual factors. Considerations such as learners' age, proficiency levels, cultural backgrounds, and learning goals may impact the selection and adaptation of these methods. Teachers should be mindful of the specific needs and characteristics of their learners and adapt the methods accordingly. Additionally, the availability of resources, time constraints, and institutional support may influence the extent to which these methods can be implemented.

4. Teacher Professional Development:

Implementing effective methods requires ongoing teacher professional development. Language teachers should stay informed about current research and best practices in the field of language education. Engaging in professional development opportunities, such as attending conferences, workshops, or online courses, can enhance teachers' pedagogical knowledge and skills. Reflective practice, where teachers critically analyze their teaching methods and make adjustments based on learner feedback and self-reflection, is crucial for continuous improvement.

5. Evaluation and Assessment:

Assessment practices should align with the effective methods discussed in this article. Authentic assessment methods, such as performance-based assessments and portfolio assessment, can provide a comprehensive understanding of learners' language proficiency and their ability to use the language in real-life contexts. Teachers should ensure that assessment tasks measure learners' communicative competence, cultural understanding, and language learning strategies [8].

6. Learner Motivation and Engagement:

Motivation and engagement play a vital role in language learning. Teachers should create a supportive and engaging learning environment that fosters intrinsic motivation, promotes learner autonomy, and encourages active participation. Incorporating interactive and communicative activities, integrating technology tools, and providing opportunities for real-life language use can enhance learner motivation and engagement. In conclusion, the effective methods discussed in this article have the potential to greatly enhance language teaching and learning. However, their successful implementation requires careful planning, consideration of contextual factors, ongoing professional development, and attention to learner motivation and engagement. By embracing these methods and adapting them to fit learners' needs, language teachers can create meaningful and effective language learning experiences that empower learners to become proficient and culturally competent communicators.

Results:

The results section of this article aims to provide an overview of the outcomes and effects of implementing the effective methods discussed in the previous sections. While it is important to note that the results may vary depending on various factors such as learner characteristics, instructional context,

and implementation fidelity, this section presents general findings and trends observed in language teaching research.

1. Differentiated Instruction:

The implementation of differentiated instruction in foreign language classrooms has shown positive effects on language learning outcomes. Research suggests that when instruction is tailored to individual learner needs, such as adapting materials, tasks, and instructional approaches, learners demonstrate increased engagement, motivation, and language proficiency (Tomlinson, 2001; Hall, 2011). Differentiated instruction allows teachers to address learners' specific strengths and weaknesses, providing targeted support and fostering a supportive learning environment [9].

2. Error Correction:

Effective error correction techniques have been found to contribute to improved accuracy and language proficiency. Research indicates that providing timely and constructive feedback, both through explicit correction and implicit clarification requests, helps learners recognize and correct errors (Sheen, 2007). Balanced error correction approaches that focus on meaningful communication and encourage self-correction have been shown to enhance learners' confidence and motivation, leading to improved language performance (Ellis, 2009).

3. Authentic Materials:

The integration of authentic materials in language teaching has demonstrated various benefits for learners. Authentic materials expose learners to real-life language use and cultural contexts, fostering their communicative competence and cultural understanding (Peacock, 1997). Studies have reported increased motivation, engagement, and language proficiency when learners have access to authentic materials, such as newspapers, videos, and online resources (Breen, 1985). Engagement with authentic materials allows learners to develop their language skills in meaningful and relevant ways.

4. Language Learning Strategies:

Explicit instruction and practice of language learning strategies have been found to enhance learners' autonomy and self-regulation, leading to improved language acquisition. Research suggests that by teaching learners specific strategies for vocabulary learning, reading comprehension, listening comprehension, and oral production, learners become more effective language learners (Oxford, 1990; Chamot & O'Malley, 1994). Learners who are equipped with a repertoire of effective language learning strategies demonstrate increased metacognitive awareness, independent learning skills, and improved language proficiency.

5. Cultural Competence:

Integrating cultural content and fostering intercultural competence have been shown to positively impact learners' language acquisition and cultural understanding. By exposing learners to diverse cultural perspectives, customs, and practices related to the target language, teachers promote learners'

intercultural competence (Byram, 1997). Research indicates that learners who engage with cultural content demonstrate enhanced communicative competence, adaptability in multicultural settings, and a deeper appreciation of cultural diversity (Fantini, 2000).

It is important to note that while the results of implementing these methods are generally positive, the effectiveness may vary depending on multiple factors, including learner characteristics, instructional context, and teacher expertise. Additionally, the interplay between these methods and other instructional factors, such as classroom management and curriculum design, can also influence the outcomes.

Overall, the results suggest that the effective methods discussed in this article have the potential to significantly improve language learning outcomes. By implementing differentiated instruction, providing effective error correction, integrating authentic materials, teaching language learning strategies, and fostering cultural competence, language teachers can create an engaging and supportive learning environment that promotes language acquisition, cultural understanding, and learner empowerment. Further research and individual classroom observations are encouraged to explore the specific impacts of these methods in different contexts and with diverse learner populations [10].

Conclusion:

In conclusion, this article has explored several effective methods for teaching foreign languages. Through a literature analysis, we have examined key studies, theories, and approaches that inform our understanding of effective language teaching methods. The methods discussed include differentiated instruction, error correction, the use of authentic materials, teaching language learning strategies, and fostering cultural competence.

These methods have demonstrated numerous benefits for language learners. Differentiated instruction allows teachers to cater to individual learner needs, promoting personalized learning experiences and optimizing language acquisition. Effective error correction techniques contribute to improved accuracy and language proficiency while maintaining learners' motivation and confidence. The integration of authentic materials exposes learners to real-life language use and cultural contexts, enhancing their motivation, engagement, and cultural competence. Teaching language learning strategies equips learners with metacognitive tools to become more independent and effective language learners. Fostering cultural competence prepares learners for communication in diverse cultural contexts and enhances their communicative competence.

However, it is important to consider the challenges and contextual factors that may influence the implementation of these methods. Factors such as learner characteristics, instructional context, available resources, and time constraints need to be taken into account to ensure the successful application of these methods.

Moreover, the results of implementing these methods can vary depending on various factors, and further research is encouraged to explore their specific impacts in different contexts and with diverse learner populations. Additionally, ongoing teacher professional development, reflective practice, and the use of appropriate evaluation and assessment methods are crucial for the effective implementation of these methods.

By embracing these effective methods and adapting them to fit learners' needs, language teachers can create engaging, inclusive, and meaningful language learning experiences. These experiences empower learners to become proficient language users, culturally competent communicators, and lifelong language learners.

In summary, the effective methods presented in this article provide a foundation for language teachers to enhance their instructional practices and promote effective language learning. By combining theoretical insights, empirical evidence, and practical considerations, teachers can create dynamic and supportive language classrooms that inspire learners to achieve their language learning goals and thrive in multilingual and multicultural environments.

References:

1. Breen, M. (1985). Authenticity in the language classroom. Applied Linguistics, 6(1), 60-70.
2. Byram, M. (1997). Teaching and assessing intercultural communicative competence. Clevedon, UK: Multilingual Matters.
3. Chamot, A. U., & O'Malley, J. M. (1994). The CALLA handbook: Implementing the cognitive academic language learning approach. New York, NY: Addison Wesley Longman.
4. Ellis, R. (2009). Corrective feedback and teacher development. L2 Journal, 1(1), 3-18.
5. Fantini, A. E. (2000). A central concern: Developing intercultural competence. SIT Occasional Papers Series, 1(2), 1-20.
6. Hall, T. (2011). Differentiated instruction: Effective classroom practices report. National Center on Accessing the General Curriculum.
7. Oxford, R. (1990). Language learning strategies: What every teacher should know. New York, NY: Newbury House.
8. Peacock, M. (1997). The effect of authentic materials on the motivation of EFL learners. ELT Journal, 51(2), 144-156.
9. Sheen, Y. (2007). The effects of corrective feedback, language aptitude, and learner attitudes on the acquisition of English articles. In A. Mackey (Ed.), Conversational interaction in second language acquisition: A collection of empirical studies (pp. 301-322). Oxford, UK: Oxford University Press.
10. Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

УДК 616.681-089.

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IMPROVING THE DIAGNOSIS AND SURGICAL TREATMENT OF ACUTE TESTICULAR DISEASES IN CHILDREN

Resume. Until now, there is no consensus regarding the tactics for acute diseases of the scrotal organs in children. Acute diseases of the testicle, epididymis and spermatic cord are one of the most dangerous situations for a male child.

The combination of all acute diseases of the scrotum organs with a single term OZOM is explained by the similarity of their clinical picture during the first 6-12 hours and the difficulty of differential diagnosis.

Key words: testicles, pediatric age, surgical treatment, diagnostics.

Introduction. The issues of the effectiveness of the treatment of acute testicular diseases in children are relevant to date [5,9]. Traditional diagnostic methods (examination, palpation, laboratory diagnostics) in some cases are not informative enough to establish an accurate diagnosis [2,8]. Modern methods of instrumental diagnosis of scrotal organs are limited in the examination of children due to a number of their negative sides [1,4]. The use of the ultrasound method allows us to obtain comprehensive information about the nature of pathological changes in the organs of the scrotum. At the same time, in the works devoted to the use of the ultrasound method in the study of scrotal organs, only certain issues of diagnosis of certain nosological units in adult patients are considered [3,7].

To date, echographic criteria for the diagnosis of acute testicular diseases in children have not been developed, the accepted surgical tactics require clarification, and there is no data on dynamic follow-up in the postoperative period [6].

Thus, it is of interest to study the issues of ultrasound diagnosis of acute testicular diseases and to develop a differentiated approach to the treatment of children with this nosology.

The purpose of the study. To evaluate modern diagnostic methods, tactics and long-term results of surgical treatment of acute respiratory viral infections in children and to develop pathogenetically sound approaches to the treatment of such a contingent of patients.

Materials and methods of research. We studied the results of surgical treatment in the long-term period in 18 patients who underwent surgery for testicular torsion in childhood and reached the age of 16 at the time of examination, and 7 patients were in childhood. All of them were examined within 5 to 12 years after surgical treatment. To assess testicular dysfunction in the long

term, patients were divided into 5 groups depending on the time of admission from the onset of the disease.

Results of the study Catamnestic ultrasound examination in the long term after testicular torsion was performed by us in 11 patients according to the data of hormonal examination of patients, to which patients with the lowest indicators of hormonal activity were subjected. The examination assessed the appearance, symmetry of the scrotum, palpation – size, shape, consistency of the testicle in comparison with the contralateral one. Taking into account the subjectivity and inaccuracy of the clinical data studied during examination and palpation, the main data for evaluating the results of treatment of testicular torsion were obtained by ultrasound. The main changes were reflected in the size, volume of the testicle – the presence and degree of atrophy.

The data obtained were distributed as follows: the size and volume of the testicle after torsion were symmetrical to the contralateral and corresponded to the age norm in three patients (27%). A decrease in testicular volume relative to the volume of a healthy testicle up to two times was detected in 4 patients (36%). Such a decrease is regarded as grade 1 atrophy. A decrease in the volume of testicular tissue after torsion in 4 patients (36%) by more than two times compared with the contralateral one was interpreted by us as the most pronounced atrophy of the 2nd degree.

When describing an atrophied testicle, in addition to a sharp decrease in linear size, a change in the shape of the testicle was noted. It was more elongated, flat, with a pronounced decrease in anteroposterior size. Uneven contours were noted. The echogenicity of the atrophied testicle was reduced, diffusely heterogeneous due to areas of increased and decreased echogenicity. With grade 2 atrophy, the testicular parenchyma was not differentiated echographically. In some cases, a hyperechoic mediastinal stripe was visible in the center of the testicle.

The analysis and comparison of the timing of the disease, the degree of torsion with the obtained long-term results confirmed the dependence of irreversible testicular damage on the timing and degree of torsion. The most pronounced degree of atrophy was found in patients of the older age group. The volume of the testicles after twisting in some cases was 3-4 times less than the volume of a normal testicle. Perhaps this is caused not only by the degree of atrophy of the ischemic organ, but also by hypertrophy with the growth of the contralateral testicle during its pubertal development.

An analysis of the long-term results of surgical treatment of children with acute testicular diseases who have reached prepubescent and post-pubertal age revealed in 27.3% of cases various types of abnormalities in the development of the reproductive system. The most common consequences of the disease were testicular hypoplasia and persistent spermatopathy.

Of all the listed nosological forms of acute testicular diseases, hydatid torsion and testicular torsion remain the most dangerous in terms of disorders of

the endocrine function of the testicles. The results of surgical treatment are inversely dependent on age, time and degree of torsion. Therefore, acute respiratory infections in children require timely diagnosis and adequate treatment.

To determine the condition of the testicles and appendage, we have developed a set of diagnostic measures, which includes: clinical examination of the scrotum organs, assessment of testicular size, ultrasound of the scrotum and prostate organs and, according to age indications, determination of the sexual formula of a man, morphospermogram, examination of prostate secretion, as well as duplex scanning of the testicles, hormonal studies, clinical assessment of puberty.

Those who have suffered from OCD in childhood require catamnestic observation, especially if paragraph 2 is not fulfilled. In children who have reached prepubescent and puberty age, to determine the condition of the testicles, it is necessary to conduct a clinical assessment of the puberty period (the timing of the appearance of secondary sexual characteristics and the dynamics of the development of the testicles, scrotum and penis), as well as a set of clinical and laboratory parameters (ultrasound of the scrotum and prostate organs, hormonal studies, Doppler scanning of the blood vessels of the spermatic cord. Morphospermogram and prostate secretion studies are carried out taking into account age-related indications).

Rehabilitation of children who have suffered acute diseases of the scrotum requires the organization of dispensary supervision by a pediatrician, surgeon, pediatric andrologist, which later culminate in observations by adult andrologists, urologists and endocrinologists.

Conclusion. The revealed clinical and echographic features of the course of acute testicular diseases make it possible to differentiate various forms of the disease in a timely manner and determine further tactics and scope of treatment. The proposed therapeutic and diagnostic algorithm makes it possible to reduce the frequency of postoperative complications and increase the effectiveness of treatment of acute testicular diseases in children.

The developed method of postoperative anesthesia and management of operated patients with acute testicular diseases has a beneficial effect on the processes of pain relief and improvement of blood circulation in the affected testicle and further rehabilitation of patients.

References:

1. Akramov N. R. The initial experience of ultrasound diagnosis of postoperative complications in boys with cryptorchidism / N.R. Akramov N. R., N.V.Vakhlamova // The Ninth Russian Congress "Innovative technologies in Pediatrics and Pediatric Surgery".- M, 2010. - p. 335.

2.Bukhmin A.V. Mesophylaxis of testicular atrophy and stimulation of testicular function of the testicle by increasing blood circulation / A.V. Bukhmin, V. V. Rossikhin, P. G. Osipov // Bulletin of the Vinnytsia National Medical University - 2007, 11(1/2) - p. 356.

3. Gumerov A. A. Reproductive health of patients operated on for cryptorchidism / A. A. Gumerov, R. 3. Akhmetshin, S. S. Smakov // The Ninth Russian Congress "Innovative technologies in Pediatrics and Pediatric Surgery". - M, 2010. - p. 335.
4.Karimov K. R. Principles of preserving and strengthening the reproductive health of children / K. R. Karimov //The Ninth Russian Congress "Innovative technologies in pediatrics and pediatric surgery" - M, 2010. - p. 375.
5. Starodubov V.I., Khalin P.A., Baran A.A. Program project "Health". Saving the people depends on you! / to doctors of inpatient medical institutions. - GEOTAR-Media., 2006. p. 62
6.Adivarekar PK, Bhagwat SS, Raghavan V, Bandivdekar A.H. The effect of 1.modex-MgS04 on the prevention of reperfusion injury after unilateral testicular torsion: an experimental study in rats. // Pediatrician-surgeon. -2005. Vol.21. - No.3. - pp.184-190.
7. Varga J., Zhivkovich D., Grebeldinger S., Somer D. Acute scrotal pain in children is a ten—year experience. // Urol Int. 2007. - Volume 78. - No.1. - pp.73-77
8.Yang D.M., Lim Y.V., Kim JAE, Kim J.H., Cho H. The twisted appendix of the testicle: gray.The results of large-scale and color Dopplerography compared with a normal testicular appendix. // J Ultrasound Med. 2005. - Volume 24. - No.1. - pp.87-91
9. Zevis A.G., Bulnowski T.P., Jarvis P.D., Worksman S., Sheldon S.A. Assessment of acute scrotum in the emergency department. // J Pediatrician—surgeon. - 1995. -Volume 30.-pp.277-282

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JIZZAX SHAHRI ALISHER NAVOIY KO’CHASIDA AVTOMOBIL SHOVQINIGA TA’SIR ETUVCHI OMILLAR

Annotatsiya. Ushbu maqolada Jizzax shahri Alisher Navoiy ko’chasida avtomobil shovqiniga ta’sir etuvchi omillar tadqiq etildi, unga ko’ra shovqin manbaalari sifatida konstruktsiyaning o’zida avtomobil dvigateli shovqini, transmissiyasi shovqini, aerodinamik shovqin va shina shovqini sabab bo’lishi tahlil qilindi.

Kalit so’zlar: avtomobil, shovqin, ko’cha, harakat xavfsizligi, shovqin manbaalari, harakat tezligi, harakat jadalligi, tirbandlik.

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FACTORS AFFECTING VEHICLE NOISE ON ALISHER NAVOY STREET, JIZZAK CITY

Abstract. In this article, the factors influencing car noise on Alisher Navoi Street, Jizzakh city, were studied, according to which, as sources of noise, car engine noise, transmission noise, aerodynamic noise and tire noise caused by the structure itself were analyzed.

Key words: car, noise, street, traffic safety, noise sources, traffic speed, speed of traffic, traffic.

Avtomobillarning ekspluatatsiyasi jarayonidagi salbiy ta’sirlarini kamaytirish bo’yicha, bugungi kunda tadqiqotchilar tomonidan olib borilayotgan ishlar ko’lami juda keng hisoblanadi, ushbu transport vositasidan foydalanuvchilar albatta eng qulay, xavfsiz, tejamkor avtomobilni tanlaydi va uni sotib oladi. O’zbekiston Respublikasida ham avtomobilsozlik sanoati kundan kunga rivojlanib, raqobatbardosh mahsulotlarni ishlab chiqarish bo’yicha katta

kuch va sarmoyalar kiritmoqda. Xususan, 2019-yil 18-iyuldagi O‘zbekiston Respublikasi Prezidentining «O‘zbekiston Respublikasi avtomobil sanoatini jadal rivojlantirish bo‘yicha chora-tadbirlar haqida»gi PQ-4397-sonli qarori qabul qilinishi ham avtomobilsozlik sanoatini rivojlantirish bo’yicha maqsadli qadamlardan bo’ldi, unda avtomobil sanoatini jadal rivojlantirish va uning investitsiyaviy jozibadorligini oshirishni ta’minlash, ilg‘or xalqaro tajriba asosida zamonaviy bozor mexanizmlari va boshqaruv usullarini joriy qilish, shuningdek, ichki va tashqi bozorlarda raqobatbardosh avtomobil markalarini ishlab chiqarishni maqsadlari belgilandi6.

2022-yil yakunigacha Respublikamizning Jizzax viloyatida avtomobilsozlik sohasida 277 mln dollarlik uchta loyihani amalga oshirish rejalashtirilgan. Birinchi bosqichda ADM Jizzakh tomonidan yengil avtomobillar va ikkinchi bosqichda Jizzax avtomobil zavodi tomonidan Volkswagen tijoriy avtomobillari ishlab chiqarish amalga oshirildi, endilikda uchinchi bosqichda esa Auto Motors Asia tomonidan tijoriy va yuk avtomobillarini ishlab chiqarish mo‘ljallanmoqda. Xorijiy davlatlar bilan sherikchilik asosida tashkil etilgan ushbu avtomobil ishlab chiqaruvchi zavod mahsulotlariga yuqori darajadagi sifat, tejamkorlik va eng asosiysi xavfsizlik talablari qo’yilgan. Shuningdek ushbu avtomobillar ekologik jihatdan eng so’ngi jahon standart talablari asosida ishlab chiqarilmoqda.

Yuqorida aytilganidek, avtomobil ekspluatatsiya jarayonida ko’plab salbiy ta’sirlarni vujudga keltiradi, bular ichida inson organizmiga ta’siri sekin ammo asorati juda jiddiy hisoblangan transport shovqini bugungi kunda hal qilinishi zarur bo’lgan dolzarb muammolardan hisoblanadi.

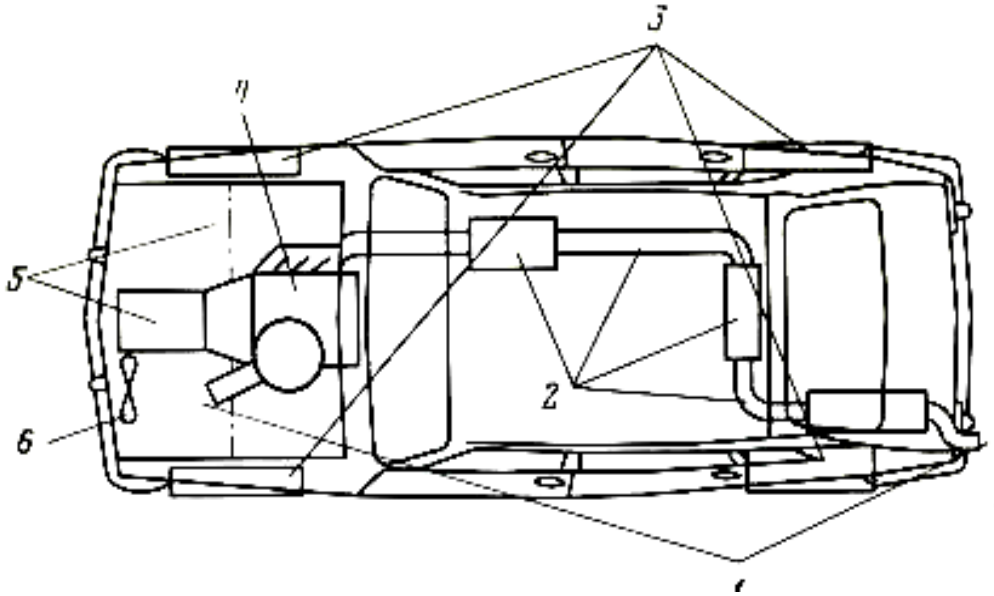
Shovqin manbaalari birinchi navbatda avtomobil ichki solon qismiga kuchli shovqin uzatadi. Yuqorida aytilganidek shovqin haydovchi diqqatini pasaytirib, tez charchashiga va toliqishiga sabab bo’ladi. Harakat davomida haydovchining diqqatining pasayishi, charchashi va juda ko’p hollarda uxlab qolishi mudhish yo’l transport hodisalarining keltirib chiqishiga sabab bo’lmoqda.

Avtomobil shovqinining ekspluatatsiya jarayonida kuchayishiga, avtomobil yo’llari harakat oqimida paydo bo’luchi eng asosiy shovqin manbalari hisoblangan - avtomobil dvigateli shovqini, transmissiyasi shovqini, aerodinamik shovqin va shina shovqini sabab bo’ladi.

Dvigatelda shovqin silindrlardagi siqilish va kengayish taktlarida hosil bo'ladi, bu o’z navbatida dvigatel tebranishlarini hosil qiladi, shovqin paydo bo’ladi. Dvigatelda shovqin miqdori uning ish hajmiga, tezligiga va quvvatiga bog'liq. Ta’minlash tizimidagi shovqin kiritish va chiqarish klapnlarining ochilishi va yopilishi hisobiga kelib chiqadi, bu shovqinning intensivligi dvigatelning ish rejimiga, aylanishlar chastatasiga va havo filtrining turiga

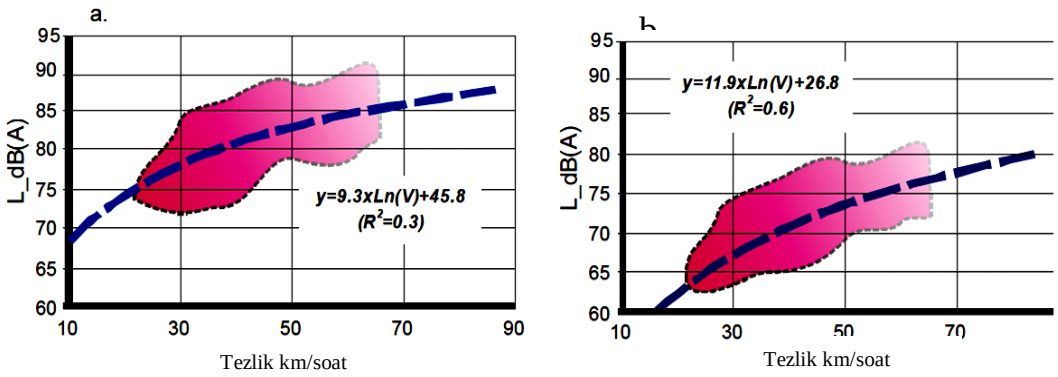
6 O‘zbekiston Respublikasi Prezidentining «O‘zbekiston Respublikasi avtomobil sanoatini jadal rivojlantirish bo‘yicha chora-tadbirlar haqida»gi PQ-4397-sonli qarori. 18.07.2019.

bog'liq. Sovitish tizimidagi ventilyator, generator va nasoslarning shovqini dvigatel shovqinini yanada kuchaytiradi. Avtomobil transmissiyasida shovqin asosan tishli va friksion uzatmalarning ilashishi, ishqalanishi natijasida paydo bo'ladi (1-rasm).



1-rasm. Avtomobilning konstruksiyasidagi shovqin manbaalari
1-dvigatelga havo kiritish va chiqindi gazlarni chiqish tuynuklari;
2- shovqin so'ndirgich;
3-g'ildiraklar;
4-dvigatel;
5-transmissiya;
6-ventilyator.

Konstruktsiyada paydo bo'ladigan shovqin avtomobilning harakati davomida yanada kuchayadi, bunga avtomobilning harakat tezligi va yo'ldagi harakat jadalligi katta ta'sir ko'rsatadi (2-rasm).



2-rasm. Yuk(a) va yengil(b) avtomobillari tezligining shovqinga ta'siri (shovqin darajasi 10 m masofada aniqlanganda)

Shu bilan birga harakat oqimida mavjud dvigatel quvvati yuqori va og'ir vaznli yuk avtomobillarini mavjudligi ham shovqin darajasini kuchaytirishga sabab bo'ladi.

Shovqin miqdorini o'lchash sinovlari xalqaro standartlar asosida o'tkaziladi, bunda avtomobilning shovqin chiqaruvchi qismlarining shovqin darajalari yaxlit holatda - avtomobilning ichki va tashqi shovqinini keltirib chiqaradi. Dvigatelning normal ish jarayonlari va boshqa agregatlarning me'yorida ishlashini sinov natijalaridan olingan shovqin miqdoridan ham bilish mumkin. Transport shovqini asosan aholi zich joylashgan shahar hududidagi magistral yo'llarda kuzatiladi, bunga asosan avtomobillar sonining kundan kunga oshib borishi va bu o'z navbatida shahar ko'chalarining serqatnovligi hisobiga yuzaga keladi. Shahar hududidagi mavjud avtomobil yo'llarida transport oqimi bo'yicha shovqin darajasi o'lchovi aniqlanadi. Sinovlar asosan transport shovqin darajasi yuqori bo'lgan avtomobil yo'llarda o'tkaziladi.

Transport shovqini bo'yicha Jizzax shahri Alisher Navoiy ko'chasida GOST ISO 362-1-2017 "Tezlanish paytida avtomobillar chiqaradigan shovqinlarni o'lchash. Texnik usul. 1 -qism. M va N toifali transport vositalari" standarti7ga asosan Jizzax politexnika instituti "Transport vositalari muhandisligi" kafedrasi mutaxassislari tomonidan o'tkazilgan tadqiqot ishlari amalga oshirildi. Shovqinni o'lchash "Sound Analyser Nor-140" shumomeri yordamida amalga oshirildi.

Xulosa qilib aytganda, transport shovqini muhofazasini tashkil etishdagi eng samarali tadbir, shovqin chiqaruvchi manbalarning o'zida shovqinni so'ndirishdir. Avtomobil shovqin chiqaruvchi manbalari dvigatel, shovqin so'ndirgich, tarnsmissiya va boshqa omillarning muqobil variantini yaratish orqali shovqin muammosini bartaraf etish mumkin. Bunga elektromobillar, avtomobil kuzovini shovqin yutuvchi materiallar bilan qoplash, dvigatel yonish jarayonini takomillashtirish orqali erishish mumkin.

Foydalanilgan adabiyotlar:

1. O'zbekiston Respublikasi Prezidentining «O'zbekiston Respublikasi avtomobil sanoatini jadal rivojlantirish bo'yicha chora-tadbirlar haqida»gi PQ-4397-sonli qarori. 18.07.2019.
2. Шум на транспорте. Пер. с англ. К.Г.Бомштейна. Под ред. В.Е. Толъского, Г.В. Бутакова, Б.Н. Мелъникова. - М.: Транспорт, 1995.-368.
3. A. Azimov "Factors affecting noise reduction on automobile roads". Scientific and technical journal of Namangan institute of engineering and technology. 2020. 328p.
4. T.f.n J. Abdunazarov, A. Azimov "Avtomobil shovqini manbalari va uning inson salomatligiga ta'siri". "Yuksak ma'naviyatli shaxsni tarbiyalashda xotin-

7 ГОСТ ISO 362-1-2017 Измерение шума, излучаемого автотранспортными средствами при разгоне. Технический метод. Часть1. Транспортные средства категорий M и N (https://files.stroyinf.ru/Data/719/71994.pdf)

qizlarning roli" mavzusidagi respublika ilmiy-amaliy anjumani. JizPI, 2018-yil 18-19 may. 710 b.
5. Jizzax viloyatining investitsiya loyihalari ko‘rib chiqildi (https://president.uz/oz/lists /view/4165)
6. Agzamov, J., Hamraqulov, Y., & Baratov, I. (2021). JIZZAX SHAXRINING MAGISTRAL KOCHALARIDA HARAKAT XAVSIZLIGINI TAHLIL QILISH. *Academic research in educational sciences*, *2*(6), 363-368.

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GENDER TENGLIGI

Annotasiya: ushbu maqola orqali xotin qizlarning huquq va erkinliklari mustahkamlab qo'yilgan qarorlar bilan,jamiyatda ayollarga bolgan munosabatlar hamda davlat boshqaruvida ayollarning orni va ro'li bilan tanishib chiqishingiz mumkin.

Kalit sozlar: gender tengligi, jamiyat, gender statistikasi, zoravonlik, bezorilik, siyosat, saylov, jinsiy tenglik.

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GENDER EQUALITY

Annotation: in this article, you can identify women with decisions that strengthen women’s rights and freedoms, relationships with women in society, and the role and role of women inpublic administration

Keywords: society, gender ststistics, violence, bullying, politics, election, gender equality.

Yillar davomida ayollar zo'rliklar va ta'zyiqlar natijasida qiylanib kelmoqda. Hamma ayollarga ojiza sifatida, hech narsaga kuchi yetmaydi, davlat boshqaruvini ayollar eplay olmaydi deb bilishadi. Ammo bunday davrlar tugadi.Bilamizki bugun butun dunyoda bir jumla keng rivojlanmoqda gender tengligi. Hozirda rivojlanib borayotgan O'zbekistonda ham bu jumlaga e'tibor kuchaytirildi.

Gender tengligini rivojlantirish maqsadida Xotin-qizlar huquqlarini kamsitilishini barcha shakllariga barham berish to'g'risidagi, Xotin qizlarning siyosiy huquqlari to'g'risidagi,Bir xil qiymatga ega bo'lgan mehnat uchun erkaklar va xotin qizlarni rag'batlantirish to'g'risidagi,Onalikni muhofaza qilish to'g'risidagi 2030 yilga qadar mo'jjallangan strategik dasturi ishlab chiqildi.

Bundan tashqari Ilk bor O'zbekiston tarixida 2019-yil 2-sentabrda 562-sonli qarori bilan "Xotinqizlar va erkaklar uchun teng huquq va imkoniyatlar kafolatlari to'g'risida"gi [1] va "Xotin-qizlarni tazyiq va zoravonlikdan himoya qilish" [2] to'g'risidagi qonunlar qabul qilindi.Ushbu qonunda ayollarga munosib hayot ta'minlab berish, ularni munosib turmush kechirishi uchun qulay bo'lgan ish o'rinlarini yaratib berish,ularni ijtimoiy himoyalash, siyosiy-huquqiy faolligini oshirish, davlat boshqaruvida rahbar ayollar safini kengaytirish,jamiyatda faola qatlamiga aylantirish shuningdek,xotin-qizlar ham erkaklar bilan teng huquq va imkoniyatlarga ega ekanligini ta'kidlab o'tiladi. "Xotin-qizlar va erkaklar uchun teng huquq va imkoniyatlar kafolatlari to'g'risida"gi qonunning 4- moddasida Xotin-qizlar va erkaklar uchun teng huquq hamda imkoniyatlar kafolatlarini ta'minlashning asosiy prinsiplari keltirilgan: qonuniylik, demokratizm, xotin qizlar va erkaklarning teng huquqliligi,jins bo'yicha kamsitishga yo'l qoymaslik,ochiqlik va shaffoflik kabi prinsiplarini keltiradi.Demakki bundan ko'rinib turibdiki Demokratik davlatlarda gender tengligi asosiy belgilari sifatida ekan. Shu jumladan,ushbu qonunda ish joyida, turmushida,ta'lim muassasalari ayollarga qilinayotgan tazyiq va zo'ravonliklardan himoya qilish munosabati ham mustahkamlab ketilgan.Bilamizki oilada erkaklar moddiy taminlab beruvchi ayollar esa doimo uy ishlari bilan shugullanuvchi inson hisoblangan.Shu tufayli ayollar ozi hoxlagan kasbni egallay olmagan.So'ngi o'n yillikka nazar tashlasek butun dunyoda gender tengligiga erishish global muammo sifatida qaralmoqda va uni ta'minlanishi uchun muhim vazifalar belgilab ketilmoqda.Bu yuzasidan davlatlar birgalikda ish olib borishmoqda.2000-yil sentyabr oyida BMT a'zo davlatlar sammitida qabul qilingan "Mingyillik" deklaratsiyasida gender tengligini ta'minlash nafaqat qashshoqlik balki ochlikni kamaytirishgashuningdek davlatni rivojlantirishga ko'maklashadi deb ta'kilab ketilgan. [3]"Mingyillik" sammitida 147 davlat rahbarlari ushbu jumlani ma'qullashgan ular qatorida O'zbekiston respublikasining birinchi prezidenti Islom Abduganiyevich Karimov ham shular qatorida edi. Ushbu hujjat butun dunyoda muhim vazifalar qatoridan joy olgan. "Mingyillik" sammitida davlatlar o'zlariga 8 ta maqsadni belgilab olishdi. Uchinchi maqsadga nazar tashlasek "ayollarga nisbatan kamsitishni kamaytirish va gender tengligini ta'minlash " Yuqorida O'zbekiston respublikasi 2030 yilga qadar strategik dastur ishlab chiqqan deb aytib otdim.Ushbu dastur Mingyillik sammitida qatnashgan davlatlar bilan kelishgan holatda gender tengligini taminlash 17ta global maqsadlardan biri sifatida aytilgan.

Dunyo rivojlanib borayotgan sababli ayollar va qizlarga zo'ravonliklar hamda tazyiqlar tobora kamayib bormoqda. Butun dunyoda jinsiy tenglik vujudga kelmoqda hamda mehnat yuzasidan ham jinsiykamsitishlar kamaymoqda. Gender tengligi bo'yicha dunyoda muammolar qolmadi deb ayta olmimiz muammolar barcha hududlarda mavjud ammo yildan yilga ushbu muammolar kamayib bormoqda. Muammolarga barham berish uchun barcha davlat o'rganlari ish olib bormoqda. Shu o'rinda O'zbekiston respublikasida Gender tengligini yuzaga keltirish uchun davlat o'rganlarining fikrlari qanday?degan savol yuzaga keladi.

Davlatimizning uchinchi hokimiyati bo'lgan Sud hokimiyatiga yuzlanadigon bolsek.2020 yil 18 sentyabrda poytaxtimizda O'zbekiston Respublikasi Oliy sudi, AQSh Xalqaro taraqqiyot agentligi (USAID) va BMT Taraqqiyot dasturining “O'zbekistonda qonun ustuvorligi yo'lida hamkorlik” qo'shma loyihasi doirasida tashkil etilgan "Gender tenglikni ta'minlashda sud tizimining o'rni" mavzusida amaliy seminar bo'lib o'tdi. Tadbirda gender balansga erishish hamda milliy sud tizimida gender jihatlarni qamrab olgan yo'l xaritasini ishlab chiqish kabi masalalar muhokama qilindi. Gender komponentlarini sud tizimiga joriy qilishda qo'llaniladigan xalqaro andozalar va amaliyot o'rganildi.

Odil sudlovni amalaga oshirishda gender tenglikni ta'minlanishini kafolatlash, gender tenglikni ta'minlash va gender diskriminatsiyani bartaraf etishda sudyalarning o'rni, ayollarning odil sudlovga erishish darajasini oshirish va sud tizimida ayollar ishtirokini yanada ko'paytirish bo'yicha O'zbekiston tajribasi kabi masalalarga alohida urg'u berildi. Seminarda “Ayollarning odil sudlovga erishish darajasini oshirish: eng yaxshi xalqaro tajriba va milliy amaliyot”, “Sud tizimida ayol-sudyalar sonini oshirish bo'yicha xorijiy tajribani o'rganib chiqish”, “Ayollar huquqlarini ta'minlash va himoya qilish sohasida sudlar faoliyati samaradorligini baholash uchun gender ko'rsatkichlarini ishlab chiqish va joriy etish”, shuningdek, “Sudyalarning odob-axloq kodeksi” misolida O'zbekiston qonunchiligida gender-huquqiy ekspertizasini o'tkazish” mavzularida tahliliy tadqiqotlar taqdim qilindi. [4] Shuningdek hokimiyat ustida ayollarning roli ham ortib bormoqda.

Ko'p yillar davomida dunyoning aksariyat mintaqalarida ayollar davlat boshqaruvida turli to’siqlarga uchradi. Hatto 1900-yillarning boshlarida ham siyosatga faqat erkaklar sohasi sifatida qaraldi. [5]Biroq, ayollar harakati va Ikkinchi Jahon urushi kabi madaniyatni o'zgartiruvchi voqealar ayollarning huquqlari va siyosatdagi rollarini asta-sekin oshirdi. [5] Shunga qaramay, ayollarning davlat boshqaruvidagi ishtiroki juda kam.

Hatto bugungi kunda ham dunyoning hech bir davlatida milliy qonun chiqaruvchi organda ayollarning 50% yoki undan yuqoriroq ishtiroki yoq, 73% mamlakatlarda esa 20% dan kam ayollar siyosatda ishtirok etadi. [5] Hukumatda mahalliy darajadan tortib to milliy darajagacha bo'lgan bir necha darajali lavozimlarmavjud. Shunga ko'ra, ayollarning ushbu vakolatlarga ega bo'lishi va munosib bo'lishi ahamiyatlidir. Misol uchun, Hindistonda olib borilgan tadqiqotlar shuni ko'rsatdiki, ayollarning mahalliy kengashlarga keng miqyosli a'zoligi ularning yuqori darajadagi rahbarlik lavozimlarida bo'lishidan ko'ra, samaraliroq. [6]Shu bilan birga, ayollarning manfaatlarini ifodalash va amalga oshirishni ta'minlash uchun davlat hokimiyatining barcha darajalarida ayollarning bo'lishi muhim ahamiyatga ega. [7]Shu orinda Ozbekiston ham rahbar ayollar soni ortib bormoqda.Bunga misol qilib mamlakatimiz se'natini ayol kishi boshqarmoqda shuningdek ko'plab davlat boshqaruvida ayollar rol oynamoqda.

2021-yil mamlakatimiz tarixida milliy parlamentda ayollar soni 32 foizga yetgan. [8] Ushbu korsatkich ikki baravarga ortgan.Bu korsatkich bilan

dunyodagi 190ta davlat parlamenti orasidan 37-o'rinni egallaganmiz. [8] Davlat organlarining samarali va oqilona ishlashi uchun tosqinlik qilishi mumkin bolgan "korrupsiya" tushunchasi mavjud.Korupsiyani oldini olish uchun butun dunyoda ishlar olib borilmoqda..2000-yildagi gender va korruptsiya bo'yicha o'tkazilgan yana bir tadqiqot shuni ko'rsatdiki, ayollar parlamentdagi o'rinlarda va hukumat byurokratiyasidagi yuqori lavozimlarda ko'proq ulushga ega bo'lganda, ya'ni ishchi kuchining katta ulushini ayollar tashkil etganda korruptsiya unchalik jiddiy xavf tug'dirmagan. [9]

Bilamizki har bir inson tug'ilishi va muomila layoqatiga yetganidan song huquqlarga ega boladi. Ammo oldinlari ayollarni bazi huquqlardan foydalanishini cheklab qoyishgan.Birgina misol qilib "saylov huquqi"ni olsek.Saylov huquqi berilgunga qadar ayollar har bir mamlakatda siyosiy hokimiyatni amalga oshirishdan mahrum edilar. Ovoz berish huquqini qo'lga kiritgandan so'ng, ayollar o'zlarining erkak hamkasblariga mutanosib ravishda saylov uchastkalarida qatnashishi va bunga ko'nikishi uchun o'nlab yillar kerak bo'ldi. [10]

Bugungi kunda AQShda ayollar statistik jihatdan erkaklarga qaraganda ko'proq ovoz berishadi [10], bu Skandinaviya mamlakatlari kabi ba'zi mamlakatlarda uchraydi, Hindiston kabi boshqa mamlakatlarda esa aksinch Skandinaviya mamlakatlari davlat lavozimlarida ayollarning eng ko'p vakili bo'lgan davlatlar qatoriga kiradi. [5]

Saylov huquqidan foydalanish ayollarning siyosiy tizimlarida o'z kuchlarini va siyosatdagi o'rinlarinihis qilishdir. Bugungi kunda Saudiya Arabistonidan boshqa qonun chiqaruvchi organga ega bo'lgan barcha mamlakatlarda ayollarga siyosiy huquqlar berilgan. 2006-yilda o'tkazilgan tadqiqot shuni ko'rsatdiki, dunyoning deyarli barcha mamlakatlarida ayollar saylov va saylanish huquqiga ega bo'lishsa-da, ayollarning o'z siyosiy huquqlaridan foydalanishlaridagi madaniy to'siqlar, jumladan, oilaviy qarshilik va savodsizlik saqlanib qolmoqda. [10]O'zbekistonda Gender tenglik bo'yicha Komissiya 2019-yildan boshlab ish yuritib keladi. Oliy Majlis Senati Raisi Tanzila Narbaeva O'zbekiston Respublikasi Gender tenglikni taminlash masalalari bo'yicha komissiyasining raisi hisoblanadi. [11] Bu ham gender tengligini rivojidan habar beradi. O'zbekiston ham boshqa davlatlar kabi 2019 yildan buyon gender tengligi ko'rsatkichi ro'yxatida qatnashishni boshladi. Bu ro'yxatda qatnashish ham qonunda gender statistikasi deb belgilab ketilgan.Gender statistikasini shakllantirish uchun vazifalar belgilab ketilgan.Ushbu vazifalar orqali 2019-yil holati boyicha Ozbekistonning gender tengligi korsatkichi ro'yxatdagi 189 mamlakat ichida 62-o'rinni egalladi. Birlashgan Millatlar Tashkilotining Aholishunoslik jamgarmasi (UNFPA) ekspertlarining fikriga kora, Ozbekistondagi har 100 000 dan29 ayol gender tengsizlik tufayli vafot etishi va 15-19 yoshdagi har ming o'spirin qiz uchun tugish ko'rsatkichi 23,8 ni tashkil qiladi. [12] Gender tengligi ko'rsatkichi ro'yxati bo'yicha 62-o'rinda O'zbekiston bilan bir qatorda Kosta-Rika va Urugvay ham 0,288 korsatkichi bilan qayd etilgan. Orta Osiyo davlatlari ortasida Qozogiston

44- chi, Qirgiziston 82-chi, Tojikiston 70-chi o'rinlarni egallashgan, Turkmaniston esa bu ro'yxatda mavjud emas. [13]

Xulosa o'rnida shuni aytish mumkinki gender tengligini rivojlantirish bu butun dunyoda davlatning rivojlanishiga sharoit yaratish deganidir. Chunki ayol nafaqat ona balki, jamiyatning asosiy bir bolagidir. Ayollar ham erkin yashashga oqib organib rivojlanishga xaqli. Davlat qachon rivojlanadi? Qachonki fuqarolar davlat rivoji uchun bor kuchi bilan xarakat qilganida. Endi erkaklar xarakat qilsayu ayollar bir chetda qolib ketsa davlat qanday rivojlanadi. Ozbekiston aholisini nafaqat ozbekiston balki dunyo aholisining 50% dan ortiq qismini ayollar tashkil qiladi. bu kuchni togri ishlata bilgan, ayollarning qadr qimmatini,ularning xurmatini oz ornigaqoygan davlat albatta rivojlanadi. Bunga tarixda xam xozirgi zamonda xam misollar tola. Gender tengligini rivojlantirish oz qolimizda uni yaxshi rivojlantira olsek oz oylagan niyatlarmiziga albatta erishamiz.

Foydalanilgan adabiyotlar royxati:

1. https://lex.uz/docs/-4494849
2.https://lex.uz/docs/-4494709?ONDATE=10.12.2021%2000
3. https://www.undp.org/
4.https://www.undp.org/uz/uzbekistan/press-releases/sudyalar-ozbeksiton-sud-tizimida-gendertenglik-tarafdori
5.Paxton, P., & Hughes, M. M. (2007). Women, politics, and power: A global perspective. Pine Forge Press
6.Iyer, L., Mani, A., Mishra, P., & Topalova, P. (2011). The power of political voice: Women'spolitical representation and crime in India. Harvard Business School BGIE Unit Working Paper, (11-092).
7.Reynolds, A. (1999). Women in the Legislatures and Executives of the World. World Politics, 51(4), 547-573.
8.https://www.xabar.uz/uz/infografika/davlat-boshqaruvidagi-top-40
9.Swamy, A., Knack, S., Lee, Y., & Azfar, O. (2003). Gender and corruption. Democracy, Governance and Growth, edited by Stephen Knack, 191-224.
10.Pintor, R. L., & Gratschew, M. (2002). Voter turnout since 1945: a global report.
11.Gender tenglik komissiyasi haqidagi rasmiy saytining „Komissiya haqida“ sahifasi, 2021-04- 14da asl nusxadan arxivlandi, qaraldi: 2021-04-14
12.Gender tengligi korsatkichi royxati (PDF).

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MAKTABGACHA TA’LIM TASHKILOTI BOLALARIDA BADIIY-IJODIY QOBILYATLARNI RIVOJLANTIRISHNING PEDAGOGIK-PSIXOLOGIK ASOSLARI

Annotatsiya. Mazkur ish maktabgacha yoshdagi bolalar rivojlanishiga qo‘yiladigan davlat talablari asosida maktabgacha ta’lim tashkiloti tarbiyalanuvchilarining badiiy va ijodiy qobiliyatlarini rivojlantirish muammolariga bag‘ishlangan. Unda maktabgacha ta‘lim tashkilotlarida tarbiya jarayonida badiiy va ijodiy qobiliyatlarini rivojlantirishning bola hayotidagi o‘rni va shunga bog‘liq ravishda bolalarning tafakkuri va dunyoqarashini rivojlantirishning ahamiyati, shuningdek, maktabgacha yoshdagi bolalarning ijodiy qobiliyatini nazorat qilish orqali uni rivojlantirishga e’tibor berilgan.

Kalit so‘zlar: Badiiy, ijodiy, qobilyat, o‘yin, ta’lim, tarbiya, ijodkorlik, bola, musiqa, talab.

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PEDAGOGICAL AND PSYCHOLOGICAL BASIS OF DEVELOPMENT OF ARTISTIC AND CREATIVE ABILITIES IN PRESCHOOL CHILDREN

Annotation. This work is devoted to the problems of developing artistic and creative abilities of children of a preschool educational organization based on the state requirements for the development of preschool children. In it, attention is paid to the role of developing artistic and creative abilities in the process of education in preschool educational organizations in the life of a child and the importance of developing children's thinking and worldview, as well as to its development by controlling the creative abilities of preschool children.

Key words: Artistic, creative, ability, game, education, training, creativity, child, music, demand.

Jahon miqyosida ta’lim soxasi ancha rivojlangan. Bolalar bog‘chasini paydo bo‘lish tarixi 1837-yilga borib taqaladi, bolalar bog‘chasining asoschisi nemis pedagogi-Fridirix Frebel hisoblanadi. Frebel bolalarni “Olloh ekinlari” deb ataydi va tarbiyachilarni esa “bog‘bon qizlar” deb nom beradi. Bunga sabab dastlabki bolalar bog‘chalari vaqtincha oila o‘rnini bosish va ota-onalarga tarbiya

berishga ko‘maklashish uchun tashkil qilingan.8Keyinchalik esa bolalar bo‘gchasi atamasi 1997-yil YUNESKO tamonidan “Maktabgacha ta’lim” atamasi kirib keldi, bugunki kunda esa bu atama “Maktabgacha ta’lim tashiloti” ga aylandi. Maktabgacha yosh davrining inson kamolotining keyingi rivojlanishidagi, bolani maktab ta’limiga tayyorlashdagi alohida roli maktabgacha ta’limning maqsadini belgilash, maktabgacha yoshdagi bolalarni o‘qitish metodlari va tashkiliy shakllarini o‘ziga xos mazmunini ishlab chiqishni, bolalarni xar tamonlama kamolga yetkazishga o‘qitishning rolini tadqiq qilish zarurligini shart qilib qo‘yilgan. K.D.Ushinskiy Maktabgacha ta’limning vazifasi ijodiy qobilyat va nutq qobilyatini rivojlantirishdan,ularni maktabga tayyorlashdan iborat9-deb hisoblaydi. Shunday ekan bugunki kunning ham talabi erkin, mustaqil, ijodiy fikrlaydigan yosh avlodni tarbiyalashdir. Mening fikrimcha, zamonaviy jamiyat muammosini hal qilish uchun bolaga tegishli sharoitlarni yaratish, eng muhimi, unga xavfsizlik va ishonch makonini yaratish kerak. Bola uchun bu joy, bir muncha vaqt, bo‘sh qog‘ozga aylanadi, to‘g‘ri tanlangan, bolalarning manfaatlarini hisobga olgan holda, dars va o‘yin. Yan Amos Komenskiy o‘yinni bola faoliyatining, uning tabiati va mayllariga to‘g‘ri keladigan zarur shakli deb hisoblardi. Uning fikricha o‘yin – bolaning barcha qobilyat ko‘rinishlari rivojlanadigan jiddiy aqliy faoliyatdir, o‘yinda borliq, dunyo haqidagi tassavvurlar doirasi kengayadi va boyiydi, nutq rivojlanadi. P.F.Lestgaft bolalar o‘z o‘yinlarida tevarak-atrofdan olgan tassurotlarini aks ettiradilar, deydi bunday faoliyat bolaning rivojlanishida katta ahamiyatga egadir.10 Shunday ekan, bolalarda ijodiy qobilyatlarni shakllaantirishda, erkin fikrlashlarida o‘yinlarning ro‘li katta. Ijodkorlik bolalar rivojlanishining doimiy hamrohidir. Ijodkorlik qobiliyatini rivojlantirishning eng yaxshi vositasi bu faollikdir”. L. S. Vygotskiy.11 Maktabgacha ta’lim yagona uzluksiz ta’lim tizimidagi birinchi, o‘ziga xos qadamdir. Maktabgacha yoshdagi davrning o‘ziga xosligi shundaki, aynan shu erda bolaning har tomonlama rivojlanishi uchun asoslar yaratiladi, uning ijodiy salohiyati ochiladi va bolalarning asosiy g‘oyalari shakllanadi. Ijodiy shaxsni shakllantirish hozirgi bosqichda pedagogik nazariya va amaliyotning eng muhim vazifalaridan biridir. Uni hal qilish maktabgacha yoshdan boshlanishi kerak, chunki aynan shu yoshda bolalar o‘zini namoyon qilish, o‘z-o‘zini rivojlantirish, hamkorlik qilish va birgalikda yaratishga asoslangan fantaziya, ijodkorlik uchun katta imkoniyatlarga ega. Ko‘pgina olimlar, o‘qituvchilar, psixologlar maktabgacha yoshdagi bolalarda ijodkorlikni rivojlantirishning an’anaviy yondashuvlarini qayta baholashga harakat

8 Ozerova, O.E. Bolalarda ijodiy fikrlash va tasavvurni rivojlantirish. O‘yinlar va mashqlar. - Rostov on / D., 2005.
9F. Qodirova, Sh. Toshpo‘latova, N. Kayumova, M A’zamova. “Maktabgacha pedagogika” Toshkent: Tafakkur nashriyoti.2019. -684b
10 N.M.Quchqarova “Maktabgacha ta’lim tashkilotlari tarbiyalanuvchilariga o‘yin orqali tarbiya berish” \o \‘quv uslubiy qo‘llanma.-Toshkent,2022 y.-74b
11 Butenko N. Poliartistik loyihalar o‘qituvchi va bola o‘rtasidagi hamkorlik shakli sifatida // Maktabgacha ta'lim. - 2013 yil - 11-son - b. 35.

qilmoqdalar. Bunday izlanishlar tanish va taniqli narsalarni qayta ko‘rib chiqishga olib keladi, erishilgan narsada to‘xtamaslikka yordam beradi, "silkitadi" va boyitadi. Qidiruv va kashfiyotlar natijasida bolalar faoliyati tobora erkin, quvnoq va muvaffaqiyatli bo‘ladi. Ijodkorlik nimani o‘z ichiga oladi? Ularga aqlning kuzatuvchanlik, taqqoslash va tahlil qilish, birlashtirish, bog‘lanish va bog‘liqliklarni, qoliplarni topish kabi fazilatlari kiradi. Ijodkorlik aqliy faoliyatning eng yuqori shakli, mustaqillik, yangi, o‘ziga xos narsa yaratish qobiliyatidir. Ijodkorlik ko‘lami har xil bo‘lishi mumkin, lekin hamma hollarda yangi narsaning paydo bo‘lishi, kashfiyoti bor (A. A. Melik-Pashaev, Z. N. Novlyanskaya). A. N. Leontiev bolalar ijodiyotining mohiyatini o‘rganar ekan, ijodkorlik shaxs rivojlanishining muhim ko‘rsatkichlaridan biri, tasavvur esa ijodiy faoliyatning asosi ekanligini ta'kidladi.12 “Tasavvur – ijodning boshlanishi. Siz nimani xohlayotganingizni tasavvur qilasiz, o‘zingiz tasavvur qilgan narsangiz bilan o‘zingizni ilhomlantirasiz va nihoyat, ilhomlantirgan narsani yaratasiz.” Jorj Bernard Shou.13 Barcha buyuk insonlar o‘z hayotlarida xayol kuchi bilan muvaffaqiyatga erishganlar. Ular buyuk bo‘lishdi, chunki ular o‘zlarining ulkan yutuqlarini tasavvur qilishga jur’at etdilar. Agar bolangiz o‘z tasavvuridan faol foydalansa, u potentsial dahodir, chunki barcha ijodkorlar boy tasavvurga ega. Ijodkorlik - o‘ziga xoslik. S. A. Suxomlinskiy shunday degan edi: “Bolalarning qobiliyatlari va iste’dodlarining kelib chiqishi ularning qo‘lida. Barmoqlardan, majoziy ma’noda, ijodiy fikrning manbai bo‘lgan eng nozik iplar - oqimlar mavjud. Boshqacha aytganda, bolaning qo‘lidagi mahorat qancha ko‘p bo‘lsa, bola ham shunchalik aqlli bo‘ladi”.14 Shuningdek, u bolalar ijodiyotida (to‘g‘ri yo‘l-yo‘riq bilan) bolaning o‘zini namoyon qilishi va o‘zini o‘zi tasdiqlashi sodir bo‘lishini, uning individualligi aniq namoyon bo‘lishini ta'kidladi. Ishonch bilan ayta olamanki, maktabgacha ta’lim muassasamiz zamon bilan hamnafas bo‘lmoqda. Interfaol guruhdagi o‘quv faoliyatlari tarbiyalanuvchilarga ayniqsa yoqadi. Interfaol doskadan foydalanib, “Badiiy-estetik rivojlanish” ta’lim sohasida ko‘plab mavzularda ko‘rgazmalardan foydalanib o‘tkazdik: “Peyzaj rassomlari”, “Natyurmort nima”, “Hayvon rassomlari, ular kimlar?”, “Qo‘shiqchi qush” va hokazo multimedia.15 Resurslar menga bolalar bilan kognitiv rivojlanish bo‘yicha o‘quv mashg‘ulotlarini qulay va qiziqarli tarzda o‘tkazishga imkon beradi: "Suv osti dunyosi", "O‘rmon aholisi", "Patli do‘stlar", "Qo‘ziqorinlar qirolligi", "9 may - G‘alaba kuni!" va hokazo.16 Katta mamnuniyat bilan yigitlar o‘zlarining fikrlashlarini rivojlantirishga hissa qo‘shadigan interaktiv didaktik o‘yinlarni o‘ynashadi. Ijodiy

13 Davydova G. N. An'anaviy bo‘lmagan chizish texnikasi. - M., 2007.
13 Asmolkova V., Chernova T. Biz qum bilan chizamiz. Katta maktabgacha yoshdagilar uchun // Maktabgacha ta'lim. - 2013 - № 5 - s. 79.
15. Beloskova S. Turli texnikalardan foydalangan holda kollektiv kompozitsiyalar // Maktabgacha ta'lim.- 2013 yil - 6-son - 65-bet.

15 Zaharyuta N. Ijodiy shaxsni rivojlantirishga zamonaviy yondashuv. // Maktabgacha ta'lim. - 2006. - No 3. - B. 21.
16 Lykova I. A. Didaktik o‘yinlar va tadbirlar. Badiiy va kognitiv faoliyatning integratsiyasi. - M., 2009.

faoliyat xotirani, fikrlashni, qo‘llarning nozik motorikasini rivojlantiradi. Bola qandaydir ijodkorlik bilan shug‘ullanib, o‘ylaydi, taqqoslaydi. Men tarbiyalanuvchilarning ijodiy qobiliyatlarini nafaqat maxsus tashkil etilgan, balki erkin mashg‘ulotlarda ham rivojlantirishni maqsad qilganmiz. “Bolalarning ijodiy izlanishlari majburiy ham, majburiy ham bo‘lishi mumkin emas va faqat bolalar manfaatlaridan kelib chiqishi mumkin” L. S. Vygotskiy.17Men tomonidan amalga oshirilgan noan'anaviy rasm chizish usullari vizual faoliyatga rang-baranglik qo‘shadi va bolaga o‘zini namoyon qilish uchun ko‘proq imkoniyat yaratadi: “Barmoqlar va kaftlar bilan chizish”, “Namuna olish”, “Monotip”, “Qattiq cho‘tka bilan chizish”, “Rangli iplar”, “Mumli qalamlar bilan chizish”, “Tritish”, “Matoga chizish”, “Tanish shakl - yangi tasvir” va boshqalar.18Tasavvur va ijodkorlikni rivojlantirish uchun men bolalarga: ularning kayfiyatini, orzularini, musiqasini, hidini, o‘zlarini, oilasini, do‘stlarini, sirli va sehrli narsalarni (mavjud bo‘lmagan hayvon, fantastik o‘simlik va boshqalar) tasvirlashni taklif qilaman. Chizishning turli usullaridan foydalanish bolaga ijodkorlik quvonchini, muallifning ovozidan xabardorlikni beradi. Shu bilan birga, bolalar nafaqat turli yoshdagi, balki turli xil boshlang‘ich imkoniyatlarga ega bo‘lishi mumkin.

Foydalanilgan adabiyotlar:

1. Ozerova, O.E. Bolalarda ijodiy fikrlash va tasavvurni rivojlantirish. O‘yinlar va mashqlar. - Rostov on / D., 2005.
2. F. Qodirova, Sh. Toshpo‘latova, N. Kayumova, M A’zamova. “Maktabgacha pedagogika” Toshkent: Tafakkur nashriyoti.2019. -684b
3. Lykova I. A. Didaktik o‘yinlar va tadbirlar. Badiiy va kognitiv faoliyatning integratsiyasi. - M., 2009.
4. Lykova I. A. Bolalar badiiy ijodida eksperiment. - M., 2003.
5. N.M. Quchqarova “Maktabgacha ta’lim tashkilotlari tarbiyalanuvchilariga o‘yin orqali tarbiya berish” \o \‘quv uslubiy qo‘llanma.-Toshkent,2022 y.-74b
6. Rodina, N. N. Bolalarning ijodiy salohiyatini rivojlantirishda maktabgacha ta'limning o‘rni / N. N. Rodina. - Matn: to‘g‘ridan-to‘g‘ri // Maktabgacha pedagogika savollari. - 2018 yil - No 7 - S. 13-17. — URL: https://moluch.ru/th/1/archive/109/3763/ (kirish sanasi: 21.12.2022).

17 Zaharyuta N. Ijodiy shaxsni rivojlantirishga zamonaviy yondashuv. // Maktabgacha ta'lim. - 2006. - No 3. - B. 21.
18 Davydova G. N. An'anaviy bo‘lmagan chizish texnikasi. - M., 2007.

UDC. 338.43

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AGROCLUSTERS ARE THE FUTURE OF AGRICULTURE IN OUR COUNTRY

Annotation. The current complex and critical period once again demonstrates the crucial role and importance of the agricultural sector in the world. The most important issue is the rational use of available resources and opportunities, the guaranteed supply of agricultural products to the population, the creation of new jobs in the industry, the further increase of interest.

Keywords. Agrocluster, agrarian sector, cluster, agriculture, economy.

Introduction: Uzbekistan is among the countries where agriculture is actively supported. Therefore, today the state allocates more funds to the agricultural sector of our republic compared to developed countries.

The current complex and volatile period once again clearly shows the decisive role and importance of the agricultural sector on the world scale. By rationally using the available resources and opportunities, the guaranteed provision of agricultural products to the population, creation of new jobs in the field, and further increase of interest are becoming the most important issues [5-6].

The main part: The head of our state considers agroclusters as the future of our country's agriculture. It's not for nothing. The more the agricultural sector is industrialized, the more the country's economic and export potential will increase, and the welfare of our people will increase. Admittedly, based on the idea of the head of our state, a cluster system based on the chain method of production and processing of products has appeared in agriculture in recent years. So what does it matter? In this regard, the fact that the legislative foundation of the industry is being created and improved is of crucial importance, of course. After all, on this basis, the rights and interests of all people operating in the network are fully guaranteed, the clusters are fully supported by the state, and a favorable agribusiness environment is being created. Experts say that the goal of forming clusters is to combine enterprises of the same field located within the city, district and region, as well as educational, scientific, engineering, consulting, standardization, certification and other services that are in a single technological chain with them. On this basis, innovative production will be organized and an integrated platform for creating competitive goods will emerge.

Result and discussion. Today, a number of recommendations were made on the innovative development of the agricultural sector and the acceleration of the clustering system.

In particular:

- By introducing the cluster model in agriculture, increasing export potential, increasing foreign exchange earnings, increasing the level of provision of quality agricultural products to the population;
- Improving the efficiency of using the existing infrastructure for storage and transportation of agricultural and food products;
- Renewal and modernization of storage and processing facilities to increase the stable and harmonious operation of the production and sales chains being created;
- In order to reduce the costs of production, processing, transportation and export of products, to increase profitability and introduce transparent contractual relations in the market, in order to form the establishment of business practices that meet the requirements of the international market in the future, to various associations of producers (cooperatives, associations, clusters, etc.) to assist;
- This includes abandoning the practice of regulating prices of agricultural and food products by gradually moving to market mechanisms of price formation [1-3].

This is the reason why in our country, the issue of modernization and diversification of the economy, including the agricultural sector, food production, financial support of farmers, clusters and cooperatives is more important than ever.

Consequently, the introduction of the cluster system, the creation of modern greenhouse farms, and the expansion of household farming practices allowed to significantly increase not only productivity, but also the standard of living of the population in the village. In other words, this new structure has become the leading power-driver of the agrarian sector in a very short period of time.

So what are the advantages of clustering? What factors is it developing at the expense of? To what extent does this direction of agriculture, which has received a lot of attention in recent years, justify itself [7,11] ?

The cluster is a system that integrates work from sowing seeds to the production of higher and value-added products, to the delivery of finished products to the domestic market and export. Today, this system is used in many countries of the world.

Due to the significant work carried out in this direction in recent years, the common interests of the producers and processors of the product are ensured in the cluster method. Cluster participants are taking the initiative to solve problems that have accumulated in the sector by bringing industry to rural areas. The most important thing is that people are employed in the clusters, they are working in winter and summer, and they are getting a monthly salary.

In other words, this system taught our farmers and representatives of the agrarian sector to work in a new, modern way. Increased productivity, income. We must admit that everyone is driven by self-interest. Everyone wants to live well, have a happy marriage. For this, of course, he works tirelessly for the benefit of himself and his country. The cluster has shown us this benefit [8,9,10].

In this regard, today a new form of business in agriculture - the cluster method - is becoming more and more popular. After all, such a mechanism can adapt to any conditions and effectively solve both economic and social problems consistently [4].

Development of clusters in the conditions of Uzbekistan is the wisest decision. Because of this, even in unfavorable years for agriculture, common jobs and salaries are maintained at the expense of other organizations of the cluster. The main thing is that clusters play a major role in strengthening the economic independence of regions, and this approach allows identifying economically priority industries and projects.

In conclusion, the cluster system is an important factor in the transition to market principles. The reason is that the cluster system means the introduction of interest, science and innovation into the field. Already, the cluster brings benefits, provides people with work and income.

References:

1. Decision No. PD-4633 of the President of the Republic of Uzbekistan dated 06.03.2020 "On measures for the widespread introduction of market principles in the cotton industry"
2. Resolution No. 397 of the Cabinet of Ministers of the Republic of Uzbekistan dated 22.06.2020 "On measures to further develop cotton-textile production" (currently, this document is being amended)
3. Decision No. PD-5200 of the President of the Republic of Uzbekistan dated 28.07.2021 "On the implementation of the cluster system in the development of viticulture, additional measures of state support for the involvement of advanced technologies in the sector"
4. Tojimurodovna, A. Y., & Tojimurodovna, A. U. (2021). Sustainable Development of Fishing, Increasing Production Volume, Strengthening Food Base. Academic Journal of Digital Economics and Stability, 551-557.
5. Mustafakulov, A. A., Jo'raeva, N. M., & Axmadjonova, U. (2022). Quyosh nurlanishi spektri va uning o 'simliklar rivojiga ta'siri. *Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany)*, 220-225.
6. Ziyatovna, Y. Z., Tojimurodovna, A. Y., & Tojimurodovna, A. U. (2021). Aydar-Arnasoy ko'llar tizimining gidrologik tavsifi va ekologik holati. Science and Education, 2(7), 160-169.
7. Ахмаджонова, Ё. Т., & Ахмаджонова, У. Т. (2022). Аграр соҳани барқарор ривожлантиришда фан, таълим ва ишлаб чиқариш интеграциясини

ўрни. *Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany)*, 894-897.
8. Yorqinoy, A., & Xolidaxon, A. (2022, February). Kolbasa mahsulotlari turlari, ozuqaviy qiymati va uning kimyoviy tarkibi. In international conference on learning and teaching (Vol. 1, No. 1).
9. Axmadjonova, Y. T., & o'g'li, B. U. B. (2021). Go'sht turlari va ularni hajmini ko'paytirish, ozuqa bazasini mustahkamlash. Science and Education, 2(11), 185-193.
10. Ziyatovna, Y. Z., Tojimurodovna, A. Y., & Akhmedovna, S. S. (2021). The Concept and Principles of Nature Pollution Monitoring. Annals of the Romanian Society for Cell Biology, 1038-1043.
11. Ахмаджонова, Ё. Т., & Ахмаджонова, У. Т. (2022). Аграр тармоқни инновацион ривожлантириш ва кластерлаш тизими. Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 607-610.

UDC. 504.06

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RAMSAR CONVENTION: ECOLOGY OF THE AYDAR-ARNASOY LAKE SYSTEM

Abstract. Aydar-Arnasoy lake system is a variable ecosystem. Changes in the ecosystem will also affect all components of the landscape, i.e. plants, animals, groundwater levels and mineralization levels. A unique microclimate is formed in the arid region, which also affects the surrounding climate.

Key words: Arid region, ecosystem, geosystem, landscape, chemical analysis, hydrochemical. Ramsar Convention, water area, natural area.

Relevance of the topic. Since the Republic of Uzbekistan is located in an arid region, the main problem is water, as our daily life or articles published in the press show. Today, due to the lack of rational use of water resources in the territory of our republic, natural water bodies are drying up (the Aral Sea), and in some areas, the water area of abandoned lakes (Aydar-Arnasoy, Sarikamish and Dengizkol) is expanding, unique ecosystems (geosystems) we see that it is being formed [1]. The Aydar-Arnasoy lake system formed in an arid region is a variable ecosystem. Changes in the ecosystem will affect all components of the landscape, primarily vegetation, fauna, groundwater levels, and the level of mineralization. On the other hand, a unique microclimate is formed in the arid region, which also affects the surrounding climate. Changes in the environmental climate are also affecting the soils, vegetation and fauna in this area. The study, analysis and prediction of these changes are of great scientific and practical importance [2]

The main part. Although more than half of the earth's surface, i.e. 71%, is covered by water, the extensive use of water bodies for industrial and economic needs in recent years has led to the expansion of the range of various impacts on them.

Based on the decision of the Oliy Majlis of the Republic of Uzbekistan on August 30, 2001, the Republic of Uzbekistan joined the Ramsar Convention, and this decision came into force on February 8, 2002 [3]. Currently, Dengizkol and Aydar-Arnasoy lakes system with an area of 31.3 thousand hectares and 527.1 thousand hectares are included in the Ramsar list.

Dengizkol is an important water conservation facility for waterfowl monitoring. More than 170 species of birds can be found there, in particular, 24 species of birds included in the Red Book of Uzbekistan and 2 species included

in the list of the International Union for the Protection of Nature and Natural Resources.

In general, the biodiversity of this water area consists of 35 species of mammals, 24 species of fish and reptiles, and 2 species of amphibians. 47 species of plants grow in the lake, 6 of which are included in the Red Book of Uzbekistan, and 16 are endemic to Central Asia.

The second object included in the Ramsar list, the Aydar-Arnasoy lake system, includes Tuzkon, Arnasoy and Aydarkol lakes. Today, the Aydar-Arnasoy lake system has become a huge reservoir with an area of 3702 km2 and a water volume of 44.1 km3.

The quantity of sulfate and sodium ions in the composition of Aydarkol waters determines its salty taste. The water color is green-blue. Water salinity varies from 3.2 to 12.2 g/l. The highest salinity level corresponds to the spring months. Gradually, the amount of salt ions in the water of this water body is increasing. Today, the amount of salt in water in different regions of Aydarkol ranges from 4 to 16.5 g/l, with an average of 10.2 g/l. The ionic composition of Aydarkol water is close to that of ocean water. According to the data of the Central Asian Research Institute of Hydrometrology, in 1990-2005, the water salinity level in the eastern region was 17 g/l, today it is 12.2 g/l, in the western region it is 22 g/l, and it has reached 14.5 g/l. The pH value of water is 8.6 in Aydarkol, 8.8 in Tuzkon, 8.9 in Arnasoy. These indicators indicate that Aydarkol water has an alkaline environment [4,5].

Result and discussion. This Convention protects bird species whose habitats are located not only on the territory of one country, but also nesting, flying, and wintering areas on the borders of different countries, as well as bird species that are included in the Red List of the International Union for Conservation of Nature and Natural Resources and live in the territory of our republic for a certain part of their life. is important.

In order to further increase the efficiency of the rational use of the lakes included in the Ramsar list in our republic and to fulfill the requirements of the Convention in general, it is important to carry out scientific researches focused on the cadastre and monitoring of wetland ecosystems.

The purpose of this international document:

- interdependence of a person and the environment surrounding him;
- economic, cultural and recreational importance of wetlands;
- Recognizing that waterfowl and their conservation should be considered as an international resource;
- is to ensure the coordination of international actions with a far-sighted national policy.

Today, 169 countries are members of this Convention. Tuzkon, Arnasoy and Aydarkol lakes in the Aydar-Arnasoy lake system are among the few objects included in the Ramsar list in our country.

It is known that, the main water sources in our country are inextricably linked with the Amudarya and Syrdarya rivers, which have a transboundary nature.

Taking into account that changes in the water level of inland lakes are inextricably linked with the annual water volume of these rivers, the urgency of this issue is evident [7-8-9].

For this reason, the Ramsar Convention stipulates that the contracting parties should consult with each other regarding the fulfillment of obligations arising from this document, especially when wetlands are located in the territories of more than one contracting party or when the water system is part of the territory of more than one contracting party.

In order to preserve and improve ecological systems, to achieve ecologically safe living of the population, the project "Concept of the Republic of Uzbekistan in the field of ecology and environmental protection and rational use of natural resources until 2030" has been developed is also one of the priorities for sustainable development in our country, and is an integral continuation of work aimed at maintaining a healthy ecological situation in our region [6].

Conclusion. Therefore, one of the priorities for sustainable development in our country is aimed at maintaining a healthy ecological situation in our region. Wetlands have a special place as an important part of the system chain in ensuring the stability and integrity of ecological systems.

Based on the above, it can be said that we are all equally responsible for preserving the ecological stability of the basins for future generations

References:

1. Mirkomil G., Bakhtiyor Z. Methods of studying the landscapes around the aydar-arnasay lake system //International Engineering Journal For Research & Development. – 2020. – Т. 5. – №. 7. – С. 5-5.
2. Yakhshieva, Z. Z., & Akhmadzhonova, Y. T. (2020). Ecological condition of Aydar-Arnasay lakes and its improvement. In Problems and prospects of innovative technology and technologies in the field of environmental protection//International scientific and technical on-line conference Part-I (pp. 38-140).
3. https://uza.uz/uz/posts/ramsar-konvenciyasiga-kiritilgan-obektlarni-saqlash-va-kengaytirish-masalalari-muhokama-etildi_312776
4. Ziyatovna, Y. Z., Tojimurodovna, A. Y., & Tojimurodovna, A. U. (2021). Aydar-Arnasoy ko'llar tizimining gidrologik tavsifi va ekologik holati. Science and Education, 2(7), 160-169.
5. Akhmadjonova, Y. T. (2022). Water composition and ecological status of aydar-arnasoy lake system. Экономика и социум, (5-2 (92)), 21-24.
6. Sh. Mirziyoev Decree No. PF-5863 dated October 30, 2019 "On approval of the concept of environmental protection of the Republic of Uzbekistan until 2030" https://lex.uz/docs/4574008

7. Narziqulovich, P. M., Abulqosimovich, A. A., & Bobur Ulug'bek o'g, M. (2023). Problems of providing clean drinking water to the population of jizzakh region. *Ta'lim va rivojlanish tahlili onlayn ilmiy jurnali*, *3*(1), 102-107.
8. Abulkosimovich, A. A. (2023). Study of water based on physicochemical analysis. *Genius Repository*, *27*, 120-122.
9. Narziqulovich, P. M., & Abulkosimovich, A. A. (2023). Pollution characteristics of sangzor river water. *Ethiopian International Journal of Multidisciplinary Research*, *10*(09), 221-224.

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IQTISODIY XAVFSIZLIKKA OID ATAMALAR TA’RIFLARI MAZMUNI

Annotatsiya. Ushbu maqolada xavfsizlik va unga aloqador bo‘lgan tushunchalarning ta’riflari berilgan. Xavfsizlik masalasi juda keng tushuncha. Chunki uning qamrovi siyosiy, iqtisodiy, ekologik, harbiy kabi xavfsizliklarni qamrab oladi. Bu o‘ta murakkab jarayon, chunki keltirilgan xavfsizlikka taalluqli tushunchalarning birortasi ta’minlanmasa, jamiyatning barqaror rivojlanishiga erishib bo‘lmasligi aniq.

Kalit so‘zlar: xavfsizlik, iqtisodiy xavfsizlik, zarar, foyda, axborot, ob’ekt, xo‘jalik yurituvchi sub’ektlar, davlat, atama, ta’rif, tovarning iste’mol xavfsizligi, ob’ekt xavfsizligi.

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TERMS RELATED TO ECONOMIC SECURITY CONTENTS OF DEFINITIONS

Abstract. This article provides definitions of security and related concepts. Security is a very broad concept. Because its coverage includes political, economic, ecological, military security. This is a very complex process, because it is clear that sustainable development of society cannot be achieved if any of the concepts related to security are not provided.

Key words: safety, economic safety, damage, profit, information, object, business entities, state, term, definition, consumer safety of goods, object safety.

Kirish. Bozor munosabatlari sharoitida har bir korxonaning o‘ziga xos tijorat, ishlab chiqarish va boshqa sirlari bo‘ladi19. Ularning saqlanishi ham mazkur xo‘jalik yurituvchi sub’ekt uchun intellektual yoki nomoddiy mulk sifatida katta ahamiyatga ega. Korxonaning zamonaviy xodimlari ushbu sirlarni oshkor qilmasliklari lozim. Bu sirni oshkor qilish asosan axborotlar orqali amalga

19Nematovich K. A., Abdurahmonovich B. F. FORMS OF COMPETITION AND A SYSTEM OF INDICATORS REPRESENTING COMPETITIVENESS //International journal of trends in commerce and economics. – 2021. – Т. 11. – №. 1.

oshiriladi. Shu tufayli hozirgi sharoitda axborot xavfsizligini ta’minlash ham muhim tadbirlardan biriga aylandi20.

Tahlil va natijalar. Bozor munosabatlari sharoitida har bir ob’ektning21 xavfsizligi ta’minlangan bo‘lishi lozim. Buning uchun ob’ekt xavfsizligining ta’rifini ishlab chiqish ham lozim bo‘ladi. Ammo, iqtisodiy adabiyotlarda bunday ta’rif yetarli darajada ishlab chiqilmaganligi tufayli biz unga ham o‘z qarashlarimizdan kelib chiqdik: **Ob’yekt xavfsizligi deganda turli tahdidlar va xavf-xatarlardan himoyalangan va o‘z faoliyatini normal rejimda olib borishga tegishli sharoit yaratib olishga qaratilgan tadbirlar majmuasiga ega bo‘lgan ob’ektlar tushuniladi.**

Biz ushbu holatda butun bir iqtisodiy va ijtimoiy faoliyat bilan shug‘ullanuvchi ob’ektlarning xavfsizligi xususida gap yuritmoqdamiz. Bu esa iqtisodiyot bilan shug‘ullanuvchi ob’ektlarning xavfsizligiga alohida ahamiyat berishni taqozo qiladi. Ularning biri, ya’ni eng muhimi ishlab chiqarish (ish bajarish, xizmat ko‘rsatish) ob’ektidir.

Iqtisodiy xavfsizlik xususida fikr yuritar ekanmiz, uning asosiy qismini tashkil qiladigan ishlab chiqarish (ish bajarish, xizmat ko‘rsatish) ob’ektlari xavfsizligi xususida ham alohida to‘xtalib o‘tish maqsadga muvofiq. Bunga biz iqtisodiy xavfsizlik tushunchalari ta’rif-lariga tayangan holda, quyidagicha ta’rif berishni lozim deb topdik.

Ishlab chiqarish (ish bajarish, xizmat ko‘rsatish) ob’ektining xavfsizligi deganda shaxs va jamiyatning manfaatlariga mos kelmaydigan turli ishlab chiqarishda sodir bo‘ladigan halokatlarning (avariyalarning) oldini olishga qaratilgan tadbirlar majmuasining mavjudligi tushuniladi.

Jamiyatimizdagi holatlar iqtisodiy xavfsizlik qatoriga yong‘in xavfsizligini ham qo‘shishni taqozo qilmoqda. Chunki har xil ehtiyotsizliklar oqibatida yuzlab yong‘in hodisalari ro‘y bermoqda. Natijada bir qator ob’ektlarda millionlab so‘m miqdorida moddiy zarar ko‘rilmoqda. Shu tufayli ushbu masala ham iqtisodiy xavfsizlikning bir turi sifatida o‘z ta’rifiga ega bo‘lishi lozim. Biz yuqorida keltirilgan ta’riflarga qo‘yilgan talablardan kelib chiqib, yong‘in xavfsizligiga quyidagicha ta’rif berishni maqsadga muvofiq deb topdik: **Yong‘in xavfsiz-ligi deganda uning oldini olishga qaratilgan barcha tadbirlarning me’yor darajasida amalga oshirilgan tadbirlar majmui tushuniladi.**

Iqtisodiy va ijtimoiy hayotda yong‘in xavfsizligini ta’minlamas ekanmiz, korxonaning umumiy xavfsizligini, shu jumladan iqtisodiy xavfsizligini to‘liq ta’minladik, deyish qiyin. Shu tufayli ushbu masalaga ham alohida ahamiyat berish lozimdir.

20Ortikniyozovich U. F. The Significance of Theoretical Concepts of Services and Service Activity //American Journal of Economics and Business Management. – 2022. – Т. 5. – №. 6. – С. 43-45.

21“Ob’yekt” deganda bozor munosabatlari sharoitida faoliyat ko‘rsatayotdan iqtisodiy va ijtimoiy faoliyat bilan shug‘ullanuvchi yuridik shaxs maqomiga ega bo‘lgan va ega bo‘lmagan barcha xo‘jalik yurituvchilarni ko‘zda tutmoqdamiz.

Bozor munosabatlari sharoitida korxonaning nufuzi bevosita uning tovariga va mahsulotiga bog‘liq bo‘lib qolmoqda. Chunki iste’molchiga sifatli va arzon tovarlar hamisha kerak bo‘lgan va bugungi kunda ham bu holat o‘z dolzarbligini yo‘qotgan emas. Qachonki har bir xo‘jalik yurituvchi sub’ekt o‘z tovarining xavfsizligini ta’minlamas ekan, uning xaridorini topib bo‘lmaydi. Bu esa uni iqtisodiy jihatdan nochor ahvolga olib kelishi mumkin. Bu holatdan ham ko‘rinib turibdiki, har bir korxona o‘zining tovarining xavfsizligini ta’minlashi lozim ekan. Buning mazmunini nazariy jihatdan to‘liq ifodalash esa uning ta’rifini ishlab chiqishni taqozo qiladi. Biz tovarning iste’mol xavfsizligiga ta’rif berishda quyidagi ta’rifga asoslanish maqsadga muvofiq, degan fikrga keldik: **Tovarning iste’mol xavfsizligi deganda uni iste’mol qilayotgan inson hayoti va mulkining xavfsizligi ta’minlangan va har qanday holatda zarar qilmasligi kafolatlangan bo‘lishi tushuniladi.**

Foydalanilgan adabiyotlar:

1. Nematovich K. A., Abdurahmonovich B. F. FORMS OF COMPETITION AND A SYSTEM OF INDICATORS REPRESENTING COMPETITIVENESS //International journal of trends in commerce and economics. – 2021. – T. 11. – №. 1.
2. Ortikniyozovich U. F. The Significance of Theoretical Concepts of Services and Service Activity //American Journal of Economics and Business Management. – 2022. – T. 5. – №. 6. – S. 43-45.
3. Ortikniyozovich, U. F.. (2023). ISSUES OF FINANCING THE HEALTHCARE SYSTEM IN MODERN CONDITIONS. Horizon: Journal of Humanity and Artificial Intelligence, 2(5), 72–73. Retrieved from https://univerpubl.com/index.php/horizon/article/view/1366
4. Ortikniyozovich, U. F. (2023). Health Care System in Our Country Development. Best Journal of Innovation in Science, Research and Development, 2(5), 56–57. Retrieved from https://www.bjisrd.com/index.php/bjisrd/article/view/176

UOC:633.2

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EFFECT OF FERTILIZER AND PLANTING RATE AND METHODS ON CORN GERMINATION AND PLANT THICKNESS

Annotation. It was established that in the conditions of meadow and loamy soils of the Fergana region, after winter wheat, bean plants were used as a repeat crop based on germination and seedling thickness when applying 250 kg/ha of seeds at a distance of 60 cm and mineral fertilizers were applied at the rate of N100R70K50 kg/ha.

Key words: Repeated sowing, corn, triticale, sowing method, seed consumption, fertilizer rate, germination, seedling thickness.

Introduction. Using scientific-based intensive technologies to preserve and increase soil fertility in our republic, to strengthen the feed base of multi-sectoral farms specializing in animal husbandry, in the wide use of cereal and leguminous crops in the 2020-2030 strategy for the development of agriculture of the Republic of Uzbekistan "Radiable use of land and water resources" Researches on the development of measures to increase the amount of nutrients obtained from one hectare of land, reduce their cost and improve their quality, using the methods of planting nutritious crops (mixed, concentrated) with the help of methods of planting nutritious crops (mixed, intensive) is important.

Research materials and method. The experiment was carried out according to the "Methods of conducting field experiments", agrochemical analysis of soil and plant samples of UzPITI " Methods of agroximic, agrophysical and microbiological studies in irrigated areas" va "Methods of agroximic analyzes of soils and plants of Central Asia" of UzPITI. As a repeated crop, corn and triticale were planted in one row of 60 cm and two rows of 15 cm.

According to agrotechnological data for the regions of the Fergana Valley, the last frost is observed on March 22, and the first autumn frost is observed on October 25.

If the repeated crops are planted on July 20, the useful temperature sum is 1095^0C, under these conditions, the repeated crops (soybeans, mash) will mature in 80 days. Therefore, there is enough opportunity to create a high yield if the

periods of planting repeated crops are chosen correctly. (Atabaeva, Mamedov [1; p. 251-253]).

The dynamics of the germination of seeds of repeated crops in the soil depends on the quality of the seeds (large and small), the rate of planting, the rates of fertilizers applied to the methods of planting (row spacing), and also the fertility of the soil.

In our research, the effects of sowing corn separately and corn together with triticale on the dynamics of seed germination and seedling thickness were studied, depending on the fertilizer rates. Repeated crops were sown on July 27, and after 5 days the germination of seeds was calculated according to the dynamics.

Analysis and results. In the conditions of the grassland of Fergana region, in the conditions of weak, saline, heavy mechanical soil, the bean plant was planted at the rate of 250 kg of seeds per hectare, with the application of mineral fertilizers at the rate of $N_{100}R_{70}K_{50}$ kg/ha, and the seed germination was 12.2 in proportion to the observation period; It was 40.4 and 88.6%.

It should be noted that 80-90% of the seeds germinated in 4-5 days because the soil moisture was acceptable and the air temperature was sufficient. However, during this period, the annual rates of fertilizers were not yet given in full.

When the corn plant is planted in each row with a row spacing of 60 cm in the above seed and fertilizer rates (option 3), the germination of seedlings is 12.9 in proportion to the observation periods; It was 41.6 and 88.9%, or these indicators are 0.7, respectively, compared to the option where the corn is planted separately at the above seed rate with a row spacing of 15 cm; It was higher by 1.2 and 0.3%. So, it was observed that the methods of sowing seeds (row spacing) also have an effect on the dynamics of germination of seedlings.

The influence of planting methods, standards and fertilizers on the dynamics of germination of corn, (%)

Variant	Crop Types	Sowing methods	Sowing rates, kg/ha	Observed deadlines		
				Germination		
				23.VII	25.VII	27.VII
Fertilizer rate $N_{100}P_{70}K_{50}$ kg/ha						
1	Control	No crops	-	-	-	-
2	Corner	Planted with 15 cm between rows (60x30)	250	12,2	40,4	88,6
3	Corner	60cm between rows planted in each row (60x60)	250	12,9	41,6	88,9
4	Corn and triticale were planted	Planted in rows 60 cm apart (60x60)	250/200	10,7	39,2	87,6
5			250/150	11,5	39,9	88,0
6			250/100	11,9	40,3	90,0
7		Planted with 15 cm between rows (60x30)	250/200	10,4	38,7	87,2
8			250/150	11,2	39,4	87,9
9			250/100	11,7	39,7	88,2

Fertilizer rate $N_{130}P_{90}K_{65}$ kg/ha						
10	Control	No crops	-	-	-	-
11	Corner	Planted with 15 cm between rows (60x30)	250	13,2	41,2	90,1
12	Corner	60cm between rows planted in each row (60x60)	250	13,1	41,8	90,2
13	Corn and triticale were planted	Planted in rows 60 cm apart (60x60)	250/200	11,2	40,1	88,1
14			250/150	11,6	41,2	89,1
15			250/100	12,0	42,0	91,2
16		Planted with 15 cm between rows (60x30)	250/200	11,0	39,1	87,2
17			250/150	11,3	38,8	88,2
18			250/100	11,4	40,1	87,6

But these indicators are also 0.7 and 0.4% lower than those of the variants planted separately (in the last observation), but 1.2% higher than those of the variant with 250/200 kg/ha of seed.

In the options (7-9) where corn is mixed with triticale, 250/200, 100 kg/ha of seeds are used per hectare, and 15 cm between rows are planted, sprout germination at the end of observation is proportionally 87.2; It was equal to 88.2%. In the experiment, the lowest values (87.2%) were obtained when corn was combined with triticale at a seed rate of 250/100 kg/ha per hectare and planted at a row spacing of 15 cm, while the highest values were obtained when corn was planted separately at a row spacing of 60 cm per row (88.9%). received.

It should be noted that during the observation period, there was no effect of fertilizers applied before planting or with planting of the planned annual fertilizer rates on the germination of seedlings.

It should be noted that in the options where research years N100R70K50 kg/ha were applied, the actual seedling thickness of corn did not differ much among returns, in option 2, where corn was planted with 250 kg/ha of seeds per individual hectare, the actual seedling thickness was 547 in proportion to the research years; It was 594 and 602 thousand/ha, and averaged 581 thousand/ha in 3 years. This plant yielded an average of 599,000/ha or 0.18,000/ha more in 3 variants planted in the above seed rate with 60 cm between rows. In the remaining options, the average in 3 years was equal to 588, 592, 597, 586, 591 and 592 thousand/ha, and differed from each other by 7-13 thousand/ha.

Even in the options where mineral fertilizers were applied at the rate of N130R90K65 kg/ha, the actual seedling thickness of the bean was in the range of 590-610 thousand/ha, and did not differ from those in the background of N100R70K50 kg/ha. Therefore, the actual seedling thickness of the bean did not change under the influence of planting methods, norms and fertilizers. In our opinion, the main reason for this is that corn is planted at the same rate (250 kg/ha).

Summary.

1. When the corn plant is planted in each row with a distance of 60 cm between the rows in the above seed and fertilizer standards (option 3), the germination of seedlings is 12.9 in proportion to the observation period; It was 41.6 and 88.9%, or these indicators are 0.7, respectively, compared to the option where the corn is planted separately at the above seed rate with a row spacing of 15 cm; It was higher by 1.2 and 0.3%.

2. In the options where mineral fertilizers were applied at the rate of $N_{130}R_{90}K_{65}$ kg/ha, the actual seedling thickness of the bean was in the range of 590-610 thousand/ha, and did not differ from those in the background of $N_{100}R_{70}K_{50}$ kg/ha. Therefore, the actual seedling thickness of the bean did not change under the influence of planting methods, norms and fertilizers.

References:

1. Атабаева Х.Н., Мамедов Н.М. Кузги буғдойдан кейин экилган махсар ўсимлигининг ҳосилдорлиги. Тупроқ унумдорлигини оширишнинг илмий ва амалий асослари. Тошкент. 2007. 251-253-б.
2. Орипов Р., Бўриев. Тупроқ унумдорлиги ва сидерация. //Ўзбекистон тупроқлари ва ер русурслари: улардан оқилона фойдаланиш ва мухофаза қилиш. Тошкент. 2008. 123-125-б.
3. Тожиев М., Тожиев Қ., Мамараимов Т. Кузги буғдойдан сўнг экилган оралиқ ва сидерат экинларнинг ўсиши, ривожланиши ҳамда ҳосилдорлиги// Дехқончилик тизимида зироатлардан мўл ҳосил олиш технологиялари. Тошкент 2010. 140-141-б.
4.Атабаева Х.Н., Мамедов Н.М. Кузги буғдойдан кейин экилган махсар ўсимлигининг ҳосилдорлиги. Тупроқ унумдорлигини оширишнинг илмий ва амалий асослари. Тошкент. 2007. 251-253-б.
5.Бойниёзов Э.Б. Янги бир йиллик ем-хашак экинларининг пахта далаларини бегона ўтлар босишига таъсири. //Пахта мажмуидаги зироатлар етиштириш технологиясининг аҳволи ва ривожлантириш истиқболлари. Тошкент. 1996. 229-231-б.
6.Болтаева З. Қарши чўлининг тақирсимон тупроқлари шароитида кузги буғдой анғизида мош етиштириш. //Фермер хўжаликларида пахтачилик ва ғаллачилик ривожлантиришнинг илмий асослари. Тошкент. 2006. 408-409-б.
7.Бўриев Я. Пути получения высокого урожая силосной массы кукуризы. //Тупроқ унумдорлигини оширишнинг илмий ва амалий асослари. Ташкент. 2007. 328-330-б.
8.Маннопова М. Сояни такрорий қилиб ўстиришучун мос навларни танлаш. //“Қишлоқ хўжалигида илғор технологиялар: Андижон тажрибаси”. Андижон. 2002. 183-188-б.
9.Маннопова М., Сиддиқов Р., Мирзахмедов Б. Сояни такрорий экишга мос янги навлари. //Тупроқ унумдорлигини оширишнинг илмий ва амалий асослари. Тошкент. 2007. 418-422-б.

10.Атабаева Х.Н., Исроилов И.А. Виляние условий возделивания на развитие и урожайность сон //сб. трудов Респ Конференция. Ташкент, 2004, 240-243-с.

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GRAIN AND CEREAL PRODUCTS, THEIR PRODUCTION TECHNOLOGY

Abstract. The storage and proper use of the entire grown crop is one of the main tasks currently facing the national economy.

Keyword: received, substantial consumption, substances, moderate.

Food products (bread, cereals, pasta, etc.) obtained from ear grains constitute important consumer goods necessary for human life. In addition, grains and seeds of ear, legume and oilseed plants play a huge role in human life.

Studies of food consumption in the world show that 50% of protein substances, 70% of carbohydrates and 15% of fats come from grains and seeds. Due to the seasonality of grain cultivation, it becomes necessary to store them year-round for use for various purposes. Centuries-old global experience shows that grain storage is a big and complicated matter. Despite the shortage of grain and leguminous products on earth, a significant part of them die during storage and, as a result, fall short of meeting human demand.

Weight reduction of grain products for various reasons during storage according to the FAO (World Food and Agriculture Organization) indicator 10...The quality of stored products is reduced by 15%. The above figures are averages, and in many countries these figures take a different form. For example, in most countries of the African continent and the Southeast Asian region, grain waste is 30% or higher. And in countries with a cool climate, sufficient technical base and qualified engineering personnel, grain waste accounts for 1 5%.

In our state, there are means to eliminate wastefulness in the storage of each grain and other products included in this group. These include the use of advanced technology in the storage process, ensuring production by qualified personnel, and the use of necessary chemicals.

The course "technology of grain and grain products storage" is included in all offers not only of technological disciplines, but also of technical and economic disciplines. Its main goal is to help future professionals in preserving grain and products from it (flour, cereals and omichta EM), as well as in increasing grain resources, which is one of the most important tasks of the national economy.

Grain and granaries. In our country, grain, seeds and products of their processing are stored in state and collective farms, seed stations, elevators, grain receiving enterprises, distribution facilities, mills, cereals, Omikhta EM plants, as well as bakeries and pasta factories, starch, breweries and distilleries.

The reasons leading to spoilage during storage of grain and cereals, ignorance of the causes of wastefulness of grain and a decrease in grain quality during storage lead to great spoilage. This, in turn, burdens the achievements of agricultural production aimed at increasing the yield of galla, and demoralizes production and harvesting. The grain storage process is the final stage in grain production, it is the science of grain and the object of storage puzzle affects the properties of the grain pile, as well as the physical, chemical and biological factors affecting the condition of the grain.

Current tasks for the storage of grain products. In the interests of the national economy and consumers, the following issues will be raised on the storage of grain products in autumn. 1. Storage of grain products without loss or with minimal loading by weight. 2. Storage of grain products without deterioration of their quality. 3. Improving the quality of cereals during storage. 4. Reducing the consumption of cocktails during the storage of cereals.

Description of The Botanist. There are two distinct types of millet: common millet (Panicum miliaceum L.) and landing (Setaria Italica L.). A simple millet ball is a shawl, a spike-shaped shawl on a landing. Italian millet of landing (S. italica) to two younger species. italica maxima A1 is a tall, growing season long, well-developed plant and S. italica mocharium Al. - relatively low height, the growing season is divided into short mold. In Italian millet or landing, the tubers reach a length of 15-30 cm. It is widespread in Uzbekistan, Kazakhstan, Kavkazorti and is grown for its grain and green mass. Mold is planted mainly for cereals, sometimes hay or green food. The most common type is common millet. Common millet (Panicum miliaceum L.) is an annual crop. It has 5 youngest types: scattered, scattered, tigiz (bent), semi-com or oval and Com. The weight of 1000 grains of millet is 5-10 g, the grain has no furrow, no popilcha. Flower sawdust makes up 15-25% of the grain. When germinated, the seed produces 1 murtak Root, and the epicotile is developed. [1] the height of the STEM is 75-100 CM, the stems from the Bush node form branches (branch) from the ground upper branches of the stem. Forms 5-20 stems on one plant. Therefore, even when planted in wide rows, the number of stems 1 m2 does not decrease. Root system-Poplar, spreading to the soil to a depth of 105 cm, around 115 cm. The number of lateral roots reaches 120. [2] the degree of development of the root system depends on the variety, applied agrotechnics. Secondary roots are formed from the bushy branch of the plant. The increase in root mass mainly lasts from the bushing to the roasting. Joint roots are formed when the soil surface layer dries up will not, the plant will develop poorly. Only millet with murtak roots will be in a semi-lying position. In germination-clumping, roots account for 20% of the total biomass, 34% in clump-clumping, and 30% in clump-clumping. After rooting, root development slows down, it stops coming to flowering. From the bottom of the stem, the roots of air are formed. They increase the plant's resistance to drought, lying down. The peculiarity of

mastering the millet root system is less than that of oats and barley. It therefore produces high yields on newly acquired land.

Drying of grain mass during storage. To do this, grain-receiving enterprises use grain cleaners of various brands and capacities. Due to the fact that the harvest season of grain crops in our region coincides with the hot and dry period, the permissible moisture content of grain is about 8-9%. For this reason, in most cases it is necessary to use a dryer. every load.

Ventilation of grain mass during storage. To create a comfortable temperature regime for storing grain and cereals, ventilation will be required. For this purpose, a system of transport mechanisms and grain cleaning machines or special active ventilation equipment are used. Natural or refrigerating air can be used as a cooling agent.

Food products (bread, cereals, pasta, etc.) obtained from ear grains, necessary for human life are important consumer goods. In addition, grains of ear, legumes and oilseeds and seeds play a huge role in human life. Studies of food consumption in the world show that 50% of protein substances, 70% of carbohydrates and 15% of fatty substances are obtained from grains and seeds. Due to the seasonality of grain crops, they are grown all year round. There is a need for storage for various purposes. The centuries-old experience of the global scale shows that grain storage is a big and complicated matter. Despite the shortage of grain and leguminous products on earth, a significant part of them dies during storage and, as a result, does not meet the demand of individuals. According to the FAO (World Food and Agriculture Organization) indicator, the decrease in the mass of grain products for various reasons is 10...15%, which are stored in the quality of products is insidiously reduced. The above figures are average, and in most countries these figures show a different form. For example, in most countries of the African continent, the region of Southeast Asia, grain waste is 30% or higher. A cool climate, sufficient technical base and a qualified engineer and in states with personnel, grain waste is 1....5% [2].

References:

1. Gulshad K., Khurshida A. GRAIN RAW MATERIALS AND THEIR CLASSIFICATION //Intent Research Scientific Journal. – 2023. – Т. 2. – №. 5. – С. 61-64.
2. Gulshad, Kurbanbaeva, and Askarova Khurshida. "GRAIN RAW MATERIALS AND THEIR CLASSIFICATION." Intent Research Scientific Journal 2.5 (2023): 61-64.
3. Gulshad, K., & Khurshida, A. (2023). GRAIN RAW MATERIALS AND THEIR CLASSIFICATION. Intent Research Scientific Journal, 2(5), 61-64.
4. Kaypovna X. B. et al. HISTORICAL STAGES OF STORAGE AND PROCESSING OF GRAIN AND CEREALS //Intent Research Scientific Journal. – 2023. – Т. 2. – №. 7. – С. 95-98.
5. Kaypovna, Xojametova Bibimaryam, and Kurbanbaeva Gulshad Sarsenbaevna. "HISTORICAL STAGES OF STORAGE AND PROCESSING

OF GRAIN AND CEREALS." Intent Research Scientific Journal 2.7 (2023): 95-98.
6. Kaypovna, X. B., & Sarsenbaevna, K. G. (2023). HISTORICAL STAGES OF STORAGE AND PROCESSING OF GRAIN AND CEREALS. Intent Research Scientific Journal, 2(7), 95-98.

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MINIMALLY INVASIVE METHODS FOR TREATING PUROPENTAL-INFLAMMATORY DISEASES OF THE UTERINE APPENDIXES

Annotation. Purulent inflammatory diseases of the uterine appendages (PIUD) in women are a complex problem associated with serious medical, social and economic losses. The progress of surgical techniques and intensive care of the postoperative period for PIUD still does not exclude a high probability of developing a threat to the lives of women.

Key words: purulent inflammatory diseases, uterine appendage, antibacterial therapy.

Introduction. Treatment for PIUD is carried out simultaneously in two main directions. Firstly, the impact on the infection, including surgical sanitation of the primary focus, systemic antibacterial therapy, correction of the altered biocenosis of the main biotopes. Secondly, the effect on the patient's body is aimed at restoring homeostasis disorders, including organ disorders: respiratory support, infusion therapy and correction of hemostasis [1, 4]. It has been established that the successful outcome of treatment of a patient with an abdominal infection depends only 15-20% on effective antibacterial therapy, and 80% on adequate surgical sanitation [2]. There are several methods of surgical treatment of PIUD: transection, laparoscopy, colpotomy and drainage of abscesses under visual control. Proponents of minimally invasive navigational surgery under ultrasound and computed tomography control perform drainage of abscesses in the pelvis using a trocar technique or special needles through the anterior abdominal wall or through the posterior vaginal fornix. In this case, purulent exudate is aspirated and antibiotics are administered [5, 6].

The use of minimally invasive endovideosurgical methods is the most promising direction in the surgery of abdominal infections, and the intensity of their development allows us to hope for rapid and significant changes in emergency abdominal surgery [1, 6]. The development of endoscopic technology led to the introduction of laparoscopy in PIUD, first for diagnostic purposes and then for therapeutic purposes [2, 7]. Subsequently, thanks to the research of domestic and foreign scientists, the endoscopic approach gained recognition

among other methods of surgical treatment of PVD as the method of choice under equal conditions and the presence of the same indications for surgical treatment [5]. Differences in the approaches of gynecologists to endoscopic treatment mainly relate to the timing and frequency of procedures. Provided that the inflammatory exudate is completely removed, a single therapeutic and diagnostic laparoscopy is sufficient. For purulent salpingitis, pyosalpinx, tubo-ovarian abscess in women of the reproductive period, the optimal option is dynamic laparoscopy and active drainage of the small pelvis [2,3]. This approach is regarded as an option for organ-preserving operations [4]. Surgical interventions for acute HFMD pose a serious problem for the reproductive health of women and are the cause of infertility in 12.5–74.0% [3]. The second most important long-term complication in 50% of women is ectopic pregnancy. One episode of purulent salpingitis increases the risk of ectopic pregnancy by 7-10 times. Relapses of inflammatory diseases of the pelvic organs occur in 11.2% and increase the likelihood of infertility in the case of a single episode by 10%, in case of three episodes - by 40-60%. In 24-30% of cases, pelvic ganglioneuritis and pain syndrome develop in patients with inflammatory processes of the uterine appendages. Chronicity of the inflammatory process in the uterine appendages occurs in 17-85% of patients with delayed treatment. In patients with this pathology, after surgery the hormonal balance changes, which is manifested by hyperpolymenorrhea (38.5-50%), algomenorrhea (16.7-18%), hypomenorrhea (6.7-7.7%), anovulation (40%). With purulent inflammation of the uterine appendages, immune dysfunction is pronounced. Thus, there is an increase in the levels of tumor necrosis factor and interleukin 2, 6 in the blood serum and in remote organs tenfold and persists for a long time after surgery. In 82% of patients with HPVPM, there is a decrease in the production of embryotropic antibodies in the postoperative period. As a result of purulent intoxication, in a third of patients, lipid profile indicators change: the concentration of total cholesterol, levels of low-density lipoproteins, and atherogenicity coefficient increase, hypoestrogenism occurs, which complicates rehabilitation. In some cases, morphological changes in the ovarian tissue are so pronounced that it is not possible to differentiate the organ, while the concentration of estradiol and progesterone receptors in the ovary approaches zero. However, with unilateral purulent lesions of the uterine appendages, the receptors remain in the unaffected ovary [4]. In recent years, there has been an obvious and natural evolution of the etiological structure of severe infections in gynecology, associated with changes in the premorbid background of patients, the presence of complex hormonal disorders (including diabetes and obesity), chronic extragenital diseases, an increase in the number of immunocompromised patients and, no less important, the expansion of the scope and nature of invasive medical interventions, widely used antibiotic therapy and antibiotic prophylaxis, which constitutes a significant problem in the treatment of CVD [6]. Thus, understanding the peculiarities of the course of the purulent process of the uterine appendages and its outcome

contributes to the provision of adequate surgical care in the early stages of inflammation, dictates active management tactics for patients and the implementation of new and effective programs to prevent complications and their consequences. When deciding on a surgical approach in patients with HPVPM in an urgent situation, the main point is the preservation of the reproductive organs, especially in young and nulliparous women.

References:

1. Abdominal surgical infection: clinical picture, diagnosis, antimicrobial therapy: a practical guide / ed. V.S. Savelyeva, B.R. Gelfand. M.: Lit-terra, 2020. 168 p.
2. Adamyan L.V., Kiselev S.I., Yarotskaya E.L. and others. Surgical treatment of purulent inflammatory diseases of the uterine appendages. Endoscopy in the diagnosis, treatment and monitoring of female diseases: materials of the international. congr. / ed. IN AND. Kulakova, L.V. Adamyan. M.: Panto-ri, 2020. pp. 170-194.
3. Aylamazyan E.K. On specific diagnosis and conservative treatment of acute inflammatory diseases of the uterine appendages // Obstetrics and Gynecology. 2021. No.
4. P. 62-66. 4. Henri-Suchet J. Laparoscopic diagnosis and treatment of inflammatory diseases of the pelvic organs. Reproductive health: trans. from English / ed. L. Keita et al. M.: Medicine, 2020. I: 14. pp. 215-229.
5. Antonova L.V. Acute inflammatory diseases of the uterine appendages: etiology, clinical picture, diagnosis, therapy: abstract. dis....Dr. med. Sci. M., 2021. 36 p.
6. Braude I.L. On the surgical treatment of inflammatory diseases of the female genital area // Council. medicine. 2021. No. 8. P. 10-12.
7. Buyanova S.N., Shchukina N.A. Topical issues of diagnosis and tactics of management of patients with purulent inflammatory diseases of the uterine appendages // Proc. I Congress of Russia Association of Obstetricians and Gynecologists. M., 2019. pp. 143-144.

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THE ROLE OF FOLATE METABOLISM IN THE DEVELOPMENT OF CERVICAL DISEASES

Annotation. Cervical cancer is one of the few cancers that can be prevented. When it is diagnosed at an early stage, the disease is more amenable to effective treatment, which increases overall and relapse-free survival, improves the quality of life of patients, and reduces the cost of treatment. According to international guidelines, Human Papillomavirus (HPV) DNA tests represent a valid alternative to Pap Test for primary cervical cancer screening, provided that they guarantee balanced clinical sensitivity and specifcity for cervical intraepithelial neoplasia grade 2 or more (CIN2+) lesions. The study aimed to assess whether HPV Selfy (Ulisse BioMed – Trieste, Italy), a full-genotyping HPV DNA test that detects and diferentiates 14 high-risk HPV (HR-HPV) types, meets the criteria for primary cervical cancer screening described in the international guidelines, on clinician-collected as well as on self-collected samples.

Keywords: diseases of the cervix, oncogenic types of HPV, folate metabolism.

Introduction. Pathology of the cervix (CC) is one of the most common gynecological diseases, especially in antenatal clinics - 25-45%. In gynecology and obstetrics, early diagnosis and adequate treatment of background and precancerous diseases, as well as initial forms of cervical cancer, remain one of the most important problems [1]. Cervical cancer (CC) is a major public health problem in Uzbekistan. According to the International Agency for Research on Cancer IARC (IARC) estimates for 2018, cervical cancer is the second most common type of cancer among women in Uzbekistan after breast cancer and the third most common cause of death of women from cancer in Uzbekistan. According to estimates for 2021, the age-standardized incidence and mortality rates are 5.3 and 2.9 per 100,000 women per year, respectively. According to the national cancer registry, in 2021 in Uzbekistan, the number of initially diagnosed cases of cervical cancer in the republic was 1827, 997 cases of death from cervical cancer were registered with the following distribution of cases by stages: stage-I: 12%, stage-II: 54, 1%, stage-III: 23.6%, stage-IV: 5.3%. Every year in Europe,

more than 25,000 cases of cervical cancer are diagnosed and about 12,000 deaths from this disease, which exceeds the number of deaths from AIDS and hepatitis combined [2,3]. The etiological link between persistent HR-HPV infection and the development of high-grade cervical dysplasia and cervical cancer is well established. The two oncogenic HPV types that most commonly cause cervical cancer are types 16 and 18. Together they cause approximately 70% of cervical cancers. of the uterus in all countries of the world, unfortunately, the incidence of cervical cancer prevails in developing countries. CC is one of the few cancers that can be prevented [2,4]. Early diagnosis of precancer provides for the possibility of primary and secondary prevention. Primary prevention is a system of measures to identify risk factors for the development of cervical cancer and eliminate them. This is primarily the promotion of a healthy lifestyle, increasing the education of the population, the fight against smoking, the use of barrier methods of contraception, the prevention and identification of risk factors for the spread of human papillomavirus infection (PVI) and other sexually transmitted infections (STIs), the development and implementation of preventive vaccines. Secondary prevention is cervical screening, that is, examination of all women in order to detect changes in the cervical epithelium and timely treatment of precancer and cervical cancer [5]. Cervical cancer of the brand is one of the few forms of malignant neoplasms that satisfy all the requirements of population screening, i.e. is an almost completely preventable disease [4,5]. The Regional Consultative and Diagnostic Center has accumulated 10 years of successfull experience in identifying, treating and monitoring patients with cervical pathology, i.e. with background and precancerous processes. Algorithms for diagnosing monitoring of patients have been developed. Improvement of screening programs and methods of early diagnosis of precancerous diseases of the cervix contributes to the prevention of invasive cervical cancer. Various methods are used in the diagnosis of precancerous diseases and cervical cancer (CC), but the most accessible for practice are the clinical-visual method, the use of colposcopy, molecular biological methods for detecting NVI (polymerase chain reaction - PCR), cytological examination of smears and histological examination targeted biopsy of the cervix.

Summarizing the information presented, it should be noted that diagnostics aimed at predicting the pathology of the cervix should be based on the cytological method, supported by PCR diagnostics of the human papillomavirus and the introduction of molecular biomarkers [5]. Methods for early diagnosis and the introduction of new screening technologies for diseases of the cervix open up additional opportunities for the prevention of cervical cancer, which is the basis for reducing diseases in general and opens up prospects for maintaining women's health.

Background: To investigate the effect of folate status on cervical intraepithelial neoplasia (CIN) progression and its relationship with high-risk human papillomavirus (hrHPV).

Subjects and methods: We evaluated 20 000 sexually active women aged <65 years in Andijan region by using a questionnaire; the subjects were also screened using the CIN-DIAG cytologic test. Patients with abnormal CIN-DIAG results (other than glandular cell abnormalities) who were willing to provide informed consent were further diagnosed using colposcopy and histopathological examination. We investigated 247 cases of low-grade cervical squamous intraepithelial lesions (LSIL), 125 cases of high-grade cervical squamous intraepithelial lesions (HSIL) and 877 controls. A 24-item food frequency questionnaire was filled out by the investigator to estimate the consumption of dietary folate. Positivity for hrHPV from residual exfoliated cervical cells was tested; serum folate was also measured. Results: The hrHPV infection rate in HSIL patients (77.6%) was higher than that in LSIL (33.2%) and control (32.0%) patients. Dietary folate intakes in controls, LSIL and HSIL were 306.9±176.6, 321.8±168.0 and 314.7±193.8 μg/kcal, respectively. The levels of serum folate in controls, LSIL and HSIL were 18.2±7.9, 15.9±7.1 and 14.3±7.5 nmol/l, respectively. Increased CIN correlated with higher rates of hrHPV infection and lower levels of serum folate.

Conclusions: Low levels of serum folate may increase the risk of CIN progression.

References:

1. Sukhih GT, Prilepskaya VN, ed. Prevention of cervical cancer: A guide for physicians. 3rd ed. Moscow: MEDpress-inform; 2016. 192p.
2. Rogovskaya S.I. Papillomavirus infection in women and pathology of the cervix: to help the practitioner. 2nd ed. Moscow: GEOTAR-Media; 2018. 192p.
3. Stern P.L., G.S. Kitchener G.S., eds. Vaccine for the prevention of cervical cancer: Per. from English Sukhikh G.T., Prilepskaya V.N., ed.M.: MEDpress-inform; 2019.192s
4. Bleotu C., Botezatu A., Goia C.D., Socolov D., Corniţescu F., Teleman S. et al. P16ink4A-A possible marker in HPV persistence screening. room. Arch. microbiol. Immunol. 2019; 68(3): 183–9.
5.Davey E., Barratt A., Irwig L., Chan S.F., Macaskill P., Mannes P., Saville A.M. Effect of study design and quality on unsatisfactory rates, cytology classifications, and accuracy in liquid-based versus conventional cervical cytology: a systematic review. Lancet. 2016; 376(9505): 122–32.

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INTRODUCTION INTO PRACTICE OF MEDICAL OZONE IN IN THE PREVENTION COMPLEX OF FETOPLACENTAL INSUFFICIENCY IN WOMEN INFECTED WITH COVID-19

Annotation. Coronavirus infection (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Pregnancy is a physiological condition in which women are more susceptible to respiratory diseases viral infections due to physiological changes in the immune and cardiopulmonary systems and constitute a risk group on severe respiratory viral infections.

Key words: Coronavirus infection, ozone therapy, fetoplacental insufficiency.

Prevention and treatment of chronic placental insufficiency remains one of the priorities of modern obstetrics. The importance of the problem is related to the increase in complications of the pregnancy process, and the development of this syndrome leads to an increase in perinatal morbidity and mortality. In clinical practice, chronic placental insufficiency occurs in every third pregnant group with a high risk of perinatal pathology, as part of the causes of perinatal death in 30-100% of cases, it aggravates the course of pregnancy with extragenital pathology and obstetric complications. The use of medical ozone in the complex for the treatment of placental insufficiency of medical ozone with multifactorial non-specific effects is considered promising. According to clinical and experimental studies, ozone therapy stimulates the hormone-producing function of the fetoplacental complex, enhances the activity of immunocompetent cells, improves blood rheology and oxygen transport function, antioxidant protection, increases arterial oxygen tension, and activates the body's enzyme systems. The effect of ozone therapy on nitric oxide exchange in the maternal-placental-fetus system in hypertensive pregnant women was studied. However, in the literature available to us, there is no information about the role of nitric oxide in the development of FPI in women with infectious-inflammatory etiology and the possibility of using medical ozone in the treatment of this contingent. Fundamental biochemical, immunological, morphological, ultrastructural, physiological studies and clinical trials of parenteral use of ozonized solutions indicate high efficiency in activating

the microsomal system of the liver, optimizing the antioxidant activity of the body. Thus, it becomes possible to use ozone in clinical toxicology in the toxicogenic and somatogenic stages, as a powerful antihypoxic and antioxidant agent. Ozone (Oz) is an allotropic form of oxygen, a gas with a pungent characteristic odor. Ozone is a much stronger oxidizing agent than oxygen. In this regard, ozone oxidizes many substances that are inert to oxygen under normal conditions. Characteristic products of a number of chemical reactions of ozone are ozonides, which are formed during the reaction of ozone with C=C bonds. Numerous studies have shown that therapeutic doses of ozone stimulate the antioxidant system and reduce the intensity of lipid peroxidation (LPO). In the process of ozone therapy, the initial activation of free radical oxidation under the influence of ozone therapy naturally occurs, since ozone, oxygen and free radicals are introduced into the body, but at the same time, the antioxidant system (AOS) is quickly launched, which ozone indirectly stimulates. Regulation of LPO and AOS processes in the body, apparently, is one of the mechanisms of the therapeutic effect of ozone therapy. At the same time, many authors consider LPO activation to be one of the universal pathogenetic factors in various diseases. The pathogenetic expediency of using medical ozone (correcting uteroplacental-fetal blood flow, improving hemorheological properties of blood, immune and biochemical parameters of homeostasis of a pregnant woman) fully extends to the newborn, whose adaptive capabilities increase significantly.

The purpose of the study: Study of the effectiveness of using medical ozone in the FPY prevention complex in pregnant women infected with Covid-19.

Research tasks: To study the effect of medical ozone on indicators of nitrogen exchange in the maternal-placental-fetus system in pregnant women infected with Covid-19 and to evaluate its effectiveness. To determine the results of pregnancy and childbirth, the condition of pregnant women and newborns who received complex therapy from Covid-19 in a place equipped with ozone therapy.

Changes in hematological, immunological, biochemical, microbiological and instrumental research methods were evaluated. It is known that the activation of the nitrate reductase enzyme in the L-arginine-nitric oxide system due to increased production of nitric oxide and disruption of nitric oxide metabolism may be one of the reasons for the development of fetoplacental insufficiency in pregnant women. The use of ozone therapy for the treatment of FPY in this group of women who underwent Covid-19 has been approved.

Practical significance: The ozone therapy method is being introduced into clinical practice in the complex for the treatment and prevention of fetoplacental insufficiency in pregnant women infected with Covid-19. The use of ozone therapy in pregnant women who have passed Covid-19 allows to significantly improve clinical and laboratory indicators, the condition of organs and systems, which helps to prolong pregnancy, reduce the frequency of pregnancy

complications, for the fetus and the newborn. provides a more favorable prognosis.

Conclusion Thus, FPI largely determines the condition of the newborn, increasing the frequency of various complications, mainly associated with insufficient supply of oxygen and nutrients to the fetus through the placenta. At the same time, the use of medical ozone as part of the complex therapy of FPI helps to reduce the severity of such manifestations, bringing it closer to the average population.

References:

1. Voloshchuk I.N. Morphological bases and pathogenesis of placental insufficiency: dis.... dr. honey. Sciences. Moscow, 2022. 298 p.
2. Khachaturova M.D., Fedorovich O.K., Novikova V.A. and other Features of the treatment of placental insufficiency in violations of the fetal-placental blood flow / Proceedings of the IX Russian Forum "Mother and Child". Moscow. 2017. S. 279-280.
3.Barry J.S., Rozance P.J., Anthony R.V. An animal model of placental insufficiency-induced intrauterine growth restriction. Semin Perinatol. 2018. Vol. 32. № 3. P. 225-230.
4. Black L.V., Maheshwari A. Disorders of the fetomaternal unit: hematologic manifestations in the fetus and neonate. Semin Perinatol. 2019. Vol. 33. № 1. P. 12-19.
5. Ergaz Z., Avgil M., Ornoy A. Intrauterine growth restriction-etiology and consequences: what do we know about the human situation and experimental animal models. Reprod Toxicol. 2020. Vol. 20. № 3. P. 301-322.
6. Glukhovets B.I., Rets lu.V. Fetal compensatory and abnormal reactions in fetoplacental insufficiency. Arkh Patol. 2018. Vol. 70. № 2. P. 59-62.
7. Bernstein DI, Bellamy AR, Hook EW et al. Epidemiology, clinical presentationand antibody response to primary infection with herpes simplex virus type 1 and type 2 in young women 35:599. 2020.
8. Xu F, Sternberg MR, Kottiri BJ et al. Trends in herpes simplex virus type 1 and type 2 seroprevalence in the United States. JAMA 2006; 296: 9644. Workowski KA, Bolan GA, Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. MMWR Re-comm Rep 2020; 64:1

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BOSHLANG’ICH SINFLARDA MUSIQA MADANIYATI DARSLARIDA INNOVATSION TEXNOLOGIYALARDAN FOYDALANISH

Annotatsiya: Musiqa madaniyati darslarida innovatsion texnologiyalardan foydalanish, o‘quvchilarning o‘zlashtirish va ma’naviy rivojlanishlarini oshirishga yordam berishi, innovatsion texnologiya o‘quvchining ma’naviy salohiyatini rivojlantiribgina qolmay, balki uning hissiy o‘sishida ham katta yordam berishi haqida so‘z yuritilgan.

Kalit so‘zlar: innoyatsiya, musiqa madaniyati, rivojlanish, ma’naviy salohiyat, san’at.

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USE OF INNOVATIVE TECHNOLOGIES IN MUSIC CULTURE LESSONS IN PRIMARY GRADES

Abstract. The article talks about the use of innovative technologies in music culture classes, which helps to increase the spiritual development of students, and how innovative technology not only develops the spiritual potential of the student, but also greatly helps in his emotional growth.

Key words: innovation, music culture, development, spiritual potential, art.

Musiqiy ta’lim har bir inson hayotida muhim o‘rin tutadi. Badiiy tasvir, ijodkorlik va ilhom baxsh etgan musiqa o‘ziga xos tushunchadir. U bolalarda noan’anaviy fikrlash, ijodkorlik hissi va dunyoni aks ettirish qobiliyati, mustaqil hayotiy pozitsiyani shakllantiradi. Musiqa darslarida innovatsion dasturni qo‘llash uchun bir qancha omillarni asos qilib olish mumkin. Bu, asosan, boshlang’ich sinf yoshidagi bolalarni o‘qitish jarayonida asosiy fikrlarni aniqlash imkoniyatini vujudga keltiradi. Boshlang’ich maktab yoshidagi bolalarni tarbiyalash bugungi kunda ko‘p mezonlarga muvofiq yangilanishi zarur. Musiqa darsida o‘quv jarayonini tashkil etishda, avvalo, o‘qituvchi hissiy(psixologik) atmosferaga ta’sir o‘tkazishi kerak. Yangi mavzuni zavq bilan o‘tishi, “o‘qituvchi-do‘st”, “o‘qituvchi-hamkor” formulasi orqali darsda ijodiy muhit yaratish eng samarali yo‘ldir. Dars yakuniga qadar o‘qituvchi faqatgina o‘zi so‘zlashi, o‘quvchilarni muloqotga undamasligi aslo mumkin emas. O‘qituvchi

o‘zi berayotgan yangi ma’lumotga o‘quvchilardan qo‘shimcha ma’lumot ham talab etishi kerak. Chunki bugungi davr o‘quvchilari uzluksiz internet tarmog’i orqali ko‘plab yangiliklardan xabardor bo‘lib turadi. Hayotimizni musiqasiz tasavvur etolmaymiz. Ammo beixtiyor o‘z istaklarimizga ko‘ra ularni tanlaymiz. Masalan, bolalarni klassika bilan tanishtirish, ularda bu janrga muhabbat uyg’otish va konsert zallarida tinglash mumkin bo‘lgan musiqa ekanligini tushuntirish mumkin. Bunda klassik, pop, rok janrlarining tarkibiy qismini aks ettiradigan asarlarni tanlashimiz samara beradi. Ushbu uslublar yordamida bolalar o‘zlarining ruhiga yaqin ritmlar orqali mumtoz musiqa bilan tanishadi.

Musiqa darsi o‘z tabiatiga ko‘ra ham san’at, ham tarbiya darsidir. Uni rang –barang, sermazmun va qiziqarli tashkil qilish har bir o‘qituvchidan katta pedagogik va professional mahorat talab qiladi. “Bolalarni san’atga o‘rgatish nihoyatda murakkab” – deb ta’kidlaydi taniqli kompozitor – pedagog D.B.Kabalevskiy, - hamma murakkabligi shundaki, ularni emotsional tarzda qiziqtirmay turib chinakam san’atga o‘rgatish mutlaqo mumkin emas. Bu o‘rinda musiqiy mashg’ulotlar jarayonida o‘quvchilarning ijodiy faolligini ta’minlash alohida ahamiyatga molik. Musiqani tushunish, uning hissiy - emotsional ta’siridan bahramand bo‘lish bilim, malaka va ko‘nikmalar qatori emotsional his – tuyg’ularning ishtirokiga ham bog’liq. Asarni ijro va idrok etishda his – tuyg’ular qanchalik faol va chuqur bo‘lsa, ularni tushunish va o‘zlashtirish, ta’sirlanish shuncha ongli va samarali bo‘ladi. Bu holatlar esa o‘z o‘rnida ijodiy faollik natijasida sodir bo‘ladigan jarayondir. Zero, zerikarli va bir xillik sinfda jonli hissiyot holatini vujudga keltira olmaydi. O‘quvchilarni darsga qiziqtirish birinchi navbatda tinglash va ijro etish uchun tanlanadigan repertuar va uslublarga (an’anaviy yoki interfaol metodlar) bog’liq.Boshlang’ich sinflar uchun tanlanadigan asarlar repertuarining asosiy mezoni ularning yoshi, qiziqishi, bilim va malakalari, ko‘nikmalari darajasiga bog’liq. Shunga muvofiq qo‘llaniladigan metodlar ham ko‘proq o‘yin xarakterida bo‘lishi maqsadga muvofiq bo‘ladi. Sho‘x, o‘yinbop, raqs ishtirokida turli musobaqa tarzida uyushtiriladigan va tematikasi bolalar dunyosiga mos ertak qahramonlari, hayvonlar, parrandalar, o‘simliklar, tabiat manzaralari, qushlar obrazlari bilan bog’liq asarlar o‘quvchilarda darsga nisbatan qiziqish va havas uyg’ota oladi, estetik hissiyotlarini, musiqiy qobiliyatlarini o‘stirib boradi. Bu o‘rinda zamonaviy qo‘shiqlar qatori xalq qo‘shiqlaridan, qardosh xalqlar va kompozitorlari asarlaridan foydalanish darslarni yanada sermazmun va faol bo‘lishini ta’minlaydi, yoshlarda xalq musiqa merosiga bo‘lgan mehr va muhabbat tuyg’ularini shakllanishiga kuchli ta’sir etadi. Har bir darsda ijodiy faollik yuzaga keladi.

Qo‘shiqni o‘rganish va uni ijro etish jarayonida innovatsion yondashish ham mumkin. Bugungi kunda bolalar o‘zini haqiqiy san’atkor kabi his etish imkoniyati mavjud. Ular dars davomida fonogramma(minus) asosida qo‘shiq kuylashi mumkin. Musiqa darsining ijod namunasi ekanligini tushunish va

boshlang’ich maktab yoshidagi bolalar uchun bunday dars texnik jihatdan jihozlangan sinfda (kompyuter, audio tizim, konsol, mikrafonlar va boshqalar) yorug’ xonada o‘tkazilishini ta’minlash zarur. Zamonaviy musiqa darsining bu kabi ko‘rinishi — XXI asrning musiqiy sabog’idir.
Bugungi kunda musiqa darsiga qo‘yiladigan talablar o‘zgardi. Endi dars yangi shakllarni izlash tamoyiliga asoslanadi. Ushbu jarayonlarni chuqur his etgan o‘qituvchi har bir darsga innovatsion tarzda yondashadi. Zamonaviy o‘qituvchi - kelajak bunyodkori, yangi pedagogik texnologiyalar, nazariyalar, konsepsiyalarning muallifi, ishlab chiqaruvchisi, tadqiqotchisi, foydalanuvchisi va targ’ibotchisidir.

Pedagogik maqsadning o‘ziga xosligini quyidagilarda bilish mumkin:

Pedagogik faoliyatning maqsadi jamiyat tomonidan belgilanadi, ya’ni pedagogik faoliyatning natijasi jamiyat manfaatlari bilan bog’liqdir. Pedagogik faoliyat avlodning ijtimoiy uzviyligi (ketma-ketligi)ni ta’minlaydi. Pedagog o‘z faoliyati maqsadini va unga erishish yo‘llarini aniq tasavvur qilishi hamda bu maqsadga erishish o‘quvchilar uchun ham ahamiyatli ekanligini ularga anglata olishi zarur. Gyote ta’kidlaganidek: «Ishonch bilan gapir, ana shunda soz ham, tinglovchilarni mahliyo qilish ham o‘z-o‘zidan kelaveradi».

Shunday qilib, pedagogik faoliyat maqsadining o‘ziga xosligi o‘qituvchidan quyidagilarni talab qiladi:

- jamiyatning ijtimoiy vazifalarini to‘la anglab, o‘z shaxsiga qabul qilishi. Jamiyat maqsadlarining «o‘sib», uning pedagogik nuqtai nazariga aylanishi;
- muayyan harakat va vazifalarga ijodiy yondashishi;
- o‘quvchilar qiziqishlarini e’tiborga olish, ularni pedagogik faoliyatning belgilangan maqsadlariga aylantirish.

Pedagogik faoliyatning o‘ziga xosligi quyidagilarda namoyon bo‘ladi:

Inson o‘zining alohida xususiyatlariga ega bo‘lgan, ro‘y berayotgan voqealarni idrok qila oladigan va ularga o‘zicha baho beradigan takrorlanmaydigan faol mavjudotdir. U pedagogik jarayonning o‘z maqsadi, ishtiyoqi va shaxsiy xulqqa ega bo‘lgan ishtirokchisi hamdir.

Xulosa

Musiqa madaniyati darsida o‘qituvchining mahorati har tomonlama yuksak darajada bo‘lishi lozim. Uning asar haqidagi kirish so‘zi va dars mavzusini tushuntirib berishi, o‘quvchilarni ajoyib va sehrli san’at - musiqa olamiga olib kiradi. Va qiziqarli suhbat bilan bolalar diqqatini musiqa mavzulariga yo‘naltirishi mumkin. O‘qituvchining musiqa asari haqidagi hikoyasi qisqa, qiziqarli bo‘lishi kerak va o‘quvchilarni badiiy idrok etishga erishtirishi lozimdir.

Dars davomida o‘qituvchi o‘quvchilar bilan muloqot usulini qo‘llasa, musiqa haqida to‘g’ri mulohaza yuritishga, aniq xulosalar chiqarrishga yordam beradi. Suhbat jarayonida ko‘proq o‘quvchilar baxsga o‘tadilar. Bu faoliyatida o‘qituvchi rejissyor singari ularni boshqarib, to‘g’ri xulosalarga erishtirilishi lozim.

Musiqa va innovatsiya, o’quvchilarga kreativlik va yaratuvchanlik qobiliyatini rivojlantirishda katta ahamiyatga ega. Innovatsion texnologiyalar, musiqa madaniyati darslarini o‘zlashtirish va o‘quvchilarni yangi texnologiyalar orqali musiqaga qiziqishlarini oshirishda keng imkoniyatlarni ochadi. Virtual darslar, interaktiv dasturlar, onlayn musiqa platformalari orqali o‘quvchilar, musiqa tarixini, ko‘ngil ochadigan musiqaviy usullarni va jamoat bilan bog’liq musiqa tadbirlarini o‘rganishlari mumkin. Bu ularning kreativlik va ko‘nikmalarini rivojlantirishga xizmat qiladi.

Adabiyotlar:

1.Sh.M. Mirziyoyev. Buyuk kelajagimizni mard va oliyjanob xalqimiz bilan quraylik. –T.: “O’zbekiston”, 2017.
2. Ishmuxamedov R.J. Innovatsion texnologiyalar yordamida ta’lim samaradorligini oshirish yo’llari. T.2004
3. L.B.Umurzoqova “Роль музыкального образования развитии личности” 2022.

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KARBYURATORLI DVIGATELNING TA’MINLASH TIZIMINING VAZIFASI VA UMUMIY TUZILISHI

Annotatsiya: ushbu maqolada karbyuratorli dvigatelning ta’minlash tizimining vazifasi, sxemasi va uning umumiy tuzilishi haqida ma’lumotlar keltirilgan.

Kalit so’zlar: yonilg’i, karbyuratorli dvigatel, gaz, benzin, aralashma, asboblar.

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FUNCTION AND GENERAL STRUCTURE OF THE SUPPLY SYSTEM OF A CARBURETOR ENGINE

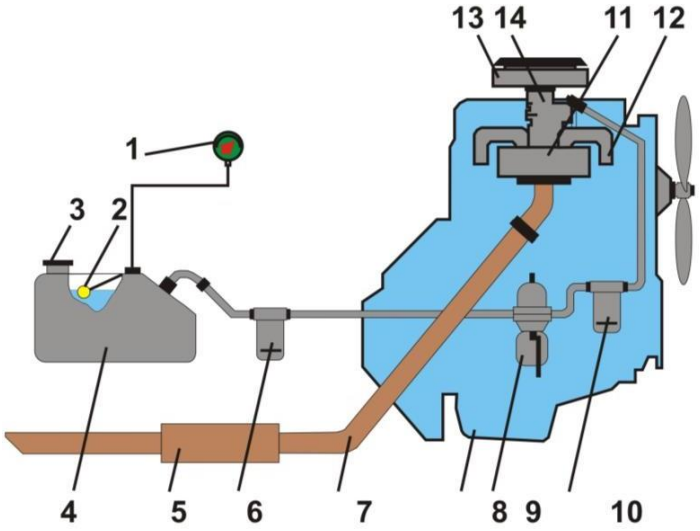
Annotation: this article presents information about the function, scheme of the supply system of a carburetor engine and its general structure.

Keywords: fuel, carburetor engine, gas, gasoline, mixture, tools.

Yonilg’i bilan ta’minlash bilan tizimi ma’lum miqdordagi yonilg’ini o’zida saqlash, yonilg’i bilan xavoni tozalash, ularda kerakli tarkibda yonuvchi aralashma tayyorlash, aralashmani silindirga kiritish hamda ishlatilgan gazlarni tashqariga chiqarib yuborish uchun xizmat qiladi.

1-chizmada karbyuratorli dvigatelning yonilg’i bilan ta’minlash tizimi asboblarining joylashish chizmasi ko’rsatib o’tilgan.

1-chizmada karbyuratorli dvigatelning yonilg’i bilan ta’minlash tizimi asboblarining joylashish chizmasi ko’rsatilgan.



Yonilg’i benzabank 12 dan naycha 9 orqali tozalagich 7 o’tib, undan benzanasoz 6-yordamida bosim ostida naycha 5 ga va undan karbyuratorga yuboriladi. Tashqi muhitdan xavo tozalagich 1 org’ali koordinator 2 ga suriladi. Karbyuratorda tuzilgan va qisman bug’langan benzin xavo bilan qo’shilib yonuvchi aralashmasini hosil qiladi. So’ng yonuvchi aralashmasi kiritish quvuri 3 orqali silindrga so’riladi, ishlatilgan gazlar esa chiqarish quvuri va oraliq quvuri 8 orqali so’ndirgich 10 ga kirib, 11 dan tashqi muhitga chiqariladi.

Benzobank 12 dagi yonilg’i sathi qalqovuch 15 yordamida kabinaga o’rnatilgan manometr 16 bilan aniqlanadi. Benzobankning yonilg’i quyish bo’g’izi

13 qopqoq 14 bilan jips qilib berkitilgan. Bunda yonilg’i aralashmasi silindr tashqarisida tayyorlanadi. Yonilg’i aralashmasni bunday tayyorlash karbyuratsiya, uni tayyorlovchi asbobni karbyurator deb ataladi.

Karbyuratorli dvigatellarda yonilg’i sifatida eng asosan benzin ishlatiladi. Benzinning sifati uning isssiqlik berish qobilyati, solishtirma og’irligi, bug’lanuvchanligi va zudlik Bilan portlashga (detonattsiyaga) moyilligi bilan ham aniqlanadi. Benzinning solishtirma og’irligi 700-760 kg/m^3, muzlash xarorati– 250^{0}S.

1 kg benzin to’la yonib bo’lganda xosil bo’lgan issiqlik miqdori 44000-46000 kJ, buni issiqlik berish qobiliyati deyiladi. Benzinning suyuq holatdan bug’ holatga o’tishi uning haroratini belgilaydi. Bu harorat qancha past bo’lsa, benzinning sifati hamda bug’lanuvchanligi shuncha yuqori bo’ladi. Benzinning detanattsiyaga moyilligi deb yonilg’i aralashmaning 25-35 m/s tezlikda to’liqsiz detonattsiyasiz yonishiga aytiladi. Yonilg’i aralashmasini bir qismi 1500-2000 m/s tezlikda zarbali to’lqin hosil qilib shiddat bilan yonishini portlab (detonattsiyali) yonish deyiladi. Benzinning portlashga qarshi chidamliligini oktan soni bilan aniqlanadi. Benzinning oktan soni qancha yuqori bo’lsa, u portlashga shuncha chidamli bo’ladi. Avtomobil benzinlarining oktan soni 66-96

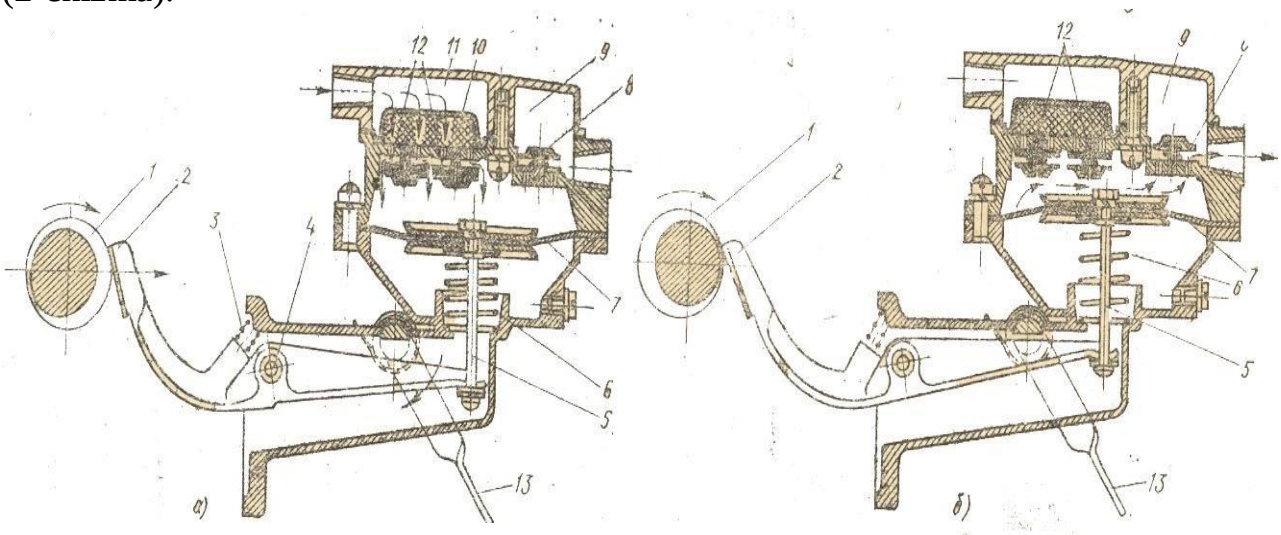
bo’ladi. Benzin portlashga chidamliligini oshirish uchun uncha portlashni susaytiruvcha modda antidetoktor qo’shiladi. Antidetoktor moddaga etil suyuqligi kiradi, bir litr benzinga 1,0 sm^3 etil suyuqligi qo’shiladi. Bunday benzin etillangan benzin deyiladi. Etil suyuqligi o’ta zaharli bo’lgani sababli, etillangan benzin ham zaharli bo’ladi. Etillangan benzinni oddiy benzindan ajratish oson bo’lishi uchun uncha qizg’ich-sariq yoki ko’k-yashil bo’yoq qo’shib rangi o’zgartiriladi.

Avtomobil dvegatellari uchun GOST bo’yicha quyidagi belgili benzinlar ishlab chiqariladi: A-72, A-76, AI-93, AI-98.

Benzin belgilaridagi A harfi avtomobil benzini ekanligini, raqamlar esa oktan sonini ko’rsatb beradi.

ZMZ-53, ZIL-130 va GAZ-2401 dvegatellari uchun A-76, Moskvich-2140, VAZ-2106, GAZ-24D dvigateli uchun AI-93 markali benzin ishlatiladi. Kuchaytirilgan dvegatellar uchun AI-98 yuqori sifatli benzin ishlatiladi (ZIL-117).

Karbyuratorli dvigatellarda diafragma turidagi yonilg’i nasosi ishlatiladi (2-chizma).



2-chizma. Diafragma turidagi yonilg’i nasosi.

Diafragmali yonilg’i nasosi yonilg’ini bakdan karbyuratorning qalqovichli bo’linmasiga uzatish uchun xizmat qiladi. Diafragma turdagi yonilg’i nasosi eng ko’p tarqalgandir.

Nasos qopqog’i bilan g’ilof orasiga diafragma o’rnatilgan bo’lib, uning o’rta qismi sterjin 5 ga tutashgandir. Sterjenning pastgi uchi ishlatish koromislosi 2 ning uchiga mahkamlangan.

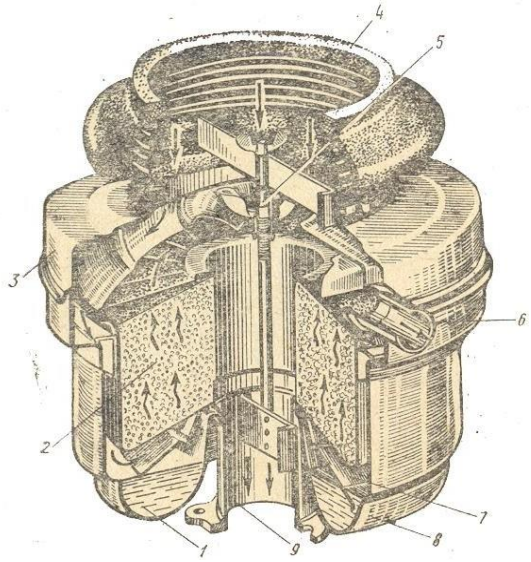
Dvigatel taqsimlash valining eksentrliga 1 nasos koromislosi 2 ning tashqi uchini bosganda sterjen 5 diafragma 7 ni pastga tortadi. Diafragma ustidagi bo’shliqda siyraklanish hosil bo’lib, uning ta’sirida kiritish klapani 12 ochiladi. Bakdan chiqayotgan yonilg’i turli tozalagich 10 dan o’tib, diafragma ustidagi bo’shliqni to’ldiradi. Ektsentrik koromislodan tushganda prujina 6 koramiloni dastlabki holatga qaytaradi. Shu vaqtda diafragma 7 purjina 6 ta’sirida yuqoriga egiladi. Diagrafagma ustiga kirgan yonilg’i bosimi ta’sirida kiritish klapani 12

yopiladi va chiqarish klapani 8 ochiladi. Natijada yonilg'i nasosdan karbyuratorning qalqovichli bo'linmasiga kirib boradi.

Dvigatelni yurgizish uchun karbyuratorning qalovichli bo'linmasini yonilg'i bilan to'ldiriladi. Buning uchun yonilg'i uzatish richagi 13 ni qo'lda harakatlantiradi, u nasos diafragmasi bilan bog'langan. Diafragma lak-to'qima yoki rezina qo'shilgan to'qimadan, klapanlar benziga chidamli rezinadan, ularning purjinalari esa bronza simdan tayyorlangan.

Karyubratorga kirayotgan havo tarkibidagi rang silindrlarga kirishi natijasida dvigatel qismlari tez yeyiladi. Shuning uchun ta'minlash tizimiga havo tozalagich o'rnatilgan. U dvigatel silindrlariga kirayotgan havoning rangdan tozalash uchun xizmat qiladi. Havo tozalagich karbyuratorning yuqorigi qismiga o'rnatilgan. Avtomobil dvigatellarida enertsiyali–moyli havo tozalagich turi keng tarqalgan.

Enertsiyali moyli havo tozalagich (3-chizma) da tasvirangan bo'lib u g'ilof, barashkali gayka 2 bilan sterjen 3 ga o'rnatilgan tozalagich, moy vannasi 7, dvigatel karterga tutashtirish nayi 6 dan tuzilgan.



Enersiyalik moyli tozalagichda havo ikki marta tozalanadi. Havo oqimi siyraklashishi ta'sirida pastga yo'nalib va moy sirtiga uriladi (chang zarralari moyda qoladi) va yo'nalishini keskin o'zgartirib, tozalagich 1 orqali karyubratorning kirishi patrubogiga kiradi.

Foydalaniladigan adabiyotlar:

1. Mamatov.X. Avtomobillar. 1-qism. -T.: O'qituvchi, 1995.-272 b.
2. Mamatov.X. Avtomobillar. 2-qism.-T.: O'qituvchi, 1998.-333 b.
3. Fayzullaev E. Transport vositalarining tuzilish va nazariyasi (lotin yozuvida). Toshkent. Yangi asr avlodi, 2006.-375 b
4. Fayzullaev E.Z va boshqalar. Transport vositalarining tuzilishi va nazariyasi. Toshkent, "Zarkalam," 2005.-432.
5. Vaxlamov V.K, Podvijnoy sostav avtomobil'nogo transporta.- M: Akademiya,

2003. -285 b.
6. Ivanov A.M, Solntsev A.N, Gaevskiy V.V Osnovoi konstruktsii avtomobilya-
7. M. Knijnoe izdatel stvo Za rulem. 2005-336 s.
8. Qodirxonov.M.O. Avtomobillarning ish jarayonlari va hisobi.- T.:O’qituvchi, 2003.-273 b

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THE ROLE OF METROLOGY AND STANDARDIZATION IN THE HUMAN WORLD

Abstract. Metrology and standardization are one of the important aspects of our life. This field is concerned with the study of measurements, quantities, and properties and ensuring compliance with standards. Also, metrology and standardization deal with determining the measurements, quantities, movements, and characteristics of a person or an external object, assigning a value to them, comparing them, and limiting errors and inconsistencies in them, ensuring compliance with external and internal standards.

Keywords: Metrology, standard, measurement, error, value, regulatory documents, compliance.

Metrology, often referred to as the science of measurement, is at the heart of numerous aspects of my daily routine. From the fuel I pump into my car to the ingredients in my morning coffee, precise measurements govern the reliability and functionality of the products I interact with. Metrology ensures that the quantities and qualities of the things I rely on daily meet established standards, providing a sense of confidence and accuracy in my day-to-day experiences. Standardization complements metrology by establishing norms and guidelines that products, services, and processes must adhere to. It sets the criteria for what is considered safe, efficient, and reliable. In my life, this means that the products I purchase – whether it's a household appliance or a technological gadget – are manufactured with adherence to specific standards, guaranteeing quality and safety. Enhancing quality of life as I reflect on the importance of metrology and standardization in my life, it becomes evident that these fields are the unsung heroes working behind the scenes to elevate the quality of my daily experiences. They shape the products I use, influence the safety and reliability of services I rely on, and contribute to a world where precision and consistency are paramount [1]. The continued advancement of metrology and standardization will undoubtedly play an even more significant role in enhancing the quality of life for individuals worldwide. Metrology and standardization play an important role in improving quality in every area of our lives. through standards and metrology principles in health, work, finance, technology, and other fields, we will be able to make our lives better, and produce reliable and accurate products [2]. In the life of mankind, metrology plays a major role in controlling activities in the field of measurements and quantities in the human world, comparing measurements with

standards, and ensuring that measurements are reliable and accurate. For example, in the health sector, laboratories and other biological materials use metrological standards and measurements [3]. This gives doctors, scientists, and health organizations a big place in the lives of mankind. Now in human life, standards are of great importance in ensuring correct, fair, and efficient activities in various fields. Familiar with standards, specifications of measurements, quantities, and requirements for products, services, and activities, and can assist in functioning as regulatory documents. In education, standardized testing and curricula ensure a fair and consistent evaluation of knowledge and skills. Moreover, many professional fields rely on standardized training programs, contributing to the development of a skilled and knowledgeable workforce [4]. Metrology and standardization are also important in scientific research and educational institutions. teachers, researchers, and students develop the educational process based on standards and principles of metrology and create a basis for learning new technologies. Of course, metrology and standardization can serve humanity as follows [5].

1. Quality and reliability: Metrology and standardization, play a major role in improving the quality of products and services and ensuring their reliability. Standards define specific qualities and requirements for products and services and ensure reliable use. It also sets requirements for the safety of products and services.

2. Comparability and comparability: Through metrology and standardization, it facilitates comparability between products and services and helps to ensure compatibility. This makes it easier for users to choose and buy the best product.

3. Identifying errors and defects: Through metrology and standardization, measurements and quantities are important in identifying errors and defects in products through a certain requirement, and are used to analyze them correctly.

4. Quality assurance and maintenance: Metrology and standardization are important in maintaining the quality of products and services. Standards help ensure, improve, and compare products across locations [6].

5. Industry and innovation: The role of metrology and standardization in the industry is important in the adoption and implementation of innovations, enabling the integration of new technologies and the development of industry through standards.

6. Health care: Through metrology and standardization, health is of great importance to our lives. Laboratories and clinics are used to ensure that measurements and quantities conform to standards, as well as to monitor the reliability and accuracy of medical devices. Consider the medicines I take or the medical equipment used in healthcare. Metrology ensures that the dosage is precise, and standardization guarantees the safety and efficacy of these life-saving

interventions. In the healthcare sector, these principles are vital to accurate diagnostics, proper treatment, and ultimately, my well-being.

7. Financial benefits and international trade: Metrology and standardization are also important in the financial sector. Standards facilitate the comparison of products in the international market and promote trade.

In conclusion, the significance of metrology and standardization in enhancing the quality of life cannot be overstated. These two interconnected fields work seamlessly to bring precision, reliability, and safety to the forefront of our daily experiences. From the products we use to the services we depend on, metrology ensures accurate measurements, while standardization sets the bar for quality and consistency. As consumers, we benefit from the confidence instilled by knowing that the items we purchase adhere to established standards, offering both reliability and safety. Whether it's the technological devices that have become integral to our routines or the medicines that contribute to our well-being, metrology, and standardization play a pivotal role in shaping these aspects of our lives. Moreover, the global nature of trade and connectivity is made possible by the harmonized measurements and universally accepted standards facilitated by these fields. This not only streamlines international commerce but also ensures that the products we encounter maintain a level of consistency and quality, regardless of their origin. In the pursuit of sustainability, metrology, and standardization guide industries toward environmentally conscious practices, influencing the choices available to us as consumers. Additionally, in education and workplaces, standardized practices contribute to fair evaluations, skill development, and organizational efficiency.

Ultimately, as we navigate the complexities of the modern world, metrology and standardization quietly serve as guardians of precision, safety, and quality, working tirelessly to enhance the overall quality of our lives. Their continued evolution promises a future where our daily experiences are shaped by increasingly reliable, efficient, and sustainable products and services.

References:

1. O’g B. O. N. et al. The role of quality management system in increasing product quality in enterprises //Web of Scientist: International Scientific Research Journal. – 2021. – Т. 2. – №. 12. – С. 228-233.
2. BADALOV U. N. O. QUALITY IN PRODUCT QUALITY MANAGEMENT SIGNIFICANCE OF INDICATORS //INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION". – 2023. – Т. 2. – №. 2. – С. 65-75.
3. Juraboyevich B. N. et al. Development Of Metrology And The Role And Importance Of Metrological Supply In Enterprises //Eurasian Research Bulletin. – 2022. – Т. 4. – С. 136-139.
4. Juraboyevich B. N., Son B. O. N. THE ROLE OF QUALITY PRODUCTION IN ENTERPRISES //Galaxy International Interdisciplinary Research Journal. – 2021. – Т. 9. – №. 10. – С. 644-647.

5. Бадалов Н. Ж., Бадалов У. Н. КОРХОНАЛАРДА МАҲСУЛОТЛАР СИФАТИНИ БОШҚАРИШНИНГ АСОСИЙ ФУНКЦИЯЛАРИ //Academic research in modern science. – 2022. – Т. 1. – №. 1. – С. 38-45.
6. BADALOV U. N. O. QUALITY IN PRODUCT QUALITY MANAGEMENT SIGNIFICANCE OF INDICATORS //INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION". – 2023. – Т. 2. – №. 2. – С. 65-75.

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FDU

THE IMPORTANCE OF ACCOUNTING IN THE ACTIVITIES OF ENTERPRISES

Abstract. This article reflects on Accounting Science and accounting. A specialist who has studied accounting understands finance and is able to carry out finance, enterprise or public finance, there will be a cadre that manages to calculate profit in advance. Therefore, it is not for nothing that we call the name of our article business language.

Keywords: accounting, business, finance, accounting.

Introduction. Business nifty activity. To conduct business and develop it, you need technologies, raw materials, labor, logistics market and, of course, accounting, and finance for full distribution and control.

Accounting is a continuous book keeping when translated from German, translation from Arabic is an activity that keeps records of durability, receipts and expenditures.

Accounting is an area of knowledge that is of paramount importance in society. Accounting is necessary in a profitable and profitable organization. With the help of accounting, the accounting of economic resources such as money, prisons, buildings is carried out.

Accounting is the language of business. At the same time it is a necessary tool for obtaining financial information even in non-profit organizations, that is, in government organizations, hospitals, charitable foundations, mosques, public organizations.

We are talking about the accounting quarter, which accounting mainly uses in the activities of production enterprises.

LITERATURE ANALYSIS AND METHODOLOGY

The Accounting system can be viewed as information. Accounting the purpose of the system is to provide the necessary financial information on production resources and their effective use. This information is processed data. And information is reflected in financial statements. Finance is an economic concept that performs the functions of distribution and control with a monetary unit. Finance is called mustahib in Arabic.

When preparing accounting financial statements, great importance is attached to who this information is intended for. Because, the tasks to be solved from the sides of producers and creditors are different, requiring different approaches and piecemeal study of information. The person who receives the money thinks about how to spend it, while the person who gives the money thinks that he will return his money in time with good. Without thinking, he studies,

analyzes information from different sides. Compares, learns. Then he will do the reason not to walk in remorse. Insures. Takes the guarantee. All this will require Accounting information. The basis.

A little information was given in the accounting grid above. A little information was also given in the round of the duties of the accountant.

This specialty is studied by business owners. As soon as you realize that buchglteria accounting is an integral part of modern life today, the language of accounting gradually becomes the language of business people. As described by the American Accountants ' Association, “accounting is the process of valuing, retrieving and processing Economic Information, informed decision – making and information by owners.”

This information is mainly reflected in the form of money, having a financial description. That is, the basic unit of measurement is money.

Social infrastructure is a set of networks and enterprises that functionally ensure the normal life of the population. These include housing, its construction, social and cultural facilities, the entire area of Housing and communal services, health systems, education, preschool enterprises and organizations. Enterprises and organizations related to recreation and recreation; retail, catering, services, sports and recreation areas; passenger transport and utility communications; a system of institutions that provide services of a legal and financial-credit Nature (legal advice, notary offices, savings banks, banks), etc. [Yuldasheva Gulmira Azatovna, & Baltabayeva Malokhat Ortikalievna. (2022). The development of social infrastructure as a factor in managing the innovative development of the region. International JOURNAL of SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact Factor: 7.429, 11(05), 65-70. Retrieved from https://www.gejournal.net/index.php/IJSSIR/article/view/486].

Accounting is confused with majority accounting. Accounting is a boring, contactless business that is the accounting of economic activity and a mechanical process. How much water flowed. How much electricity was transmitted. How many sheep are grazing, how many workers are there. Pakhtakor scored several goals. How many times was cotton treated with chemicals. Several students come to the first grade this year. How many socks were sold. How many fruits remained in the warehouse, and x.k. Accounting is a broader concept than accounting. Accountants tax and process financial information. They prepare financial statements, carry out audits (audits), develop accounting systems, Tax production and financial activities, solve issues related to taxation.

The accounting process (also called Cycles) will consist of the following groups of functions.

1. To monitor, identify and manage hosts – (a) monitor hosts; (B) separate hosts ' economic jixats; (C) manage these hosts in financial form (with sums).

2. For purposes of activity accounting, categorization, and outcome determination, - (A) are accounted for; (B) are categorised; (v)determine the end (outcome).

3. They draw up reports in different options-a) drawing up a financial report; b) anic users (take into account the specific requirements of the users of the report.)

Let's give examples of calculating finance: comparing the national income and leaders of Uzbekistan in 2020. The national income of Uzbekistan is from the national income of the United States (21286.6 billion. dollar) was 99.7 percent less. China's national income ($14,623.8 billion) is 99.6%, Japan's national income ($5,156. 4 billion) is 98.9%, and Germany's national income ($3,953. 5 billion) is 98.9%. dollar) by 98.5%, and the UK's national income ($2,723.2 billion) by 97.8%. The National per capita income in Uzbekistan is 97.3% of the National per capita income ($64,310.0) in the United States, 96.3% of the National per capita income ($47,186. 7) in Germany, 95.7% of the National per capita income ($40,770. 1) in Japan, 95.6% of the National per capita income ($40,770,13. 7) in the United Kingdom, 95.6% of the Chinese the National per capita income ($10,160. 2) is 82.8% lower. [Yuldasheva, G. A. (2022). Znachenie innovasionnogo opita V formirovanii povisheniya urovnya doxodnosti naseleniya. Educational sacrifices, 8, 172-185.] These figures will certainly be delivered and collected in the first steps of accounting isobism, and in the Nutshell of this we will have a clear idea. From the data obtained, we will develop plans for the next analysis.

Results

For example, everything will be clear if we give information about washing machines in the instruction of specific numbers: A centralized water use system is being implemented in many rural areas of Uzbekistan. As a result of our research, we learned that the composition of artesian and drainage water is considered harsh for automatic washing machines. The water content coming through the centralized water supply system is soft and convenient as drinking water. As a result, every family tends to use automata.

Firstly, the time spent on washing will be low and productive for any contingent, women and men from the population;

Secondly, automatic washing machines are connected to sewage systems, so that wastewater does not pollute water or soil. A person washing laundry by hand pours used water in a stream or rinses laundry in flowing streams;

Thirdly, when the cost price is reduced to the amount sufficient for purchase by the population, the volume of sales of products increases. For example, in 10 years the number of farms has increased by 66%. This means that in about 10 years, the same increase is expected.**22**

22 Baltabayeva Malokhat Ortiqaliyevna. (2022). DEVELOPMENT OF THE ECONOMY OF ENTERPRISES AND ITS IMPACT ON GROSS DOMESTIC PRODUCT. INTERNATIONAL JOURNAL OF SOCIAL

IN PLACE OF THE CONCLUSION

It is necessary to understand that the information obtained by the account is recorded for later use for certain practical or scientific purposes, or for other events, actions, by obtaining them, the management of the economic activity of an enterprise, organization, institution, which consists in describing the changes that occur in activities in quantities in order to control the activity.

References:

1. Yuldasheva Gulmira Azatovna, & Baltabayeva Malokhat Ortikalievna. (2022). The development of social infrastructure as a factor in managing the innovative development of the region. INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact Factor: 7.429, 11(05), 65–70. Retrieved from https://www.gejournal.net/index.php/IJSSIR/article/view/486;
2. Юлдашева, Г. А. (2022). Значение инновационного опыта в формировании повышения уровня доходности населения. Ta'lim fidoyilari, 8, 172-185;
3. Baltabayeva Malokhat Ortiqaliyevna. (2022). DEVELOPMENT OF THE ECONOMY OF ENTERPRISES AND ITS IMPACT ON GROSS DOMESTIC PRODUCT. INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630
4. Baltabayeva, M. (2022). SANOATNI RIVOJLANTIRISH - DAVR TALABI - UY MAISHIY TEXNIKALARINING FOYDALARI. Евразийский журнал права, финансов и прикладных наук, 2(5), 29–32. извлечено от https://in-academy.uz/index.php/EJLFAS/article/view/3061Impact Factor: 7.429, 11(09), 100–104. Retrieved from https://www.gejournal.net/index.php/IJSSIR/article/view/976;
5. Ortikalievna, B. M., & Abdunabievna, K. D. (2022). BENEFITS OF HOUSEHOLD APPLIANCES IN THE PROTECTION OF THE ENVIRONMENT AND WATER RESOURCES. Thematics Journal of Economics, 8(1).
6. Baltabayeva, M. O. (2023). Using the Mechanism of Social Partnership to Ensure the Employment of Women. Web of Synergy: International Interdisciplinary Research Journal, 2(3), 65-69.
7. M. SHarifxo'jaev, Abdullaev. Menejment: 100 savol va javob. T. "Mehnat" – 2000.
8. A. O'lmasov. Iqtisodiyot. T. IQTISOD-MOLIYa. 2017.
9. M. Ostonaqulov. BUDJET HISOBI. T. "TALQIN". 2008.

SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact Factor: 7.429, 11(09), 100–104. Retrieved from https://www.gejournal.net/index.php/IJSSIR/article/view/976

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RAQOBAT MUHITINI TAHLIL QILISH

Annotatsiya. Mazkur maqolada, xo‘jalik subyektlarining raqobatda ustunlikka erishishlari uchun faoliyat yuritayotgan raqobat muhitini tahlil qilish bosqichlarini olib borish haqida ma’lumotlar berilgan.

Kalit so’zlar: raqobat, tahlil bosqichlari, raqobat muhiti, vaziyatli tahlil, diagnostika, diagnostika modellari, raqobat ustunligi.

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ANALYSIS OF THE COMPETITIVE ENVIRONMENT

Annotation. This article provides information on the conduct of stages of analysis of the competitive environment in which economic entities operate so that they can gain an advantage in competition.

Keywords: competition, stages of analysis, competitive environment, situational analysis, diagnostics, diagnostic models, competitive advantage.

Marketing jarayonini qo'llamasdan biron-bir tashkilot yoki korxonani rivojlantirish istiqbollarini, raqobat muhitini hisoblash albatta mumkin emas, bozorga kirishning eng yaxshi vaqtini taxmin qilish ham aynan marketing bilan bog‘liq.

Raqobat mehnat va kapitalning optimal taqsimlanishi uchun foyda foizlarini muvozanatlashtiradigan bozorning «ko’rinmas qo‘li» kabi shaxs va jamiyat manfaatlarining muvofiqligini tartibga soluvchi omil sifatida baholanadi. Raqobat-bozorning muhim bir xususiyatlaridan biri bo‘lib, bozor tizimi subyektlari o‘rtasidagi o‘zaro amalga oshiriladigan ishlab chiqarishni tartibga solish mexanizmi hisoblanadi. Subyektlar o‘rtasidagi o‘zaro munosabatlarning ijtimoiy shakli sifatida raqobat ikki yoki undan ortiq aniq belgilangan biznes raqiblari o‘rtasidagi kurashda ishtirok etuvchi har bir subyektning alohida iqtisodiy manfaatlarini ro‘yobga chiqarishning muhim shartidir.

Raqobat monopoliyalarga barham berish va oldini olish vositasi sifatida ham qaraladi. Raqobatni tadbirkorlik faoliyatini amalga oshiruvchi va shu kabi maqsadlarga erishishdan manfaatdor bo‘lgan bozor ishtirokchilari o‘rtasidagi raqobat jarayoni sifatida ko‘rish muhim ahamiyatga egadir. Marketingda bu maqsad iste’molchilarning afzalliklarini topish orqali foydani maksimallashtirish jarayonidir. Raqobatchilikning asl ma’nosi raqib korxonalarga qarshi harakat qilish emas, balki raqobatchilar xizmatidan foydalanadigan aniq iste’molchilarni eng afzal jihatlarni isbotlagan holda ularni jalb etishdan iboratdir. Shu bilan birgalikda, raqobatda g’alaba qozonish uchun bozorda ma’lum ustunlikka ega bo‘lish, mahsulotning iste’mol xususiyatlari va bozorda uni rag’batlantirish vositalari sohasida raqobatchilardan ustunlik omillarini yarata olish kerakdir.

O‘z novbatida ustuvorliklarga va bozor holati tendensiyalariga yuqori darajada mos keladigan hamda korxonaning kuchli tomonlariga asoslangan samarali strategiyaga ega bo‘lish uchun har qanday firma bozorda raqobat ustunligini doimo kuzatib, tahlil qilib borishi kerak.

Raqobat muhiti holatidagi chetlanishlarning xarakteri, belgilari, sabablarini aniqlash xususan, raqobat munosabatlarini har tomonlama o‘rganish uchun usul va vositalari sifatida diagnostika orqali amalga oshiriladi. Ilm-fan sohasi sifatida diagnostika jarayonlarini tashkil etish nazariyasi va usullarini, shu bilan birgalikda, diagnostik vositalarni o‘rnatish tamoyillarini, raqobat muhiti xususiyatlarida mumkin bo‘lgan chetga chiqishlarni tasniflashni o‘z ichiga oladi. Diagnostik jarayonni tashkil etishning uchta shakli-analitik, ekspert va imitatsion modellari mavjuddir.

Analitik diagnostika-marketing, statistik axborotlar yordamida va raqobat munosabatlarning tahlili, tipologiyasi, raqobat xaritalarini tahlil qilish usullaridan foydalangan holda kontaksiz (bilvosita) usullar bilan tashxis qo’yish jarayonidir.

Ekspert diagnostikasi kontakt (bevosita) usullari bilan olingan tashxis maqsadlarida, dala tadqiqotlari jarayonida maxsus ekspert va ijtimoiy-iqtisodiy so’rovlar orqali ma’lumotlarga asoslanadi.

Imitatsiya (modeli) diagnostikasi modellashtirish yo‘li bilan tashxis obyekti haqida ma’lumot olish imkonini beradi. Raqobat holatini modellashtirish juda mushkul vazifa bo’lsada internet asosida marketing yechimlarini faol axborotlashtirish sharoitida modellashtirish ko‘proq imkoniyatlarga ega bo‘lishi mumkin.

Diagnostikaning natijasi raqobat muhitining hozirgi va kelajakdagi holatini aniqlash hamda tavsiflashdan iboratdir. Belgilangan diagnoztika asosida menejer kompaniyaning raqobatda ustunlik salohiyatini shakllantirishi yoki mustahkamlash bo‘yicha strategik va taktik tadbirlarini ishlab chiqadi. Raqobat muhitining diagnostikasini tashkil etish va o‘tkazish bozor tadqiqotlarining usul va vositalari yordamida amalga oshiriladi. Raqobat muhitini tashxislash taqqoslashga asoslangan bo‘lishi lozim. Diagnostik natijalar marketing axborotini shakllantirish va kompaniyaning raqobat siyosatini ishlab chiqish uchun zaruriy asos bo‘lib hisoblanadi.

Diagnostika kompaniyaning va raqobatchi firmalarning kuchli hamda zaif tomonlarini aniqlash jarayoni sifatida raqobatchilarning o‘zaro munosabatlari jarayonida ziddiyatlardan qochish, kuchlarini va resurslarni yanada samarali rejalashtirish hamda ulardan oqilona foydalanish imkonini beradi.

Kompaniyaning raqobat ustunligini ta’minlashning eng asosiy yo‘nalishlari quyidagilardan iboratdir: raqobatchilarning harakatlarini kuzatish, raqobatda tashabbusni saqlab qolish, belgilangan maqsadlarga erishish uchun resurs salohiyatini ta’minlash, kompaniyaning bozordagi faoliyatini rejalashtirish uchun moslashuvchan tizimni ishlab chiqish, raqobatchilar bilan o‘zaro hamkorlik uchun samarali strategiyani asoslash.

Raqobat muhiti jarayonining tahlillarini amalga oshirish quyidagi bosqichlarni o‘z ichiga oladi:

- Maqsadli yoki yangi bozorlarda joylashgan firmalarni aniqlash.
- Bazaviy axborotlarni yig’ish.
- Xarajat va moliyaviy ko’rsatkichlarni solishtirma shaklga keltirish.
- Tanlangan bozor tilini aniqlash (sotuvchi bozori, xaridor bozori).
- Bozor holatini aks ettiruvchi xususiyatlarni aniqlash.
- Raqobat intensivligining umumlashgan xarakteristikalarini hisoblash.
- Raqobatchilar bozor ulushlari dinamikasining omilli tahlili.
- Bozor ulushlarining statistik taqsimlanish turini tanlash.

Xulosa qilib aytganda, Raqobat muhitining diagnostikasi nafaqat raqobatning turli usullari va strategiyalarini tahlil qilishni, shuningdek tovar va kompaniya imijini o‘rganishni ham talab qiladi. Haqiqatdan ham, mahsulot yoki xizmat narxini kamaytirish orqali, kompaniya raqobatchilar bilan solishtirganda o‘z o‘rnini mustahkamlash uchun imkoniyatga ega bo‘ladi. Mahsulot yoki xizmat narxining oshishi uning raqobat ustunligi darajasining pasayishiga olib keladi.

Foydalanilgan adabiyotlar ro'yxati:

1. I.H. Ibragimov Korxonada bazaviy strategiyalarni o’rnatish amaliyoti / SamISI.: Servis jurnali. 2013 №1-son.
2. Kotler, F. Marketing Menedjment/ F. Kotler. 2002. – 480 s.
3. Lamben, J.-J. Strategicheskiy marketing / J.-J. Lamben: S’b.: Nauka, 1996. — 420 s.
4. Raxmatullayeva D.R. Kasb-hunar ta’limi muassasalari o‘quvchilarini tadbirkorlik faoliyatiga yo‘naltirib o‘qitishning tashkiliy pedagogik shart-sharoitlari. Uslubiy tavsiyanoma. –T.: 2019. –B. 96.
5. Umirova, G. Iqtisodiyotimizni rivojlantirishda innovatsiyalarning tutgan o‘rni va ro'li //Qo‘qon universiteti xabarnomasi. – 2022. – T. 5. – C. 64-66.
6. Umirova, G. (2022). Mamlakatimizdagi monopoliyaga qarshi kurashishning raqobat muhitini shakllantirish. *Современные тенденции инновационного развития науки и образования в глобальном мире*, *1*(1), 288-290.
7. Gulmira, U. (2023). Theoretical basis of management of the financial stability of the banking system. *International Journal of Advance Scientific Research*, *3*(05), 126-130.

8. Bartram. D.International Labour Migration.Foreign Workers and Public Policy.UK.2005.
9. Umirova, G.Sh. (2023). Yosh olimlar, doktorantlar va tadqiqotchilarning onlayn ilmiy forumi. Raqamli iqtisodiyot sharoitida bank tizimini isloh qilishning yo‘llari, 37-38. TATUFF-EPAI.

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YOSHLARGA ZAMONAVIY KASB-HUNARLARNI O’RGATISH ULAR O’RTASIDA TADBIRKORLIKNI RIVOJLANTIRISH-DAVLAT VA JAMIYAT TARAQQIYOTINING MUHIM OMILI

Annotatsiya: Maqolada jamiyatimizning hozirgi rivojlanish bosqichida professional ta’lim tizimida yoshlarni mehnat bozori ehtiyojlari asosida zamonaviy va sifatli kasbga o‘qitish tizimini Yevropa standartlari asosida joriy etilishining mohiyati yoritib berilgan. Tahlillar asosida mehnat bozorida yoshlarning kasb-hunar egallash va shu orqali ish bilan bandlik masalalaridagi muammolar aniqlangan. Shuningdek, professional ta’lim muassasalari mehnat bozorida yoshlarni davlat va xususiy sektordagi ish beruvchilarning ehtiyojlari asosida zamonaviy kasblarga sifatli tayyorlashni takomillashtirish bo‘yicha ilmiy va amaliy tavsiyalar ishlab chiqilgan.

Kalit so`zlar: mehnat bozori, mehnat resurslari, kasb-hunarga o‘qitish, professional ta’lim, ish beruvchilar, xususiy sektor, mehnat migratsiyasi, ishchi kuchi, tashqi va ichki mehnat bozori, tadbirkorlik ko‘nikmalari, kasbiy malaka tizimi,jamiyat,shaxs, sun’iy intellekt,loyiha menejerlari, buxgalter, virtual haqiqat dizayneri,marketing.

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TEACHING YOUTH MODERN PROFESSIONS AND DEVELOPING ENTREPRENEURSHIP AMONG THEM IS AN IMPORTANT FACTOR OF STATE AND SOCIETY DEVELOPMENT

Abstract. The article explains the essence of the introduction of a system of modern and high-quality vocational training of young people based on the needs of the labor market in the professional education system at the current stage of development of our society based on European standards. On the basis of the analysis, the problems in the employment of young people in the labor market have been identified. Also, scientific and practical recommendations have been developed to improve the quality training of young people in the labor market of

professional educational institutions for modern professions based on the needs of employers in the public and private sectors.

Key words: labor market, labor resources, vocational training, professional education, employers, private sector, labor migration, labor force, external and internal labor market, entrepreneurial skills, professional qualification system, society, personality, artificial intelligence, project managers, accountant, virtual reality designer, marketing.

Zamonaviy bilim olish hamda mehnat bozorida talab yuqori bo‘lgan kasb-hunar egallash istagida bo‘lgan yoshlarning ta’lim olishi uchun keng imkoniyatlar yaratish, ulg‘ayib kelayotgan yosh avlodning intellektual hamda kasbiy mahoratini rivojlantirishga bo‘lgan intilishlarini rag‘batlantirish va qo‘llab-quvvatlash, va sharoit yaratib berish asosiy vazifalardan birdir.

Har qanday jamiyat boyligining manbayi, insoniyat tomonidan moddiy va ma’naviy boylik yaratishning asosiy omili mehnatdir. Jamiyatning ijtimoiy shakli qanday bo‘lishidan qat’i nazar, mehnat moddiy va nomoddiy ne’matlar ishlab chiqarishda zarur faoliyat bo‘lib qoladi. Prezidentimiz Sh.M.Mirziyoyev[1] ta’kidlaganidek, iqtisodiy islohotlar va ijtimoiy o‘zgarishlarning samarasi, birinchi navbatda, aholining moddiy ahvoli va farovonligiga, uning hayot darajasi hamda sifatiga qay darajada ta’sir ko‘rsatayotgani bilan o‘lchanadi. O‘zbekiston Respublikasi Prezidenti Sh.M.Mirziyoyevning [2]2022-yil 20-dekabrdagi Oliy Majlisga va O‘zbekiston xalqiga Murojaatnomasida ta’kidlaganidek, odamlarimizni kasb-hunarli qilish, ularning biznesiga keng yo‘l ochish, haqiqiy mulkdor bo‘lib, daromad topishi uchun zarur sharoitlarni yaratish davlatning asosiy vazifalaridan biri hisoblanadi.

Inson, uning har tomonlama uyg‘un kamol topishi hamda farovonligi, shaxs manfaatlarini ro‘yobga chiqarishning sharoitlarini va ta’sirchan mexanizmlarini yaratish respublikada amalga oshirilayotgan islohotlarning asosiy maqsadidir. Xalqning boy intellektual merosi va umumbashariy qadriyatlari asosida, zamonaviy madaniyat, iqtisodiyot, fan, texnika va texnologiyalarning yutuqlari asosida kadrlar tayyorlashning mukammal tizimini shakllantirish O‘zbekiston taraqqiyotining muhim shartidir.

1. Kelajak uchun eng yaxshi kasb qaysi?
2. Yaqin 10 yil ichida qay bir sohadan kattaroq daromad topish mumkin?
3. Bugungi kunda qanday mutaxassislarga talab kuchliroq?

Bu savolga javob izlayotganda, avvalo, avtomatlashtirish yoki muqarrar ravishda sun’iy intellekt rivojlanishi bilan almashtirilishi mumkin bo‘lgan kasblardan qochish lozim. Sababi, texnologiya rivojlanishi bilan mazkur yo‘nalishdagi ishlar o‘z ahamiyatini yo‘qota boshlashi mumkin.

Ma’lum bir ishning dolzarbligiga turli omillar ta’sir qiladi: doimiy rivojlanish, yangi mashina va robotlarning yaratilishi orqali inson hayotining yaxshilanishi, qo‘l mehnati orqali bajariladigan bir qancha amallar o‘rnini texnika bajarishi, sun’iy intellekt takomillashishi va hakozolar.

Uzoq kelajakda qaysi kasbga talab yuqoriroq bo‘lishini avvaldan aytish biroz qiyin. Biroq yaqin 5 yil ichida yuqori trendda bo‘lishi kutilayotgan kasblarni sanab o‘tishimiz mumkin.

Loyiha menejerlari

Hozirda har bir kompaniya o‘ziga tegishli loyihalarini ishlab chiqish jarayonini boshqarish uchun malakali loyiha menejeriga ega bo‘lishni istamoqda. Bugungi kunda loyiha menejerlariga talab har doimgidanda yuqori. Odatda, kompaniyalarda bir vaqtning o‘zida bir nechta dasturlar ishlaydi va loyiha menejeri ko‘p vazifani bajarish va bajartirishga mas’ul shaxs hisoblanadi. Loyiha menejerlari loyihaning asosiy maqsadlari va ko‘lamini aniqlash, rivojlanishning yaxlit rejasini tuzish, ijro bosqichida jamoani boshqarish, loyihaning yakuniy yopilishiga bosh-qosh bo‘ladi.

Buxgalter

Daromad va xarajatlarni kuzatishda, ularning qonun hujjatlariga muvofiqligini taminlashda, investorlarga, menejment va hukumat vakillariga biznes qarorlarini qabul qilishda zarur bo‘lgan miqdoriy moliyaviy malumotlarni taqdim etishga yordam beruvchi soha buxgalteriya hisoblanadi. Shuningdek, buxgalteriya hisobini yuritish korxonaning moliyaviy operatsiyalarini muntazam va batafsil ro‘yxatga olishni anglatadi. Ahamiyatlisi, buxgalterlarga talab doimiy tarzda mavjud bo‘ladi.

Chet tillaridan birortasini bilsangiz, masofadan turib kattaroq so‘mmadagi maosh to‘laydigan bir necha kompaniyada bir vaqtning o‘zida buxgalter sifatida faoliyat yurita olishingizhammumkin!

Dasturiy ta‘minot ishlab chiqaruvchisi (Software manufacturer) Bilamizki, ushbu kasb IT (axborot texnologiyalari) sohasidagi juda mashhur va yaxshi haq to‘lanadigan ishhisoblanadi.

Virtual haqiqat dizayneri(VR designer)

VR minigarnituralar va boshqa gadjetlarga talab katta ekanligi o‘z-o‘zidan ushbu yo‘nalishda faoliyat yurituvchi dizaynerlarga kelajakda yaxshi daromad topish mumkin bo‘lgan ish o‘rinlarining mavjud bo‘lishiga ishora hisoblanadi.

Marketing bo‘yicha mutaxassis

Marketing tadqiqotlari-bu kelajakda ham o‘z ahamiyatini yo‘qotmaydigan sohaladan biri sanaladi, sababi kompaniyalar doimiy tarzda yanada ko‘proq rivojlanish va kattaroq natijalarga erishishga intilishadi. Mazkur jarayonlarning samarali tarzda amalga oshirilishida esa bevosita marketing tadqiqotlarining o‘rni beqiyos sanaladi.Bunda tovar va xizmatlarini innovatsion usullar bilan targ‘ib qilish va brend, imijni yaratadigan, saqlaydigan va obro‘sini oshiradigan kasb egalari ham marketologlar safiga qo‘shilib ketadi. Kelajagingiz uchun eng yaxshi ish o‘rinlari haqida o‘ylaganingizda, avvalo, kasbning jamiyatda tutgan o‘rni qanday bo‘lishidan qat’iy nazar, o‘zingizning qobiliyatlaringiz va qiziqishlaringizni ko‘proq inobatga olganingiz ma’qul. Sababi, har qanday ishni san’at darajasida qila olish uchun uni yaxshi ko‘rib bajarish talab etiladi. Aslini olganda, jamiyat uchun keraksiz kasbning o‘zi yo‘q. Istalgan kasb obro‘sini

oshirish unda faoliyat yuritayotgan shaxslarga bevosita bog‘liqdir, desak, adashmaymiz!

Xalqaro mehnat bozoridagi talab va taklifning o‘zgarishi, globallashuv va integratsion jarayon tezlashishi, raqamlashtirish, sanoatdagi texnologik inqiloblar inobatga olinsa, shunga mos ravishda zamon talablariga javob bera oladigan ko‘nikma va malakaga ega, raqobatbardosh mutaxassislarni tayyorlash masalasining dolzarbligi yanada oshadi. Tadqiqot ishini amalga oshirishda mehnat bozorida ehtiyojlaridan kelib chiqib, yoshlarni zamonaviy va sifatli kasb-hunarga o‘qitish tizimi bilan o‘zaro aloqalari tahlil etilgan. Mehnat bozorida ish beruvchilarning talab va ehtiyojlari asosida iqtisodiy aloqalarni takomillashtirish yo‘nalishlari solishtirma hamda statistik tahlillar asosida davlat va xususiy sektorda ish beruvchilarning ishchi kuchiga qo‘yiladigan talablari tahlil etilgan.

Kasb-hunarga o‘qitishni tizimli isloh qilishning ustuvor yo‘nalishlarini belgilash, mehnat bozorida ehtiyoj bo‘lgan va yangi istiqbolli kasblar bo‘yicha zamonaviy bilim va yuksak ma’naviy-axloqiy fazilatlarga ega, mustaqil fikrlaydigan malakali kadrlarni kasb-hunarga o‘qitish jarayonini yangi bosqichga ko‘tarish hamda zamonaviy ta’lim texnologiyalari asosida o‘quv jarayonlarini tashkil qilish maqsadida mamlakatimizda keng qamrovli ishlar amalga oshirilmoqda.

Yangi O‘zbekistonning 2022–2026-yillarga mo‘ljallangan taraqqiyot strategiyasida umumta’lim maktablari kasb o‘rganish istagidagi bitiruvchilarining davlat tomonidan kamida bir kasbni egallashiga ko‘maklashuvchi tizimni joriy etish vazifasi belgilangan. Ana shu topshiriq ijrosini ta’minlash maqsadida ko‘rilayotgan chora-tadbirlar o‘quvchilarning muayyan kasb o‘rganib, maxsus malakaga ega, raqobatbardosh kadr bo‘lib yetishishiga xizmat qiladi. Zero, iqtisodiyot barqarorligi, barcha sohalarda rivojlangan davlatlar bilan bellasha olish ham mehnat bozoridagi kadrlarning salohiyatiga bog‘liq.

Ma’lumki, bugungi shiddat bilan rivojlanib borayotgan asrimizda yoshlarning har tomonlama puxta bilim egallashi, zamonaviy kasb-hunar sirlarini chuqur o‘rganishi dolzarb ahamiyatga ega. Bu esa iqtisodiyot tarmoqlariga malakali kadrlar yetishtirib beruvchi muassasalar oldiga ham muhim vazifalarni qo‘yadi. Zamonaviy kasb-hunarga ega yoshlar mamlakat iqtisodiyotining muhim tayanchi hisoblanadi. Zero, ichki va tashqi mehnat bozoriga munosib kasb egalarini tayyorlash ham bugun ustuvor masala sanaladi.

Shuningdek, tashqi mehnat migratsiyasiga chiqib ketayotgan fuqarolarimiz va yoshlarni xorijiy ish beruvchilarning malaka talablariga javob beradigan mutaxassislar tayyorlash maqsadida professional ta’lim muassasalari, “Ishga marhamat” monomarkazlari hamda kasb-hunarga o‘qitish markazlari hamda nodavlat ta’lim tashkilotlarida kasb-hunarga va xorijiy tillarga o‘qitish yo‘lga qo‘yilgan.

Bundan tashqari, mehnat bozori konyunkturasi tahlil qilindi mehnat bozorida talab yuqori bo‘lgan kasblar bo‘yicha 124 000 nafardan ortiq ishchi kasb egalariga bo‘lgan joriy va yaqin istiqboldagi ehtiyoj belgilab olindi.

Kasb-hunarga o‘qitiladigan kontingent sifatida 1 558,3 000 nafar ishga joylashtirishga muhtoj aholi hamda 563 000 nafar mehnat bozoriga ilk marta kirib keluvchilar belgilab olindi.“Temir daftar”, “Ayollar daftari” va “Yoshlar daftari”ga kiritilgan ishsiz shaxslar hamda nogironligi bo‘lgan shaxslarni kasb-hunarga o‘qitishda ustuvorlik belgilandi.

Bugun yoshlarni ish bilan ta’minlash, biror faoliyat turiga jalb etishning eng samarali yo‘li ularni kasb-hunarga o‘qitish ekani mamlakatimiz tajribasida yaqqol namoyon bo‘lmoqda. O‘tgan qisqa vaqt ichida yoshlar, ayniqsa, ishsiz aholi qatlamini bu tizimga jalb qilish, kelgusida oliy ta’limni davom ettirishidan qat’i nazar, ularga hayotida asqotadigan biror hunarni o‘rgatish, egallagan kasbi bo‘yicha bo‘sh ish o‘rinlari yaratish davlat siyosatining ustuvor yo‘nalishlaridan biriga aylandi.

2023-yilda har bir hududda kamida **1 tadan namunaviy texnikum** tashkil etib, ularda Ye**vropa kasbiy ta’lim sifatini ta’minlash standartlarini** joriy etish hamda bu orqali Yevropa kasbiy ta’lim va kasbga o‘qitish sifatini ta’minlash (EQAVET) tizimi asosida professional ta’lim sifatini ta’minlashning mezonlarini ishlab chiqildi.

EQAVET tizimi bu: Yevropa mamlakatlari professional ta’limida sifatni ta’minlashning namunali (etalon) yagona tizimini yaratish maqsadida 2009-yilda Professional ta’lim va kasbga o‘qitishda Yevropa sifat kafolati tizimi (EQAVET – European Quality Assurance in Vocational Education and Training*)* yo‘lga qo‘yilgan. Maktab o‘quvchilarni kasbga yo‘naltirish ishlarini rivojlantirish bo‘yicha kompleks chora-tadbirlar dasturlarini ishlab chiqish va kasb-hunar maktablariga o‘quvchilar qamrovini oshirish maqsadida chora-tadbirlar ishlab chiqiladi. Professional ta’lim tizimini 2023–2030-yillarda rivojlantirish **strategiyasini** ishlab chiqish bo‘yicha asosiy ustuvor vazifalar belgilab olindi.

Xulosa: Mehnat bozorining rivojlanishi tendensiyalarini inobatga olgan holda, aholining keng qatlamlarini talab yuqori bo‘lgan kasblarga o‘qitish va malakali kadrlarni tayyorlashning sifat jihatidan yangi tizimini joriy etish hamda mehnat resurslari balansini shakllantirish tartibini takomillashtirish, ayniqsa, mehnat bozoriga ilk bor kirib kelayotgan yoshlar bandligini ta’minlash hamda tadbirkorlikka jalb etish bo‘yicha mehnat bozorining aniq talabidan kelib chiqib, kasb-hunarga o‘qitish davlat buyurtmasini hududiy investitsiya dasturlari asosida yaratilayotgan ish o‘rinilarini inobatga olgan holda shakllantirish mehnat bozorida 2030-yilgacha mavjud yangi paydo bo‘ladigan kasblar ro‘yxatini shakllantirish yoshlar bandligi samaradorligini oshirish uchun iqtisodiy rag‘batlardan, jumladan, yoshlarni ishga joylashtirish va qabul qilish, ularni kasbga o‘qitish, malakasini oshirish hamda qayta tayyorlash bo‘yicha xizmatlarini taqdim qilishdan korxonalarning manfaatdorligini oshiradigan soliq imtiyozlaridan ham foydalanish, yoshlarni ishga qabul qilish uchun qo‘shimcha kvotalar ajratish lozim.

Foydalanilgan adabiyotlar ro‘yxati:

1.Мирзиёев Ш. “Янги Ўзбекситоннинг тараққиёт стратегияси”. – Тошкент: “Ўзбекистон” нашриёти, 2021.
2.Ўзбекистон Республикаси Президенти Ш.М.Мирзиёевнинг Ўзбекистон Республикаси Олий Мажлисига Мурожаатномаси. – Тошкент 2022 йил, 20 декабрь.
3.Ўзбекистон Республикасининг 2020 йил 20 октябрдаги “Аҳоли бандлиги тўғрисида”ги ЎРҚ- 642-сон Қонуни.
4.Ўзбекистон Республикасининг 2020 йил 23 сентябрдаги “Таълим тўғрисида”ги ЎРҚ-637-сон Қонуни.
5.Ўзбекистон Республикасининг 2022 йил 28 октябрдаги “Меҳнат кодексини тасдиқлаш тўғрисида”ги ЎРҚ-798-сон Қонуни.
6.Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги “2022–2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида”ги ПФ-60-сон Фармони.
7.Абдурахмонова Г. Меҳнат иқтисодиёти. // Ўқув қўлланма. – Тошкент: Инновацион ривожланиш нашриёт-матбаа уйи, 2020.

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MODELING OF LIVESTOCK HERD COMPOSITION

Abstract. In order to further increase the volume of production of meat and dairy products in livestock farms, the article presents the problems of mathematical modeling of livestock herd composition and obtaining optimal results using computer technologies. The obtained results were analyzed economically.

Key words: livestock products, herd composition, groups of cattle by gender and age, mathematical modeling, business plan.

Introduction. In the sustainable development of our country's economy, the implementation of modern technologies and scientific achievements in the livestock industry, which is considered one of the most important areas of agriculture, is of great importance in increasing the economic efficiency and competitiveness of the entire livestock industry.

One of the most important tasks is to meet the demand of the population of our growing country for livestock products, to further increase the volume of production of meat and dairy products in the domestic consumer markets, and to ensure the stability of their prices.23

One of the important issues in the development of the production of livestock products is the improvement of herd movement of cattle in agricultural enterprises specialized in cattle breeding, on farms.

It is important to comply with the standards and requirements set by the science of zootechnics, regardless of the form of the management mechanism in the livestock sector. Therefore, it is required that the composition of the herd of livestock, the composition of their sex-age groups, should be balanced. [2,3]

In the composition of the herd, the movement of livestock by sex-age groups can be symbolically expressed as follows.

23 Maksudov I., Joraev J. and others. “Shorvachilik asoslari”. Tashkent 2012.

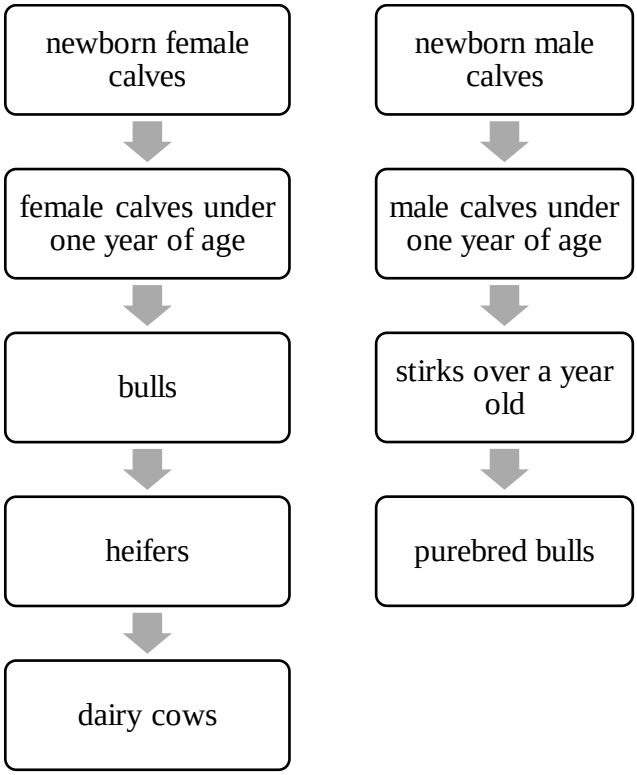

Figure 1. Herd composition and movement of livestock

Livestock farms can mainly specialize in: beef production, meat production, dairy production. The effective development of the network will directly depend on the performance of the main production indicators according to the number of cattle in the herd, and the provision of expanded reproduction.

In optimizing the movement and composition of livestock, the problem is as follows: it is required to find such an optimal annual herd movement of livestock that, taking into account the end of the planned year, the number of cattle by each gender and age group is determined. As a result of solving the problem of optimization of herd movement and composition of livestock: cattle by each gender-age group: to be written off or realized; transferred from one group to another; The goal is to determine the number of cattle and indicators of milk and meat production at the end of the year. Maximization of milk or meat production is taken as the criterion of optimality of the problem.

With the help of economic-mathematical models and methods, it is desirable to have the following initial data when determining the annual movement of the livestock herd:

- information on the write-off of cattle on the farm during the year;
- normative indicators on the number of heads of cattle to be written off or realized and on the indicators of losses;
- cattle data by gender and age for the following groups: breeding bulls, dairy cows, heifers, carcasses, weanlings over one year old, female calves over one year old, male calves over one year old, newborn male calves and newborn female calves head count;

- livestock farm specialization direction;
- indicators of the amount of milk obtained in a year for dairy cows;
- indicators of live weight according to the composition of cattle on the farm.

One of the large farms with 252 head of cattle in the Republic of Karakalpakstan was selected as a research object, and an economic-mathematical model and a matrix model were developed based on the information about livestock in it, and the results were obtained using standard computer programs. Maximization of milk and meat production was taken as the optimality criterion of the problem. According to the optimal solution obtained by the computer, according to the meat production plan, the number of cattle at the end of the year is 196 quintals and the number of cattle at the end of the year is 268, i.e. 16 heads, according to the milk production plan, the number of cattle at the end of the year is 5376 quintals, and the number of cattle at the end of the year is 282, that is 30 per head.

Result. The results obtained when the annual optimal herd movement and composition of cattle on the farm by gender and age are solved for the maximization of meat production (option 1) and the maximization of milk production (option 2) are presented in Table 1.

Composition of groups of cattle by gender and age	The number of black goods at the beginning of the year, head	Come on, head			Expenditure, head								The number of black goods at the end of the year, head	
		a new breed	switch from small groups		transition to large groups		Damage	write off						
								Head		live weight of one head of cattle, ts	total, q			
			Option 1	Option 2	Option 1	Option 2		Option 1	Option 2		Option 1	Option 2	Option 1	Option 2
Pedigree bulls	4		2	0	-	-		2	0	5,9	11,8	0	4	4
Cows	100		31	32	-	-		15	8	4,6	69	36,8	116	124
Heifers	32		17	19	31	32		1	0	3,6	3,6	0	17	18
Bulls	20		28	30	17	19		3	1	3,5	10,5	3,5	28	30
Stirks over a year old	24		27	27	2	0		22	24	2,8	61,6	67,2	27	27
Female calves under one year of age	36		39	41	28	30		8	7	1,8	14,4	12,6	39	42

Male calves under one year of age	36		37	37	27	27		9	9	1,8	16,2	16,2	37	37
New born female calves	-	46	-	-	39	41	1	6	3	0,6	3,6	1,8		
Newborn male calves	-	46	-	-	37	37		9	9	0,6	5,4	5,4		
Total	252	92	181	186	181	186		75	61	-	196,1	143,5	268	282

Table 1. Annual optimal herd movement and composition of cattle on the farm by gender and age

Now we will analyze the issue of livestock herd movement, the results obtained to maximize meat production.

The contents of the business plan for the annual herd movement of livestock on the farm by sex and age are as follows:

1) 2 of the existing 4 breeding bulls are removed from the farm account. Accordingly, 2 heads are transferred to this group at the expense of calves over one year old. As a result, the number of breeding bulls at the end of the year will be 4 heads.

2) 15 of the available 100 head of cows at the beginning of the year will be written off. From a group of heifers to a group of 31 head cows as a result of addition, the number of cows at the end of the year is 116 heads.

3) 1 of the 32 heifers available at the beginning of the year is yearling will be written off, 31 heads will be transferred to the group of dairy cows. Year During the year, 17 heifers were transferred to the group of heifers, and the number of heifers at the end of the year was 17.

4) At the beginning of the year, 3 of the 20 head of cows available on the farm

head is written off, the remaining 17 heads are transferred to the heifer group. 28 heads from the group of under-one-year-old female calves are transferred to the female group, resulting in a total of 28 heads at the end of the year.

5) 22 of the 24 over-one-year-old bulls will be written off during the year, and 2 will be transferred to the breeding bull group. From the male calves born before the end of the year, 27 were transferred to the group of calves over one year old, as a result, their number at the end of the year is 27.

6) 36 heads at the beginning of the year are removed from the account of 8 heads of female calves under one year of age, and 28 heads are transferred to the body group during the year. 39 female calves are transferred to this group. As a result, the number of female calves under one year will be increased to 39 at the end of the year.

7) 36 heads will be removed from the account of 9 heads of male calves under one year old, 27 heads should be transferred to the group of calves over one year old. Their place will be filled by a group of 37 newborn male calves.

8) 46 female calves born during the year are removed from the account of 6 heads, 39 heads are transferred to the group of female calves under one year of age (counted as 1 head loss).

9) During the year, 46 newborn male calves are removed from 9 heads, 37 heads are transferred to the group of male calves under one year of age.

According to the farm, out of 252 heads of cattle at the beginning of the year, 75 heads are written off during the year (loss of 1 head), the number of cattle at the end of the year is 268 heads due to 92 head of newborns. During the year, it would be appropriate for the number of cattle to be transferred from small groups to large groups by age and gender to be 181 heads.

Conclusion.

The obtained results and analysis, the solution of economic-mathematical modeling of herd behavior, show the advantage of this method over traditional methods.

In conclusion, it should be noted that the modeling of production and economic processes in agriculture, which is adapted to the prevailing natural and climatic conditions, allows agricultural producers to justify their development strategy. The use of economic-mathematical methods and computers significantly increases the efficiency of planned economic work, makes it possible not only to significantly reduce the time of calculations, but also to ensure optimal results. However, applying economic and mathematical models and high technologies, it is necessary to know deeply and in detail the processes in the economy, production and technological parameters, as well as cause-and-effect relationships of the elements of the modeled system.

References:

1. Винничек, Л. Б. Методические аспекты оценки системы планирования в сельскохозяйственных организациях / Л. Б. Винничек, Т. В. Харитонова // Нива Поволжья. – 2013. – № 1. – С. 89-93.
2. Maksudov I., Joraev J. and others. “Shorvachilik asoslari”. Tashkent 2012.
3. Математическое моделирование экономических процессов в сельском хозяйстве/ под ред. А.М. Гатаулина. – СПб: ООО «ИТК ГРАНИТ», 2009. – 432с.
4. М.Б.Багров Анализ результатов моделирования управлению структурой и численностью стада крупного рогатого скота: Вестник ТеГу, Серия “экономика и управления”, 2010, Выпуск 8, №34 с. 77-82.
5. Сауханов Ж.К. Яйловлардан унумли фойдаланган ҳолда гўшт етиштириш самарадорлигини эконометрик баҳолаш. // Иқтисодиёт ва таълим журнали. 2020, №4. 156-161 б. (08.00.00 №11).

6. Сауханов Ж.К. Оценка эффективности использования водных ресурсов в регионе Приаралья и разработка прогнозных показателей. // ЎзРФА ҚҚ бўлимининг ахборотномаси, 2021, №2. стр. 82-88. (08.00.00 №14).
7. Beknazarova G.J. Use of economic-mathematical methods in the planning of agricultural and animal husbandry activities in the conditions of Karakalpakstan. // Journal of Economy and entrepreneurship. Volume 17 № 5 (154) 2023 y. Russion. Pages 473-477. (08.00.00 №29).

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THEORETICAL VIEWS OF THE ECONOMY OF THE SERVICE SECTOR

Abstract. In this article, the theoretical views of the economy of the service sector in our country today are studied by the author. In addition, as a result of the research, suggestions and recommendations were developed by the author.

Key words: economy, service, theory, enterprises.

Introduction. The socio-economic development of the service sector is based on its content of increasing the quality of life and its quality, creating optimal conditions for the development of human capital associated with the formation of modern industries, and the distribution of a relatively high level of division of labor. covers various directions of economic activity.

In the conditions of the transformation of the economy, the service sector is more economically efficient than industrial production, because the implementation of initial activities in the service sector requires less funds, and the turnover rate of capital is much higher.

Currently, in the conditions of the transformation of the economy, the improvement of the socio-economic mechanism of increasing efficiency in the continuous and stable development of service enterprises and the provision of service intensity is a particularly urgent issue.

The main part. Economic growth, development of the service economy, socio-economic development of the service sector, improvement of the quality and competitiveness of services, improvement of service processes, regulation of socio-economic relations, factors of increasing economic efficiency, modern service networks fundamental aspects of problems related to development, growth of labor productivity, innovative development of personnel., Abdurakhmanov K.Kh., Kotova L.R. is explained in his works.

Qualitative and quantitative assessment of the factors of economic growth in service industries, determination of the contribution of each of these factors to the growth of service industries and industries is still an important scientific issue. In the works of the above-mentioned authors, the impact of various factors on the socio-economic development of the industry is studied. In these studies, the directions of socio-economic development in service enterprises were not systematically studied. Accordingly, in the course of the research, the mechanisms of socio-economic development in the service sector were studied. In the process of research, a dialectical and systematic approach to the study of economic systems and ratios, comprehensive assessment, comparative and comparative

analysis, statistical and dynamic approach, and grouping methods were used for the study of economic systems and ratios for ensuring economic socio-economic development in service enterprises.

Today, the effectiveness of service enterprises directly depends on the basis of the strategy, and its formation is one of the main tasks of the top management. Improvement of the socio-economic mechanism of the development of service enterprises is of particular importance in the constantly changing conditions of the external and internal environment, and makes it possible to maintain a leading position in the market. Therefore, in order to develop a rational mechanism for the management of service enterprises, it is important to study the role and importance of the activities of enterprises in the field of service to the end consumers, in particular, individuals and legal entities, and to the economy of the country as a whole.

When researching the service industry, it is necessary to first emphasize how unique this industry is. The reason for this is that service enterprises and organizations, as well as employees working in this field, are able to satisfy most of the material, social, daily and spiritual needs of the population. In order to give a general description of the service sector and to determine the role and importance of economic entities operating in this sector, first of all, consider the concepts such as "work" and "service" and take into account the existence of a boundary between these two concepts. taking into account, it is necessary to provide their exact definitions, because although their economic nature is similar, they differ from each other in legal terms.

Considering the provision of services not only as the activity of the executor necessary to provide the service, but as a process, it is possible to distinguish the following main stages: provision of necessary resources, technological process of execution, control making, testing, acceptance, evaluation, service process.

Quality indicators have a special place in the process of service delivery, and they are in the process of constant change and improvement. The following can be taken as the main basic parameters: service time (the period of time during which the consumer interacts with the service provider); service completion time (standard time for service completion). All quality parameters that affect the consumer of the service must be recorded in the following two internal documents of the organization and must be constantly monitored by the quality control service at the enterprise: service rules - requirements regulating the order and conditions of service and document containing standards; terms of service - a document describing the set of factors affecting the consumer during the service.

Quality service and service quality are not the same thing for different people. Even when sellers understand what customers mean by quality service, there are challenges in managing service to prevent non-standard deviations.

In addition, there may be differences of opinion among service personnel, which are more difficult to accurately evaluate against a machine-made product. The problems associated with trying to prevent service quality variability are

compounded by the fact that consumers do not emphasize that service quality inconsistencies require management's attention, resulting in management being unaware of poor service levels and taking appropriate action. can't agree.

The provision of services began to have a significant share in the structure of the gross domestic product of countries with developed market economies.

All over the world, the services industry is going through a phase of changes of a revolutionary nature, in which traditional business models are becoming less and less viable. At the beginning of the new millennium, under the influence of new trends in the field of services, people's life and work methods are undergoing drastic changes. Constantly, new methods of meeting the needs in this field are being invented, in which ways to meet the needs that people could not even imagine existed until recently are also emerging.

The socio-economic development of service enterprises requires them to comply with the basic rules in the implementation of their goals and tasks. Accordingly, taking into account the specific characteristics of the service sector, the main principles of the development of enterprises and organizations operating in this sector are as follows:

1. The principle of goal orientation of service activities. This principle consists in realizing the goals of ensuring socio-economic development in service enterprises. In the process of effective use of economic resources, it is necessary to determine the directions of improving the efficiency of service, taking into account the general and special characteristics of the tasks.

2. The principle of compliance with the final results of the service provider and the buyer. It is necessary to distinguish the final result of the work of the service provider and the customer (the final result of the service). The complexity lies in the fact that the goals, interests and resources of the service provider and its customer are often not aligned or clearly defined. In order to fight against the inconsistency between the final results of the relationship between the service provider and the customer, it is necessary to implement the following measures: legal support of the services; risk insurance; certification and standardization of services and certain procedures; introduction of special procedures for control of execution quality; time control; analysis of complaints and suggestions; to carry out a comparative analysis of competitors for the provision of these services.

Conclusions and suggestions. An important issue for service industry managers is efficiency. Accordingly, increasing labor productivity is an important goal determined both at the state level and at the enterprise level. It can be noted that increasing efficiency without increasing labor productivity is a way to find much easier ways to achieve unsatisfactory results. The task of improving labor productivity in the service sector presents its own complexities, which are not only related to its increase, but also to the evaluation, which is largely the result of the management's actions.

Another important feature of the service sector is that many services are provided without the transfer of ownership rights and the relationship between consumers and producers of services.

References:

1. Бурменко Т.Д. Сфера услуг: экономика: учебное пособие / Т.Д. Бурменко, Н.Н. Даниленко, Т. А. Туренко; под ред. Т.Д. Бурменко. – Москва: КНОРУС, 2007. – 328 с.
2. Веснин В.Р. Управление персоналом. Теория и практика. – Москва: Проспект, 2011. – 688 с.
3. Волгин А.П. Управление персоналом в условиях рыночной экономики: Учебник – Москва, 2009.
4. Кейнс Дж.М. Общая теория занятости, процента и денег / Пер. сангл. проф. Н.Н.Любимова, под. ред. д.э.н., проф. Л.П.Куракова. – Москва: МИЭМП, 2010.
5. Котлер Ф. Основы маркетинга. – Москва: Прогресс,1993.

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SOME INFORMATION ABOUT GORYANKA "MOUNTAIN GRASS" DISTRIBUTED IN THE MOUNTAINS OF HUMID REGIONS

Abstract. This plant, like itself, has a wonderful name and is called by different names in different continents, i.e. elif flower, horned goat grass, gorianka. It has many valuable properties for use in medicine. It gives decorative beauty to our houses.

Keywords: Goryanka, Epimedium grandiflorum, Epimedium pinnatum Fisch, Epimedium x perralderianum, Epimedium niveaum.

Horned goats are found only in the Eastern Hemisphere, they live in the foothills of Europe, the Caucasus, Turkey, Japan and China. Only one species is found in Northwest Africa. In nature, Goryanka grows in moist mountain forests or mountain ranges (perhaps that is why they are called Goryanka in Russian). Many species are found in limestone. Currently, it includes more than 50 species of goryanka plants. And this is not the limit, because every year in the province of Si-Chuan, botanists find more and more new species. The goryanka plant is a plant belonging to the family of sedums. It is not for nothing that it took root in Germany, Holland, Western Europe and other countries because of amateur gardeners. Because it is resistant to diseases, adapted to grow in wet soils, the color of its leaves changes slightly depending on the season.

Horned Goatweed is a perennial plant with a highly branched rhizome and leaves that appear on long stems. The distance between the leaves determines the appearance of the plants. If it is 1-2 cm, dense "bushes" are formed, and if it is more (2-7 cm), "bushes" are loose. After 4-5 years, the plants should be divided to preserve their decorative properties. All species and garden hybrids of horned goat grass are reliable, stable, unpretentious perennials. They tolerate both full light and shade. However, they bloom well in partial shade. Soil: fresh, moist, permeable, sandy loam or clay loam, rich in loose, neutral acidic nutrients. Horned goat grass does not tolerate waterlogging at all. Root pumps of trees constantly remove excess moisture, which is harmful to it - in flooded areas, especially in the cold season, there is always a risk of losing interesting specimens of hornwort.

Care: Some sources indicate that mountain grass belongs to zone five or even warmer. However, the practice of growing them in the Moscow region has shown that if you know the specifics of growing them, they will grow and develop successfully: before winter, the root system of all species must be mulched with

compost, and the mountain of China and Japan herbs. the origin must be additionally covered with a leaf. In early spring, immediately after the snow melts, it is recommended to tear off the leaves covering the seedlings. Evergreen leaves of mountain grasses in the Moscow region lose their decorative effect, so in the spring the overwintered leaves should be cut to the soil level for better development of new leaves and flower buds. This should be done as soon as the snow melts, because mountain grass starts to grow very early. However, we must remember that spring frosts below 1-2 degrees can damage young leaves and flower buds. Therefore, a number of gardeners advise not to rush to remove the cover in the spring. Regular watering is required in dry weather. Horned goat grass does not require intensive feeding. Mulching with compost before winter and one-time standard fertilization in spring is enough for their normal development. Propagation: by cuttings of rhizomes. It is recommended to divide and transplant in August - early September. Pieces of rhizomes with 2-3 buds should be planted in a hole 4-6 cm deep. After transplanting, the plants are covered with a layer of leaves. Seeds require two-stage stratification: 2-3 weeks at 15-20 degrees heat and about 1 month at 2-5 degrees cold. Seedlings are simple, develop quickly, but bloom only in 3-4 years. They should be planted at a distance of 35-40 cm from each other. Horny weeds grow very quickly, usually forming a dense, closed cover in the second year after transplantation. Mountain weeds have a lifespan of 10 years or more. Uses: hornworts are ideal for beautifying areas under deciduous trees and shrubs. It is used in mixed groups together with other perennial plants. Epimediums form dense groups at the foot of a row of stones in a moist, shady place. Horned goat weed attracts attention all season long: in the spring with beautiful delicate flowers, in summer and autumn with beautiful decorative leaves.

Epimedium grandiflorum or horned goat grass (Epimedium grandiflorum) is a perennial evergreen plant. The plant has long been used in folk medicine to restore the proper functioning of the genitourinary system. Still, hornwort extract is an aphrodisiac and can primarily support sexual function in men. In addition, this plant extract dilates blood vessels, thins the blood, has antioxidant effects, lowers blood pressure, improves memory and brain activity, normalizes sleep and ensures normal functioning of the nervous system, has an antimicrobial effect.

In conclusion, it can be said that the cultivation of this plant for our climate will not be without benefit. It can be used in the medical field, in the production of pharmaceutical drugs.

References:

1.Jo‘rayeva M.A. Dorivor o‘simlillar atlasi. – Toshkent, 2019. 270 bet.

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CURRENT ISSUES OF HISTORY TEACHING METHODOLOGY

Abstract. This article discusses the current issues of history teaching methodology. Complex issues of historical science methodology are analyzed.

Key words: History, method, methodology, lesson analysis, periodization, pedagogical skills, innovative methods.

Methods of teaching history is a branch of pedagogical science that studies the process of teaching history in order to use its laws to further improve the effectiveness of teaching, education and personal development. The subject of history teaching methods is the process of teaching history. The learning process can be defined as a change in learning acts that occurs according to objective laws, during which the activities of the teacher and students change, as well as the properties of students as a result of their activities.

The learning process consists of the following interrelated and interdependent components: learning goals, content, teacher activities, student activities and results. The methodology of teaching history explores how, with the help of what methods, means and techniques to ensure the most accessible, visual, concrete and convincing perception, understanding and assimilation of historical facts; what methods and means to ensure the memorization of these facts, how to reveal the phenomena being studied in the most accessible way, how to organize the active mental work of students so that the revealed phenomena are learned and help further knowledge. The task of methodology as a science is to explore the natural connections between various aspects of learning and, on the basis of the known patterns, to develop requirements for the academic subject, teaching and learning, to ensure that students deeply understand the fundamentals of historical science and to instill in them a humanistic worldview. The content of the history teaching methodology includes:

a) studying the history of the technique;

b) determination of the cognitive, educational significance and objectives of history, its place in the education system;

c) determining the scope of the school history course, scientific substantiation of programs and textbooks;

d) development of methods and organizational forms of training that correspond to its goals and content;

e) development of educational equipment for history, etc.

The process of teaching history is part of the general educational process at school, but a special part. It is carried out on the basis of the general principles of

didactics (a section of pedagogy that sets out the theory of education and learning).

2. Methods of teaching history is a pedagogical discipline. This does not at all mean that there is no organic connection between the methodology and history itself. This connection lies in the fact that when analyzing the learning process and its development, the methodology actually works with historical material, comparing how they taught previously, which methods and techniques were more effective and how, based on them, the learning process can be improved at the present time. In addition, when organizing a lesson and using various teaching methods, an objective historical picture of the past and present must be preserved. It should be added that the methods of teaching history themselves are specific, they are unique to history. The methodology of teaching history at school is closely related to pedagogy, since it is a branch of pedagogical science, and is connected with didactics and the theory of education. In addition to the above, the technique is associated with philosophy (the theory of knowledge is of particular interest), psychology (knowledge of the mental characteristics of children of different ages), age-related physiology and school hygiene.

3. It must be admitted that throughout the world, methodology is one of the most conservative sciences. And it is often difficult to determine what is more in this conservatism: the desire to preserve traditional methods or the desire to prevent the introduction of new ones.

This feature is imprinted on the state of our school, where the unprecedented centralization of education (unified programs, common textbooks, unified methodology) has led the methodology to a moral impasse. At the same time,

It should be noted that at present, in some schools of our republic, teacher-methodologists work and they are allowed to develop methodological techniques for conducting lessons themselves; teachers use various textbooks and teaching aids. Existing shortcomings in the learning process can be eliminated through greater use of experiment as a method of scientific research. The experiment should primarily concern the process of students' assimilation of knowledge and the development of methodological recommendations on how to enhance students' independence in acquiring knowledge, what incentives and techniques to use so that knowledge, even the most difficult, is acquired consciously and stored for a long time. It is also necessary to strengthen theoretical research into methodological problems. The development of science and technology has led to the inclusion of a significant amount of new knowledge in school curricula, and accordingly has led to an overload of programs and textbooks. Eliminating this overload is one of the most pressing problems of the technique. Experimental work is carried out in the teaching methods of all school subjects. For example, to check the availability of the material selected for training. Research has found in a number of cases that students' cognitive abilities are underestimated. In some areas, the material being studied turned out to be so elementary that it delayed the

overall development of the children. In this regard, some topics previously studied in high school were transferred to a lower grade. On the other hand, the activities carried out showed that the complication of the studied material in some subjects reduced the accessibility of training. Finally, organizational forms of training require more in-depth research. Among these forms, the lesson now receives the most attention. Other forms of organizing educational activities have been less studied - seminars, discussions, lectures, electives, homework, extracurricular activities, etc. The issue of the relationship and interconnection of lessons and other organizational forms of education in boarding schools and extended-day schools has been poorly studied. It is necessary to study more deeply the meaning of rational forms of mutual assistance, collective work, etc.

4. The main tasks of teaching history at school can be divided into 3 groups: educational, educational, developmental. The group of educational objectives requires:

• enriching the memory of students with information about the most important events, names, ideas, and the development of civilizations of the world - from ancient times to the present day;

• develop a scientific understanding of the historical process in a form accessible to students;

• teach students to find cause-and-effect relationships, to identify factors that influenced the pace, nature and characteristics of the historical development of different countries and peoples.

The group of educational tasks sets the goal:

• to educate conscious patriots of the Fatherland who know and honor the history of their people, the uniqueness of their centuries-old culture as an integral part of world culture, and feel personal responsibility for its historical destiny;

• on the basis of history, to form a personality who is aware of the priority of universal and national values over class, party, and group interests;

• to instill in children diligence, readiness to work and respect for working people.

The group of developmental tasks includes:

• developing students' creative thinking and cognitive activity;

• instill in schoolchildren independence in academic work, develop the ability to independently replenish their knowledge from sources of extracurricular information, and critically evaluate various historical sources;

• stimulate interest in science and art, develop their political activity, encouraging humanistic values in it.

5. The successful implementation of these tasks depends on many conditions of educational activity: specific and general. Individual conditions develop in each individual school and individual class.

References:

1. Nurmatova, M. (2021). Family economy: Sources of incomeand types of costs. *Asian Journal of Research in Business Economics and Management*, *11*(11), 69-73.
2. Ilxamovna, N. M. (2022, December). Zamonaviy ta'limda iqtisodiy fanlarni o'qitish usullari tahlili. In *E Conference Zone* (pp. 79-81).
3. Расулов, И. И. (2021). Фразеологические единицы русского и узбекского языков со значением качественной оценки лица. In *Система непрерывного филологического образования: школа–колледж–вуз. Современные подходы к преподаванию дисциплин филологического цикла в условиях полилингвального образования* (pp. 420-423).
4. Inamovich, R. I. (2021). The Concept of" Community/World" in the Linguistic and Cultural Aspect. *Middle European Scientific Bulletin*, *16*.
5. Расулов, И. И. (2016). Наречные фразеологизмы русского языка с имплицитно выраженным значением. In *Молодежь и наука: реальность и будущее* (pp. 275-277).

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EDUCATIONAL MARKETING STRATEGIES TARGETING THE DEVELOPMENT OF EDUCATIONAL INSTITUTIONS

Abstract. This article discusses the basics of education marketing, discusses effective strategies, and explores the latest trends. This article aims to provide insight into current trends in education marketing.

Keywords: marketing, educational marketing, digital marketing, school marketing, marketing for higher education.

Introduction

Owing to the number of opportunities created by the internet and other modern technologies and facilities in the pandemic situation, the educational sector has experienced a massive boom. According to research conducted by Orbis, the global e-learning market is anticipated to surpass $275 billion worldwide by 2022 driven largely due to the escalating usage and growing access to broadband internet and the number of internet users with mobile phones and other smart devices with online facilities. More than 500000 educational apps have been released available on the App Store and Google Play so far by traditional educational institutions and private developers. The e-learning market is saturated with multiple scores of online courses, videos, eBooks, and websites making it challenging for newcomers in the field.

Main part

Education marketing promotes integral educational content and makes it available to individuals and educational institutions. Educational content includes courses, how-to videos, research applications, software applications for mobiles and computers, and lots more. Educational marketing uses strategies to make educational content useful to academic institutions and available to students. While marketing in education has been present for a long time, it has advanced and adapted a lot throughout the years, especially during the global turmoil caused by the pandemic. The purpose of education marketing is to promote valuable educational content with the help of various marketing strategies. It is often considered the only single way to reach students and catch their attention. The essence of marketing in the education sector is considerably overlooked in the industry to drive revenue and promote growth. To thrive in this era of cut-throat

competition the leaders in the education industry must leverage the power of education marketing.

However, one shouldn't confuse education marketing with education-based marketing which is a specific marketing strategy that focuses on educating the prospects rather than just pitching them to establish trust among them. Whereas, education marketing comprises all the marketing activities in the education sector, encompassing the following:

School marketing: Tech-savvy millennial parents turn to the internet to reinforce their decision-making rather than relying on word of mouth like the traditional era. Schools need to actively market themselves to catch the attention of all those parents who are constantly in search of the best.

Marketing for higher education: Marketing for higher education benefits colleges and universities as such higher education helps them to elevate and promote their brand and drive a flood of enrollments. Students as individuals also benefit from the same as they can choose for themselves while choosing their educational path.

Digital marketing for the education sector: Traditional marketing strategies are no longer sustainable and are of no help in today's digital world for targeting younger demographics. Digital channels must be embraced to convey your message to a larger group of audience and it turns out to be very cost-effective. Such digital channels include email, web content, blogs, paid searches, social media platforms, and others. The potential of digital marketing will eventually lead to decreased cost per lead, thus making digital marketing a really important cornerstone of any education marketing strategy.

Social media marketing for educational institutions: Both students and their parents spend a greater deal of time on social media sites and thus educational institutions must establish a significant presence on sites like Facebook, Twitter, and Instagram to engage and learn about their wants and expectations.

There are a few things to remember to guarantee the success of the chosen marketing strategy to develop educational institutions:

Understand social media. There are currently roughly 3.2 billion online social media users around the world, which is likely to be around 42% of the population. Web-based entertainment platforms like Facebook, Twitter, Instagram, and Reddit are the most well-known among recent college grads, followed by Gen Z, Gen X, and Gen X-ers. Since their initial days, social media platforms have developed inside and out, and they currently give a bunch of various ways how they can be utilized in advanced education promotion. Despite which platform you choose to focus on, the objective ought to be similar all the time: establish and develop significant connections with the main interest group by offering them engaging content.

Rank highly on Google. Whenever guardians and students are searching for suitable education providers, universities must be a top outcome. Google is the most popular search engine. Google Ads can be a compelling method for helping

to drive traffic to your site. There is a huge amount of relevant and significant competition in Google Ads. It's a good idea to work with somebody who has the knowledge and relevant experience in web search engine marketing (SEM), if not, it can turn out to be extravagant.

Get some credibility! Testimonials from ex-students, awards won as well as most recent outcomes are critical to developing the validity behind the story. These are of extraordinary support which can be incredibly strong.

Make a Mobile-Friendly Website with an Optimised Landing Page. It has been quite a long while since the number of smartphone internet users has surpassed the number of individuals who access the web from desktop computers and laptops. In 2022 the number of smartphone users overall is projected to arrive at 2.87 billion, and that implies that no one who needs to prevail in schooling advertising can bear to not have a versatile site with an enhanced and optimised landing page.

Encourage Students to Leave Online Reviews. It's a well-known fact now that 90% of consumers read web-based audits before visiting a business or paying for a service. That is the reason why online surveys ought to be a fundamental part of all advanced education marketing strategies and techniques. The most ideal way how to urge students to leave online reviews is to make the review process as simple as could be expected.

Conclusion

Marketing in the education sector is markedly difficult. Well-known obstacles incorporate spending and budget restrictions and having to entice a new group of customers every year. With the predominance of advanced promoting channels, effectively marketing your educational institution becomes even more challenging and complex. Nowadays, students and their parents expect a seamless online experience, and a credible presence via social media, and since candidate recruitment has become a year-round activity even reputed and established educational suppliers re-evaluate their marketing strategies on an annual basis.

References:

1. American Marketing Association, “Definition of Marketing,” http://www.marketingpower.com/AboutAMA/Pages/DefinitionofMarketing.aspx?sq=definition+of+marketing (accessed December 3, 2009).
2. Best education marketing stretegies. https://comboapp.com/higher-education-marketing-agency/education-marketing-strategies.
3. What is Educational Marketing & How to Use it to Grow with Examples Anthea Papadopoulou and 1 more, January 18, 2021
4. Education Marketing: Guide and Strategies. -2019. https://wearecsg.com/blog/education-marketing/
5. Healey, M. (2020). Developing the scholarship of teaching in higher education: a discipline-based approach. Journal of Higher Education Research & Development.

УДК 616.12-002-053.2-07

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CLINICAL AND LABORATORY CHARACTERISTICS OF ACUTE CARDITIS AND THE ROLE OF RISK FACTORS IN THEIR DEVELOPMENT

Annotation. The true prevalence of carditis in the pediatric population is not known. The lack of clear diagnostic criteria, as well as the high prevalence of infectious diseases in children and, in particular, respiratory viral, leads to a fairly frequent involvement in the pathological process of the cardiovascular system. An important role in the development of acute carditis in young children is played by an unfavorable perinatal history, protein–energy eating disorder and a high tendency to hyperergic reactions.

Keywords: cardiovascular system, carditis, heart failure, systolic murmur, electrocardiography, echocardiography.

Relevance. Carditis is an inflammatory lesion of the membranes of the heart of an infectious, toxic, allergic, autoimmune or unknown etiology with a wide range of clinical manifestations from asymptomatic to heart failure, life-threatening rhythm and conduction disturbances, cardiogenic shock and sudden cardiac death. [5,7,12]

In recent years, interest in the problem of carditis has increased - as a disease of non-coronarogenic and non-rheumatic nature, due to the growth of this pathology, especially among young children. [3,6,13]

The concept of “carditis” was recently introduced into pediatric clinical practice. The expediency of identifying carditis in pediatrics is due not only to isolated, but also often combined damage to two or three membranes of the heart. [4,6,8]

The true prevalence of carditis in the pediatric population is unknown. The lack of clear diagnostic criteria, as well as the high prevalence of infectious diseases in children and, in particular, respiratory viral diseases, leads to a fairly frequent involvement of the cardiovascular system in the pathological process. [1,2,9]

According to many researchers, approximately 1-5% of children with acute viral infection may have myocardial damage, which is either not diagnosed or the diagnosis is made at a later date. [1,5,13]

Features of the clinical manifestation of carditis depend on local or diffuse damage to one or more membranes of the heart, which determines the characteristics of the clinical course, possible complications, and often the prognosis. [5,6,10]

The course of carditis, regardless of the cause that caused the heart damage, can vary from mild, slightly symptomatic forms with an erased clinical picture and without signs of heart failure, to a pronounced clinical picture with severe circulatory failure and complex cardiac arrhythmias. [3,7,8,11]

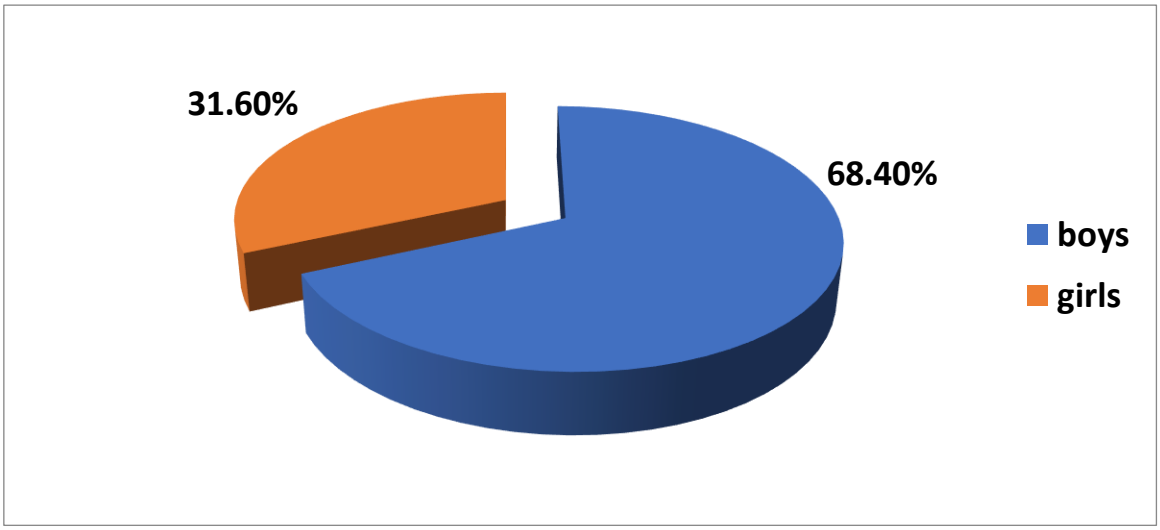
An important role in the development of acute carditis in young children is played by an unfavorable perinatal history, protein-energy malnutrition and a high tendency to hyperergic reactions. [1,4,7]

Purpose of the study: to establish possible risk factors and features of clinical manifestations of carditis in young children.

Material and research methods. All studies were carried out at the Andijan Regional Children's Multidisciplinary Medical Center, in the department of cardiorheumatology, for the period 2020-2022. The paper presents data from a survey of 38 children aged from 6 months to 3 years. While carrying out the work, we conducted conversations with parents, studied medical histories and used the results of laboratory and instrumental research methods.

Results. All children were admitted to the hospital in serious condition. In 7 children (18.4%), this hospitalization was repeated, in the rest it was primary. With a diagnosis of Carditis, 28 children (73.7%) were admitted to hospital treatment; the rest (26.3%) were diagnosed during the period of acute community-acquired pneumonia.

Children from rural areas dominated by place of permanent residence - 86.8%. By gender, boys predominated.



All mothers whose children received treatment for acute carditis had an unfavorable obstetric history. The frequency and significance of possible risk factors in the ante- and perinatal periods are presented in the table.

Risk factors of the ante and perinatal periods	Abs.	%
Frequent ARVI during pregnancy	38	100%
Anemia in mother	38	100%
Intrauterine fetal hypoxia	12	31.6%
Presence of TORCH infection in the mother	9	23.7%
Preeclampsia	8	21%
Exacerbation of maternal genitourinary tract infection	6	15.8%
Weakness of labor	16	42.1%
Early rupture of amniotic fluid	12	31.6%
Umbilical cord entanglement during childbirth	5	13.1%

We identified the most informative and predisposing factors in the development of carditis in young children in the postnatal period: anemia (100%), perinatal damage to the nervous system (60.5%), allergic mood (55.2%), frequent acute respiratory viral diseases (42.1%), intrauterine infection (23.7%) and protein-energy malnutrition (13.2%).

Particular concern in terms of the leading risk factor for the development of carditis was caused by children whose blood tests revealed cytomegalovirus infection (23.7%), with immunoglobulin G levels 3 times higher than the normative values.

The clinical course of carditis depended on the diversity and polymorphism of complaints. All children (100%) had shortness of breath and groaning breathing upon admission, which worsened with any physical activity of the child. Low-grade fever was diagnosed in 47.3% of cases, obsessive cough - in 63.1%, and 21% of children had edema, the appearance of which parents associated with a decrease in diuresis. Sleep disturbance in 8% of children was manifested by drowsiness, in the rest - with periods of unmotivated restlessness at night.

The auscultatory phenomenon in 1/3 of children (31.6%) was manifested by muffled tone I, in 69.4% of children - by dullness of tones, and the severity of the latter was associated with the degree of cardiomegaly. In 2/3 of children - 69.4%, a systolic murmur was heard that was not associated with organic lesions and in 14 children (36.8%) there was a splitting of the first tone according to the type of gallop rhythm.

Symptoms of heart failure of the left ventricular type were diagnosed in all children, and in 73.3% - degree II B. Hepatomegaly, as a sign of stagnation in the systemic circulation, occurred in all children. The liver dimensions varied from +2 cm to +5 cm.

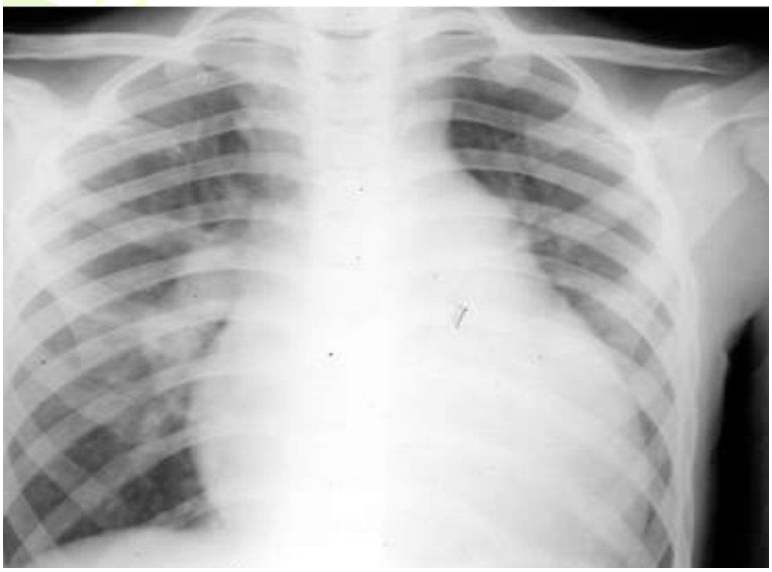
Hemodynamic disorders were assessed using electrocardiography parameters. Automaticity disorders were manifested by sinus tachycardia and in more than half of the examined children (55.3%) the heart rate exceeded the 20% threshold of age standards. One child was diagnosed with an attack of supraventricular tachycardia upon admission to the hospital. Conduction disorders in children with acute carditis are represented by RBBB (23.9%) and AV block of the first degree (7.9%).

In addition, electrocardiographic signs of carditis in the children we examined were signs of: left ventricular hypertrophy (39.5%), left ventricular hypertrophy with atrial overload (39.5%), biventricular hypertrophy (21%), subendocardial ischemia (31.6 %) and metabolic changes in the myocardium (15.8%).

Echo signs confirming carditis diagnosed changes in the form of dilatation of the cavity of the left and right ventricles, an increase in the end-systolic and end-diastolic dimensions of the left ventricles and a significant decrease in the ejection fraction, the range of which was from 28% to 42%.

X-ray examination revealed an increase in the shadow of the heart, mainly due to the left ventricle, with cardiothoracic index values of 67% + 3%.

X-ray of the patient Ashurov V., 2 year 3 months, diagnosis – acquired carditis, acute course, severe degree, NC 2 A. (case history No. 259/184).



Based on blood test results, all hospitalized children with carditis were diagnosed with anemia, as a factor aggravating the course of this disease. Children with moderate anemia accounted for 63%; in 8 children (21%), HB indicators corresponded to severe anemia.

A marker of myocardial damage is the creatine phosphokinase index, an increase in which was detected in all children with severe (73,7%) carditis. In addition, all children had high levels of CRP, exceeding standard values by 4-5 times.

Thus, based on our results, we can assume that the most likely and significant risk factors for the development of carditis in young children are on the maternal side: a complicated obstetric history; on the part of the child - frequent viral and viral-bacterial infections, intrauterine infections, perinatal damage to the nervous system, protein-energy malnutrition and allergic mood.

Acute carditis in young children in our studies was predominantly severe, with symptoms of heart failure, which we regarded as an unfavorable prognostic sign.

References:

1. Balykova L.A., Krasnopolskaya A.V., Vlasova E.A. Myocarditis in children: clinical picture, diagnosis and treatment// Pediatric pharmacology/ 2020/ Volume 17/ No. 2, pp. 137-147
2. Efimenko O.V., Khaidarova L.R., Zhalolov B.B. Comparative assessment of hemodynamic disorders in children with various forms of cardiomyopathies. //Biology and Integrative Medicine, 2022, No. 5 (139), pp. 60-62.
3. Efimenko O.V., Khaidarova L.R., Zhalolov B.B. The influence of the onset of dilated cardiomyopathy on hemodynamic disorders and prognosis. //Economy and Society, No. 2 (93) – 2022, pp. 308-315.
4. Efimenko O.V., Khaidarova L.R. and others. Assessment of the influence of possible risk factors on the course of non-rheumatic carditis in young children. //Economy and Society, No. 2 (105) – 2023, pp.570-577.
5. Potekhina M.N., Naumenko E.I. and others. Non-rheumatic myocarditis in children. Clinical observation. //Modern problems of science and education. 2022 No. 4, pp. 148-157.
6. Shaykhova M.A. The role of respiratory diseases in the development of non-rheumatic myocarditis in childhood. //Young Scientist, No. 22 (126), 2016, pp. 116-118.
7. Dasgupta S., Iannucci G., Mao C., Clabby M., Oster ME Myocarditis in the pediatric population: A review. Congenit Heart Dis. 2019. Vol. 14 (5). P. 868-877. DOI: 10.1111/chd.12835.
8. Tschope C., Ammirati E., Bozkurt B., Caforio ALP et al. Myocarditis and inflammatory cardiomyopathy: current evidence and future directions. Nat Rev Cardiol. 2021. Vol. 18(3). P. 169-193.
9. Myocarditis Foundation. Myocarditis in children: incidence, clinical characteristics and outcomes. [Electronic resource]. URL:

https://www.myocarditisfoundation.org/myocarditis-inchildren-incidence-clinical-characteristics-and-outcomes/ (accessed 07/28/2022).
10. Zhang M., Wang H., Tang J., He Y., Xiong T., Li W., Qu Y., Mu D. Clinical characteristics of severe neonatal enterovirus infection: a systematic review. BMC Pediatr. 2021. Vol. 21(1). P. 127. DOI: 10.1186/s12887-021-02599-y.
11. Chang Y.-J., Hsiao H.-J., Hsia S.-H. et al. Analysis of clinical parameters and echocardiography as predictors of fatal pediatric myocarditis. PLoS ONE. 2019. Vol. 14(3). e0214087. DOI: 10.1371/journal.pone.0214087.
12. Neagu O., Rodríguez AF, Callon D., Andréoletti L., Cohen MC Myocarditis Presenting as Sudden Death in Infants and Children: A Single Center Analysis by ESGFOR Study Group. Pediatr Dev Pathol. 2021. Vol. 24. R. 327-336.
13. Rodriguez-Gonzalez M., Sanchez-Codez MI, Lubian-Gutierrez M. et al. Clinical presentation and early predictors for poor outcomes in pediatric myocarditis: A retrospective study. World J. Clinical Cases. 2019. Vol. 7 (5). P. 548-561. DOI: 10.12998/wjcc.v7.i5.548.

УДК 66.013.5

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BINO VA INSHOOTLAR KONSTRUKSIYALARINI LOYIHALASHNING ZAMONAVIY USLUBLARI

Annotatsiya. Ushbu maqolada bino va inshootlarni loyihalashtirish va qurilish ishlarining samaradorligini oshirish, loyihalash jarayonlarida zamonaviy texnologiyasining imkoniyatlarini tahlil qilindi.

Kalit so‘zlar: Bino va inshootlar, konstruksiyalar, CAD dasturiy ta'minoti, BIM texnologiya, Autodesk Building Systems, Autodesk Revit Structure.

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MODERN METHODS OF DESIGNING BUILDING AND CONSTRUCTION STRUCTURES

Abstract. This article analyzed the possibilities of modern technology in designing buildings and constructions and improving the efficiency of construction works.

Keywords: Buildings and constructions, structures, CAD software, BIM technology, Autodesk Building Systems, Autodesk Revit Structure.

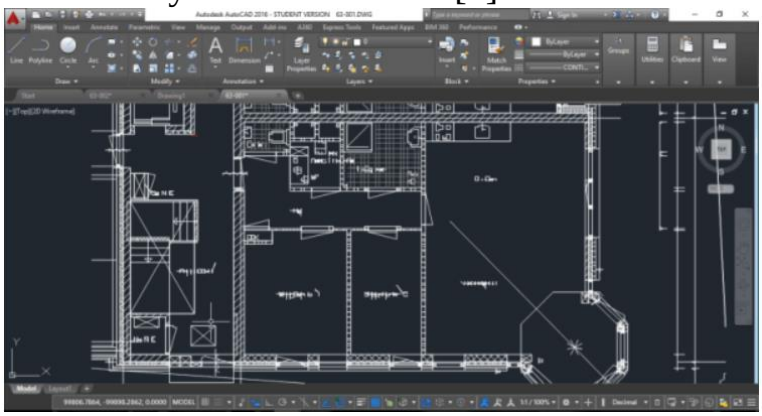
KIRISH

Qurilish konstruksiyalari — har qanday bino va sun’iy inshootlurni qurish, turar-joy binolari, jamoat, sanoat va qishloq xo‘jalik binolari, ko'priklar, katta hajmli imoratlar, quvurlar va inshootlarning asosi hisoblanadi. Bino va inshootni qurish uchun sarflangan xarajatlarning asosiy qismi konstruksiyalarga to‘g‘ri keladi. Hozirgi kunda amalga oshirilayotgan katta hajmdagi kapital qurilishlar, qurilish konstruksiyalaridan samarali foydalanish rivojining juda tez jadallashuviga turtki bo'ldi — konstruksiyalarning turlari va ulardan tayyorlanadigan xomashyolar to‘xtovsiz takomillashib bormoqda. Shu boisdan ularni hisoblash, loyihalash va tiklash usullari ham takomillashtirilmoqda. [1]. Shu tufayli mexanizatsiyalashtirilgan va avtomatlashtirilgan texnologik jarayonlami qo‘llash bilan bir qatorda qurilish maydonchalarida bajariladigan ishlarga keng imkoniyatlar ochib berildi. Bunda yanada aniqlikka erishish hamda sohada sifatni oshirish bilan estetik ko‘rinishlarni zamonaviy usullarga keltirish,

aniq hisob-kitoblarni amalga oshirish uchun ham ko’plab zamonaviy texnologiyalardan foydalanilmoqda. Quyida biz shularni ko’rib chiqamiz.

METODLAR

Bino va inshootlar konstruksiyalarinini loyihalash oddiy, funktsional binolardan beri uzoq yo'lni bosib o'tdi. Bugungi kunda me'morlar va muhandislar nafaqat estetik jihatdan yoqimli, balki juda funktsional va xavfsiz tuzilmalarni yaratish uchun keng ko'lamli zamonaviy usullarga ega. So'nggi yillarda binolarni loyihalashdagi eng muhim yutuqlardan biri bu kompyuter yordamida loyihalash (CAD) dasturiy ta'minotidan foydalanishdir. Ushbu texnologiya arxitektorlar va muhandislarga binolarning juda batafsil va aniq raqamli modellarini yaratishga imkon beradi, ulardan strukturaning turli jihatlarini tahlil qilish va optimallashtirish uchun foydalanish mumkin [2].



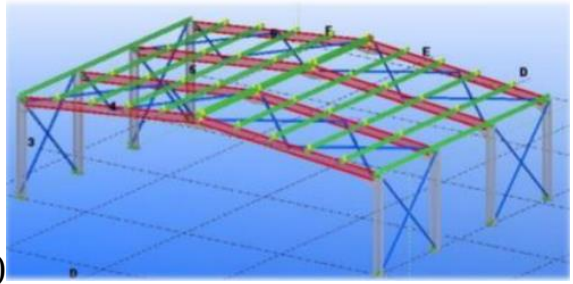
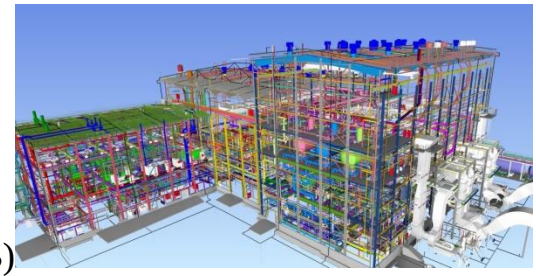
1-rasm. CAD dasturi yordamida sanoat inshoot konstruksiyalarini loyihalsh jarayoni.

Yana bir muhim ishlanma - bu qurilish ma'lumotlarini modellashtirish (BIM) dasturidan foydalanish bo'lib, u dizaynerlarga har bir komponent haqida batafsil ma'lumotni o'z ichiga olgan binoning 3D modelini yaratish imkonini beradi. Bu turli pudratchilarning ishini muvofiqlashtirish va qurilish boshlanishidan oldin yuzaga kelishi mumkin bo'lgan muammolarni aniqlashni osonlashtiradi [3].

NATIJA VA MUNOZARLAR.

Zamonaviy binolarni loyihalashda ilg'or materiallardan foydalanish ham asosiy tendentsiya hisoblanadi. Ultra yuqori samarali beton, muhandislik yog'och mahsulotlari va uglerod tolasi bilan mustahkamlangan polimerlar kabi yangi materiallar po'lat va beton kabi an'anaviy materiallarga qaraganda ko'proq kuch, chidamlilik va moslashuvchanlikni ta'minlaydi. Bundan tashqari, ko'plab dizaynerlar hozirda matematik algoritmlarga asoslangan murakkab, yuqori darajada optimallashtirilgan shakllarni yaratishga imkon beruvchi parametrik dizayn vositalaridan foydalanmoqda. Ushbu yondashuv materiallardan yanada samarali foydalanish va energiya samaradorligini oshirishga olib kelishi mumkin. Qayta tiklanadigan energiya manbalaridan foydalanish zamonaviy binolar dizaynidagi yana bir muhim tendentsiyadir. Quyosh panellari, shamol turbinalari

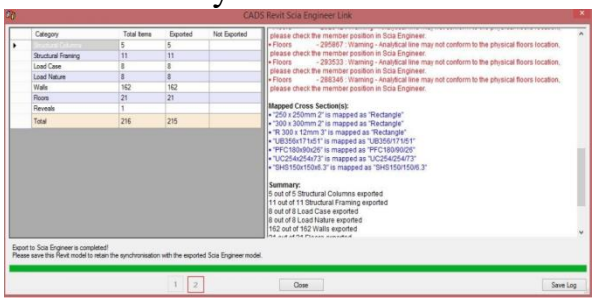
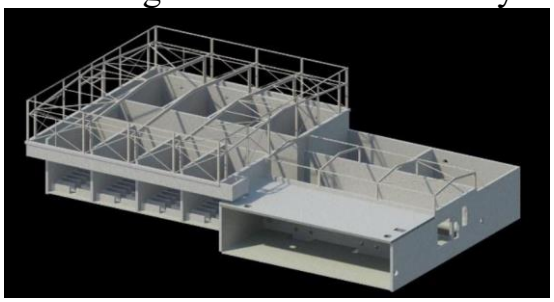
va geotermal tizimlarning barchasi yoqilg'iga bog'liqligini kamaytirish va uglerod chiqindilarini kamaytirish uchun binolarga integratsiya qilinishi mumkin.

A)  B) 

2-rasm. Zamonaviy dasturlar yordamida sanoat inshoot konstruksiyalarini loyihalsh jarayoni. A) BIM dasturida B) HVAC dasturida

Barqarorlik zamonaviy binolarni loyihalashda ham asosiy e'tibor hisoblanadi. Ko'pgina me'morlar va muhandislar binolarning atrof-muhitga ta'sirini kamaytirish uchun yashil tomlar, yomg'ir suvini yig'ish tizimlari va boshqa barqaror xususiyatlarni o'z dizaynlariga kiritmoqdalar. Qurilish konstruksiyalarini loyihalashda qurilish texnologiyasidagi yutuqlar ham ta’sir ko‘rsatmoqda. Misol uchun, prefabrik va modulli qurilish kabi maydondan tashqari qurilish texnikasi qurilish vaqtini tezlashtirishi, chiqindilarni kamaytirishi va sifat nazoratini yaxshilashi mumkin. Binolarni avtomatlashtirish texnologiyasidagi yangi yutuqlar ham bino dizayniga kiritilmoqda. Aqlli qurilish tizimlari energiya sarfini kuzatishi, HVAC tizimlarini optimallashtirishi va binoning ishlashi haqida real vaqtda fikr-mulohazalarni taqdim etishi mumkin. [4].

Autodesk Revit Structure-qurilish konstruksiyalarini hisoblash va loyihalash uchun maxsus funksiyalarni o‘z ichiga oladi. Dasturiy ta’minot Building Information Modeling (BIM) texnologiyasiga asoslangan. Ushbu texnologiyadan foydalangan holda, Revit Structure ya’ni bir nechta konstruksiyalarni muvofiqlashtirish ta’minlaydi, xatoliklarni kamaytiradi va konstruktiv loyihachilar va arxitektorlar o‘rtasidagi hamkorlikni ta’minlaydi [5].

3-rasm. HVAC dasturi yordamida sanoat inshoot konstruksiyalarini loyihalsh jarayoni

Axborotni modellashtirish texnologiyalari ob’ektning butun hayotiy sikli davomida turli xil vositalar va ma’lumotlardan samarali foydalanadigan taqsimlangan ishchi guruhlarning hamkorligini talab qiladi.

XULOSA

Xulosa o‘rnida shuni ta’kidlash joizki, zamonaviy texnologiyalarni takomillashtirish
yaratilayotganloyihalarsifatinihamloyihalashbosqichidahamqurilishva
ekspluatatsiya bosqichlarida oshirib borish zarur bo‘lgan jarayondir. Biroq, bu texnologiyalarni biznesning har bir darajasida, xususan, kichik va o‘rta biznes uchun amalga oshirish qiyin masala hisoblanadi, chunki BIM texnologiyalarini bosqichlari bo‘yicha ushbu toifadagi korxonalar uchun joriy etish ancha qimmatga tushishi mumkin. Yana bir muhim jihat-malakali kadrlar tayyorlash, ular nafaqat qo‘shimcha malaka oshirish kurslari yordamida, balki oliy o‘quv yurtlari dasturlari doirasida ham o‘qitilishi kerak. Soha bo‘yicha ko‘plab adabiyotlar tahlil qilindi. Dasturiy ta’minotlarning funksional vazifalari ochib berildi. Shu asosida mashg‘ulot mavzusi va maqsadidan kelib chiqqan holda mashg‘ulotlarni tashkil etish samarali va tinglovchi o‘zlashtirishi uchun maqbul bo‘lishi asoslandi.

Foydalanilgan adabiyotlar:

1. N.J.To‘ychiyev, ‘‘Bino va inshootlar konstruksiyasi’’ darslik Toshkent — 2010.
2. Yousefzadeh, S., Spillane, J. P., Lamont, L., McFadden, J., & Lim, J. (2015). ‘‘Building Information Modelling (BIM) Software Interoperability: A Review of the Construction Sector’’. Proceedings of the 31st Annual ARCOM Conference. (pp. 711-720). ARCOM.
3. Autodesk (2002). Building Information Modeling. San Rafael, CA, Autodesk, http://www.laiserin.com/features/bim/autodesk_bim.pdf
4. RuffleS. Architectural design exposed: from computer-aided-drawingto computer-aideddesign// Environments and Planning Buildings: Planning and Design. –1986. –March 7. –P. 385-3897.
5. Aish R. Building Modelling: The Key to Integrated Construction CAD//CIB 5th International Symposium on the Use of Computers for Environmental Engineering related to Building, 7–9 July, 1986. –Page.

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MAKTABGACHA YOSHDAGI BOLA SHAXSINI RIVOJLANTIRISHDA O'YINLI TEXNOLOGIYALARDAN FOYDALANISHNING AHAMIYATI

Annotatsiya. Maqolada maktabgacha yoshdagi bola shaxsini rivojlantirishda o'yinli texnologiyalardan foydalanishning psixologik mexanizmlari, usullari va ahamiyati haqida atroflicha ilmiy mulohazalar yuritilgan.

Kalit so'zlar: maktabgacha yosh, o'yinli texnologiyalar, shaxsga yo'naltirilgan ta'lim, shaxs rivojlanishi, o'yin kompetensiyasi, o'yin uslubi va xususiyatlari.

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THE IMPORTANCE OF USING GAME TECHNOLOGIES IN PERSONAL DEVELOPMENT OF PRESCHOOL CHILDREN

Abstract. The article contains detailed scientific comments about the psychological mechanisms, methods and significance of the use of game technologies in the development of the personality of preschool children.

Key words: preschool age, game technologies, person-oriented education, personality development, game competence, game style and features.

Kirish. Maktabgacha yosh inson hayotidagi eng noyob davr hisoblanadi, chunki bu davrda bilim orttirishga qiziqish uyg'otish, irodali bo'lishga, his tuyg'ularga poydevor qoyish, umuminsoniy qadriyatlarni anglash, bolaning shaxsiy qobiliyatlarini rivojlantirishdek muhim jarayonlar sodir bo'ladi.

Maktabgacha ta’lim tashkilotlarida ta’lim jarayonini tashkil qilish tamoyillarining biri o‘yin orqali ta’lim berish va rivojlantirish ekanligi ham fikrimizning yaqqol isbotidir. Bundan tashqari, “Ilk qadam” davlat o‘quv dasturida ko‘rsatilgan kompetensiyalarda ham o‘yin texnologiyalaridan unumli foydalanish asos sifatida ko‘rsatilgan. Jumladan, o‘yin kompetensiyasi – bolaning o‘yin jarayoni va uni tashkil qilishda tajriba, bilim va ko‘nikmalardan ijodiy foydalanishi o‘quv-tarbiyaviy faoliyat uchun asos hisoblanadi. Bolalarda faol harakatlarning shakllanishi va rivojlanishining asosi o‘yindir.

Asosiy qism. O‘yin har bir yosh bosqichida bolaning tevarak-atrofdagi hayotni va kishilar o‘rtasidagi turli munosabatlarni har tomonlama bilib olishga qaratilgan faoliyatidir. Maktabgacha yoshdagi bolaning o‘yin faoliyati mazmun jihatdan har kungi vaziyatga qarab o‘zgarib turadi. O‘yinli texnologiyalardan foydalanishning asosini maktabgacha yoshdagi bolalarning faollashtiruvchi va jadallashtiruvchi faoliyati tashkil etadi. Shunday ekan, bolalar tobora rivojlanib jamiyat talablariga moslashishlari uchun muhim bo‘lgan faolliklarining shakllanishiga asosiy ta’sir ko‘rsatuvchi o‘yinlarni o‘rganish va ulardan unumli foydalanish hozirgi kunda maktabgacha ta’lim oldida turgan dolzarb muammolardan hisoblanadi. Shu bois, o‘yin olimlar tadqiqotlariga ko‘ra mehnat va o‘qish bilan birgalikda faoliyatning asosiy turlaridan biri hisoblanadi. O‘yin ijtimoiy tajribalarni o‘zlashtirish va qayta yaratishga yo‘nalgan vaziyatlarda, faoliyat turi sifatida belgilanadi va unda shaxsning o‘z xulqini boshqarishi shakllanadi va takomillashadi. Maktabgacha ta’lim tashkilotining bola shaxsini rivojlantirishga yo‘naltirilgan ta’limni amalga oshirish faoliyatida bolalarning kognitiv (aqliy), kommunikativ (nutq), ijtimoiy-hissiy va jismoniy-motor rivojlanishiga sharoit yaratish, tarbiyachi va tarbiyalanuvchi o‘rtasida ishonch munosabatlarini shakllantirish, ruhiy-emotsional hamda jismoniy zo‘riqishni bartaraf etish juda muhimdir.

Ta’limiy o‘yinlar samaradorligini oshirish uchun uning texnologiyasi:

- o‘yinning ta’lim maqsadlariga mos bo‘lishi;
- imitatsion – rolli o‘yinning amaliy pedagogik (psixologik) vaziyatga ta’sir etishi;
- o‘yin qatnashchilarining o‘yin mazmuniga mos keladigan maxsus psixologik tayyorgarligi;
- o‘yinda ijodiy elementlardan foydalanish imkoniyatlari;
- tarbiyachi (psixolog) nafaqat rahbar sifatida, balki o‘yin jarayonida “to‘g’rilovchi” va maslahatchi sifatida ham ishtirok etish kabi talablarga tayyor bo‘lishi kerak.

O‘yinlar uslubi va xususiyatidan kelib chiqib quyidagi turlarga ajratiladi: imitatsion o‘yinlar; mazmunli-rolli o‘yinlar; innovatsion o‘yinlar; tashkiliy-faoliyatli o‘yinlar; ishchan treninglar.

ishlab chiqarishining faoliyati imitatsiya qilinadi, shuningdek, mahsulotlarni modellashtirish bo‘yicha olingan amaliy ko‘nikmalarni qo‘llaydilar.

Mazmunli-rolli o‘yinlar ularning asosida aniq hayotiy, ishchan yoki boshqa vaziyat yotadi. Bunday holda, o‘yin har bir qatnashchi aniq rolni bajaradigan (o‘ynaydigan) teatr qo‘yishni eslatadi). O‘yin bunday holda mazmuni – intellektual faoliyat shaklli ijodiy o‘yinlardir, shuning uchun, bu holda qatnashchilarni tayyorlash va o‘yin senariysini ishlab chiqish katta ahamiyatga ega.

Innovatsion o‘yinlarning boshqa o‘yin turlaridan ajralib turadigan farqi, harakatli tuzilishga ega ekanligi va o‘yinni bir necha o‘qitish-rivojlantiruvchi “fazolarda”, masalan, kompyuter dasturlaridan foydalanib o‘tkazishdir. Innovatsion o‘yinlar zamonaviy pedagogik va axborot texnologiyalaridan foydalangan holda sifatli bilim olishga qaratilgan;

Tashkiliy-faoliyatli o‘yinlarda e’tibor ko‘proq o‘yin vaziyatlarini tashxis qilish va muammoni yechish variantlarini tanlashni asoslashga qaratiladi. Uslub nuqtayi nazardan, bu yerda e’tibor ko‘proq qatnashchilarning muloqotiga, munosabatlariga va guruhiy ishlarning boshqa shakllariga qaratiladi. Bolaning rivojlanishini faollashtiradigan sharoit barcha joyda: guruh xonalarida, muassasaga kirishda, yo‘laklarda, sport va dam olish maydonchalarida ham yaratilgan bo‘lishi shart. O‘yin, mehnat va o‘qish inson faoliyatining asosiy turlaridir. O‘yin ijtimoiy tajribani qayta yaratish va o‘zlashtirishga qaratilgan faoliyat turi bo‘lib, u orqali insonning o‘z–o‘zini boshqarish ko‘nikmalari rivojlanadi. O‘yin shunday faoliyatki, uning natijasigina emas, balki jarayonning o‘zi ham insonga zavq bag’ishlaydi. O‘yin faoliyati ijod uchun imkon beradi, his-tuyg’ularini kuchaytiradi. O‘yin olimlar tadqiqotlariga ko‘ra mehnat va o‘qish bilan birgalikda faoliyatning asosiy turlaridan biri hisoblanadi.

Muhokamalar va natijalar. Psixologlarning ta’kidlashlaricha, o‘yinli faoliyatning psixologik mexanizmlari shaxsning o‘zini namoyon qilish, hayotda o‘z o‘rnini barqaror qilish, o‘zini o‘zi boshqarish, o‘z imkoniyatlarini amalga oshirishning fundamental ehtiyojlariga tayanadi. O‘yin ijtimoiy tajribalarni o‘zlashtirish va qayta yaratishga yo‘nalgan vaziyatlarda, faoliyat turi sifatida belgilanadi va unda shaxsning o‘z xulqini boshqarishi shakllanadi va takomillashadi.O‘yinli texnologiyalar bolalarda tahlil qilish, mantiqiy fikrlashni tadqiq qilish, hisoblash, o‘lchash, yasash, sinash, kuzatish, solishtirish, xulosa chiqarish, mustaqil qaror qabul qilish, guruh yoki jamoa tarkibida ishlash, axloq-odob o‘rgatish, nutq o‘stirish, til o‘rgatish, yangi bilimlar o‘rgatish va turlarini o‘rganish rivojlantirishga yo‘naltiradi. O‘yinli texnologiyalar shaxsni tarbiyalashga yordam beradi, chunki har bir o‘yinning takrorlanishi topshiriqni bajarishga yangicha munosabatda bo‘lishni talab qiladi. Uni hal qilish zarurati esa ijodiy izlanishlarni keltirib chiqaradi. O‘yinli texnologiyalarda tirishqoqlik, matonatlilik, boshlangan ishni oxirigacha yetkaza bilish singari eng kerakli irodaviy sifatlar tarbiyalanadi. Boshqacha qilib aytganda, ilg’or pedagogik texnologiyalar yordamida bolaning aqliy zakovatini, erkin fikrlashini, mustaqil faoliyat ko‘rsatishni ta’minlanish zarur.

Har bir yosh davrining psixologik xususiyatlarini hisobga olgan holda bolalarga tarbiyaviy ta’sir o‘tkazish natijasida o‘z vaqtida o‘zini anglash hissi vujudga keladi. Bolada o‘zini anglash tuyg’usi qancha erta uyg’onsa, uning barcha aqliy, ruhiy, ijtimoiy imkoniyatlarini baholash va his etish tez namoyon bo‘ladi. Har qaysi davrda bola rivojlanishining o‘ziga xos qulay holatidan unumli foydalanish muhim ahamiyatga ega. Bolalarning asosiy faoliyati o‘yin hisoblanishini inobatga olgan holda biz ta’lim-tarbiya jarayonini albatta o‘yin tarzida tashkil etmog’imiz zarur. O‘yinning har qaysi turi bolalar dunyoqarashini tubdan o‘zgartiradi va ularni fikrlashga chorlaydi. Ularni mashg’ulotda olgan bilimlarini real holatda o‘z shaxsiy tajribaga tayanib amaliyotda qo‘llashlari uchun imkoniyat yaratadi, ularda bilish jarayonlari faoliyati tezlashuvini tartibga solish uchun xizmat qiladi.

Xulosa. Yuqorida aytib o‘tilgan fikrlarimizdan ham ko‘rinib turibdiki, bu faoliyat tarbiyachini o‘z vazifa va maqsadlariga erishish uchun jiddiy yondashishga undaydi. Zero, O‘zbekiston kelajagi ta’lim maskanlarida tarbiyalanayotgan yosh avlodning yuksak kamoloti, aql-u zakovatiga bog’liq. Buning uchun esa, tarbiyachilar - o‘quv faoliyatida keng foydalanish uchun o‘yinli texnologiyalarni mukammal o‘zlashtirishlari, maktabgacha ta’lim tashkilotining turli yosh guruhlarida “Zinama-zina”, “Klaster”, “Charxpalak” kabi interfaol usullardan foydalanish qulayligini tasdiqlagan holda, o‘yinli texnologiyalardan samarali foydalanishi lozim.

Adabiyotlar:

1. “2017-2021 yillarda maktabgacha ta’lim tizimini yanada takomillashtirish chora-tadbirlari to‘g’risida”gi PQ -2707-son qarori. 29.12.2016.
2. O‘zbekiston Respublikasi Prezidentining 2018-yil 30-sentabrdagi “Maktabgacha ta’lim tizimini boshqarishni takomillashtirish chora-tadbirlari to‘g’risida”gi PQ-3955-sonli qarori.
3. O‘zbekiston Respublikasi Maktabgacha ta’limga qo‘yiladigan davlat talablari. -T., 2018.
4. “Ilk qadam” davlat o‘quv dasturi. –T., 2018.
5. Norbosheva M.M. Bolalar psixologiyasi. -T., 2002.
6. Mirdjalilova S., To‘laganova R. Ta’lim jarayonida pedagogik texnologiyalar. -T., 2008.
7. Nishonova Z.T. Bolalar psixologiyasi (o‘quv qo‘llanma). – T., 2006.

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MAKTABGACHA TA'LIM TASHKILOTIDA BOLALAR BILAN TURLI SAYOHATLAR O'TKAZISHNING AHAMIYATI

Annotatsiya: mazkur maqolada maktabgacha ta'lim tashkilotlarida turizmning ahamiyati, qiziqarli va esda qolarli sayohatlarni tashkillashtirish yo'llari, tarbiyachining sayohatga tayyorlanishi, sayohatlarni boshqarish, bolalarni sayohatga tayyorlash, sayohatdan keyingi ishlar va bolalarning sayohat uchun kiyimlari qanday va qay tartibda tayyorlanishi yoritilgan.

Kalit so'z: maktabgacha ta'im tashkiloti, turizm, ekskursiya, sayohat, turizm turlari, rolli o'yinlar, ko'rgazmali va amaliy metodlar, tabiat burchagi, tabiatshunoslik.

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THE IMPORTANCE OF TRAVELING WITH CHILDREN IN PRESCHOOL EDUCATION ORGANIZATION

Abstract. this article describes the importance of tourism in preschool educational organizations, ways to organize interesting and memorable trips, teacher's preparation for a trip, managing trips, preparing children for a trip, work after the trip, and how and in what order children's clothes for the trip are prepared.

Key word: preschool nutrition organization, tourism, excursion, travel, types of tourism, role-playing games, demonstration and practical methods, nature corner, natural science.

Turizm – bu bolalar uchun jismoniy tarbiya shakllaridan biri bo‘lib, u bolalar sog‘lig‘ini saqlash va mustahkamlash uchun zaruriy komponent sanaladi.

Maktabgacha ta’lim tashkilotlarida turizmni tashkil qilish oson, arzon, shu bilan birga tabiiy va amalga oshirilishi mumkin bo‘lgan hamda tarbiyalanuvchilarning jismoniy imkoniyatlari bilan bog‘liq bo‘lgan sport turi sanaladi. Turizm inson xarakterining jamoaviylik, tartib-intizom, matonat kabi ajoyib fazilatlarini rivojlantiradi, bolalarda irodani mustahkamlaydi, mardlik, mustaqillik, o‘zaro tushunishni rivojlantiradi. Shuningdek, turizm orqali maktabgacha yoshdagi bolada ekologik madaniyat ko‘nikmalari shakllanadi, bu bolalarda tabiiy va ob-havo hodisalari haqidagi bilimlarini kengaytirishga yordam beradi. Bolaning jismoniy tayyorgarligining asosi sifatida muvofiqlashtirish qobiliyatlari va chidamlilik rivojlanadi. Bolalar turizmi tog‘larga, qir-adirlarga sayr qilishni, muzeylarga, turli shahar va tashkilotlarga borishni va o‘yin-kulgilarni o‘z ichiga oladi. Maktabgacha ta’lim tashkilotlarida bog‘ga ekskursiyalar va sayrlarni bolalarning yosh xususiyatlari, sog‘lig‘i va individual ko‘rsatkichlari hisobga olingan holda o‘rta guruhdan boshlash mumkin. Tabiat qo‘yniga chiqish yoki sayr qilishni rejalashtirayotganda (qir-adirlarga, parkga, ko‘lga) vaqtni tashkil qilish haqida o‘ylash kerak: ochiq havo, sport o‘yinlari va mashqlari, attraksionlar, kam harakatchanlik o‘yinlari, topishmoqlar. Har bir sayr bolalar tomonidan kutilmagan vaziyatlar, qiziqarli uchrashuvlar (o‘rmon odami, gnom, tipratikan, tulki va boshqalar bilan) esda qolishi kerak. Ota-onalar ertak qahramonlari rollarini o‘ynashlari mumkin. MTTlarida bolalar bilan sayohatlarni tashkil etish bo‘yicha rolli o‘yinlar tashkil etish mumkin.

Maktabgacha ta’limni modernizatsiya qilish davrida maktabgacha ta’lim tashkiloti pedagoglariga ta’lim xizmatlari tarmog‘ini, jumladan, kundalik faoliyatlarning boshqa turlarini, dasturdan tashqari, kengaytirish va chuqurlashtirishga ruxsat beriladi. Ushbu yangi turlardan biri MTTda turizm bo‘lishi mumkin, bu bolaning jismoniy, intellektual, axloqiy rivojlanishiga hissa qo‘shadi. Maktabgacha ta’lim tashkilotlarida (piyoda, chang‘ida, chanada, skuterlarda, velosipedda, ekskursiya avtobuslarida) tabiiy muhitda piyoda sayohatlarni tashkil etish, maktabgacha yoshdagi bolaning tanasiga xos bo‘lgan faoliyatni amalga oshirish uchun shart-sharoitlarni yaratish kerak. Sayohat bolalarni tabiat bilan tanishtiruvchi faoliyatlardan biridir. U tabiat bilan tanishtirish metodlarining ko‘rgazmali metodiga kiradi. Sayohat vaqtida bola tabiat hodisalarining mavsumiy o‘zgarishlarini tabiiy sharoitda kuzatishi, tabiatning insonning hayot va talablariga muvofiq o‘zgarayotganini hamda atrofimizdagi jonli va jonsiz tabiatda yuz berayotgan hodisa va jarayonlar to‘g‘risida bilimlar to‘plashga imkon beradi. Sayohat faoliyatlarining afzalligi yana shundaki, unda bolalar o‘simlik va hayvonlarni ular yashaydigan muhitda ko‘rish, hamda tabiatda mavjud bo‘lgan o‘zaro aloqalar haqida dastlabki dunyoqarash, tasavvurlarini, olamni materialistik tushunishni shakllantirish imkoniyatiga ega bo‘ladilar.

Tarbiyachining sayohatga tayyorlanishi. Tarbiyachi sayohatni rejalashtirar ekan, sayohat mavzusi hamda maqsadini aniq belgilaydi, sayohat o‘rnini, unga boriladigan qulay (bolalarni charchatmaydigan, ular diqqatini asosiy maqsaddan chalg‘itmaydigan) yo‘lni belgilaydi. Sayohat o‘rnini tanlashda bolalarning jismoniy imkoniyatlarini (piyoda yuriladigan sayohatlar kichkintoylar uchun faqat yaqin masofalargagina uyushtirilishi mumkin), shuningdek mavsumni, yo‘lning xususiyatlarini, ob-havo holatini hisobga olish zarur. Sayohat uyushtiriladigan joy tarbiyachiga qanchalik tanish bo‘lmasin, u bir-ikki kun oldin o‘sha joyni ko‘rib chiqishi lozim. Bo‘lajak sayohat joyida bo‘lgan tarbiyachi marshrutni aniqlaydi, kerakli obyektlarni topib, bolalar kuzatishlarni mustaqil olib borishlari hamda dam olishlari mumkin bo‘lgan joyni belgilaydi. Sayohatlarni tashkil etishda obyekt tanlash katta ahamiyatga ega.

Sayohatlarni boshqarish. Sayohatni o‘tkazishdan oldin tarbiyachi uni o‘tkazish usullarini atroflicha o‘ylab ko‘radi va sayohat qiziqarli o‘tishi uchun oldindan she’r, topishmoq, maqollarni tanlab ulardan foydalanadi. Tarbiyachi bu jarayonni birinchi marotaba o‘tkazayotgan bo‘lsa, dastlab bolalarda hosil bo‘lgan qiziqishlarini qondirish hamda kuzatilayotgan narsa haqida birinchi taassurot hosil qilish uchun ularni kamida 1—2 daqiqa tomosha qildirib turadi. Bolalar kuzatishni boshqarish jarayonida tarbiyachi xilma-xil usullardan — bolalarning yoshlariga mos savol va topshiriqlar, narsani ushlab ko‘rish, qiyoslash, o‘yin harakatlaridan foydalanadi.

Tabiatshunoslik sayohati. Tabiatshunoslik sayohati kirish suhbati, kollektiv bo‘lib kuzatish, bolalarning individual mustaqil kuzatishlari, tabiatga oid materiallarni to‘plash, bolalarning dam olish vaqtida to‘plagan materiallar bilan o‘ynashi va yakuniy qismlarni o‘z ichiga oladi. Bolalarni sayohat o‘tkaziladigan joyga olib kelgandan so‘ng tarbiyachi qisqa suhbatda sayohatning maqsadi va vazifalarini eslatadi. Shundan so‘ng ular tabiatdagi narsa va hodisalarni kuzatishga o‘tadilar.

Sayohatning asosiy qismi — jamoaviy kuzatishdir. Bunda faoliyatning asosiy qismi hal qilinadi. Tarbiyachi bolalarga narsa va hodisalarning xarakterli xususiyatlarini anglab olishlariga yordam beradi. Bunga turli usullar (savol va topshiriqlar, she’rlar, tadqiqotchilik harakatlari, o‘yin usullari)ni qo‘llash orqali erishiladi.Tarbiyachi kuzatishlarni o‘z hikoyasi hamda tushuntirishlari bilan to‘ldiradi. Kuzatishda asosiy e’tibor jism va hodisalarni yaxshilab ko‘rishga, ularni qiyoslashga, tabiat hodisalari o‘rtasidagi aloqalarni aniqlashga yordam beradigan savol va topshiriqlarga qaratiladi.

Sayohatdan keyingi ish. Sayohatda olingan bilimlar faoliyatlarda, o‘yinlarda, tabiat burchagida o‘tkaziladigan kuzatishlarda kengaytiriladi va mustahkamlanadi. Sayohat yakunida to‘plangan materiallarni tabiat burchagiga joylashtirish (masalan, o‘simliklarni vazalarga, gul tuvaklarga solish, jonivorlarni akvarium, terrarium, sadaklarga joylashtirish), o‘simlik va hayvonlarni kuzatuv ostiga olish zarur.Xulosa qilib shuni aytish mumkinki, maktabgacha ta’lim tashkilotlarida tashkil etiladigan turizm bolalarning tabiatga

nisbatan ehtiyotkorlik, tejamkorlik bilan ish ko‘rishi va zarur bo‘lganda, unga amaliy yordam ko‘rsatishga tayyor turib, boshqalarni ham shunga undaydigan darajada bilim, malaka va ko‘nikmalarga ega bo‘lishi bilan xarakterlanadi.Buning uchun tarbiyachi yuksak darajadagi umumiy ekologik madaniyat va kasb-mahoratni egallagan bo‘lishi, milliy va umuminsoniy qadriyatlarni o‘zlashtirgan, tabiat va atrof-muhitni muhofaza qilishga salbiy ta’sir etmaydigan bolalarni tarbiyalashi zarur. Tabiat bolalarning tevarak-atrofga kuzatuvchanligini oshiradi, voqea-hodisalarining sodir bo‘lish sabablarini aniqlashga qiziqishlarini kuchaytiradi. Natijada bolalarning idroki, tasavvuri, qobiliyati, topqirligi, mustaqilligi rivoj topadi. Ayniqsa, bolalarga borliqdagi narsa- hodisalarning yaxlit ko‘rinishida qismlardan, qism ko‘rinishida esa yaxlitlikdan tarkib topishini idrok etishlariga, olam bir butunligini anglab yetishlariga, hayot go‘zalliklaridan ma’naviy zavq olishlariga va shu go‘zallikni qadrlashlariga o‘rgatishda muhim o‘rin tutadi.

Foydalanilgan adabiyotlar ro‘yxati:

1. Mirzayev Murotjon Ahmadjonovich, Aliyeva Mahbuba To‘ychiyevna. “Turizm asoslari”. T., “O‘zbekiston faylasuflari milliy jamiyati nashriyoti” 2011yil.
2. Sharipova D., Toirova M., Muxamedova S. “Agar bolam sog‘lom bo‘lsin desangiz” Toshkent “Ilm Ziyo” -2006 yil
3. To‘xtaev A., Xamidov A. «Ekologiya asoslari va tabiatni muhofaza qilish». T., «O‘qituvchi»1994yil.
4. Usmonxo‘jaev T., Toirova M., Sagdiev X., SHaripov T.. “Kichkintoylarga 200 ta harakatli o‘yinlar”. Toshkent-2003 yil
5. Usmonxo‘jaev T.S., Toirova M.T. “Bolalar bog‘chasida sayrlarni o‘tkazish”. T.: Cho‘lpon. 2008yil

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O'ZBEKISTONNING 2030-YILGACHA BO'LGAN DAVRDAGI RIVOJLANISH STRATEGIYASI VA UNI AMALGA OSHIRISH BOSQICHLARI

Annotatsiya. Ushbu maqolada O'zbekistonning 2030-yilgacha rivojlanish strategiyasi haqida hamda uni amalga oshirish istiqbollari borasida fikr va mulohazalar keltirilgan.

Kalit so'zlar. Rivojlanish, strategiya, Harakatlar strategiyasi, taraqqiyot strategiyasi, maqsad, vazifa.

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THE DEVELOPMENT STRATEGY OF UZBEKISTAN UNTIL 2030 AND THE STAGES OF ITS IMPLEMENTATION

Abstract. This article presents thoughts and opinions about the development strategy of Uzbekistan until 2030 and the prospects for its implementation.

Key words. Development, strategy, Action strategy, development strategy, goal, mission.

Bugun yurtimiz hayotining barcha jabhalarida o‘zgarish, islohotlar epkini kuzatilmoqda. Yangi zamon ruhi kirib bormagan, inson manfaatiga ustuvor ahamiyat qaratilmayotgan biror-bir soha yo‘q. Ayniqsa, so‘nggi yetti yildagi tadrijiy rivojlanish bosqichlariga nazar solsak, ularning mazmun-mohiyatida xalqimiz xohish-irodasi, yillar davomida fuqarolarning tinchlik-xotirjamligiga to‘siq bo‘layotgan og‘riqli muammolar yechimi turgani yanada ahamiyatlidir. Bir so‘z bilan aytganda, bunday tarixiy evrilishlar o‘z-o‘zidan sodir bo‘lmaydi. Mazkur islohotlar zamirida aniq va rejali maqsad, qat’iyat, kuchli siyosiy iroda mujassam.

Mamlakatimizning uchta strategik taraqqiyot dasturi:

2017–2021-yillarda O‘zbekiston Respublikasini rivojlantirishning beshta ustuvor yo‘nalishi bo‘yicha Harakatlar strategiyasi;

2022–2026-yillarga mo‘ljallangan Yangi O‘zbekistonning taraqqiyot strategiyasi;

“O‘zbekiston – 2030” strategiyasi “Kun tartibi – 2030”ga uyg‘un bo‘lib, O‘zbekistonga tegishli bo‘lgan 16 ta global Barqaror rivojlanish maqsadlariga erishishga yo‘naltirilgan milliy maqsad va vazifalarni to‘la qamrab olgan.

Masalan, “O‘zbekiston – 2030” strategiyasiga e’tibor qaratsak, tahlillar, uning 5ta yo‘nalishi BMT tomonidan belgilangan 16ta Barqaror rivojlanish maqsadlarini to‘la qamrab olishini ko‘rsatadi.

“O‘zbekiston – 2030” strategiyasi doirasida 2023 yilning o‘zida qabul qilinishi rejalashtirilgan 25 ta qonun loyihasi, 39 ta Prezident farmoni va qarorlari, boshqa normativ-huquqiy hujjatlar (jami – 118 ta) Barqaror rivojlanish maqsadlariga erishishning zarur tashkiliy-huquqiy asoslarni yaratadi. Bu esa, o‘z navbatida, “O‘zbekistn – 2030” strategiyasida belgilangan maqsad-vazifalar Barqaror rivojlanish maqsadlarini amalga oshirish uchun o‘ziga xos “Yo‘l xaritasi” vazifasini o‘tashini hamda Strategiyani amalga oshirish va uning maqsadli ko‘rsatkichlariga erishish barcha davlat organlari va tashkilotlarining eng ustuvor vazifasi ekanidan ham dalolat beradi.

2023 yil 30 aprelda o‘tkazilgan referendumda umumxalq ovoz berish orqali O‘zbekiston Respublikasining yangi tahrirdagi Konstitutsiyasi qabul qilingani Yangi O‘zbekistonni barpo etishning konstitutsiyaviy asoslarini mustahkamlashga xizmat qildi. Mazkur hujjat yurtimiz taraqqiyotining asosiy yo‘nalishlarini takomillashtirish va ulkan islohotlarni yangi bosqichga olib chiqish dolzarb ahamiyat kasb etadi.

Yangi tahrirdagi Konstitutsiya davlatimiz rahbari tomonidan joriy yilning 11 sentyabrida imzolangan “O‘zbekiston – 2030” strategiyasi to‘g‘risida”gi farmon hamda “O‘zbekiston – 2030” strategiyasini 2023 yilda sifatli va o‘z vaqtida amalga oshirish chora-tadbirlari to‘g‘risida”gi qarorga tayanch vosita bo‘lib xizmat qildi deyish mumkin. Zero, farmon muqaddimasida “yangilangan konstitutsiyaviy-huquqiy sharoitlarda mamlakatimiz taraqqiyotining asosiy yo‘nalishlarini takomillashtirish va amalga oshirilayotgan keng ko‘lamli islohotlarni yangi bosqichga olib chiqish talab etilmoqda”, deb alohida ta’kidlangani bejiz emas. Natijada yurtdoshlarimizning yangi O‘zbekistonni barpo etish bo‘yicha xohish-irodasini ro‘yobga chiqarish, sog‘lom, bilimli va ma’naviy barkamol avlodni tarbiyalash, kuchli iqtisodiyotni shakllantirish, adolat, qonun ustuvorligi, xavfsizlik va barqarorlikni kafolatli ta’minlash ustuvor maqsad sifatida belgilangani qayd etildi.

“O‘zbekiston – 2030” strategiyasining asosiy maqsadlaridan biri farovonlikka erishish uchun shart-sharoit yaratish. Bunga aholi turmush darajasini oshirish, iqtisodiyotni rivojlantirish, xorijiy sarmoyalarni jalb etish va ish o‘rinlarini yaratish orqali erishiladi.

Dasturda tadbirkorlik sohasida muvaffaqiyatli rivojlanish va yuqori natijalarga erishish uchun qulay ishbilarmonlik muhitini yaratish ko‘zda tutilgan.

O‘zbekistonning buguni va ertasi uchun muhim bo‘lgan ushbu hujjatda ijtimoiy sohani rivojlantirishga alohida e’tibor qaratilgan. Dasturda ta’lim, sog‘liqni saqlash va madaniyat sohalarini rivojlantirish bilan birga yoshlar va

xotin-qizlarga bo‘lgan e’tiborni kuchaytirish g‘oyasi ilgari surilgan. Strategik maqsad – mamlakat aholisiga yuqori sifatli xizmatlardan foydalanish hamda o‘z-o‘zini rivojlantirish va o‘zini o‘zi anglash imkoniyatlarini ta’minlashdan iborat.

Ushbu hujjatda belgilangan sud-huquq islohotlari haqida gapirganda, uning 4.2-bandiga alohida to‘xtalib o‘tish lozim. Bu O‘zbekiston Konstitutsiyasi va qonunlari ustunligini ta’minlash, inson huquq va erkinliklarini ishonchli himoya qilishni sud-huquq islohotlarining asosiy mezoniga aylantirishni o‘z ichiga oladi va ozodlikdan mahrum qilish tarzidagi jazolarni tayinlash amaliyotini 30 foizdan 20 foizga qisqartirishni nazarda tutadi. Bundan tashqari, sudlar va tergov organlari faoliyatida ayrim protsessual harakatlarni masofadan turib amalga oshirish imkoniyatlarini kamida 2 barobar oshirish ko‘zda tutilgan.

Milliy maqsad va vazifalar o‘zida 2030 yilgacha barqaror rivojlanish sohasida jami 17 ta maqsad va ular doirasida amalga oshiriladigan vazifalarni qamrab olgan.

Jumladan, amalga oshiriladigan tadbirlar natijasida 2030 yilgacha O‘zbekistonda o‘ta qashshoqlikni tugatish, kam ta'minlangan aholi sonini hozirgiga nisbatan ikki baravarga kamaytirish rejalashtirilgan.

Sog‘lom turmush tarzini ta'minlash maqsadida esa aholi o‘rtasida yurak-tomir, onkologik, qandli diabet va surunkali respirator kasalliklar tufayli bevaqt o‘limlar sonini 30 foizga qisqartirish, shuningdek 2025 yilgacha yo‘l-transport hodisalari sonini ikki baravarga qisqartirish rejalashtirilgan. Shuningdek, umumqamrovli va sifatli ta'limni ta'minlash hamda barchaga butun umri davomida ta'lim olish imkoniyatini rag‘batlantirish maqsadi bo‘yicha 2030 yilgacha o‘qituvchilarni tayyorlash, qayta tayyorlash va malakasini oshirish sohasida xalqaro hamkorlik qilish orqali o‘qituvchilar sonini jiddiy ravishda ko‘paytirish mo‘ljallangan.

Yangi O‘zbekistondagi islohotlar falsafasi ham o‘z navbatida “inson, jamiyat va davlatning barqaror rivojlanishi” hamda 2030-yilgacha mamlakatning barcha belgilangan Barqaror rivojlanish maqsadlariga erishishini ta’minlash g‘oyalariga asoslangan.

O‘tgan davr mobaynida mamlakatda bu borada keng ko‘lamli va kompleks tashkiliy-huquqiy chora-tadbirlar amalga oshirildi va bu boradagi tajribasi xalqaro hamjamiyat tomonidan ham e’tirof etildi. Avvalambor, Barqaror rivojlanish maqsadlari va bu boradagi tegishli vazifalar yangi tahrirdagi O‘zbekiston Respublikasi Konstitutsiyasi, 360 dan ziyod qonunlari va boshqa normativ-huquqiy hujjatlarida o‘z aksini topdi.

Shu o‘rinda yangi tahrirdagi Konstitutsiyamizga Barqaror rivojlanish maqsadlariga oid normalar kiritilganligi borasidagi quyidagi ma’lumotlarni keltirish o‘rinli, deb hisoblaymiz.

Foydalanilgan adabiyotlar:

1. Mirziyoyev Sh.M. Milliy taraqqiyot yo„limizni qat‟iyat bilan davom ettirib, yangi bosqichga ko„taramiz. T. 1. - Toshkent: O„zbekiston, 2017.

2. Mirziyoyev Sh.M. Buyuk kelajagimizni mard va olijanob xalqimiz bilan birga quramiz. - Toshkent: O„zbekiston, 2017.
3. Mirziyoyev Sh.M. Qonun ustuvorligi va inson ma‟nfaatlarini ta‟minlash – yurt taraqqiyoti va xalq farovonligining garovi. O„zbekiston Respublikasi Konstitutsiyasi qabul qilinganining 24 yiligiga bag„ishlangan tantanali marosimidagi ma‟ruzasi. - Toshkent: O„zbekiston, 2017.
4. https://uza.uz/oz/posts/ozbekiston-2030-strategiyasi-maqsad-vavazifalar_532507
5. https://uza.uz/oz/posts/ozbekiston-2030-strategiyasi-yangi-ozbekiston-uchun-yangi-davr_537810

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THE COMPETENCE APPROACH IN EDUCATION OF A FOREIGN LANGUAGE

Abstract. This article is dedicated to the knowledge of a foreign language, which gives a future specialist access to foreign sources of information, without which the activity of a certified specialist is currently unthinkable. The ability to work with original literature in the specialty includes obtaining the information contained in the text, its critical comprehension, generalization, analysis and assessment of reliability. Foreign language competence ensures the readiness of the student to actually use the acquired knowledge in a professional environment.

Key words: foreign, language, competence, pedagogy, specialist, text, ability, progress, quality.

INTRODUCTION

The change in the socio-political situation, the development of international contacts in all spheres, the consolidation of these contacts and international integration have led to an increase in the role and importance of skills and abilities of genuine foreign language communication. Rapid socio-economic progress dictates high requirements for the quality of foreign language teaching in educational institutions, as each new generation of students must rise to a higher level of foreign language proficiency. Changes in the socio-cultural context of a foreign language, new requests of students regarding the level of proficiency in it necessitate a qualitative change in training. In connection with the modernization of local education, one of the most important tasks facing educational institutions is the formation of key competencies, the issue of competence-based approach in education becomes especially relevant. Knowledge of a foreign language gives a future specialist access to foreign sources of information, without which the activity of a certified specialist is currently unthinkable. The ability to work with original literature in the specialty includes obtaining the information contained in the text, its critical comprehension, generalization, analysis and assessment of reliability. Foreign language competence ensures the readiness of the student to actually use the acquired knowledge in a professional environment.

MATERIALS AND METHODS

Competence began to be considered as a personal category, and competencies turned into units of the curriculum and constituted the "autonomy" of competence. Speaking about competencies, it is necessary to clarify the concept of "competence" – a set of competencies, that is, the observed manifestations of successful productive activity. Competence is a complex personal resource that

provides an opportunity for effective interaction with the outside world in a particular area and depends on the competencies necessary for this. The competence approach imposes certain requirements on students and their level of proficiency in a foreign language. In this regard, the basic and advanced competencies of students are distinguished. At the basic level, language proficiency as a means of communication is assumed (a certain vocabulary, knowledge of basic grammatical structures, knowledge of the laws of language functioning, familiarity with the cultural environment, etc.). The advanced level assumes that students will use a foreign language to solve practical problems, for example, to find the necessary information on the profile of their specialty. This level has an interdisciplinary character and is evaluated by the result achieved, and not only by the correctness of the use of certain grammatical constructions and active vocabulary.

The main means of forming key competencies in learning a foreign language are various technologies, forms and methods of teaching. Such forms and methods include: a teacher's monologue; a frontal-individual survey; informative conversations; independent work with a textbook on teacher's assignments; a film demonstration; traditional control work. Researchers of the competence-based approach to learning offer several classifications of key competencies:1) value-semantic, 2) general cultural, 3) educational and cognitive, 4) informational, 5) communicative, 6) social and labor, 7) personal improvement. Each of the competencies includes a large complex of knowledge, skills and values.

It is these key competencies that make it possible for the formation of a student as a subject of educational activity and the upbringing of his personality. The competence-based approach to teaching a foreign language requires a creative approach to the organization and construction of the educational process, the creation of conditions for the formation and development of practical skills and skills of foreign language speech. Therefore, it is necessary to strive to create such conditions in the classroom when the assimilation of language material by students is carried out naturally, in the process of communication between the teacher and the students among themselves in life situations modeled by us in various ways. The formation of students' competencies depends on their activity, when the "activity" of the teacher turns into the activity of the trainees.

RESULTS AND DISCUSSIONS

The competence-based approach strengthens the practical orientation of education, emphasizes the need to acquire experience in activities, the ability to put knowledge into practice. Thus, the competence approach includes a set of principles for determining the goals of education, expressed in self-determination, self-actualization and the development of the individuality of students. No less important is the question of choosing forms and methods of teaching students. Learning in competence-oriented education acquires an activity character, i.e. the formation of knowledge and skills is carried out in the practical activities of

students, their joint activities in groups are organized; active forms and methods of teaching are used, innovative technologies of a productive nature are built; an individual educational trajectory is built; interdisciplinary connections are actively implemented in the learning process; the most important qualities are developed: independence, creativity, initiative and responsibility.

The formation of educational and cognitive competence is the formation of skills of educational activity, the ability to analyze their activities. Self-control and mutual control are actively used to form this competence. The formation of communicative competence takes place in stages with the help of game technologies, discussions, case study technology. When conducting classes, we use electronic multimedia technologies, since it is impossible to teach a foreign language without giving students the opportunity to hear the speech of native speakers and see their style of behavior in a particular communication situation. Students define social roles, conduct dialogues on various topics, practice oral speech and speech cliches of a socio-cultural orientation, which allows them to show creativity of thinking.

As for practical skills of foreign language proficiency, students should have a certain program, lexical and grammatical material, be able to work with correspondence in a foreign language and independently draw up various documents in native and foreign languages, have an idea of conducting business negotiations in a foreign language.

CONCLUSION

Thus, for the competent use of the competence approach, considerable preparation is required, the creation of a solid language base for students, which is carried out in the learning system. In turn, the high quality of foreign language learning contributes to competitiveness and professional mobility in the field of professional activity and communication of the future specialist. The acquisition of foreign language competence by students consists in mastering a foreign language at a level that will allow them to use it to meet professional needs, implement business contacts and further professional self-education and self-improvement.

References:

[1]. FAYZULLAEVA, U. A Competent Approach as a Model of the Development for the Professional Training of the Future Teachers. PROCEEDINGS E-BOOK, 392.

[2]. Fayzullaeva, U. Factors of Formation and Development of the Digital Educational Process in the Social Sciences. PROCEEDINGS E-BOOK, 44

[3]. Fayzullaeva U., & Muhiddinova, M. (2023). THE CREATIVITY OF JOHN FOWLES. Журнал иностранных языков и лингвистики, 6(1).

[4]. Fayzullaeva U., & Parmonova, N. (2021). THE EVOLUTION OF FEMALE WRITERS IN THE 20TH CENTURY: FROM THE LATE 19TH CENTURY TOWARDS 21ST CENTYRY. Mental Enlightenment Scientific-Methodological Journal, 75-83.

[5]. Kadirov, F., & Fayzullaeva, U. (2022). The narrative point of the novel of education of the twentieth century. Journal of Pedagogical Inventions and Practices, 10, 49-51.
[6]. Dusanova, D., & Fayzullaeva, U. (2022). The" poetic renaissance" in American literature of the XX century. Zien Journal of Social Sciences and Humanities, 10, 70-73.
[7]. Fayzullaeva, U., & Solieva, G. (2023). THE “GOTHIC” TRADITION IN THE NOVELS OF IRIS MURDOCH AND JOHN FOWLES. INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION, 2(16), 192-194
[8]. Fayzullaeva, U., & Kadirov, F. (2023). THE XX-CENTURY ENGLISH UPBRINGING NOVEL. INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION, 2(16), 189-191.
[9]. Fayzullaeva, U., & Kadirov, F. (2023). POETIC CLASSIFICATION OF THE XX-CENTURY ENGLISH UPBRINGING NOVEL. World of Science, 6(4), 361-363.
[10]. Fayzullaeva, U., & Dusanova, D. (2023). THE INTERNATIONAL NATURE OF THE “SMALL MAGAZINES” CREATED BY MODERNIZM IN XX CENTURY. JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH, 6(4), 692-694.
[11]. Fayzullaeva, U. (2022). " WOMEN WRITERS" AS THE REPRESENTATIVES OF EARLY MODERNISM. International Journal of Early Childhood Special Education, 14(3).

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REGIONAL LABOR MIGRATION AND SOCIO-ECONOMIC FACTORS AFFECTING IT

Annotation. The article analyzes the formal and informal forms of labor migration, its seasonal, temporary and recurring characteristics, as well as the impact of socio-economic and demographic factors affecting migration on the example of some regions of the republic.

Keywords: labor market, labor migration, donor and recipient countries, foreign labor migrants, high wages.

Introduction. Labor migration refers to the territorial movement of the population within and outside the borders of the country in different periods in order to sell the knowledge, skills and qualifications of migrants in the labor market. The following factors cause labor migration in world practice: economic inequality between rich and poor countries; disproportion of population demography; damage to social relations as a result of economic development; relations between donor and recipient countries; cheap labor of migrants and others. In the Republic of Uzbekistan, especially in the south-western regions of the Republic the reasons of labor migration are as follows: insufficient jobs; low cost of labor; lack of well paid permanent work; relatively low living conditions; earning money for education; lack of jobs in the specialty; not having any profession or trade, etc.

The main part. Migrants not only provide developed countries with cheap labor, but they help to fill the shortage of workers in many fields with knowledgeable specialists. The existence of the above problems in providing employment to the population in the labor market requires effective organization of labor migration. In the current period, the main factors with an economic, socio-demographic and organizational-territorial description have a direct impact on the change of foreign labor migration. Among the main economic factors of foreign labor migration, it is necessary to create a special fund for the preparation of citizens for a profession and support them during their migration abroad, and give tax incentives to agencies that provide services in the field of employment. The minimum wage paid to migrants should not be less than the specified one,, ease of doing business, industry innovation or the availability of technical capabilities for new industries, allowing labor migrants to obtain loans from commercial banks for transportation and other expenses, and introducing convenient mechanisms for obtaining and paying loans through international payment systems have a significant impact.

Statistical data and their analysis. As a socio-demographic factor, the workforce exporting country should collect information from foreign employers about job vacancies, nature of work, salary, skills required from workers, necessary medical care and good health. It is planned to provide hygienic conditions[2]. It is also a priority that the employer must offer medical insurance for migrants, providing them with accommodation, and ensuring compliance with sanitary and hygienic standards.

Table 1

Foreign labor migrants in south-western Uzbekistan change in number (thousands)

Regions	**2010**	**2015**	**2017**	**2018**	**2020**	**In 2020 comparing to 2015 (%)**
Bukhara	37,5	66,4	108,2	133,2	116,9	311,7
Kashkadarya	21,2	100,1	96,5	177,9	162,1	764,6
Navai	3,7	14,4	17,2	37,7	28,1	759,5
Samarkand	36,2	143,3	186,5	341,2	242,0	668,5
Surkhandarya	19,4	74,1	72,5	163,4	146,0	752,6
Total	**118,0**	**398,3**	**480,9**	**853,4**	**695,1**	**589,1**

The table is compiled based on the information of the State Statistics Committee of the Republic of Uzbekistan.

According to the Ministry of Employment and Labor Relations, the share of foreign labor migrants in south-western Uzbekistan is 37.8 percent, and their number increased by 5.89 times in 2010-2020 (Table 1). In 2020 673 citizens of southwestern Uzbekistan were sent abroad to work by the Agency for foreign labor migration issues. According to the bilateral agreement, 614 citizens of Uzbekistan were sent to work in South Korea, 50 to Russia, and 9 to Bulgaria.

As can be seen from the table, during the analyzed period, the number of labor migrants has increased more compared to other regions in Kashkadarya (7.64 times) and Surkhandarya (7.52 times) regionsThis situation demands paying more attention to its regulation for continuous improvement of existing mechanisms related to the issues of foreign labor migration level. 80.7 percent of citizens working abroad (2020) are men, the remaining 19.3 percent are women. More than half of Foreign labor migrants (56.8 percent) is accounted for young people. When analyzed by countries, 61.5 percent of foreign labor migrants live in the Russian Federation, 12.1 percent - in the Republic of Kazakhstan, 9.5 percent - in Turkey, 5.3 percent - in the Republic of Korea, 1.2 percent - in the United Arab Emirates, the remaining 10, 3 percent work in other countries. in (Table 2). According to the analyzes carried out in the south-western regions of Uzbekistan, we can observe that the majority of immigrants from the Bukhara region go to the Russian Federation, from the Navoi region to Kazakhstan and the Republic of Korea, and from the Samarkand region, the majority go to work in

Turkey and the United Arab Emirates. and these amounts are higher than in other regions of the republic.

Table 2

№	Regions	2010			2016			2018				2019						2020			
		Total	*From this*		Total	*From this*			*from this*			Total	*From this*					Total	*From this*		
			rea	Russia		rea	Russia		rea	Russia	Japan		rea	Ruusia	Turkey	Poland	Bulgaria		rea	Russia	Bulgaria
1	Bukhara	317	52	265	95	92	3	115	44	71	-	198	56	112	30	-	-	191	170	21	-
2	Kashkadarya	723	199	524	392	387	5	433	373	59	1	397	349	41	7	-	-	277	243	25	9
3	Navai	210	210	-	72	72	-	89	57	32	-	133	70	56	7	-	-	50	49	1	-
4	Samarkand	749	749	-	172	172	-	376	331	43	2	315	220	83	12	-	-	40	40	-	-
5	Surkhandarya	86	86	-	67	67	-	139	63	72	4	98	56	34	8	-	-	115	112	3	-
	Total	2085	1296	789	798	790	8	1152	868	277	7	1141	751	326	64	-	-	673	614	50	9

Changes in the number of people employed abroad through the external labor migration agency from the residents of South-Western regions of Uzbekistan (per person)

Labor migration can be of two types: formal and informal. In Uzbekistan, formal labor migration has been established with the following countries: the Republic of South Korea, the Russian Federation, Turkey, UAE, Bulgaria, Poland, Japan. During the research period (2010-2020), the number of people employed in the region decreased from 2085 to 673, that is, by 67.8%. Such a decreasing trend was also observed in Bukhara, Kashkadarya, Navoi and Samarkand regions. In particular, the number of official foreign migrants in 2020 compared to 2010 decreased in Samarkand region - for 94.7%, in Navoi region - 76.2%, in Kashkadarya region - 61.7%; percent, and in Bukhara region by 39.8 percent. The number of workers employed abroad by an agency during the research period increased only in the Surkhandarya region (from 86 to 115 people, respectively). It should be noted that in 2010-2017, citizens of the Republic of Uzbekistan were sent to work formally only 2 countries, i.e. Korea and Russia, but since 2018, the geography of official labor migration has expanded, including Japan, Turkey, Poland and Bulgaria. In 2019, private employment agencies in the southwestern part of Uzbekistan employed 1,227 citizens abroad. According to statistics, migrants are employed in 22 countries through private employment agencies. Most of the foreign labor migrants were sent to Russia, Turkey, Lithuania, Latvia, Poland and Bulgaria. When analyzed by regions, the largest

number of foreign labor migrants came from Bukhara, Surkhandarya and Kashkadarya regions. The major difference of Labor migration in The Republic is that it has more informal appearance. This situation is reflected in the seasonal, temporary and recurring nature of this type of labor migration. Actions performed without official documents such as a work visa, permit, employment contract, special card for migrants, customs declaration, and so on, are also stated unofficial. Under the influence of the above-mentioned factors, the population is provided with work in various fields and industries in different cities. Based on the information of the Ministry of Employment and Labor Relations, the regions of the republic can be divided into 3 groups according to the supply of labor resources:

1. Regions with abundant labor resources are Samarkand, Fergana, Kashkadarya, Andijan, Namangan, Tashkent and Surkhandarya regions.

2. Regions with average labor resources Republic of Karakalpakstan, Bukhara and Khorezm regions.

3. Regions with low supply of labor resources Jizzakh, Syrdarya and Navoi regions.

It can be seen that in southwestern Uzbekistan Samarkand, Kashkadarya and Surkhandarya regions are rich in labor resources, whereas, Bukhara region is average, and Navoi region is low among the other areas. Effectively organizing the migration of people from regions with abundant labor resources to regions with less resources in an organized manner ensures equal distribution of labor resources of the republic This is manifested in such directions as migration of labor migrants within the Republic from villages to cities, from district centers to other large cities, or from one region to another. Internal labor migration in south-western Uzbekistan account for 8.9 percent and Large cities are the role of the city where internal labor migrants move. In particular, 70.0-80.0 percent of internal migration of the republic is accounted for by the city of Tashkent. Migration from rural to urban areas has positive significance in the republic. After all, the majority of the country's population lives in rural areas, and the population in these areas continues to grow at a high rate. In these densely populated areas, labor resources are more than needed, despite the fact that primary attention is paid to the creation of new jobs in rural areas, the problem of employment of labor resources remains urgent. Labor migration in the south-western region of Uzbekistan is mainly characterized by
seasonality and repetition. The main part of the labor movement is rural residents (80.5%). The main reasons for this are the increase in labor supply in rural areas and relatively low employment opportunities.

Regions	2010	2015	2016	2017	2018	2019	2020	In 2020 compared to 2010
Bukhara	4,6	4,9	5,2	5,4	4,9	5,4	5,8	126,1
Kashkadarya	7,2	8,1	9,3	8,9	8,8	9,6	10,3	143,1
Navai	8,6	9,1	9,4	10,4	10,5	9,1	9,9	115,1
Samarkand	8,3	9,9	8,6	8,3	9,6	9,4	10,6	127,7
Surkhandarya	7,8	9,3	9,4	11,6	9,6	10,3	11,8	151,3
Total	**36,9**	**41,3**	**41,9**	**44,6**	**43,4**	**43,8**	**48,4**	**131,2**

Changes in the number of internal labor migrants of South-Western regions of Uzbekistan (per person)

The table is compiled based on the information of the State Statistics Committee of the Republic of Uzbekistan.

The main reason for seasonal labor migration in the republic is that a large part of the labor force is mobilized in rural areas, mainly in the agricultural sector, and the work in this sector is temporary, that is, seasonal in nature. According to the information of the Ministry, the internal labor migration of the able-bodied population is becoming active in the studied region (Table 2). Among these areas, the regions with active internal migration are mainly are Surkhandarya, Kashkadarya, Samarkand and Bukhara regions. Over the past 2010-2020, internal migration has increased in Sukhondarya (151.3 percent), Kashkadarya (143.1 percent), Samarkand (217.7 percent), and Bukhara region (126.1 percent). It can be seen that the lowest indicator belongs to Navoi region (115.1 percent) (Table 2). It is possible to highlight three important directions of movement of labor migrants within the republic:

- The first is the capital city Tashkent, the main direction for all regions of the republic
- The second route is within the regions, in which the regional centers play an important role.
- The third direction is the centers of regional districts.

As mentioned above, the main part of this type of labor movement is accounted for by rural residents (80.5%). The main reasons why the main part of the internal labor movement is contributed by the rural population are explained by the following:

First, there is a surplus in the rural areas of the regions availability of labor resources.

Second, there is a lack of jobs and low employment opportunities in rural areas.

Thirdly, the migration of labor migrants to regional centers or the capital is explained by the large number of seasonal jobs and relatively high wages.

Due to the export of labor force of the Republic of Uzbekistan to foreign countries:

- foreign capital are added to the national income of the republic.

- migrants bring with them the most up-to-date knowledge, foreign experiences important for production, and study the effective use of modern technologies;

- - organization of existing labor in foreign companies and enterprises, effective work, correct management of the production process will be learned, and most importantly - acquisition of modern knowledge and skills will be achieved.

There are positive and negative aspects of labor export. In our opinion, in order to regulate migration in the regions and properly use labor migrants, it is appropriate to implement the following:

Positive aspects	Negative aspects
Acquisition of new professional skills by workers	Lack of access to skilled labor
reduction of the balance of payments deficit	In addition to goods, increasing dependence on international demand for labor
Balancing supply and demand in the domestic labor market	Directing the capital used for the development of production resources intended for consumption to other areas
Structural and technological restructuring of production	Increase in inflation rate

Conclusion and suggestions.

First, it is necessary to establish the activity of centers dealing with internal labor migration issues in all districts of the republic. These centers require the organization of labor market monitoring in order to develop a balance of regional, inter-branch, occupational mobility of labor resources, to identify persons who need to change their place of residence in the regions.Secondly, proper identification of regional migration groups by dividing them into groups according to the extent to which they are provided with labor resources in the cities and districts of the Republic.Thirdly, to fully ensure the legal and social protection of citizens moving to other regions.Fourth, to regulate labor migration, under the leadership of relevant organizations and ministries, to create a mechanism for hiring, training qualified workers and specialists in accordance with the orders of labor importing countries and large employer companies.Migrants should be taught the language, history, customs and traditions of the country in which they plan to work, and necessary qualifications and skills should be formed for the chosen work and profession. It was observed, that life expectancy at birth in South-Western Uzbekistan is slightly higher than the national average, life expectancy at birth in the republic is 0.4 years, and in the studied area it is 0.1 years longer, and foreign labor migrants are high in these regions. Such a situation requires paying more serious attention to the issues of foreign labor migration at the state level, and constantly improving the existing mechanisms for its regulation. In order to regulate migration in the regions and properly use labor migrants, it is proposed to establish centers dealing with internal and external labor migration issues in all districts of the republic. These

centers carry out important tasks such as developing the regional, inter-branch, occupational mobility balance of labor resources, identifying persons who need to change their place of residence in the regions, and organizing constant control of the labor market.

References:

1.Tojiyeva Z.N. Do'smonov. F.A., Ibragimov L. Mehnat migratsiyasi: omillar, sabablar, muommolar // O'zMU xabarlari. - Toshkent, 2012. – B.14-15.
2. Khamid Khudaybergenovich Abdurahmon, Lutfullo Ziyadullayevich Ibragimov, 2015." Regional Characteristics Of Demographic Development In The Republic Of Uzbekistan ", SEA-Practical Application of Science. Romanian Foundation for Business Intelligence, Editorial Department, issue 7, pp.363-368,April.
3. Муҳиддинов Э.М. Аҳолини иш билан бандлигини таъминлашда меҳнат миграциясининг роли. Иқтисодиёт фанлари бўйича фалсафа (PhD) доктори илмий даражасини олиш учун ёзилган диссертация. Тошкент, 2019.
4. Парманов Ф.Я. Миграция жараёнларини бошқаришда инсон омили. Социлогия фанлари номзоди илмий даражасини олиш учун ёзилган диссертация. Тошкент, 2012.
5. Расулова Д.В. Бозор муносабатлари тизимида ишчи кучи миграциясининг назарий-услубий асосларини такомиллаштириш. Иқтисод фанлари номзоди илмий даражасини олиш учун ёзилган диссертация. Тошкент, 2010.

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O'ZBEKISTON RESPUBLIKASIDA DAVLAT BUDJETINING G'AZNA IJROSIGA O'TISHNING ZARURLIGI VA AHAMIYATI

Annotatsiya. Ushbu maqolada bugungi kunda mamlakatimizda davlat budjetining g'azna ijrosiga o'tishning zarurligi va ahamiyati muallif qarashlari bilan ochib berilgan. Qolaversa, g'azna amaliyotidagi o'zgarishlar tendensiyalari bo'yicha taklif va tavsiyalar ishlab chiqilgan.

Kalit so'zlar. Davlat moliyasi, g'azna ijrosi, davlat budjeti, g'azna amaliyoti.

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THE NECESSITY AND IMPORTANCE OF THE TRANSITION TO TREASURY EXECUTION OF THE STATE BUDGET IN THE REPUBLIC OF UZBEKISTAN

Abstract. In this article, the necessity and importance of transitioning to the treasury execution of the state budget in our country today is revealed with the views of the author. In addition, suggestions and recommendations were developed regarding the trends of changes in treasury practices.

Key words. State finance, treasury execution, state budget, treasury practice.

O'zbekiston Respublikasida davlat moliyasini boshqarish tizimida olib borilayotgan islohotlar, qator vazifalar bilan birgalikda, davlat budjetining g'azna ijrosiga bosqichma-bosqich o'tishni va uning faoliyat mexanizmlarini takomillashtirishni nazarda tutadi. Bunda zamonaviy axborot texnologiyalari yordamida davlat mablag'larining harakati to'g'risidagi ma'lumotlarni jamlash, qayta ishlash, uzatish usullarini o'zlashtirish asosida davlat moliyasini boshqarishning samarali usul va vositalarini shakllantirish va muvofiq holda ishlashini ta'minlash zarur bo'ladi. Mamlakatimizda davlat budjetining g'azna ijrosini samarali tadbiq etishga faqatgina barqaror rivojlanish ko'rsatkichlariga erishganimizdan keyingina muvaffaq bo'lindi. O'zbekiston hukumati davlat moliyasini boshqarish tizimida ham kengqamrovli islohotlarni muvaffaqiyatli amalga oshirib kelmoqda. Bu islohotlarning ijobiy natijalarini davlat budjeti g'azna ijrosining muvaffaqiyatli joriy etilishida ko'rishimiz mumkin.

Davlat budjetining g'azna ijrosi davlat budjeti va davlat maqsadli jamg'armalarining barcha daromadlarini, shuningdek, budjet tashkilotlarining budjetdan tashqari mablag'lar bo'yicha tushumlarini yagona g'azna

hisobraqamga jamlash va ularning barcha xarajatlarini shu hisobraqamdan amalga oshirishni nazarda tutadi. Bu esa davlat budjeti, budjetdan tashqari fondlar, budjet tashkilotlarining budjetdan tashqari mablag'lari, davlat qarzlari va ularga xizmat ko'rsatish jarayonlarining tezkor nazoratini va monitoringini olib borish, davlat mablag'larining samarali ishlatilishini ta'minlash, davlat moliyaviy resurslaамrining harakati to'g'risida operativ tarzda ma'lumotlarni jamlash imkonini beradi. Bugungi kunda budjet jarayonini samarali tashkil qilish ishlarini g'aznachilik nazoratisiz ta'minlash qiyin ekanligini olimlar va iqtisodchilar, qolaversa, soha mutaxassislari asosli ravishda e'tirof etmoqdalar. Chunki g'aznachilik nazorati budjet daromadlari va xarajatlarini yagona g'azna hisobraqamiga jamlash, pul mablag'larini to'g'ri rejalashtirish, moliyaviy oqimlarning dastlabki va joriy nazoratini amalga oshirish hamda davlat budjetini yuqori operativlikda ijro qilish imkonini beradi. Ma'lumki, global jahon iqtisodiyotidagi jiddiy muammolar hamda ularning dunyodagi ko'plab mamlakatlar qatorida bizning mamlakatimiz iqtisodiyotiga ham ko'rsatayotgan salbiy ta'siriga qaramasdan, oxirgi yillarda respublikamizda yuqori va barqaror o'sish sur'atlarini saqlab, makroiqtisodiy barqarorlik va mutanosiblikning ta'minlanayotganligi o'ziga xos ijobiy ko'rsatkich bo'lmoqda. Avvalo, budjet jarayoni tushunchasining mazmuniga to'xtaladigan bo'lsak, budjet jarayoni - budjet loyihasini tuzish, ko'rib chiqish, qabul qilish va ijro etish, uning ijro etilishini nazorat qilish, ijrosi haqidagi hisobotni tayyorlash va tasdiqlash, shuningdek davlat budjeti tuzilmasiga kiruvchi budjetlar o'rtasidagi o'zaro munosabatlarning qonun hujjatlariga muvofiq tartibga solinishi bilan bog'liq bo'lgan davlat hokimiyati va mahalliy o'z-o'zini boshqarish organlari hamda boshqa budjet jarayoni ishtirokchilarining maqsadli faoliyatidir. Uning mazmuni mamlakatning davlat va budjet qurilishi, tegishli vakolatli organlar va yuridik shaxslarning budjet huquqlari bilan belgilanadi. Byudjet jarayoni budjetni rejalashtirishdan boshlanadi. Byudjetni rejalashtirish davlat moliyaviy siyosati talablariga muvofiqlashtirilgan moliyaviy rejalashtirishning muhim tarkibiy qismini tashkil qiladi. Bunday rejalashtirishning iqtisodiy vazifasi turli darajadagi budjetlar va budjetdan tashqari jamg'armalarni tuzish va ijro etish jarayonida mamlakatni ijtimoiyiqtisodiy rivojlantirishning umummilliy dasturlari asosida yalpi ichki mahsulot va milliy daromad qiymatini moliya tizimi bo'g'inlari o'rtasida markazlashtirilgan tarzda qayta taqsimlash nisbatlarini to'g'ri belgilashdan iboratdir.

Bu amaliyot bir necha o'n yillar mobaynida budjet ijrosida ma'lum darajadagi samara bilan qo'llanib kelindi. Lekin keyingi yillarda davlat budjetining kassaviy ijrosi davlat mablag'larini boshqarish, budjet ijrosini tashkil qilish va nazoratini olib borish, mablag'larning samarali ishlatilishini ta'minlash masalalarida bir qator muammolarni keltirib chiqardi:

– budjet daromadlari va xarajatlari to'g'risidagi axborotlarning etarli darajada operativ (tezkor) emasligi;

– daromadlarning bank hisobraqamlariga tushishi va budjetning hisobraqamlarida aks ettirilishidagi uzilishlarning mavjudligi bois budjet resurslarini boshqarishdagi tezkorlikning sustligi;

– soliq daromadlarining budjet tizimi bo'g'inlari o'rtasida taqsimlanish jarayonlarini samarali tartibga solish va daromadlar tushumini jadallashtirishning zarurligi;

– budjet ajratmalarining hajmlari bilan haqiqatda amalga oshirilgan to'lovlar summalari ko'rsatkichlarining tarqoqligi tufayli mablag'larning tushumi va sarflanishi ustidan yagona nazoratning murakkablashuvi;

– budjet tashkilotlarining hisobraqamlarida ishlatilmayotgan budjet mablag'larining turib qolishi;

– budjet mablag'larining ajratilishi bilan ularning so'nggi iste'molchilarga etib borishigacha bo'lgan vaqtning uzoqligi;

– davlat mablag'lari harakatining murakkablashuvi va hajmlarining ortib borishi bilan ulardan oqilona foydalanish ustidan dastlabki nazoratning va joriy monitoringning zarurligi va boshqalar. Sanab o'tilgan muammolar kecha yoki bugun yuzaga chiqmadi, ular yillar davomida yig'ilib, tezkor sur'atlar bilan rivojlanib borayotgan jamiyat taraqqiyotiga halaqit bera boshladi. Byudjet ijrosi ustidan nazoratning sustligi, mablag'larni operativ boshqarish imkoniyatining kamayib borayotganligi, budjet ijrosi to'g'risidagi tezkor va aniq ma'lumotlarni olish, jamlash, qayta ishlash va tegishli boshqaruv qarorlarini qabul qilishdagi qiyinchiliklar davlat moliyasini boshqarish tizimida islohotlar qilishni, budjet mablag'larini boshqarishning samarali usul va vositalarini izlab topib, tadbiq etishni talab etdi va davlat budjetining kassaviy ijrosidan g'azna ijrosiga o'tishning zarurligini belgilab berdi.

Foydalanilgan adabiyotlar ro'yxati:

1. Erkaboyev S.O, Ibragimov A.G (2023). Davlat moliyasini boshqarish tizimida davlat moliyaviy nazorati: Yevropa tajribasini tahlil qilish. Nazariy va amaliy haqida xalqaro jurnali, 3(3), 6-18. doi: 10.5281/zenodo.7821225
2. Huseynov R. (2019) Byudjet mablag'laridan foydalanish samaradorligini oshirishda moliyaviy nazoratning o'rni. Iqtisodiy va ijtimoiy rivojlanish bo'yicha 37-xalqaro ilmiy konferensiya - "Barqaror rivojlanishning ijtimoiy-iqtisodiy muammolari" - Boku, 14-15 fevral. P. – 238
3. Sultonmuratov D.Yu. (2021) Davlat moliyaviy nazorati konsepsiyasi. Rivojlanish uchun yangi impulslar: tadqiqot savollari. VII Xalqaro ilmiy-amaliy konferensiya materiallari. ostida N.V nashrlari. Emelyanov. Moskva. S. 203
4. Tuychiyev A.J., Tashmuxmedova D.A. G'aznacilik. Darslik. – T.: "IQTISOD MOLIYA" 2019. - 834 b.

Qosimova G. A. Davlat byudjeti ijrosining g'aznachilik tizimi. O'quv qo'llanma. – T.: "IQTISOD-MOLIYA", 2013. 372b.

УДК 621.38

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READ DATA FROM KEYBOARD AND OUTPUT TO LCD DISPLAY. CODE LOCK

Abstract. This article discusses the code lock that shows how to read data from the keyboard and output it to the LCD screen, and the connection schemes are explained and analyzed in detail.

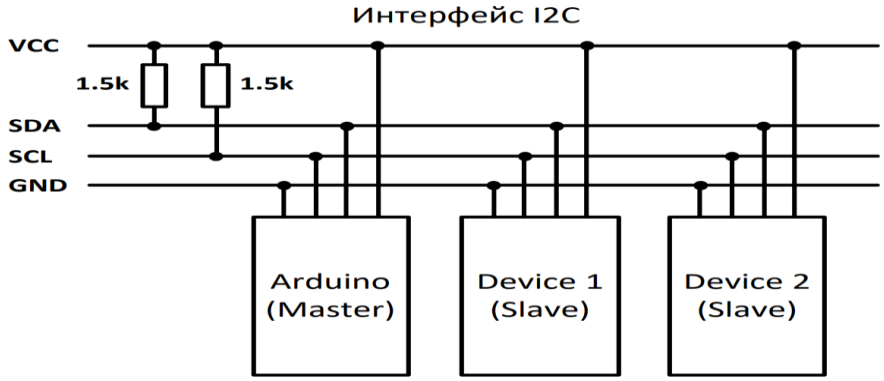
Keywords: LCD, HD44780, Arduino, Circuit), String, Genuino, I2C, IIC, LED, USB, SDA, SCL, motherboard, Sketch, digitalWrite.

Theoretical information.

Liquid crystal indicators display symbolic information. They come in different sizes, measured by the number and length of lines displayed. Some are backlit and allow you to choose the color of the characters and background. Any LCD display with a compatible HD44780 interface and a 5V backlight supply voltage can work with the Arduino board [1].

The I2C adapter module allows you to connect the character display to the Arduino board with just two signal wires. I2C is a serial two-wire bus for communicating integrated circuits inside electronic devices, known as I 2 C or IIC (Inter-Integrated Circuit). I2C was developed by Philips in the early 1980s. as a simple 8-bit bus for internal communication between circuits in control electronics, such as computers on motherboards, mobile phones, etc [2]. (Fig. 1.).

Fig.1. Connecting multiple devices to the I2C bus



The LCD display with I2C adapter module connects to the Arduino with only 4 wires - 2 data wires and 2 power wires.

To connect an LCD display to Arduino via an I2C adapter module, you need to install the LiquidCrystal_I2C library. You also need the Wire library, which is already installed in the standard Arduino IDE program [3].

LiquidCrystal_I2C library.

The LiquidCrystal_I2C(address, col, row) constructor creates an object of type LiquidCrystal_I2C and accepts display connection parameters (I2C address and display size) [4].

Functions:

– **init()** – initialization of the LCD display;

– **backlight()** – turns on the backlight;

– **nobacklight()** – turns off the backlight;

– **clear()** – clears the screen and returns the cursor to the starting position;

– **setCursor(x,y)** – setting the cursor to a given position;

– **print(string)** – displays text on the display;

– **cursor()** – shows the cursor, i.e. the underline under the place of the next character;

– **noCursor()** – hides the cursor;

– **blink()** – cursor blinking;

– **noBlink()** – cancel blinking;

– **noDisplay()** – turns off the display while saving all displayed information;

– **display()** – turns on the display and saves all displayed information;

– **scrollDisplayLeft()** – scrolls the display contents 1 position to the left;

– **scrollDisplayRight()** – scrolls the display contents 1 position to the right;

– **autoscroll()** – enable autoscrolling;

– **noAutoscroll()** – disable autoscrolling;

– **leftToRight()** – sets the text direction from left to right;

– **rightToLeft()** – text direction from right to left;

– **createChar(index, Letter)** – creates a custom character for the display.

Connecting a membrane matrix keyboard to Arduino [5,6].

In projects where the Arduino is not connected to a computer, you need to be able to enter characters, such as a secret code, to turn something on or off. To do this, use a matrix keyboard (Fig.2).

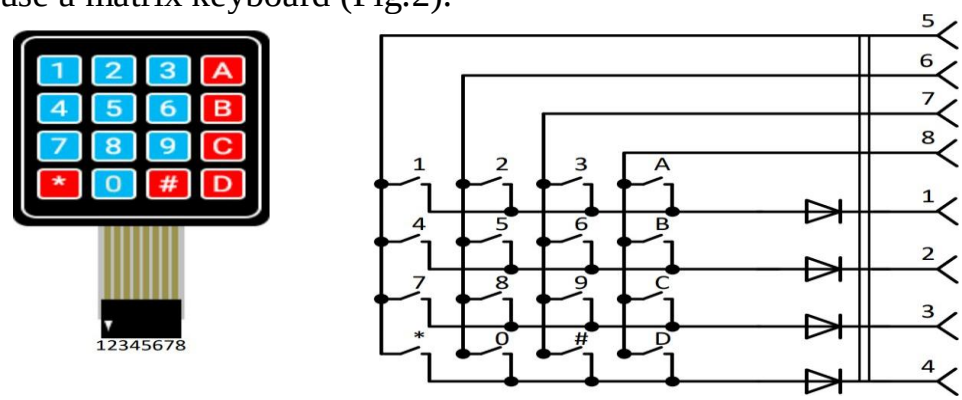


Fig.2. Matrix keyboard and its circuit

The advantage of such a keyboard is that only 8 contacts are used instead of 16. For this circuit to work, it is necessary to use dynamic polling of the keyboard. The Arduino pins to which keyboard pins 1, 2, 3 and 4 are connected are configured as digital outputs, and the pins to which 5, 6, 7 and 8 are connected are configured as inputs [7,8]. A low voltage level is alternately applied to pins 1, 2, 3 and 4 of the keyboard. Pins 5, 6, 7 and 8 are under control. If the button is pressed, the Arduino will determine which line the 42nd level was low on and from which line it came to the Arduino input. As a result, the coordinates of the button will be determined [9].

Description of the demo program.

The program simulates the operation of a combination lock. Connected to Arduino:

− 4x4 matrix keyboard, the pins of which are connected to digital pins 2..9 of Arduino;

− 16×2 LCD display, which is connected to Arduino via an I2C adapter board; The riser board is connected to pins A4 (SDA) and A5 (SCL) of the Arduino;

− two LEDs LED1 and LED2, which are connected to pins 10 and 11 of the Arduino, respectively.

After power is applied, the Arduino LED lights up, which is connected in-circuit to pin 13. The INSERT CODE message is displayed on the top line of the display, and the cursor blinks on the bottom line. LED1 also lights up, which means the lock is closed [10,11].

After dialing the code 8888, press # to confirm. If the code is entered correctly, the message CORRECT CODE is displayed on the top line of the display and the entered code on the bottom line is deleted. The lock opens for 4 seconds, which means that LED1 goes out and LED2 lights up. After 4 seconds, LED2 goes out and LED1 lights up again. The INSERT CODE message appears again on the top line of the display. If the code is entered incorrectly, INCORRECT CODE appears on the top line of the display. After 2 seconds, the information on the display is cleared and the INSERT CODE message appears again [12]. After the third attempt, a 30-second countdown begins: INCORRECT CODE is displayed on the top line of the display, and WAIT XX SECONDS is displayed on the bottom line, where XX seconds (30, 29, 28, etc.). After 30 seconds have passed, the message INSERT CODE is displayed on the top line of the display and the program again waits for the code to be entered [13,14].

The program is restarted using the Reset button on the Arduino.

The order of work.

1. Launch Arduino IDE.

2. Make sure the LiqudCrystal-I2C library is installed in the Arduino IDE. To do this, in the main menu of the Arduino IDE, select Sketch / Connect library and, if it is not there, install it (section 9.2).

3. Make sure that the Arduino Uno board is selected in the Arduino IDE, for which in the main menu of the Arduino IDE select Tools / Board: “Arduino / Genuino Uno” / Arduino / Genuino Uno [15].

4. Compile the sketch and search for and correct errors if they arise.

5. Connect the Arduino to your computer via a USB cable and flash the program into memory. Disconnect the USB cable from the Arduino.

6. Make the necessary connections on the board in accordance with the diagram shown on the front panel (Fig. 3).

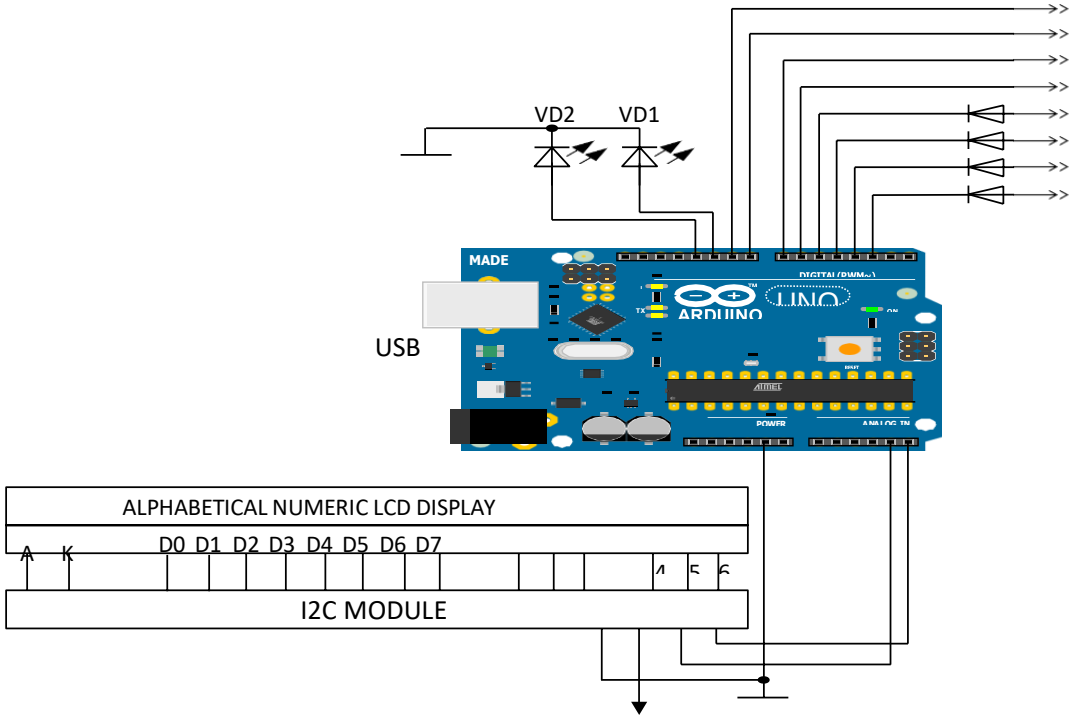
7. Make sure that the program works as described: enter the correct code and monitor the program's actions. Do the same by entering the wrong code [16].

8. Make changes to the sketch in accordance with the given option from the “Additional tasks” section. Before the program code, add a comment containing the text of the completed individual task [17].

9. Flash the program into the Arduino memory and make sure that the program works as required by the job.

10. Save the sketch and close it.

Fig. 3. Connection diagram



Here is an example of a code lock program that reads data from the keyboard and outputs it to an LCD display using Arduino programming language:

References:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.

2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.

3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.

16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

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PYTHON DASTURLASH TILI HAMDA UNING IMKONIYATLARI

Annotatsiya: ushbu maqolada python dasturlash tili hamda uning imkoniyatlari haqida ma’lumotlar keltirilgan.

Kalit so’zlar: python dasturlash tili, axborotlashgan jamiyat, Guido van Rossum, Internet.

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PYTHON PROGRAMMING LANGUAGE AND ITS CAPABILITIES

Annotation: this article provides information about the python programming language as well as its capabilities.

Keywords: python programming language, informed society, Guido van Rossum, Internet.

O‘zbekiston Respublikasida ijtimoiy-iqtisodiy sohada, shu jumladan axborot kommunikatsiya texnologiyalari, zamonaviy axborotlashgan jamiyatni shakllantirish borasida keng ko‘lamli islohotlar izchillik bilan amalga oshirilmoqda.

O’zbekiston Respublikasi mustaqillik odimlarini dadil qo’yayotgan hozirgi davrda axborotlashgan jamiyat qurish masalasi mamlakatimiz uchun naqadar katta ahamiyat kasb etayotgani hech kimga sir emasdir. Internet hayotimizning bir bo’lagiga aylanib ulgurdi, biz uning xizmatlaridan har kuni foydalanishga odatlandik. Respublikamizda o’qitish texnologiyalarini zamonaviylashtirishni jadallashtirish rivojlangan iqtisodiyotli mamlakatlarga qaraganda yanada dolzarb ahamiyatga ega hisoblanadi. Chunki hozirgi kunda milliy ta’lim tizimining salohiyati iqtisodiy rivojlanishning yanada yuqori pog’onasiga ko’tarilishga amaliy imkoniyat ta’minlovchi asosiy ijtimoiy resurs sifatida gavdalanadi.

Dasturlash tillari hozirgi vaqda rivojlanib bormoqda. Ana shu tillardan biri bu- Python dasturlash tilidir. Pythonning rasmiy sayti – www.python.org hisoblanadi. Python hozirgi kunda mashhur dasturlash tillaridan biridir. Bu til Guido van Rossum tomonidan yaratilgan va 1991-yilda chiqarilgan.

Python – bu o‘rganishga oson, shu bilan birgalikda imkoniyatlari yuqori bo‘lgan oz sonlik zamonaviy dasturlash tillari qatoriga kiradi. Python yuqori darajadagi ma’lumotlar strukturasi va oddiy lekin samarador obyektga yo‘naltirilgan dasturlash uslublarini taqdim etadi.

Stack Overflow saytining 2019-yildagi dasturchilar o‘rtasida dasturlash tillari bo‘yicha olib borilgan so‘rovnomasida, eng qulay va ko‘p foydalaniladigan dasturlash tillari ro‘yxatida Python JavaScriptdan so‘ng ikkinchi o’rinni egallagan. Shu bilan bir qatorda dunyoning Twitter, Pinterest, HP, Symantec, Instagram va Groupon kabi yirik korxonalar aynan Python dasturlash tilidan foydalanib kelmoqda. YouTube, DropBox, Google va Quora kabi dunyoning mashhur online platformalarining dasturiy ta’minoti ham aynan mana shu python dasturlash tilida yozilganligi ushbu dasturlash tiliga bo‘lgan talabning yuqori ekanligini anglatadi. Python nafaqat web sohasida balki sun’iy intellekt va robotexnika sohasida ham yuqori talabga ega tillardan biri hisoblanadi.

Python dasturlash tilida yaratilgan eng yirik loyihalar quyidagilardir:

Python quyidagi sohalarda ishlatiladi:

- Web dasturlash (serverlar bilan)
- Dasturiy ta’minot
- Matematika
- Tizim skriptlari

Pythonni hattoki katta proyektlarda ishlatish mumkin. Bularga misol qilib Google, Instagram, YouTube ni misol qilib ko‘rsatsak bo’ladi. Bu loyihalar aynan Python dasturlash tilida yozilgan. Chunki, uni chegarasi yo‘q, imkoniyati juda yuqori.

Shuningdek, u sodda va universalligi bilan dasturlash tillari orasida eng yaxshisi hisoblanadi.

Python dasturlash tili sintaksisi o‘zi kabi juda sodda:

Satr oxiri instruksiyaning oxiri hisoblanadi (nuqta vergul shart emas). Pythonda sintaksis juda sodda tuzilishga ega. Quyida “**Salom dunyo**” gapini ekranga chiqaruvchi kodni ko’rsatib o’tamiz:

```
print ("Hello world")
```

Har bir qator boshidagi bo‘sh joy (отступ) muhim ahamiyatga ega hisoblanadi. Kiritilgan amallar bo‘sh joylarning kattaligiga qarab bloklarga birlashadi. Bo‘sh joy istalgancha bo‘lishi mumkin asosiysi bitta kiritilgan blok chegarasida bo‘sh joy bir xil bo‘lishi kerak. Noto‘g‘ri qo‘yilgan bo‘sh joylar

xatolik yuz berishiga olib kelishi ham mumkin. Bitta probel bilan bo‘sh joy hosil qilish yaxshi qaror emas uni o‘rniga to‘rtta probel yoki *Tab* belgisini ishlatishimiz kerak.

Odatda dasturlash tillarida abzas kodni oson o‘qilishi uchun ishlatiladi. Ammo Pythonda abzas kodning blokini ajratib ko‘rsatadi. Masalan:

```
if 5 > 2:
    print("Besh ikkidan katta")
```

```
                                if 5 > 2:
print("Besh ikkidan katta")
```

Agar kodimizni mana bunday tarzda yozsak dasturda xatolik yuz beradi:

Pythonga kiritilgan amallar bir xil shablonda yoziladi. Bunda asosiy amal ikki nuqta bilan tugatiladi va uning orqasidan kiritilgan blok kodi ham joylashadi. Odatda, asosiy amalning ostidagi satr bo‘sh joy bilan ajratiladi.

Bazan bir nechta amalni bitta satrga nuqtali vergul bilan ajratgan holda yozish ham mumkin.

`a=1; b=2; print(a, b)`

Buni ko‘p ham qo‘llash mumkin emas.

Kalit so‘zlar

False – yolg‘on.

True - rost.

if - agar.

else – for/else yoki if/elsega qarang.

None - “bo‘sh” obyekt.

elif – aks holda, agar.

for – for sikli.

while – while sikli

def–funksiyani aniqlash.

def–funksiyani aniqlash.

with / as – konteks menejeri.

del – obyektni yo‘qotish.

break – sikldan chiqish.

not –mantiqiy INKOR amali.

class – metod va atributlarda iborat.

continue – sikldan keyingi iteratsiyaga o‘tish.

from – moduldan bir nechta funksiyani import qilish.

and – mantiqiy VA amali.

import – moduldan import.

lambda –yashirin funksiyani aniqlash.

is –xotirani bitta joyida 2 ta obyektni jo‘natsa bo‘ladimi.

or –mantiqiy YOKI amali.

Pythonda izohlar quyidagi holatlarda ishlatiladi:

- Koddagi bajarilayotgan ishlarni tushuntirish uchun;

- Kodning o‘qilishini yanada osonlashtirish uchun;
- Kodning ba’zi qismlarini vaqtincha hisobga olmay turish uchun.

Izohlarni hosil qilish:

Izohlar # belgisi bilan hosil qilinadi va python o‘sha qismni kod deb qabul qilmaydi:

```
# Bu yerda izoh
print("Salom dunyo")
```

Izohlarni kod yozilgan qator oxiriga yozish ham mumkin:

```
print("Salom dunyo") #Bu yerda izoh
```

Kodning biror qismini izohga kiritsak aynan o’sha qism natija bermaydi. Quyidagi holatda ***Salom dunyo*** jumlasi ekranga chiqmaydi:

```
# print ("Salom dunyo")
print ("Dasturlashni o'rganamiz")
```

Izohlar dastur kodini o‘qiyotganlar uchun foydali bo‘ladi va dastur nima qilishini oson tushunishga yordam beradi. Unga yechimdagi muhim joylarni, muhim bo‘lgan qismlarni yozish mumkin.

Adabiyotlar:

1. Narzullayev Anvar. Pythonda dasturlash asoslari. — T.: „Akademnashr“, 2021. —B. 6.
2. Дмитрий Мусин. Самоучитель Python. 2015 г
3. К.Ю. Поляков, В.М. Гуровиц. Язык Python в школьном курсе информатики – М.: Издательский дом МЭИ, 2011. – 424.
4. Девид Бизли. Python -Санкт-Петербург: МЭИ, 2008. – Часть III.
5. Сергей Лебедев. Модули и пакеты 10. Прохоренок Н.А. Python.Самое необходимое. – Санкт-Петербург: БХВ-Петербург, 2011, –416 с.
6. https://uz.wikipedia.org/wiki/Python

УДК: 620.92

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IN THE TECHNOLOGY OF MANUFACTURING OF SOLAR ELEMENTS APPLICATION OF THE PHOTOLITHOGRAPHY METHOD

Abstract. The photolithography method has already been given high precision in semiconductor structuresa shape with topology is drawn and then it is technologically processed. A special photographic process on photoresist (light-sensitive polymer layers). Photoresists.

Key words: Photolithography, download a form using a photo templateSilicon oxide, transfer FR to the material, Photoresists.

Photolithography method and its essence. Modern microelectronics achievements largely depend on the use of the photolithography method. By this methodin structures, a form with a previously given topology is drawn with great accuracy and then it is processed technologically. With the help of this method, various materials, including projection images on dielectrics, semiconductor materials, and metals can be downloaded. Processing of materials (IaO, metal, dielectric) by photolithographic method (FLU). when given, first the necessary forms are made in a special light-sensitive material – photoresist is taken. Photoresist (FR) is imaged using special devices [1]. 1-3 using the FLU method With a micron size, shapes can be drawn with an accuracy of 0.2-0.6 μm. With the FLU method The main processes of obtaining a form are technological, which are carried out in the following order consists of actions [2].

- transfer FR to the material,
- photoresist strengthening,
- drawing a picture using a photo template,
- light the shape,
- erosion of unnecessary areas,
- remove excess FR.

Photoresists. FRs are light-sensitive materials that are exposed to light based on the phenomenon of change in solubility, the form is worked out. FRs are mostly UV activated by light. Photoresist is made of polymer materials and is positive and will be negative. If its solubility increases under the influence of light, it is called positive, if it decreases is called negative. Materials used in the photolithography method [3]. Preparation of the material during the

photolithography process is important technologically is a process. When applying FLU, the following requirements are imposed on the sample.

1) The absence of defects on the surface of the sample (dirt, mechanical lines, etc.) [4].

2) Absence of various physical or chemical conditions on the sample surface (sample atoms other than the atom).

3) Selection of FR with the required adhesion. Sufficient thickness of the dielectric layers previously placed on the surface of the sample need [5].

The process of getting the FR layer on the surface of the sample. There are several ways to get the FR layer there is. One of these is to extract the FR layer using a centrifuge. At a certain speed FR in the form of a droplet is placed on the surface of the sample attached to the rotating centrifuge [6]. FR is observed to flow and form a thin layer during the process and from it evaporation of the solvent is observed until its viscosity reaches a certain level is used. The process continues until the FR flow stops. Usually the thickness for the formation of a uniform thin layer, the spin speed of the centrifuge is 1500-6000 rpm is desirable. The advantages of this method are the simplicity of the device, thinness it is possible to get layers [7].

In the spraying method, FR is sprayed onto the surface of the sample using compressed air. This method is FR gives the opportunity to get thick. One of the simplest methods is to immerse the sample in FR method. FR drying process. Drying FR in a thermal chamber or by means of infrared rays there are methods. Drying is carried out at 80-100°C, and in some cases at 120-140°C. Take a photo using a photo template. A photo template is a sample that you need to download the shape on it is in the form of a reflection (for negative FR) or itself (for positive FR) [8]. Overlaying and irradiating the photo-template with the sample is usually done on the same machine will be held. Superimposing a photo template with a sample is a privileged, responsible process, it is the action that determines the accuracy of the FLU. The overlap process is under the microscope will be held. After this process, this pair is illuminated, mainly by contact method is used. The light passing through the FR layer is partially absorbed and the photosensitive part of the FR activates. After the photoresist is activated by illumination, it is activated (i.e. light falling places) are absorbed by chemical method. As a result, the desired shape is formed. This the process is called "opening". "Opening" is done by immersion or pulverization method [9]. This control in the process is carried out under a microscope and the accuracy of the given form importance is given. The accuracy of the "opening" process depends on the temperature of the "opening reagent". depends on concentration and lighting time.

Forming in metal and dielectric layers. Forming in a thin layer first, a mask is created using FR, then a shape is created using FLU. One of the main steps in this process is chemical etching to form the shape. During chemical etching, only areas not protected by FR should be etched [10]. But in some cases, erosion can go not only inside, but also to the side. And this can cause partial distortion of the

shape and decrease in accuracy. This is the process mainly depends on the adhesion properties of the selected photoresist. Forming a silicon oxide (SiO2) layer. For the absorption of FR obtained on SiO2 mainly chemical solutions are used. For example, 88-91% of 40% ammonium fluoride (NH4F) 9-12% volume solution is prepared from volume and concentrated 48% HF. Erosion speed can be 0.04-0.5 μm/minute depending on the conditions of the process. For controlled absorption of very thin layers, 15 ml of 48% HF, 10 ml of 70% HNO3, 300 ml of H2O is taken and the absorption rate is 0.012 μm/min [11]. Erosion of aluminum-based layers. Decomposing derived layers based on Aℓ acidic and alkaline solutions are used for Orthophosphorus as the main absorber acid is obtained. As an example, we give the following composition, 80-95 mlH3PO4 Q 5 ml When using HNO3 Q (1-20 ml) H2O at 40 oC, the rate of aluminum dissolution is 0.2 will be μm/minute. There are two opposing views on the influence of the base material on the QE properties. QE F.I.K. in order to substantiate the serious dependence of the base material on the width of the forbidden zone, it is necessary to analyze the element VAX and study the effect of the optical radiation spectrum falling on it. 1956 J. Lofersky completed the above-required theoretical calculation for the spectrum of solar radiation under Earth conditions - the book. The values of optical and photoelectric losses were evaluated for QEs made of different optimized materials. The results of such samples are shown in Figure 9 below. It can be seen from the picture that solar cells based on silicon material have a higher F.I.K. than the useful work coefficient [12]. the possibility of obtaining it is available in materials with a bandgap in the range of 1.1-1.6 eV. To obtain the maximum photoelectric efficiency (maximum F.I.K.) QE is determined using parameters A and Io related to VAX it is very important to determine the mechanism of the reverse saturation current passing through the r-p junction. In relation to the expansion of the spectral range of photoactive absorption of solar radiation, improving the above-mentioned parameters of the r-n transition is more likely to increase efficiency. In p-n junction solar cells based on homogeneous YaO' material, the p-n junction usually separates and collects excess non-primary charge carriers formed on both sides of it under the influence of light. The effective quantum output of the solar cell Qeff and the collection coefficient g are practically the same quantity, so we write these two quantities with the same sign and call it the collection coefficient Q. This physical quantity is the ratio of the number of electron-hole pairs that have passed through the r-n transition and are separated by excess charge carriers formed by optical radiation. Q is equal to the sum of the summation coefficients of the p- and n-fields, just like the currents flowing through an p-n junction [13].

References:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.

2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS” PROGRAM. Экономика и социум, (4-1 (107)), 189-193.
14. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. Universum: технические науки, (11-3 (104)), 9-12.

УДК: 620.92

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CHARACTERISTICS OF MATERIALS USED IN THE MANUFACTURE OF SOLAR CELLS

Abstract. The efficiency of QE operation depends on the various processes that occur between the upper levels of the valence field and the lower levels of the conduction field.

Key words: In photoconverters, Semiconductor materials, It wasn't right, crystal lattice, radiation spectrum.

The preparation of highly efficient solar cells depends on the properties of semiconductor materials. In fact, when the ideal efficiency of QE (for temperature Tq300 oK) is taken in relation to the change in band gap, for Earth conditions (AM 1) the maximum F.I.K band gap Eg~1.4 eV is equal to YaO' is coming. Materials that approximately satisfy this equality include solid solutions based on Si, InP, GaAs, CdTe, AlSb and A3V5, A2V6 semiconductors [1].

The efficiency of QE operation depends on the various processes that occur between the upper levels of the valence field and the lower levels of the conduction field. If the material is homogeneous, that is, its chemical composition does not change from one point to the next, then the energy of electrons above the valence region and below the conduction region is independent of coordinates [2,3]. The absorption index will have large values in EO‘s with a "correct" transition area. Because the energy received by an electron that has received energy from the outside is enough to pass through the forbidden region $hy \geq E_g$ and enter the conduction region to continue its state of motion.

On the other hand, the absorption index and the rate of its growth from energy are lower in the EOs with the "incorrect" transition field. Because it becomes difficult for the electron to move from the valence band to the conduction band under the quantum effect [4,5]. This is because the electron changes its direction and position. And this process can happen only in certain cases, in particular, due to the fact that a photon on its way meets such a valence electron in the YaO' material, during the absorption of hý energy, the atoms of the crystal lattice receive an impulse ΔK as a result of the vibrations from heat.

In photoconverters other than QE s (photoreceiving structures, photoresistors), the choice of material depends mainly on the requirements, that is, on which part of the radiation spectrum is used [6,7]. The choice of technology for obtaining semiconductor materials depends on the requirements placed on

them, which mainly include the purity of the material. For example, the applied voltage of the YaO' diode in the reverse direction depends on the specific resistance of the material, and it is possible to obtain a diode with Utesq of 10-12 V in Ge with r~0.5 Ohm cm. If there are 1.5 109 Ge atoms per 100 input atoms in such a Ge material, if the number of inputs is reduced 100 times (rq 50 Ohm cm), a diode with a Utesq equal to 500 V can be obtained. Therefore, materials are divided into three categories in terms of the purity of materials used in technical devices based on semiconductors. Class A includes materials with A1 - 99.9% purity and A11 - 99.99% purity, which can be determined by simple classical chemical analysis [8]. Class V is divided into V3 and V6. Such substances are called particularly pure and ultra-pure (10-3-10-6% precision inputs). The next cleanest category is S7-S10, with a purity level of 10-7-10-10% [9].

Choosing a method of growing semiconductor materials depends on studying their physical and chemical properties. If the melting temperature of the substance is high, chemical activity and vapor pressure are high, it is very difficult to grow crystals of such substances. It is desirable to grow them from vapor phase or solutions at low growth rates. It is necessary to accurately measure the temperature of the growing process, control the distribution of substances, maintain the pressure of the components in the gas state at a constant level, and precisely control the operation of the mechanical parts of the machine [10]. There are many methods of cultivation, the main of which include the following.

1. Growth from pure substances and supersaturated solutions with doped inputs.

2. Growing from solutions.

3. Vapor phase growth.

There are 2 ways to grow crystals from a stoichiometric liquid phase. Crucible and non-crucible growing methods. This method is divided into several views. Including the directed crystallization method, "horizontal" and "vertical" Bridgeman method, field melting method and Chokhralsky method [11].

The basis of these methods is directed heat transfer. An example of this is the Chokhralsky method in.

A characteristic feature of vertical furnaces is that the “crystallization” front cannot be observed. Another drawback is that the growing crystal is in constant contact with the walls of the crucible. In order to obtain single crystals of the required size, the crystallization boundary should be convex during the entire technological process. The use of these methods is also relatively limited due to the limitation of suitable materials for the crucible. One of the main materials suitable for a crucible is quartz. In quartz crucibles used to grow silicon and gallium arsenide crystals, the solution is usually contaminated with oxygen [12]. For example, in the process of growing a single crystal of silicon, oxygen can enter silicon with a concentration of up to 10^{17} cm^{-3}. In the process of growing a single crystal of gallium arsenide, silicon can enter it along with oxygen from quartz. We can see methods without a crucible in the example of the Varneyle

method and field cultivation without a crucible. A silicon sample in the form of a polycrystalline solid cylinder is fixed in a vertical position on a common axis cooling mandrel. In a small slotted container attached to the upper stock, the powder of the growing material is placed. Stocks can be rotated at a constant speed or moved relatively close to each other. A molten area is created in a narrow (bounded) part of the silicon with the help of a heat source. The molten sphere is held under the influence of surface tension forces. That is, the weight of the molten sphere is kept under the influence of surface tension forces. The diameter of the growing crystal depends on the critical length of the sphere and the material properties, i.e. (G/d)1/2 (G is the surface tension between the liquid-solid body, d is the specific gravity of the dissolved substance). High-frequency inductive heating, electron-beam or radiation methods can be used as a heat source. This method is relatively universal and can be used to grow semiconductor compounds with any melting temperature and high vapor pressure. In the process of growing in this method, the solvent in the preparation of the solution can be from a neutral substance (a substance that is not part of the growing material) or from substances that are part of the compound. The choice of solvent is important in the process of crystal growth. If the semiconductor material itself is used as a solvent, then in order to obtain the desired material: it is necessary to clean the base material from impurity impurities and introduce one or two impurity compounds with a certain concentration into the crystal lattice during crystal growth [13].

If another material is used as a solvent in the production of a semiconductor material, first it is dissolved in this material and then the crystallization process is carried out. In this case, all available inputs are redistributed in the solution and in the growing crystal.

The solubility of any substance in a solid body is determined by the composition of the solid body and which phases it is in equilibrium with, the state of the solid body, liquid, gas and the minimum state of free energy of the system as a whole. Since the free energy depends on the state of the system, the change in temperature disturbs the equilibrium and the composition of the existing phases also changes. If the solvent itself is present, then the growth process proceeds at a constant temperature, and the composition of the solid depends on the concentration and nature of the inputs [14]. If the solvent is from another substance, then since the crystallization process of the main substance takes place at different temperatures, its composition depends on the temperature and changes proportionally to it. The process of distribution of inputs is one of the determining properties in the process of semiconductor crystallization, and it is determined by the Schroeder equation based on the theory of ideal solutions.

References:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.

2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS” PROGRAM. Экономика и социум, (4-1 (107)), 189-193.
14. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. Universum: технические науки, (11-3 (104)), 9-12.

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UCH O'LCHAMLI KRISTALLARNING ATOM TUZILISHI

Annotatsiya: Kristallardagi atomlar yoki molekulalarning joylashish tartibi butun Kristall bo'yicha saqlangan bo'lsa bunday kristall monokristallar deyiladi. Barcha monokristallar anizotrapiyaga ega yani ma'lum bir yo'nalishlarda ularning fizik xossalari turlicha bo'ladi.

Kalit so`zlar: Kristall, elektron mikraskop Polikristallar, Monokristallarning makraskop bo'lakchalar, elektronlar difraksiyasi, sirtdagi atomlar aro ta'sir.

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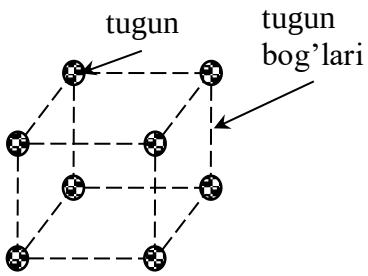
ATOMIC STRUCTURE OF THREE-DIMENSIONAL CRYSTALS

Annotation: If the arrangement of atoms or molecules in crystals is preserved throughout the crystal, such crystals are called monocrystals. All single crystals have anisotropy, that is, their physical properties differ in certain directions.

Key words: Crystal, electron microscope Polycrystals, macroscopic fragments of monocrystals, electron diffraction, interaction between atoms on the surface.

Kristall qattiq jismlarda ularni tashkil qilgan atom va molekulalar ma'lum bir tartibda joylashgan bo'ladi. Agar bu tartib ikki qo'shni atom yoki molekula orasidagi masofadan bir qancha marta katta bo'lgan masofalargacha saqlansa uni uzoq tartib deb ataymiz. Kristallardagi atomlar yoki molekulalarning joylashish tartibi butun Kristall bo'yicha saqlangan bo'lsa bunday kristall monokristallar deyiladi. Barcha monokristallar anizotrapiyaga ega yani ma'lum bir yo'nalishlarda ularning fizik xossalari turlicha bo'ladi. Tabiatda monokristallar juda oz shu sababli polikristall materiyallarni suyuqlikga aylantirilib maxsus tehnalogiyalar asosida monokristallar o'stiriladi. Monokristallarning makraskop bo'lakchalarning tartibsiz birikishidan hosil bo'lgan kristallarga polikristallar deb yurutiladi. Polikristallar har bitta monokristall yacheykalarning tartibsiz joylashishidan tashkil topganligi uchun ularning fizik zossalari barcha yo'nalishlar bo'yicha bir xil bo'ladi. Bunday jismlar izotrob jismlar deyiladi.



1.1-rasm. Kristall panjara tugunlarining va tugun bog'larining ko'rinishi

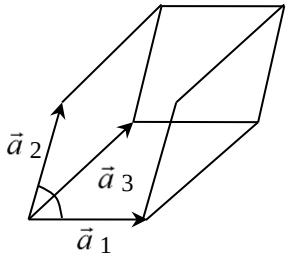
Kristallarni tashkil qiluvchi zarrachalar o'z muvozanat nuqtasida tebranma harakat qilib turadi. Ushbu muvozanat nuqtalarni fikran birlashtirsak kristall panjara shu muvozanat nuqtalar kristall panjaraning tugunlari deb ataladi. Tugunlarni bir biriga bog'lovchi ipga tugun bog'lari deyiladi.

Tugunlar orasidagi masofa 1-5 Å oralig'ida bo'ladi. Bir yo'nalishdagi tugunlar orasidagi masofa boshqa yo'nalishdagi tugunlar orasidagi masofadan farq qilishi mumkin, bu jismning kristall tuzulishiga qarab bir turdagi yoki har hil turdagi Kristall panjaralar bilan farqlashimiz mumkin. Masalan, kremniy kristallari barcha tugunlarida *Si* atomlari joylashgan bo'lsa *GaAg* Kristallining birida *Ga* boshqa tugunda *Ag* joylashgan bo'ladi. Kristall panjaraning tuzulish qiyofasini saqlagan eng kichik bo'lagielemantar yacheyka deb ataladi. Odatda elementar yacheyka kristalli paralelopiped shakildan iborat bo'ladi, ushbu parolelopepedning 3 ta qirrasi bo'ylab $\vec{a}_1$ $\vec{a}_2$ $\vec{a}_3$ vektorlarni yo'naltiramiz bu vektorlar uzunliklari shu paraleopepedlarning qirrasi uzunligiga teng bo'lsin bunday vektorlar asosiy translession vektorlar (yoki davrlar) deb ataladi. Translession vektorlarning asosiy xossalari shundan iboratki bu vektorlar yordamida cheksiz katta kristallar hosil qilish mumkin. Eng oddiy papolelopeped shakldagi kristall quydagicha:

$$R = n_1\vec{a}_1 + n_2\vec{a}_2 + n_3\vec{a}_3$$

bu yerda n_1, n_2, n_3 – butun sonlar, R – kristall panjara hajmi (kattaligi)

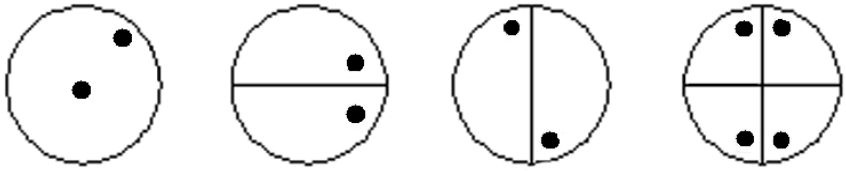
Shu elementar yacheykalarning bir butunligicha ustma-ust hollarda ko'chirilsa kristall panjara vujudga keladi. Bunday takrorlanuvchi atomlar guruhi bazis deb yuritiladi.



1.2-rasm. Elementar yacheykaning ko'rinishi

Ixtiyoriy kristallning bazisi va translyatsion kattaligi aniqlangan bo'lsa bu kristall panjara aniqlangan bo'ladi.

Umuman olganda kiristallar ma’lum bir nuqtaviy simmetriyaga ega bo’ladi, yani bu panjaraning ma’lum bir aylanishlar siljitish akslantirish orqali yana o’zining joyiga keltirish mumkin. Simmetriya nuqtaviy elektron mikraskop yordamida aniqlab beriladi. Shu nuqtaga qarab monokristallarni anizotrapiya xossasiga ega ekanligini aniqlash maqsadida uni azimutlar yoki qutubiy burchaklarga burib fizik xossalarini aniqlash mumkin.



a) 1 b) 1m v) 2g) 2mn

1.3-rasm. Simmetriyalarning ko’rinishi

a) rasimda berilgan shakilning berilgan o’qga yoki tekislikga nisbatan simmetriyasi yo’q ushbu shakil faqat 360^o li burchakga burilganda o’zi bilan o’zi ustma ust tushadi, bunday quyi simmetriyaga ega bo’lgan jismlarni halqaro belgilanishi 1 deb qabul qilingan.

b) dagi shakl uziq uziq chioziq bilan tasvirlangan shu sababli u tekislikga ninbatan simmetriya bo’ladi. Bunday shakl 1m deb belgilanadi.

v) rasmda180^o gradusga burilganda simmetriya bir birini ustiga tushadi. 360^o gradusga burilganda esa u 2 martda ustma –ust tushadi. Bunday simmetriya 2 – tartibli simmetriya bariga ega bo’lib 2 raqami blan belglanadi. Oxirgi simmetriya tekislikka va buralish o’qiga nisbatan simmetrya bo’lgani uchun 2 *mm* deb belgilanadi.

Kristall panjaralar elementar yacheykalarni ketma-ket qo’yish, burish (aylantirish) yoki akslantirish orqali hosil bo’ladi deb qarash mumkin. Demak, kristall panjara ma’lum bir tartibda joylashtirilgan elementar, yacheykalarning majmuidan iborat bo’lar ekan.

Umuman, kristall panjaralar ma’lum bir nuqtaviy simmetriyaga ega bo’ladi. ya’ni bu panjarani ma’lum bir aylantirishlar, akslantirishlar orqali yana o’zining joyiga (o’z holiga) keltirish mumkin.

Geometrik nuqtalarning berilgan konfiguratsiyasini (shaklini) invariant holda saqlaydigan aylantirishlar va akslantirishlarning umumiy yig’indisi ma’lum bir guruhni tashkil etadi. Bunday guruhlar nuqtaviy guruhlar deyiladi.

Adabiyotlar:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.

2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. Universum: технические науки, (11-3 (104)), 5-8.

3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. НАНОЭЛЕКТРОНИКИ», 1(A4), 241.
7. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
8. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
9. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
10. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
11. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
12. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023):
13. Mirzaev, U., Abdullaev, E., Kholdarov, B., Mamatkulov, B., & Mustafoev, A. (2023). Development of a mathematical model for the analysis of different load modes of operation of induction motors. In E3S Web of Conferences (Vol. 461, p. 01075). EDP Sciences

УДК 548.4

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ATOMIC STRUCTURE OF THREE-DIMENSIONAL CRYSTALS

Abstract. If the arrangement of atoms or molecules in crystals is preserved throughout the crystal, such crystals are called monocrystals. All single crystals have anisotropy, that is, their physical properties differ in certain directions. In crystalline solids, the atoms and molecules that make up them are arranged in a certain order. If this order is maintained up to distances several times greater than the distance between two neighboring atoms or molecules, we call it a long order.

Key words: Crystal, electron microscope Polycrystals, macroscopic fragments of monocrystals, electron diffraction, interaction between atoms on the surface, physical properties of single crystals, Three-dimensional crystal lattices.

In crystalline solids, the atoms and molecules that make up them are arranged in a certain order. If this order is maintained up to distances several times greater than the distance between two neighboring atoms or molecules, we call it a long order. If the arrangement of atoms or molecules in crystals is preserved throughout the crystal, such crystals are called monocrystals [1]. All single crystals have anisotropy, that is, their physical properties differ in certain directions. There are very few single crystals in nature, therefore polycrystalline materials are converted into liquid and monocrystals are grown based on special technologies. Crystals formed by the irregular joining of macroscopic particles of monocrystals are called polycrystals. Since polycrystals are composed of irregular arrangement of single crystal cells, their physical properties are the same in all directions. Such bodies are called isotropic bodies [2].

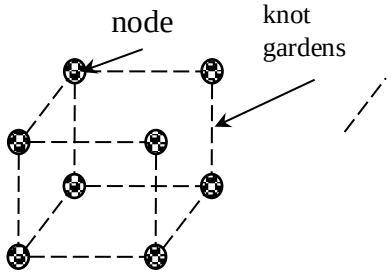


Figure 1.1. View of crystal lattice nodes and node bonds

Particles that make up crystals vibrate at their equilibrium point. These balance points are called crystal lattice nodes. The threads that connect the knots are called knot ties [3].

The distance between nodes is 1-5 Å. The distance between the nodes in one direction may differ from the distance between the nodes in another direction, depending on the crystal structure of the body, we can distinguish one type or different types of crystal lattices. For example, Si atoms are located in all the nodes of silicon crystals, while GaAg crystals have Ga in one node and Ag in another node [4]. The smallest part that preserves the structure of the crystal lattice is called an elementary cell. Usually, the elementary cell crystal consists of a parallelepiped shape, we direct 1 2 3 vectors along the 3 edges of this parallelepiped, the length of these vectors should be equal to the length of the edge of these parallelepipeds, such vectors are called basic translation vectors (or periods) [5]. The main property of translesion vectors is that infinitely large crystals can be formed using these vectors. The simplest papoleloped crystal is as follows:

$R = n_1\vec{a}_1 + n_2\vec{a}_2 + n_3\vec{a}_3$

where n1, n2,n3 are integers, R is the size (size) of the crystal lattice

If all of these elementary cells are moved on top of each other, a crystal lattice is formed. Such a repeating group of atoms is called a base

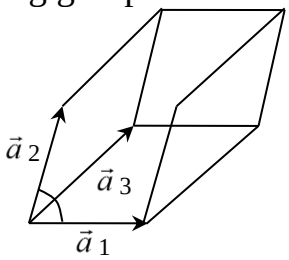
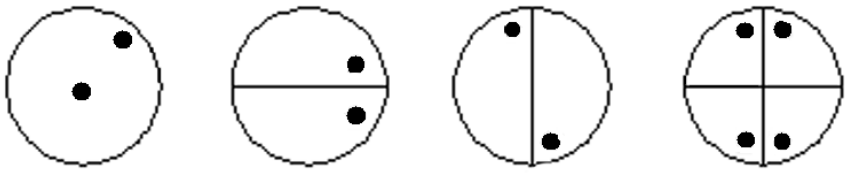


Figure 1.2. The view of the elementary cell

If the basis and translational size of an arbitrary crystal is determined, then this crystal lattice is determined [6].

In general, crystals have a certain point symmetry, which means that certain rotations of this lattice can be brought back to its place by reflection. Symmetry is determined using a scanning electron microscope. Depending on this point, it is possible to determine the physical properties of monocrystals by turning them to azimuths or polar angles in order to determine whether they have the property of anisotropy [7].



b) 1 b) 1m v) 2g) 2mn

Figure 1.3. Appearance of symmetries

a) the figure shown in the picture does not have symmetry with respect to the given axis or plane, this figure overlaps with itself only when it is turned

through an angle of 360o, the circular designation of objects with such lower symmetry is accepted as 1.

The shape in b) is represented by a long line, so it is symmetrical about the plane. Such a form is designated as 1m [8].

c) in the figure, when turning 180o degrees, the symmetry overlaps each other. And when it turns 360 degrees, it falls on top of each other on March 2. Such symmetry has a 2-order symmetry bar and is denoted by the number 2. The last symmetry is defined as 2 mm because it is symmetrical about the plane and the torsion axis.

Crystal lattices can be considered to be formed by stacking, twisting (rotating) or reflection of elementary cells. So, the crystal lattice consists of a set of elementary cells arranged in a certain order [9].

In general, crystal lattices have a certain point symmetry. that is, this grid can be brought back to its place (its state) through certain rotations and reflections.

The sum total of rotations and reflections that keep the given configuration (shape) of geometric points invariant forms a certain group. Such groups are called point groups [10].

Three-dimensional crystal lattices can be divided into 7 different point groups. They are called halohedral point groups. One crystal system corresponds to each halohedral group. There are 7 different crystal systems, which make up 14 different types of lattices. These grids are called Brave grids. They are given in Table 1.1 [11].

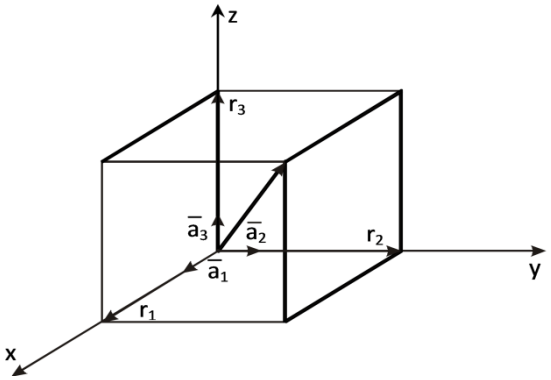


Figure 1.4. Drawing view of primitive grid. - unit vectors, - integer coefficients.

It can be seen from the table that one or more Brave bars are suitable for each system.

1.1 – table Symmetry groups of three-dimensional crystals

t/r	Crystal system	Brave grill
1	Triclin	Simple
2	Monocline	Simple, the base is centered
3	Orthorhombic	Simple, base-centered, volume-centered, side-centered
4	Trigonal	Simple
5	Tetragonal	Simple, the base is centered

6	Hexagonal	Simple
7	Cubic	Simple, base-centered, volume-centered, side-centered

In addition to translational symmetry, crystal lattices are characterized by other symmetry properties. These are called point groups and spatial groups of directions. Point groups of directions are divided into 32 types. Each of these groups corresponds to one crystal class. The number of spatial groups is 230. We will not consider the route group and spatial groups [12,13].

References:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.
2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). "MAPLE" DA SO'NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI "MULTISIM" DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.

11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.
14. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. Universum: технические науки, (11-3 (104)), 9-12.

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KRISTALLARDAGI ATOMLARNING BOG'LANISH TURLARI

Annotatsiya. Atomlar va molekulalarning bog'lanishiga ko'ra 5 turdagi bog'lanishlar mavjud bular: Kavalent, Ion, Malekuliyar, Vodorod va Metall, Vander-Vals bog'lanishi bog'lanishdir.

Kalit so`zlar: Vander-vals bog'lanishi, ionli bog'lanish, madelunk energiyasi, metall bog'lanish, kovalent bog'lanish.

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TYPES OF BONDS OF ATOMS IN CRYSTALS

Annotation. According to the bonding of atoms and molecules, there are 5 types of bonds: Covalent, Ionic, Molecular, Hydrogen and Metal, Vander-Waals bond is a bond.

Key words: Vander Waals bond, ionic bond, Madelunk energy, metallic bond, covalent bond.

Kristall panjarasi ularning geometrik tuzulishi to'g'risida tassavur hosil qilishga yordam beradi. Lekin ushbu bilim kristallardagi atom yoki molekulalarning kristall panjarasi tugunlarida tutub turuvchi kuchlarning tabiyati haqida ma'lumot bera olmaydi shuning uchun kristallarni ularni tashkil qilgan atomlar yoki molekulalar orasidagi ta'sir kuchlariga qarab ajratish va o'rganish maqsadga mofuqdir. Atomlar va molekulalarning bog'lanishiga ko'ra 5 turdagi bog'lanishlar mavjud bular: Kavalent, Ion, Malekuliyar, Vodorod va Metall, Vander-Vals bog'lanishi bog'lanishdir.

Ion bog'lanishli kristall panjarasida tugunlarida ionlar joylashgan bo'ladi. Turli ishorali ionlar orasidagi masofa bir hil ishorali ionlar orasidagi masofa kichik bo'lganligi uchun turli ishorali ionlar orasidagi tortishish kuchi bir hil ishorali ionlar orasidagi itarish kuchidan kattadir. Lekin tortish kuchi ma'lum bir *r* masofagacha ta'sir qiladi agar ionlar orasidagi masofa *r* dan kichkina bo'lsa ular orasida itarish kuchlari paydo bo'ladi.

Kardinatsion son *K* deb ataladi. Kardinatsionning qiymati panjaradagi ionlarning radiuslari bilan aniqlanadi. Quydagi jadvalda kardinatsion sonning panjara atolarini efeltiv zaryadlarning radyuslarining nisbati keltirilgan

kordinatsion son	12	8	6	4	2
r_a/r_b ning qiymati	r_a/r_b =1	$1>r_a/r_b>0.71$	$0.71>r_a/r_b>0.41$	$0.40>r_a/r_b>0.21$	$r_a/r_b<0.21$

Bu yerda r_a va r_b Ava *B* elementning efektiv zaryadlarning radyusi.

Misol uchun osh tuzi kristall tuzulishini ko'rib chiqaylik *Na* atomining efektiv zaryadining radyusi *r* = 0.98 Å *Cl* atominiki esa *r*= 1.81 Å ekanligini inobatga olsak $r_{Na}/r_{Cl}=\frac{0.98}{1.81}=0.54$

Yuqoridagi jadvaldan ushbu kristall uchun kardinatsion son 6 ga teng bu degani 1 ta ion atrofida 6 ta ion o'rab turushini anglatadi.

NaCl kristallida radyusi natriyning radyusidan deyarli ikki barobar katta shuning uchun ularning o'rtasida yana bir ionni joylashtirish uchun b o'sh joy qolmaydi, natijada ion kristallarda o'zaro bog'lanish energiyasi asosan elektrostatik tavsifga ega bo'lib bu energiya madelunk energiyasi deb ham ataladi. Kristalldagi ihtiyoriy *I*(i) va *J*(j) nomerli atomlar orasidagi bog'lanish energiyasini *U*ij deb ataylik u holda i nomerli ionning boshqa hamma atomlar bilan o'zaro ta'sirlashuv energiyasi

$$\mathbf{U}=\sum_j U_{\mathbf{ij}}$$

Bu yerda i≠j. ion bog'lanishli kristall uchun ikki qisimdan iborat deb qarab bog'lanish energiyasini quydagicha yozish mumkin.

$$U_{ij}=\lambda\, exp\left(-\frac{r_{ij}}{\rho}\right)=\frac{q^2}{l_{ij}}$$

Ifodadagi 1-had ionlar orasidagi ionlar orasidagi itaruvchi kuchning potensiyali bo'lib 2-had klon qonunini potensiyalini ifodalaydi. Qo'shni atomlar orasidagi masofani R deb olsak u holda shu o'z

$$r_{ij}=P_{ij}\cdot R$$

O'zgartirishini kiritaylik o'zaro itarish kuchlari faqat yaqin joylashgan atomlar orasida mavjud deb olsak u holda yuqoridagi ifodani quydagi ko'rinishda yozish mumkin

$$U_{ij}=\begin{cases}\lambda\exp\left(-\frac{R}{\rho}\right)-\frac{Q^2}{R} & \text{yaqin atomlar uchun}\\ \pm\frac{1}{P_{ij}}\cdot\frac{Q^2}{R} & \text{qolgan atolar uchun}\end{cases}$$

Kristalldagi musbat va manfiy ionlarning soni $2N$ ga teng bo'lsa kristallning to'liq energiyasi

$$U_T=NU_i$$

Ga teng bo'ladi. U_i ni N ga bog'liqligidan har bir ta'sirlashuvchi ionlarni bir marta hisobga olish zarur. Bundan U_i uchun quydagini yozamiz

$$U_i = z\left[\lambda \exp\left(-\frac{R}{\rho}\right) - \frac{q^2}{R}\right] + \sum_j^{N-Z} \pm \left(\frac{1}{P_{ij}}\right) \cdot \frac{q^2}{R}$$

Bu yerda z eng yaqin qo'shni atomlar soni ifodani soddalashtirish uchun $z\frac{q^2}{r}$ ni 2- hadga qo'shib quydagini hosil qilamiz.

$$U_i = z\lambda \exp\left(-\frac{R}{\rho}\right) - \sum_j^N \left(\frac{1}{P_{ij}}\right) \cdot \frac{q^2}{R}$$

Bu ifodadan

$\sum_j \left(\pm \frac{1}{P_{ij}}\right) = \alpha$ deb belgilaymiz

Ushbu ifoda Modelunk doimiysi deb yuritiladi. U holda yuqoridagi ifodani quydagicha yozish mumkin.

$$U_i = z\lambda \exp\left(-\frac{R}{\rho^2}\right) - \alpha \frac{q^2}{R}$$

Ifodaning ohirgi hadi eng yaqin z atomlar xossasini o'z ichiga oladi, shuning uchun

$$U_T = N\left(\lambda \exp\left(-\frac{R}{\rho}\right) - \alpha \frac{q^2}{R}\right)$$

Toliq enirgiya *R* ga bog'liq bo'lmaydi. U holda

$$\frac{dU_T}{dR} = o$$

$$N\frac{dN_i}{dR} = -\frac{Nz\lambda}{\rho} \exp\left(-\frac{R}{\rho}\right) + \frac{N\alpha q^2}{R^2} = 0$$

$$U_T = -\frac{N\alpha q^2}{R}\left(1 - \frac{\rho}{R}\right)$$

Bu yeda ρ juda kichik son bo'lib $\rho=0.1R_{\circ}$ ni tashkil qiladi u holda ifoda

$$\left[U_T = -\frac{N\alpha q^2}{R}\right]$$

ga teng bo'ladi. demak ion bog'lanishdagi kristallarning bog'lanish energiyasining hammasi klon energiyasini tashkil qiladi. Ion bo'lanish tashqi ta'sirlarga ham bevosita bog;liq masalan temperaturaning ortishi bilan musbat ionlarning effektiv zaryadining radyusi manfiy ionnikiga qaraganda tezroq ortadi bu esa o'z navbatida kristall tuzulishni o'zgartiradi masalan xarorat ortishi bilan *CsCl* kristalli markazlashgan kubik panjaradan sodda kubik panjaraga aylanadi. Bosimning ortishi esa o'z navbatida kristall panjaraga ta'sir ko'rsatadi. Masalan *ClCa* hlorli brom kabi kristallar hajmiy markazlashgan kubik panjaraga aytiladi.

Adabiyotlar:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.

2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. Universum: технические науки, (11-3 (104)), 5-8.
3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. НАНОЭЛЕКТРОНИКИ», 1(A4), 241.
7. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
8. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
9. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
10. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
11. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
12. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023):
13. Mirzaev, U., Abdullaev, E., Kholdarov, B., Mamatkulov, B., & Mustafoev, A. (2023). Development of a mathematical model for the analysis of different load modes of operation of induction motors. In E3S Web of Conferences (Vol. 461, p. 01075). EDP Sciences

УДК 548.4

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ION IMPLANTATION AND QUANTUM STRUCTURES

Abstract. Creating such objects in silicon crystals, which is considered the main material of modern electronic technology, is a very promising issue. The creation of such objects in silicon crystals, which is considered the main material of modern electronic technology, is a very promising issue. The amount of impurities introduced into the silicon crystal depends on their solubility in silicon I am limited.

Key words: Ion implantation, Application of quantum structures, Resonant tunnel diode, Lasers based on quantum depths, inverse density, high-frequency tunnel diodes, transistors, semiconductors, lasers, various sensors for quantum computers.

Ion implantation is the bombardment of ions of another element (eg, Ge, Mn, Fe, Ni) into the base material (eg, silicon) [1].

In this case, the intended amount of foreign atoms is introduced into the substrate by controlling the energy and dose of ions. Due to the processes of self-organization, a large number of introduced and unbalanced atoms form nanoclusters, a single-point combination of a large number of up to 10,000 atoms, and they are called quantum properties [2].

In recent years, the formation of KNs on the surface of semiconductors using the method of ion implantation and the study of their properties are rapidly developing. In particular, in many scientific centers of the world, there are a number of scientific works dedicated to the formation of KNs with the help of implantation of germanium ions in silicon crystal, and the study of their shape and properties [3].

The creation of such objects in silicon crystals, which is considered the main material of modern electronic technology, is a very promising issue. The amount of impurities introduced into the silicon crystal depends on their solubility in silicon

I am limited. One of the methods used to change this limit is the method of ion implantation. The introduction of atoms of transition group elements into silicon fundamentally changes their physical and recombination parameters. Due to this, silicon samples containing such mixtures are used as highly sensitive probes in various sectors of the economy. The formation of CNs composed of such mixtures is of course very interesting from a practical point of view [4].

A number of experiments were conducted to study the conditions for the formation of KNs and their effect on the electrophysical and photoelectric properties of FeQ and MnQ ions introduced into the silicon crystal with the help of ion implantation. Indeed, in such samples with KN, anomalously large photosensitivity in the near and mid-infrared region of the spectrum, various heterogeneous current instabilities, giant magnetoresistance, and the like have many interesting and practically promising results received [5,6]. They are explained by the formation of complex molecules (for example: Mn6, Mnl2, Fe8, Fel0, etc.), i.e. KNs, in the ionized state of atoms of iron and elements belonging to the transition group.

In fact, in recent times, the elements of the firing group, such as Fe, Co, Ni, Mn, have a very large spin due to the processes of self-organization by interacting with oxygen, hydrogen and carbon atoms under certain conditions. (S=12) formation of huge magnetic molecules, study of their magnetic properties is being carried out rapidly.

Application of quantum structures. Quantum structures are already widely used in all aspects of electronics [7]. In particular, ultra-high-frequency tunnel diodes, transistors, semiconductors created on the basis of quantum structures lasers, various sensors and microprocessors for quantum computers are considered the basis of modern electronics.

Resonant tunnel diode is a classic particle, full, it exceeds the energy of the potential barrier only if it is greater than it, if it is less, the particle returns from the barrier and moves in the opposite direction. A quantum particle moves differently: even if its energy is insufficient, it can overcome the barrier like a wave. Even if the total energy is less than the potential energy, there is a possibility to pass the barrier without increasing [8]. This quantum phenomenon has been named the "tunneling effect" and is used in resonant tunneling diodes.

Lasers based on quantum depths. Quantum structures are successfully used in the preparation of lasers. Today, effective laser devices created on the basis of quantum wells have reached the consumer market and are successfully used in fiber-optic communication [9]. The structure and operation of the devices are as follows: first, for any laser, it is necessary to increase the inverse density of energy levels. In other words, more electrons should be located in the higher energy level than in the lower one, and this is less during the state of thermal equilibrium. Secondly, each laser needs an optical resonator or a system of calculators that collect electromagnetic radiation into a working volume.

In order to turn a quantum well into a laser, it must be connected to two contacts that allow electrons to flow in and out. An electron entering the conduction band of the contact arc jumps, passes from the conduction band to the valence band and radiates its excess energy in the form of a quantum, that is, an electromagnetic wave. Then it leaves the valence zone through another contact [10]. In quantum mechanics, the radiation frequency hv=Ed-Ev (5) with the

condition is known to be identified. Here Ev Ev1 is suitable. energy of the first energy levels in the conduction band and the valence band.

Electromagnetic radiation generated by the laser should be concentrated in the central working area of the device. For this, the refractive index of the inner layers should be greater than the outer one. It can also be said that the inner field acts as a wave transmitter. Reflecting mirrors are installed on the boundaries of the waveguide, which act as a resonator Lasers based on quantum wells have several advantages over conventional semiconductor lasers [11]. The following can be included in them: the ability to control the generated laser frequency, the lack of useless fading in optical radiation, the ease of creating inverse density in electronic gases, which requires less current and provides more light. Due to this, their efficiency reaches up to 60%.

Currently, extensive work is being carried out in many laboratories of the world on the preparation of lasers based on quantum depths. In 2003, Russian scientist J. Alfyorov was awarded the Nobel Prize for his services in creating lasers used in fiber-optic communication [12].

References:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.
2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). "MAPLE" DA SO'NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI "MULTISIM" DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.

9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.
14. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. Universum: технические науки, (11-3 (104)), 9-12.

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RADIOCHASTOTA SPEKTRINI BOSHQARISHNI TASHKIL QILISH

Annotatsiya. Ushbu maqolada Radiochastotalar va ularning faoliyati, asosiy vazifalari va yo`nalishlari haqida ma’lumotlar berildi va tahlil qilindi.

Kalit so`zlar: Radiochastotalar, spektr, foydalanishni tartibi, ilmiy-texnikaviy tadqiqotlar.

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ORGANIZATION OF RADIO FREQUENCY SPECTRUM MANAGEMENT

Annotation. In this article, information was given and analyzed about radio frequencies and their activities, main tasks and directions.

Key words: Radio frequencies, spectrum, method of use, scientific and technical research.

O‘zbekiston Respublikasi Prezidentining «Radiochastota spektrini boshqarishni tashkil qilish va foydalanishni takomillashtirish to‘g‘risida» gi qaroriga muvofiq O‘zbekiston Respublikasi Radiochastotalar bo‘yicha davlat komissiyasi Radiochastotalar bo‘yicha respublika kengashiga o‘zgartirildi.

Radiochastotalar bo‘yicha respublika kengashi faoliyatining asosiy vazifalari va yo‘nalishlari etib:

- mamlakatni ijtimoiy-iqtisodiy rivojlantirishning ustuvor yo‘nalishlariga muvofiq O‘zbekiston Respublikasining radiochastota resursidan samarali foydalanishni ta’minlash sohasida davlat siyosatini amalga oshirish;
- radiochastota spektrini taqsimlash va foydalanish konsepsiyasini ishlab chiqish va amalga oshirish, radiochastotalarni taqsimlash milliy jadvalini shakllantirish, radiochastota spektridan foydalanish sohasida ilmiy-texnikaviy tadqiqotlar o‘tkazilishini tashkil qilish;
- radiochastota spektridan foydalanish sohasida xalqaro hamkorlikni amalga oshirish, radiochastotalarni rejalashtirish, tayinlash va ulardan foydalanish masalalari bo‘yicha xalqaro tashkilotlarda O‘zbekiston Respublikasining milliy manfaatlarini himoya qilish;
- radiochastota spektri to‘g‘risidagi qonun hujjatlariga rioya etilishi monitoringini tashkil qilish, radiochastota spektridan foydalanuvchilarning huquqlari va qonuniy manfaatlarini himoya qilishga qaratilgan tizimli kompleks chora-tadbirlarni ishlab chiqish va qabul qilish;

• radiochastota spektrini tartibga solish va undan foydalanish sohasida zamonaviy texnologiyalarni qo‘llash borasidagi ilg‘or xorijiy tajribani o‘rganish, mazkur sohada yagona avtomatlashtirilgan boshqarish tizimini yaratish va rivojlantirish;

• radiochastota spektridan foydalanuvchilarning huquqlari va qonuniy manfaatlarini himoya qilish.

• Radiochastotalar bo‘yicha respublika kengashi o‘z vakolati doirasida qabul qilgan qarorlar davlat va xo‘jalik boshqaruvi organlari, mahalliy davlat hokimiyati organlari, shuningdek radiochastota spektri foydalanuvchilari tomonidan ijro etilishi majburiy hisoblanishi belgilangan.

Radiochastotalar bo‘yicha respublika kengashi tarkibi va nizomi qaror bilan tasdiqlangan. O‘zbekiston Respublikasi Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi Radiochastotalar bo‘yicha respublika kengashining ishchi organi etib belgilangan. Vazirlik tuzilmasida Radiochastotalar bo‘yicha respublika kengashi faoliyatini tashkiliy-texnik jihatdan ta’minlash uchun radiochastota spektridan foydalanishni tartibda solish bo‘limi tashkil etilgan.

Adabiyotlar ro‘yxati:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.
2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. Universum: технические науки, (11-3 (104)), 5-8.
3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
7. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
8. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
9. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.

УДК 616.36-002+618.3-06+616-022.61

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FEATURES OF THE COURSE OF CHRONIC VIRAL HEPATITIS B DURING PREGNANCY AND PERINATAL RESULTS

Rezyume. Parenteral viral hepatitis (VH) is one of the most important problems of modern hepatology and human infectious pathology, as the rates of growth and scale of prevalence on the globe are significantly higher than those of other infections. Thus, according to the WHO, 3-4 million people are infected each year with the hepatitis C virus, more than 240 million people have chronic liver damage caused by the hepatitis B virus.

Key words: pregnancy, hepatitis B, perinatal outcomes, hepatology, infection.

Introduction. Parenteral viral hepatitis (HCV) is one of the most important problems of modern hepatology and human infectious pathology, since they significantly exceed the incidence of other infections in terms of growth rates and prevalence on the globe [1, 2]. Thus, according to WHO, 3-4 million people are infected with the hepatitis C virus every year, more than 240 million people have chronic liver damage caused by the hepatitis B virus [3, 4, 5].

The detection rate of antibodies to hepatitis B and C in pregnant women ranges from 1-2.5% in Western Europe, the USA, Japan and Australia to 10% and higher in some countries of Africa and the Middle East. In regions of the Russian Federation with moderate intensity of the epidemic process, the frequency of detection of ap^-N^ among pregnant women is 0.9% in 1997 and 2.8% in 2002. A higher frequency is recorded among pregnant women in risk groups, among those infected with the human immunodeficiency virus it is 17-54% [1].

Studies by hepatologists have found that viral hepatitis B and C and pregnancy have a mutually aggravating effect. Manifestations of this effect are a high percentage of miscarriage - the threat of termination of pregnancy is 2.5 times more common than in healthy pregnant women; placental insufficiency - signs of intrauterine fetal hypoxia and intrauterine growth retardation syndrome occur in 22-25%, there is a threat of infection [9, 10, 11, 12]. In most patients, pregnancy does not have a negative effect on the course of the disease and does not pose a risk to the mother. The course of chronic viral hepatitis in pregnant women is characterized, as a rule, by low activity and the rarity of exacerbations [1, 9, 10].

All of the above leads to an increase in the number of pregnant and parturient women among women suffering from HCV, which poses a real threat not only to the life and health of the expectant mother, but also to the child, who

may become an asymptomatic carrier of infection, develop acute or chronic hepatitis with the outcome of cirrhosis and hepatocellular cancer.

The purpose of the study: to study the features of the course of pregnancy, childbirth, intrauterine development of the fetus and newborns in pregnant women with chronic viral hepatitis B and C.

Material and methods: We conducted a retrospective analysis of 75 birth histories with chronic viral hepatitis B and C and 76 (one twin) newborn histories.

The result and their discussion: The average age of pregnant women was 25.1±3.72 years. Chronic viral hepatitis B was diagnosed in 25 patients (33.3%), 49 women with chronic viral hepatitis C (65.3%) and 1 woman with viral hepatitis B and C (1.3%).

The social status assessment data revealed problems in the study group: unemployed, excluding housewives, 10 (13.3%); unmarried, excluding civil marriage, 8 (10.7%); most patients had bad habits: smoking in 29 cases (38.7%), alcohol dependence was observed in 4 patients (5.3%), drug addiction was detected in 10 (13.3%) patients.

When analyzing the available extragenital pathology, it was found that more than half of the women in the group (66.7%) were often ill in childhood and suffered several childhood infections. The most frequent diseases of the cardiovascular system (vegetative-vascular dystonia, hypertension) were diagnosed in pregnant women we took into account - 15.9%, diseases of the digestive system (chronic cholecystitis, gastritis) -13.3%. Hepatitis A was detected in 18 women (24%). When analyzing women's awareness of the diagnosis of viral hepatitis B or C before pregnancy, only 19 patients (25.3%) from the entire study group knew about the existence of the diagnosis. According to WHO data in developed countries, only 1/4-1/3 of young women are diagnosed with chronic hypertension before pregnancy [4, 5].

These estimates of reproductive function indicated an almost equal ratio of first- and second-time births - 45 (60%) and 30 (40%), respectively. It should be noted that among the first-time pregnant women, there were only 24 patients (53.3%), termination of pregnancy by spontaneous miscarriage prevailed - 13.7% or medical abortion - 26.7%. Gynecological history is burdened in every second patient, the most common were: pelvic inflammatory diseases - 18.6% of cases; sexually transmitted infections - 17.2%.

The peculiarities of the course of a real pregnancy testified that every second pregnant woman was not registered for pregnancy in a women's clinic (33, or 44%). In the patients of the study group, in most cases, pregnancy occurred against the background of various complications. The most common early cases were: the threat of termination of pregnancy - 17.2% of cases, early toxicosis - 21 pregnant women (28%), anemia of pregnant women -6 (8%) cases. Uncomplicated course of the first half of pregnancy was observed in 32 women (42.7%). Phases of exacerbation of viral hepatitis in the first half of pregnancy were not observed in any patient.

The second half of pregnancy occurred against the background of the threat of termination of pregnancy in 10 (13.3%) patients,

Anemia was observed in 38.7% (29 women) of cases, moderate preeclampsia was detected in 25 pregnant women (33.3%). Disorders on the part of the mother-placenta-fetus (hemodynamic disorders, intrauterine development delay (IVRP)) were diagnosed in 19 pregnant women (25.3%), polyhydramnios - in 6 (8%) patients, low water content - in 5 (6.7%). The diagnosis of "cholestasis" was made to 2 women - 2.7%, exacerbation of HCV with deterioration of the general condition was observed in 1 pregnant woman - 1.3%. In 16 (21.3%) women, the second half of pregnancy proceeded without complications.

Data from serological and biochemical blood tests of the studied women showed that HBsAg was detected in 25 (33.3%) pregnant women, antibodies to viral hepatitis C were detected in 49 (65.3%) women, HBsAg and antibodies to viral hepatitis C were detected in 1 woman (1.3%).

Biochemical blood examination revealed the following deviations: the average value of total protein was 64.87±6.71 g/l; an increase in bilirubin was detected in 5 (6.7%) pregnant women (the maximum value was 65.7 mmol/l); an increase in AlAT occurred in 2 (2.7%) women, reaching a maximum value of 2 mmol/h/l (no. up to 0.68 mmol/h/l), AsAT - in 3 (4%) women, up to a maximum of 0.85 mmol/h/l (no. up to 0.45 mmol/h/l); an increase in the thymol sample was observed in 2 (2.7%) pregnant women, up to a maximum of 7 units (no. up to 4 units), alkaline phosphatase was increased in 12 (16%) people. No changes in coagulogram parameters were detected in any patient.

To compare the indicators of biochemical screening in patients of the study group with those in physiologically occurring pregnancy, a group of practically healthy women with uncomplicated gestational process (n=21) was recruited. The analysis of the data obtained in the study group revealed significant differences in the average values of bilirubin - 18.83±3.64 mmol/l and AlAT -0.64±0.12 mmol/h/l in the direction of increase compared with those in physiologically progressing pregnancy ($p<0.05$). The average indicators remained within the normative values.

Conclusions. Testing for markers of viral hepatitis B and C three times (in each trimester of pregnancy) is a routine examination method that allows to identify asymptomatic carriage of the hepatitis virus, but does not exclude the possibility of further infection.

Viral hepatitis B and C have a negative effect on the course of pregnancy in both the first and second half, causing the threat of termination of pregnancy (13.3%), placental insufficiency (25.3%), moderate and severe preeclampsia (33.3%). In every 3rd pregnant woman (32%), there are changes in the biochemical parameters of the blood (total bilirubin, aminotransferase, alkaline phosphatase, thymol sample) in the direction of increase.

The presence of changes in the uteroplacental complex (chronic fetal hypoxia, fetal I and II grade IVRP) leads to a complicated course of the early

neonatal period of newborns (development of cerebral ischemia of I and II degrees (60%), hypotrophy of the newborn (28%), VAI (24%)).

Based on our data and literature data, it can be reliably stated that the transplacental transmission of HCV and HCV antibodies exists, since, according to the data obtained, HBsAg was detected in 6.7% of newborns, antibodies to HCV were detected in 58.7%. In 36% of cases, HBsAg and HCV antibodies were not detected. However, to resolve the issue of possible infection of the child, a repeated laboratory blood test for the presence of viral antibodies and RNA/DNA in 1-, 3-, 6-, 12-, 18- months of pregnancy.

References:

1. Власова О.Н. Сложный вопрос гепатологии - вирусный гепатит и беременность. Гастроентеролопя. 2013. № 4. С. 89-94.
Vlasova O.N. Slozhnyi vopros gepatologii - virysnyi gepatit i beremennost'. Gastroenterologiya. 2013. № 4. S. 89-94.
2.Жданов К.Б., Лобзин Ю.В., Гусев Д.А., Козлов К.В. Вирусные гепатиты. СПб.: Фолиант, 2011. 308 с.
Zhdanov K.B., Lobzin U.V., Gysev D.A., Kozlov K.V. Virysnye gepatiti. SPb.: Foliant, 2011. 308 s.
3.Барамзина С.В. Хроническая HCV-инфекция: эпидемическая и эпидемиологическая характеристика заболевания в разных возрастных группах за 14-летний период наблюдения. Медицинский альманах. 2014. № 1 (31). С. 34-37.
Baramzina S.V. Hronicheskaya HCV-infekziya: epidemicheskaya i epidemiologicheskaya harakteristika zabolevaniya v raznih vozrastnih gryppah za 14-letniiperiod nabludeniya. Medicinskii al'manah. 2014. № 1 (31). S. 34-37.
4. ВОЗ. Гепатит С. Информационный бюллетень ВОЗ. Женева: ВОЗ, 2013. № 164.
VOZ. Gepatit C. Informacionnyi byulleten' VOZ. Zheneva: VOZ, 2013. № 164.
5. ВОЗ. Гепатит В. Информационный бюллетень ВОЗ. Женева: ВОЗ, 2013. № 204.
VOZ. Gepatit B. Informacionnyi byulleten' VOZ. Zheneva: VOZ, 2013. № 204.
6. Постановление правительства Красноярского края № 223-п от 30.04.13 «Об утверждении программы «Развитие здравоохранения Красноярского края на 2013-2020 годы». Наш Красноярский Край. 2013. № 89/583. С. 12-13.
Postanovlenie pravitel'stva Krasnoyarskogo kraya № 223-п ot 30.04.13 «Ob ytvershdenii programmi «Razvitie zdravoohranenia Развитие здравоохранения Krasnoyarskogo kraya na 2013-2020 godi». Nash Krasnoyarskii krai. 2013. № 89/583. S. 12-13.
7.Приказ Министерства здравоохранения РФ от 1.11.2012. № 572н «Об утверждении Порядка оказания медицинской помощи по профилю акушерство и гинекология (за исключением использования вспомогательных репродуктивных технологий)».

Prikaz Ministerstva zdravoohraneniya RF ot 1.11.2012. № 572n «Ob ytverzhdenii Poriydka okazaniya medizinskoi pomochi po profily akysherstvo i ginecologiya (za isklycheniem ispol'zovaniya vspomogatel'nih reprodyktivnih tehnologii)».
8. Талли Н.Д., Исаков В.А., Сигал А., Уэлтман М.Д. Гастроентерология и гепатология. Клинический справочник. Практическая медицина. 2012. 565 с.
Talli N.D., Isakov V.A., Sigal A.. Ueltman M.D. Gastroenterologiya i gepatologiya. Klinicheskii spravochnik. Prakticheskay medizina. 2012. 565 s.
9. Apuzzio J., Block J.M., Cullison S.et al. Chronic Hepatitis B in Pregnancy. A Workshop Consensus Statement on Screening, Evaluation, and Management, Part 1. The Female Patient. 2012. Vol. 37. P. 22-29.
10. Apuzzio J., Block J.M., Cullison S.et al. Chronic Hepatitis B in Pregnancy. A Workshop Consensus Statement on Screening, Evaluation, and Management, Part 2. The Female Patient. 2012. Vol. 37. P. 32-35.
11. Reddick K.L.B., Jhaveri R., Gandhi M. et al. Pregnancy outcomes associated with viral hepatitis. J. Viral. Hepat. 2011. Vol. 18. Issue 7. P. 394-398.
12. Cottrell E.B., Chou R., Wasson N. et al. Reducing risk for mother-to-infant transmission of hepatitis C virus: a systematic review for the U.S. Preventive Services Task Force. Ann. Intern. Med. 2013. Vol. 158 (2). P. 109-113.
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THE INFLUENCE OF THE SOCIAL ENVIRONMENT ON THE TRAINING OF ATHLETES

Abstract. The article shows the influence of external and social environmental conditions on the athletic performance of track and field athletes. An obvious fact in the activities of athletes is that representatives of sports whose competitions take place outside are susceptible to the influence of environmental conditions. This could be heat, wind, rain, snow, etc. In this regard, it is worth stating that these natural moments certainly have an impact on the level and sustainability of the athletes' sports results, no matter how the athlete is ready for competition.

Keywords: competitions, athletes, running, sports results, external environment, wind direction and speed, rating points, athletics.

Today, sport plays an important role in human life. Some do it for themselves, for some sports is a hobby, and some devote their whole lives to sports and try to achieve high results by working and working, some succeed in everything at once, but there are people who are looking for all possibilities, improving the result. An athlete's performance is influenced not only by physical preparation, but also by the training process as a whole, but external environmental factors also play an important role.

In modern systems of physical education, sport occupies an increasingly prominent place. This is explained by a number of reasons, first of all, the special effectiveness of sport as a means and method of physical education, its popularity, the widest development of international sports relations in the last decade, the steadily increasing general cultural and prestigious significance of sport in the modern world. As a product of social development, it forms an organic part of the culture of society and, depending on specific social conditions, acquires various features and forms.

The core of sport, the basis of its features, is specific competitive activity, i.e. activity, the characteristic form of which is a system of competitions, which historically developed primarily in the field of physical culture of society as a special sphere of identification, development and unified comparison of human capabilities (strengths, abilities, the ability to use them rationally). Unlike other forms of activity, which include competition only as one of their moments or methods (in the field of production, art, etc.), competitive activity in sports is built, first of all, according to the logic of competition, in the form of competition. At the same time, it is characterized by a special type of competitive relationship,

free in principle from antagonism, a clear regulation of the interactions of competitors, as well as the unification of the composition of actions, the conditions for their implementation and methods for assessing achievements according to established rules, which have now acquired the meaning of international or relatively local, but quite widely accepted norms of competition.

The immediate goal of competitive activity in sports is to achieve the highest possible result, expressed in the conditional indicators of victory over an opponent or in other indicators conventionally accepted as an achievement criterion. But its essence is never reduced to achieving purely sporting results. As an activity that affects the person himself, and as a sphere of unique interhuman contacts, it also has a deeper meaning, determined, ultimately, by the totality of the basic social relations in which it is included and which determine its social orientation in the specific conditions of a particular society. In its life embodiment, sport is a person's steady desire to expand the "boundaries" of his capabilities, realized through special training and systematic participation in competitions associated with overcoming increasing difficulties, and a whole world of emotions continued by successes and failures along this path, and a complex a complex of interhuman relations, and the most popular spectacle, and one of the most massive social movements of our time, and much more.

However, sport cannot be reduced only to competitive activity; it also has a deeper meaning. This is due to the social essence and purpose of sport in our society. Achieving high sports results is impossible without a fairly well-established system of training an athlete, carried out in the field of diverse interpersonal contacts that develop between coaches, athletes and judges, organizers, spectators, etc. They are carried out at different levels, from sports teams to competitions at various international levels.

Thus, special preparation for it, specific interpersonal relationships and institutions in the sphere of this activity, its socially significant results, taken as a whole. The social value of sport lies most of all in the fact that it represents a set of the most effective means and methods of physical education, one of the main forms of preparing a person for work and other socially necessary activities, and along with this, one of the important means of ethical and aesthetic education, satisfying the spiritual needs of society, strengthening and expanding international ties that promote mutual understanding, cooperation and friendship between peoples.

The special effectiveness of sport as a means and method of physical education is due to the competitive nature of sports activity, its inherent focus on the highest possible results and the objective laws of their achievement in the process of special training (the need for in-depth specialization associated with the use of functional loads, increasing up to the limit, etc.), as well as the peculiarities of the organization and stimulation of sports in society (a specific system of rewards for sports achievements). Because of this, sport, in comparison

with other means and methods of physical education, allows us to ensure the highest degree of specialized development of certain abilities, skills and abilities.

In the interests of concretizing ideas about the relationship between physical education and sports, it is important, along with the above, to take into account that sport is not limited to physical education. As already noted, it is a multifaceted social phenomenon that has independent general cultural, pedagogical, aesthetic, prestigious and other significance. This especially applies to elite sport (the so-called "big sport"). In addition, a number of sports are not an effective means of physical education at all or are indirectly related to it (chess, aircraft modeling and some other sports that are not directly related to highly active physical activity).

Athletics is a combination of several sports, including such disciplines as running events, race walking, technical events (jumping and throwing), all-around events, runs (road running) and cross-country running (cross-country running). One of the main and most popular sports.

In athletics, where competitions take place not only indoors, but also in stadium conditions, weather conditions influence the running and jumping disciplines to a greater extent, where the manifestation of maximum speed in the process of performing a complete exercise is of undeniable importance in realizing one's potential capabilities. Athletes use running as a means to improve performance year-round, regardless of training conditions - at the stadium or indoors. If, in indoor conditions, the athlete is not affected by, for example, weather conditions, then training conducted in a stadium, as noted above, has various effects - positive and negative.

In the chain of listed environmental factors, let us pay attention to the wind. It is the "obstinacy" of the wind, especially at competitions, that creates "special conditions" for track and field athletes that do not allow or, on the contrary, allow them to achieve the desired result.

It is worth noting that in athletics, according to the competition rules, two indicators related to the wind are determined - direction and speed. If a tailwind (characterized in the protocols by the "+" sign) quite suits the athlete, then a headwind (characterized in the protocols by the " -" sign), on the contrary, causes negative feelings. With a headwind, regardless of its speed, the energy expenditure for performing a competitive exercise increases and, on the contrary, with a tailwind, it decreases.

A healthy lifestyle is a prerequisite for the development of various aspects of human life, the achievement of active longevity and the full performance of social functions. The relevance of a healthy lifestyle is caused by an increase and change in the nature of stress on the human body due to the complication of social life, increasing risks of a man-made, environmental, psychological, political and military nature, provoking negative changes in health.

Athletics is one of the most popular sports, which together consists of specific means and methods of harmonious physical education of people. The

variety of exercises and their high efficiency, ample opportunities for regulating physical activity, simple equipment - all this has allowed athletics to become a mass sport accessible to every person. It is no coincidence that athletics is called the “queen of sports.”

External (abiotic) factors are factors of inanimate nature that directly or indirectly act on the body - light, temperature, humidity, the chemical composition of the air, water and soil environment, etc. (i.e., properties of the environment, the occurrence and impact of which is not directly dependent from the activities of living organisms). The effectiveness of playing sports depends on the process of interaction between the athlete and the coach, on the one hand, and on the other, with external environmental factors: temperature and humidity, noise, visual, auditory and tactile stimuli coming from teammates, opponents, spectators. By influencing a person, these factors force him to react to them, that is, they control his behavior, actions, actions, and cause a change in state.

Based on this, we conclude that external factors are directly related to increasing the athlete’s performance during the training process.

According to the rules, non-mechanical devices should be used at international competitions. The device for measuring wind speed can be turned off automatically or by remote control, and the information can be transmitted directly, for example, to a computer used for competitions. Against this background, it is worth noting an important aspect that if the tailwind speed exceeds the digital indicators (+ 2.0 m/s), then the record, for example, of the country, Europe, the world, etc. is not counted. The demonstrated sports result in this case, that is, with the help of the wind, including exceeding the specified numbers, allows the athlete to still become a winner and/or prize-winner of specific competitions and nothing more.

From all of the above it follows that according to the competition rules, aspects of the influence of the external environment, in particular wind, are fully defined.

For several decades now, among specialists, and mostly among coaches and athletes, there have been discussions about the influence of speed and, in particular, wind direction on the level and sustainability of sports results. We are talking about those running and jumping types of athletics mentioned above, where, according to the rules of the competition, measurements of these indicators are carried out. Of course, environmental factors have a positive or negative impact on the practical activities of an athlete, in particular, they perceive this “painfully” in competition conditions.

Various discussions boil down to the fact that, for example, in the 100-meter race, a tailwind (+) equal to 1 m/ s can “help” the sprinter improve his performance by almost 0.10 s (depending on the athlete’s skill level) compared to its absence (0 m/s). In jumping events (long jump and triple jump), this will contribute to the distance of the jump.

In this case, a comparative analysis of several performances of the same athlete in natural conditions and within the same competition, and on the same day, can serve as an argument. It is not possible to provide any other evidence base, since it is impossible to conduct or conduct experimental research on this issue in reality.

Wind “fluctuations” encountered during competitions put athletes in unequal conditions. For some, the wind can contribute to achieving a worthy result and a place on the podium, while for others, among whom there may be obvious contenders, for example for victory, on the contrary, it can have a negative impact on the final result. At the same time, athletes can perform in the same jumping sector, or start in the same event, but in different races, etc. It turns out that, being at the same competitions, at first glance in equal conditions, athletes, due to environmental influences, can find yourself in unequal conditions.

References:

1. Bondarchuk A.P. Management of the training process of high-class athletes. Olympia Press. M.: 2007. - 272 p.
2. Mirzoev O. M. Features of the manifestation of tactical skill in the 200-meter race / O. M. Mirzoev, O. A. Mukhin // Athletics. – 2019. – No. 9-10. – pp. 22–31.
3. Chemov V.V., Barabankina E.Yu., Martyushev AC Strategy and tactics of using targeted influences on respiratory function in the special training of athletes / Issues of managing the training of athletes: Scientific works of teachers and graduate students of the department of theory and methodology of athletics. - Issue VIII. – V.:2010. - pp. 210-214.

UDC. 378.046.4

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THE SCIENCE OF AGROMETEROLOGY AND THE CONTRIBUTION OF UZBEKISTAN SCIENTISTS TO ITS DEVELOPMENT

Abstract. The article discusses the science of agrometeorology and the scientific and technical basis of teaching this science. Interesting information about the scientific heritage contributed by great thinkers and scientists of our country to the development of this science is provided.

Key words: agrometeorology, hydrometeorology, black frost, plant development, water, air, soil, climate.

Introduction: In the years after the independence of the Republic of Uzbekistan, the entire system of higher and secondary special education was completely rebuilt, serious reforms were carried out in the structure of educational directions and specialties. Serious attention was paid to the teaching of agrometeorology in the field of agriculture, agrometeorology and hydrometeorology in higher educational institutions. The demand for providing the agro-industrial complex of our country with multi-faceted, planned, fast agro-meteorological and hydro-meteorological information from different districts, using new methods and tools in the observation practice of agro-meteorology has continuously increased.

The main part: The First President of the Republic of Uzbekistan I. Karimov stated that "...in Uzbekistan, the peculiarities of the natural climatic conditions have a decisive influence on the selection of ways and approaches to the implementation of reforms." In fact, the influence of weather, climate, soil climate and agrometeorological and agroclimatic conditions on agricultural crops cannot be denied. To be able to use them in practice, to be aware of the scientific results of the science of agricultural meteorology is the demand of the present time. The total of these works is to reduce the negative effects of weather, agro-climatic conditions and dangerous hydrometeorological events in agricultural production, to ensure stable production of crops in agriculture. '1 may be directed to find ways of obtaining crops. At the Hydrometeorological Research Institute (GMITI) within the Hydrometeorological Service Center (Uzgidromet) under the Cabinet of Ministers of the Republic of Uzbekistan, scientific researches and research analyzes in agrometeorology are carried out on the basis of a wide program, improving the methods of providing agrometeorological services to agriculture and new ones are being developed [1-2].

Until the 20th century, the development of agrometeorology as an independent science is very much slowly developed. Based on various historical and scientific documents, as a result of the analysis of the ancient scientists of Central Asia, the proof of the compatibility of agricultural production with the weather and climate, the sanctity of air, water, and soil created an opportunity for the budding of the science of agrometeorology in ancient times. For example, in the book "Avesta" published 2700 years ago, agrometeorological elements: air, water, soil are considered an integral part of nature and divine. Anyone who pollutes water, air, or soil is punished according to the law adopted at that time. The book "Avesta" is currently considered an important book of our nation with a rich historical and religious spirituality. Even now, this book encourages the young generation to love and protect their native land, and urges the people to pay special attention to nature at the present time when the island problem has arisen. It is known from ancient history that people's activities in everyday life were very dependent on numbers and measurements. Many people have realized that the results of measurements and measurements should be put into a specific format, because the human mind cannot store a lot of measurements and numbers in the brain [2-3].

Currently, mathematical and electronic calculators are widely used to solve agrometeorological problems. It is necessary to prepare a special program-calculation algorithm for Personal Electronic Computing Machines (PCCs) in finding solutions to various calculations using mathematics. "Algorithm" is a Latin word derived from the name of the great mathematician and geographer Musa al-Khorazmi. Al-Khwarizmi was the first to correctly use the climate theory of the time to divide the dry part of the Earth into cultivated areas, and his work is still considered one of the first scientific works [5-6].

Ahmad al-Farghani was born in the village of Quva in the Fergana valley, lived approximately from 797 to 865. According to the decision of Caliph al Mutawakkil, he came to the city of Fustot (Egypt) in 861. The purpose of his visit was to repair the nilomer, a device for measuring the water of the Nile River, and to create a new nilomer, he was engaged in measuring the water of the Nile River. He determined the water level of the Nile River and predicted the amount of crops that could be harvested and, accordingly, how much tax to collect from the population. made recommendations regarding.

Mirzo Ulugbek (Muhammad Taragai, 1394-1449), a great Uzbek astronomer and mathematician, invited famous scientists to Samarkand and built an astronomical observatory with them. This was of incomparable importance both during Ulugbek's time and long after. Ulugbek and his students performed very important scientific works related to astronomy. In particular, they indicated the geographical latitude and longitude of different places, the exact times of sunrise and sunset. This makes it possible to calculate the duration of sunlight, which is an important factor of agrometeorology.

Zahiruddin Muhammad Babur (1483-1550) is the founder of the Babur dynasty, which ruled India for three centuries. His book "Boburnoma" describes the climatic conditions and agriculture of Central Asia. In this book, in many titles, the surrounding nature is divided into rivers, mountains, plants and pastures. It is written about the productivity of plants and their adaptability to different climatic conditions. The productivity of Central Asia's agricultural crops, its climate, and its nature were also recorded in the books of Central Asian scientists Beruni, al-Umari, Mahmud Kashgari, and Muhammad Ibn Najib Bacon in the 11th-12th centuries. Especially the manuscript "Ziratnoma" - "The Science of Farming" written 500-550 years ago is of particular historical importance. information such as harvest period is collected [2-4]. It is also written about the measures to save plants from black frosts. It is written that protecting plants from frost and covering them in winter, for example, figs can be frostbitten in winter at a temperature of -6°C, but unfortunately, it is not written about how the temperature is measured and how an important agrometeorological indicator is set..

Uzbek scientists, professors L.N. Babushkin, F.A. Mominov, I.G. Gringof and Doctor of Geography A.Q. Abdullayev and others contributed to the development of modern agricultural meteorology in the articles and scientific works written one after the other. For the Central Asian region, L.N. Babushkin's scientific works "Agro-climatic zoning of the cotton-growing zones of Central Asia" (1960), "Agro-climatic classification of Central Asia" (1964) carried out by Babushkin in the field of agro-climatology show the effectiveness of agro-climatic resources in the placement of cotton and other agricultural crops by region. practical recommendations for the purpose of use are highlighted. The territory of Central Asia is located in the region of artificial irrigation, and since the 1950s, agrometeorological assessment and forecasting of the moisture supply conditions of cotton has been developed in order to develop irrigated lands [2-3].

In the 1960s, scientific-research works on the assessment of the condition of desert-pasture plants were started in large areas. If we look at the years of independence of the Republic of Uzbekistan, during this period, we can witness the development of agrometeorological and agroclimatic scientific-research works on the creation of new methods of improving agrometeorological service to agriculture.

Conclusion: As a result of the development of agrometeorological science, agrometeorological observations are currently being conducted in the crop fields around more than 100 agro- and hydrometeorological stations and posts in Uzbekistan. Monitoring of the growth, development, density, productivity elements of cotton, grain plants along the highway in the fields of all regions was organized using a special methodological program on the dates set by Uzgidromet. Therefore, we are confident that the development of this science and the results of scientific research in these areas will make a significant contribution to the economy of our country.

References:

1. Abdullayev A.Q., Arginboyev H., Abdullayev H.U. Agrometeorology -T.: "Science and technology", 2015, 480 pages.
2. Журина Л.Л.- Агрометеорология: учебник. Санк-Петербург; Квадро, 2014.-368 с.
3. Мустафакулов, А. А., Халилов, О. К., & Уринов, Ш. С. (2019). Цель и задачи самостоятельной работы студентов.
4. Жураева, Н. М., & Ахмаджонова, У. Т. (2021). Использование творческой работы в кругах. *Экономика и социум*, (3-1 (82)), 552-555.
5. Суярова, М., Примов, Б. А., Джураева, Н. М., & Соатуллаева, А. С. (2016). Методические основы решения творческих задач. In *Современные тенденции развития аграрного комплекса* (pp. 1676-1678).
6. Juraeva, N. M. (2022). The role of physics clubs in the development of creativity. *Экономика и социум*, (6-1 (97)), 130-133.

УДК 00 – 004.056

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EMULATION OF NETWORK ACTIVITY FOR MALWARE ANALYSIS IN AN ISOLATED ENVIRONMENT

Annotation. As part of the study, the principles of a secure runtime environment and detection of malicious software in an isolated environment were studied. Attention was paid to the problem of unavailability of network services when analyzing malicious software in an isolated environment. As a result of the work, the existing network activity emulation systems, their advantages and disadvantages were considered. An algorithm for the functioning of the network activity emulation technique was developed, and basic modules were created, including HTTP/HTTPS, DNS, SMTP, FTP, SMB, recording network traffic and configuring rules. The technical details of the development of a technique for emulating network activity were presented. Samples of malicious software were used to demonstrate the capabilities of the system. In general, the development of a network activity emulation technique for malware analysis in an isolated environment has improved the efficiency and accuracy of malware analysis in a controlled security environment.

Keywords: information security, network activity emulation, isolated environment, virtualization, malicious software.

Introduction

The issues of analyzing malicious activity are becoming more relevant due to the inefficiency of signature methods. One of the ways to detect malicious activity is to track requests to external network services. Thus, in the process of automatic analysis of malicious code in an isolated environment, situations often arise when malicious software requires the availability of certain services on the Internet. However, simply preventing any access to the Internet is in many cases impossible, since malware often requires access to run and demonstrate its activity. If services are not available, the malware does not execute code blocks and thus limits the analyzed area of behavior. In order to make the analysis as complete as possible, it is necessary to emulate inaccessible services between the isolated environment and the network.

Network activity emulation is an important tool for malware analysis. It

allows you not only to emulate inaccessible services, but also to recreate the network conditions in which malicious software operates. This is especially important when analyzing the spread of such types of malware that actively use the network for their work. Using the network activity emulation technique allows you to conduct research in a controlled environment and obtain more accurate and reliable results.

Features of the work of the VPO, which depends on the availability of network services for the execution of malicious code. One of the key goals of malware analysis is to identify their functionality, which may be aimed at damaging the system or a specific organization. However, in some cases, the execution of malware tasks may depend on the availability of network services. This section provides an overview of services that may be critical to the operation of common malware families, and how their unavailability may affect threat analysis and protection.

The work of malware, which depends on the availability of network services to execute malicious code, is closely related to the C2 system, since these programs can use network services to receive commands from intruders and transfer data. If the availability of network services for executing malicious code is limited, this may affect the ability of attackers to manage malware and receive information from it.

Command and Control

The Management and Control Infrastructure, also known as the C2 system, or Command and Control, is a tool for remote management and control of malicious software. Through C2, attackers can control hacked computers with an autonomous VPO, collect information and carry out various types of computer attacks. Malware is usually installed on the target computer by exploiting vulnerabilities or social engineering and communicates with the C2 system to receive instructions, download additional malicious data, and transfer stolen data. Limiting the availability of network services for executing malicious code can block the ability of attackers to manage malware and receive information from it, therefore, the work of such malware is closely related to the C2 system.

The "Cobalt Strike" malware family

"Cobalt Strike" is a complex for conducting attacks, which allows you to deliver a payload to the attacked computer and control it. Interaction with the Cobalt Strike server part takes place by creating hidden channels using DNS, HTTP, HTTPS protocols to prevent the detection of this network interaction. The payload can execute the following commands:

– get information about the system (OS, hardware, list of processes, computer name);

– get information about the network environment;

– execute a shell command.

Download and run the executable file.

To perform these tasks, Cobalt Strike uses a C2 server that provides

communication between the attacker and infected devices. Therefore, a working network infrastructure is needed to use Cobalt Strike.

Conclusions

As a result of the research, a technique for emulating network activity was developed to analyze malicious software in an isolated environment. The main problem associated with the unavailability of network services when analyzing malicious software in an isolated environment has been identified and studied. The existing network activity emulation systems were analyzed, and based on this, a mathematical formulation of the problem of network activity emulation in an isolated environment for malware analysis was developed. An algorithm for the functioning of the network activity emulation technique was also developed, as well as the main modules were designed, including HTTP/HTTPS, DNS, SMTP, FTP, SMB, recording network traffic and configuring rules. In the technological part, the technical details of the development of a technique for emulating network activity using the Python programming language, which provides an extensive set of libraries for working with network protocols, were presented. In addition, the technological aspects of all modules of the emulation system were considered, their functionality, implementation features and interaction were described. Samples of malicious software were used to demonstrate the capabilities of the system. In general, the development of a technique for emulating network activity in an isolated environment has made it possible to increase the efficiency and accuracy of malware analysis in an isolated environment.

References:

1. Кибербезопасность цифровой индустрии. Теория и практика функциональной устойчивости к кибератакам / Под ред. Зегжда Д.П. и др. М.: Горячая линия, 2021. 560 с.
2. Барабанов А.В., Гришин М.И., Кубарев А.В. Моделирование угроз безопасности информации, связанных с функционированием скрытых в вредоносных компьютерных программ //Вопросы кибербезопасности. 2014. № 4 (7). С. 41–48.
3. Ермаков А.О., Кавешников М.Б., Клянчина Е.В. Вредоносное программное обеспечение APT-групп и его характеристики//Вопросы кибербезопасности. 2017. № S2 (20). С. 24–29.
4. Жуковский Е.В., Зегжда Д.П. Анализ вредоносного по, обладающего механизмами опасного триггерного поведения//Защита информации. Инсайд. 2019. № 3 (87). С. 60–63.
5. Марков А.С., Фадин А.А. Организационно-технические проблемы защиты от целевых вредоносных программ типа Stuxnet//Вопросы кибербезопасности. 2013. № 1 (1). С. 28–36.
6. Мирзабаев А.Н., Самонов А.В. Метод обеспечения устойчивости вычислительного процесса в условиях воздействия вредоносных программ//Вопросы кибербезопасности. 2022. № 2 (48). С. 63–71.

7. Шкирдов Д.А., Сагатов Е.С., Сухов А.М., Дмитренко П.С. Выявление сетевых угроз на основе данных с серверов-ловушек//Защита информации. Инсайд. 2020. № 3 (93). С. 48–56.
8. Thorsten Holz. Improving Dynamic Malware Analysis by Emulating the Internet. [Электронный ресурс]. URL: www.researchgate.net/publication/221540604_TrumanBox_Improving_Dynamic_Malware _Analysis_by_Emulating_the_Internet.
9. Зулькарнаев Р.Ф. Изоляция и АСУ ТП//Защита информации. Инсайд. 2019. № 6 (90). С. 34-38.
10. Петренко С.А., Петренко А.А., Костюков А.Д. (2021). Киберустойчивость цифровых экосистем//Защита информации. Инсайд. № 4(100). С. 17-23.

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QORAQALPOG'ISTON RESPUBLIKASIDA QILICHBOZLIK SPORTINI RIVOJLANTIRISH ORQALI SOG'LOM AVLODNI TAKOMILLASHTIRISHNING ILMIY PEDAGOGIK ASOSLARI

Annotatsiya. Qilichbozlik jismoniy tayyorgarlik, aqliy ziyraklik va taktik mahoratni o'zida mujassam etgan sport turidir. Qoraqalpog'iston Respublikasida sog'lom avlodni voyaga yetkazish imkoniyatlarini e'tirof etgan holda, yoshlar o'rtasida jismonan va ma'naviy barkamollikni mustahkamlash vositasi sifatida qilichbozlikni rivojlantirish borasida izchil ishlar amalga oshirilmoqda. Ushbu maqola Qoraqalpog'istonda yosh avlod salomatligi va har tomonlama rivojlanishini yaxshilash vositasi sifatida qilichbozlikdan foydalanishning ilmiy pedagogik asoslarini o'rganishga qaratilgan.

Kalit so'zlar: jismoniy tayyorgarlik, sport turlari, trening dasturlari, zamonaviy metodlar, murabbiylar mahorati.

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SCIENTIFIC PEDAGOGICAL BASIS OF IMPROVING A HEALTHY GENERATION THROUGH THE DEVELOPMENT OF FENCING SPORTS IN THE REPUBLIC OF KARAKALPAKISTAN

Abstract. Fencing is a sport that combines physical fitness, mental acuity, and tactical skills. Recognizing the potential benefits of fostering a healthy generation, the Republic of Karakalpakstan has been making efforts to develop fencing as a means to promote physical and mental well-being among its youth. This article aims to explore the scientific pedagogical basis behind the use of fencing as a tool for improving the health and overall development of the younger generation in Karakalpakstan.

Keywords: physical training, sports, training programs, modern methods, skills of coaches.

Kirish: Zamonaviy qilichbozlik mashg'ulotlarning yuqori intensivligi va sportchi organizmiga o'ziga xos talablarni qo'yadigan raqobatbardosh faoliyat bilan ajralib turadi. Zamonaviy sport nazariyasi sportchilarning maxsus ish qobiliyati va ularning organizmlarining funktsional tizimlarining raqobatbardosh

faoliyati davomida samaradorligi jismoniy tayyorgarlikning oqilona rejalashtirilgan va uyushgan tizimiga bog'liqligini ta'kidlaydi.

Qilichbozlik bo'yicha sportchilarning jismoniy tayyorgarligi va ko'nikmalarini rivojlantirish samaradorligini oshirish muammosi yangi emas, garchi u o'zining dolzarbligini yo'qotmasa ham, so'nggi tadqiqotlar tomonidan tasdiqlangan.

Qilichbozlarning jismoniy tayyorgarligini tashkil etishga kompleks yondashuvlar Tyshler va Ryzhkova asarlarida keng namoyish etilgan. Mualliflar o'z asarlarida qilichbozlikda sportchilarning jismoniy tayyorgarligini qilichbozlik paytida namoyon bo'ladigan psixofiziologik fazilatlarni rivojlantirishga qaratilgan ko'p o'lchovli vositalar va usullar to'plami deb hisoblashadi. Qilichbozlikda raqobatbardosh faoliyatning turli jihatlarini o'rganish uchun ko'plab tadqiqotlar o'tkazildi. Mualliflarning keng doirasi elita darajasidagi sportchini tavsiflovchi va raqobatbardosh faoliyat samaradorligiga bevosita ta'sir ko'rsatadigan eng ko'zga ko'ringan fazilatlardan biri bu qilichbozning tezlik qobiliyatlari darajasidir, degan fikrga kelishdi. Shunga qaramay, oddiy va murakkab qo'l-ko'z reaktsiyasining yashirin vaqti qilichbozlar orasida tezlik qobiliyatining namoyon bo'lishining eng ko'zga ko'ringan komponentidir. A. Sorel va boshqalar qilichbozlarning jismoniy tayyorgarligi jarayonida asosiy e'tibor portlovchi kuch, muvofiqlashtirish va tezlik qobiliyatining turli tarkibiy qismlarini rivojlantirishga qaratilishi kerakligini ta'kidlagan.

Oldingi tadqiqotlarimiz natijalari qilichbozlikka ixtisoslashgan sportchilar o'rtasida ko'nikmalarni rivojlantirish muhimligini ham ko'rsatmoqda. Bu ta'lim va qo'shimcha-tayyorlash eksperimental kompleksi ta'siri ostida oddiy va murakkab vizual javob tezligi yanada mashhur o'zgarishlar aniqlandi, degan ma'noni anglatadi, deb topildi. Shuningdek, eksperimental mashg'ulotlar va qo'shimcha mashg'ulotlar vositalarini qo'llash sportchilarning tezlik qobiliyatlarini sezilarli darajada oshirishga yordam berganligi ko'rsatildi,shuningdek ijobiy raqobat faoliyati samaradorligini aks ettirdi.

Qilichbozlikka ixtisoslashgan sportchilar o'rtasida kuch, chidamlilik, muvofiqlashtirish qobiliyatlari va moslashuvchanlikni rivojlantirish va takomillashtirishning o'ziga xos xususiyatlariga bag'ishlangan ilmiy tadqiqotlar juda kam.

Di Cagno eksantrik ish yuklarining pastki oyoq-qo'llariga ta'sirini o'rganib chiqdi, qilichbozlikka ixtisoslashgan malakali sportchilarning kuch ko'rsatkichlarini ham [3]. Tadqiqot natijalari shuni ko'rsatdiki, maxsus ishlab chiqilgan mexanik qurilmalar yordamida qo'shimcha ish yukini qo'llash, fleksorlar kuchini oshirish orqali erishilgan oldinga siljish paytida hujum harakatlarining oralig'ini oshirishga yordam berdi. Ularning tadqiqotlarida J. Redondo 12 haftalik kuch mashqlari dasturining qilichbozlarning maksimal va portlovchi kuchlari ko'rsatkichlariga ta'sirini tasvirlab bergan. Mualliflar maxsus qilichbozlik ta'lim vositalari bilan birga berilgan eksperimental dastur o'z

navbatida ham ijobiy qilichbozlar (yagona harakat tezligi) [4] tezligi qobiliyatlarini namoyon ta'sir kuch qobiliyatlarini takomillashtirish olib ko'rsatdi.

Qilichbozlikka ixtisoslashgan sportchilarning jismoniy tayyorgarligi va ko'nikmalarini rivojlantirishning o'ziga xos xususiyatlariga bag'ishlangan tegishli tadqiqotlar tahlili shuni ko'rsatdiki, tadqiqotchilar va murabbiylar sportchilarni tayyorlash jarayonini yaxshilaydigan vosita va usullarni doimiy ravishda izlaydilar. Shu bilan birga, o'tkazilgan tahlillar shuni ko'rsatdiki, qilichbozlarni tayyorlash tizimida qilichbozlik bo'yicha malakali sportchilarning muvofiqlashtirish qobiliyatlarini rivojlantirishga qaratilgan ilmiy asoslangan yondashuvlar mavjud emas. Bu quyida keltirilgan tadqiqotning dolzarbligini shakllantiradi.

Ilova maxsus ishlab chiqilgan o'quv mashqlari to'plamlari qilichbozlik bo'yicha malakali sportchilarning muvofiqlashtirish qobiliyatini oshirishi mumkin.

Tadqiqotning maqsadi Qoraqalpog'iston respublikasida qilichbozlik bo'yicha malakali sportchilarning muvofiqlashtirish qobiliyatini oshirishga qaratilgan va mo'ljallangan o'quv majmualarining samaradorligini o'rganishdir. Tadqiqot bir necha bosqichlarni o'z ichiga olgan. Birinchi bosqichda qilichbozlikda jismoniy tayyorgarlikning o'ziga xos xususiyatlari, xususan, vosita mahoratini rivojlantirish yondashuvlari bo'yicha so'nggi ilmiy tadqiqotlar ma'lumotlarini o'rganib chiqdik. Qilichbozlik bo'yicha malakali sportchilarning muvofiqlashtirish qobiliyatini rivojlantirishga qaratilgan eksperimental o'quv majmualarining mazmuni va yo'nalishini aniqlash uchun qilichbozlik bo'yicha murabbiylarning so'rovnomasi (n=20) o'tkazildi. Tadqiqotning keyingi bosqichlari ishchi gipotezani tekshirishga imkon beradigan ketma-ket pedagogik tajriba o'tkazishni o'z ichiga oldi. Ketma-ket pedagogik eksperimentni tanlash haqqoniylik bilan bog'liq albatta.

Tadqiqot ishtirokchilari malakali sportchilar ekanligi va bu bizga erishilgan natijalarni tahlil qilish uchun ko'proq ma'lumotli namunalarga erishishga imkon berdi. Ikkinchi bosqichda sportchilarning muvofiqlashtirish qobiliyatlari (n=22) dastlabki sinovdan o'tkazildi. Dastlabki sinov davomida quyidagi testlar qo'llanildi:

1. Chiziq otlar (sm)

Vazifa shartlari: ishtirokchi 90 sm baland sakrash qutisida turadi. Signalda " boring!"ishtirokchi sakrash qutisidan 1 metr narida polga chizilgan chiziqqa sakraydi. Ishtirokchi tovonini chiziqqa iloji boricha yaqinroq qo'nishi kerak. Ishtirokchilarning poshnalaridan chiziqgacha bo'lgan masofa o'lchov lentasi bilan o'lchanadi. Ikki sinovning eng yaxshi natijasi qayd etiladi.

2. Shuttle run 4x9 (s).

Vazifa shartlari: ishtirokchilar iloji boricha tezroq ikkita parallel chiziq o'rtasida oldinga va orqaga yugurishadi. Belgilar sifatida ikkita chiziq ishlatiladi, chiziqlardan birining orqasida ikkita yog'och blok qo'yiladi. Boshlang'ich pozitsiyasi bloklarning qarama-qarshi tomonidagi chiziqda. Signalda " tayyormi?

Bor!", ishtirokchilar boshqa chiziqqa yugurishadi va blokni olishadi, keyin uni boshlang'ich chiziq orqasida joylashtirish uchun qaytib kelishadi. Shundan so'ng, sportchilar ikkinchi blokni olish uchun qaytib kelishadi, so'ngra ular chiziq bo'ylab orqaga yugurishadi. Ishtirokchi chiziqdan o'tayotganda sekundomer to'xtatiladi. Ikki yo'lning eng tezkorligi qayd etiladi.

3. T-sinov (lar).

Vazifa shartlari: ishtirokchi start/marra chizig'idan boshlanadi. Signalda " tayyormi? Bor!", ishtirokchilar a konusiga yugurishadi va o'ng qo'li bilan konusning tagiga tegishadi. Keyin ular chapga burilib, b konusiga yugurishadi, shuningdek, bu safar chap qo'llari bilan uning tagiga tegishadi. Keyin ular C konusiga yuguradilar va chap qo'llari bilan taglikka tegadilar. Keyin ular a konusiga qaytib, o'ng qo'li bilan tegib, keyin start/marra chizig'iga yugurishadi. Ishtirokchi marra chizig'idan o'tayotganda sekundomer to'xtatiladi. Ikki yo'lning eng tezkorligi qayd etilgan. Mashqlarni bajarayotganda, asosiy e'tibor harakatlarning to'g'ri ketma-ketligini va berilgan mashqning turli elementlari o'rtasidagi munosabatlarni rivojlantirishga qaratilishi kerak. Dinamik va kinematik harakat parametrlari to'g'risida tushunchani shakllantirish kerak. Sportchilarning e'tiborini tana elementlarini oqilona ko'chirish, harakatlar ketma-ketligi va soni, shuningdek, turli mushak guruhlarining kuchlanishi va bo'shashishiga qaratiladi.

Ikkinchi kompleksga maxsus fextavonie mashqlari elementlari va sherik bilan bajariladigan mashqlar kiradi. Ushbu kompleks qo'l motorikasini rivojlantirish, bir harakatdan ikkinchisiga o'tish tezligi va sportchilar o'rtasida ixtiyoriy konsentratsiyani yaxshilashga qaratilgan. Berilgan kompleks quyidagi mashqlarni o'z ichiga oladi: 1. Sportchi yetakchi qo'lda tennis to'pini ushlab, qilichbozlik pistining yon tomonidagi "garde" pozitsiyasidan boshlanadi. Muvofiqlashtirish qobiliyatlarini rivojlantirish va takomillashtirish malakali qilichbozlarning jismoniy tayyorgarligi tizimida muhim o'rin tutadi. Muvofiqlashtirish qobiliyatlari darajasi vosita ko'nikmalarini rivojlantirish, texnik va taktikani o'zlashtirish jarayonida muhim rol o'ynaydi.

Harakatlar va ularni raqobatbardosh faoliyatning doimiy o'zgaruvchan sharoitida amalga oshiriladi. Sportchilarning muvofiqlashtirish qobiliyatlarini rivojlantirish muammosi yangi emasligiga qaramay, malakali qilichbozlarni tayyorlash tizimida qo'llanilishi mumkin bo'lgan turli xil uslubiy yondashuvlarni izlashga ehtiyoj bor. Qilichbozlikda muvofiqlashtirish qobiliyatini rivojlantirish masalasini qamrab oladigan so'nggi tadqiqotlar yetishmayapti xolos. Ushbu masalalarning alohida dolzarbligi, shuningdek, muvofiqlashtirish qobiliyatining namoyon bo'lishining har xil turlari sportga xos ekanligi bilan bog'liq. Bu haqiqatni qilichbozlik bo'yicha malakali sportchilarning muvofiqlashtirish qobiliyatini yaxshilashga qaratilgan ixtisoslashtirilgan o'quv majmualarini ishlab chiqishda hisobga olish kerak.

Ushbu maqolada keltirilgan tadqiqotlar shuni ko'rsatdiki, qilichbozlik bo'yicha murabbiylarning aksariyati har xil turdagi muvofiqlashtirish qobiliyatlari

orasida qilichbozlar uchun eng muhimi harakatlarning vaqtini, fazoviy va jismoniy parametrlarini boshqarish qobiliyatlari hamda umumiy harakatni muvofiqlashtirish deb hisoblashadi. Biz ushbu murabbiylarning fikri qilichbozlik bo'yicha raqobatbardosh faoliyatning o'ziga xos xususiyatlari bilan bog'liq deb hisoblaymiz, bu qilichbozlik o'yinining noaniq shartlariga muvofiq harakatlarni doimiy ravishda o'zgartirishni talab qiladi.

Xulosa

Qoraqalpog‘istonda o‘sib kelayotgan yosh avlod salomatligini mustahkamlash va har tomonlama kamol toptirish vositasi sifatida qilichbozlikni rivojlantirishning ilmiy pedagogik asoslariga e’tibor qaratib, ushbu maqola sportning afzalliklarini ko‘rsatib beradi. Qilichbozlik nafaqat jismoniy tayyorgarlikni kuchaytiradi, balki kognitiv rivojlanish va muhim hayotiy ko'nikmalarni rivojlantirishga ham hissa qo'shadi. Qoraqalpog‘istonda inklyuzivlik va gender tengligini ta’minlashga intilayotgan holda qilichbozlikni rivojlantirish borasidagi sa’y-harakatlari sog‘lom avlodni tarbiyalashga qaratilgan yaxlit yondashuvni aks ettiradi.

Foydalanilgan adabiyotlar:

1. Platonov VN. Olimpiya sport turlari bo'yicha sportchilarni tayyorlash tizimi. Umumiy nazariya va uni amaliy tadbiq etish. 1-jild. Kiev: Olimpiya adabiyoti; 2015. (rus tilida)
2. Agosti V, Autori M. Qilichbozlik funktsional trening tizimi (FFTS): Yangi pedagogik-ta'lim o'qitish loyihasi. Sport fanlari, 2020; Suppl 1(13): 118-122.
3. Di Cagno A, Iuliano E, Buonsenso A, Giombini A, Di Martino G, Parisi A va boshqalar. Eksentrik mashqlar va plyometrik mashg'ulotlarning yosh elita qilichbozlarning ishlashiga ta'siri. Sport fanlari va tibbiyoti jurnali, 2020; 19(4): 703-713.
4. Redondo JC, Alonso CJ, Sedano S, de Benito AM. 12 haftalik kuch mashqlari dasturining tajriba qilingan qilichbozlarning harakat vaqtiga ta'siri. J Strength Cond Res. 2014 yil; 28(12):3375-84. https://doi.org/10.1519/JSC.0000000000000581
5. Turna B. Qilichbozlarda chaqqonlik mashg'ulotlarining reaktsiya vaqtiga ta'siri. Journal of Education and Learning, 2020; 9:127-135. https://doi.org/10.5539/jel.v9n1p127
6. Tyshler DA, Movshovich AD. Qilichbozlarning motorli mashg'ulotlari. Moskva: Akademik loyiha; 2007. (rus tilida)
7. Tyshler DA, Ryzhkova LG, Shamis VV. qilichbozlik. Raqobatbardosh texnologiyalar va ixtisoslashtirilgan kadrlar tayyorlash metodikasi. Moskva: erkak; 2013. (rus tilida)
8. Milic M, JanicijeviCD, NedeljkovicA, Cuk I, Mudric M, Garcia Ramos A. Hujum samaradorligini oshirish uchun optimal ko'rsatmalar

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QORAQALPOQISTON RESPUBLIKASIDA QILICHBOZLIK SPORTINI RIVOJLANTIRISH ORQALI SOG‘LOM MUHITNI SHAKLLANTIRISH ASOSLARI

Annotatsiya. Qoraqalpog‘iston Respublikasida yosh avlod salomatligi va farovonligini mustahkamlash vositasi sifatida qilichbozlik sportini rivojlantirishga katta e’tibor qaratilmoqda. Ushbu maqolada qilichbozlikdan yoshlar o‘rtasida jismoniy tayyorgarlik, aqliy chaqqonlik va xarakterni rivojlantirish vositasi sifatida foydalanishning ilmiy pedagogik asoslari o‘rganiladi.

Kalit so‘zlar: rivojlanish, tarixi, jismoniy mashqlar, tezkorlik, chidamlilik, yoshlar sporti

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FUNDAMENTALS OF FORMING A HEALTHY ENVIRONMENT THROUGH THE DEVELOPMENT OF FENCING SPORTS IN THE REPUBLIC OF KARAKALPAKISTAN

Abstract. In the Republic of Karakalpakistan, the development of fencing sports has gained significant attention as a means to improve the health and well-being of the younger generation. This article explores the scientific pedagogical basis for utilizing fencing as a tool for promoting physical fitness, mental agility, and character development among the youth.

Keywords: development, history, exercise, agility, endurance, youth sports.

Kirish: Dunyo bo‘ylab sport tanlovi va iste'dodlarni rivojlantirishning eng mashhur modellaridan biri bu uzoq muddatli sport mashg‘ulotlari uchun ko‘rsatmalar to‘plamidan iborat sport chempionati modeli. Model dastlab ekspert va ekstrapolyatsiya usullariga asoslangan edi [7]. Uning navlaridan biri sportchilarning morfo-strukturaviy va fiziologik parametrlari va ularning sport natijalari o‘rtasidagi o‘zaro bog‘liqlik asosida qurilgan "chempion modeli" dir [1].

G‘arb mamlakatlarida hukmron tendentsiya ilgari ilm-fan, san'at, biznes va hokazolardagi paradigmalarga o‘xshash sportda iste'dodlarni aniqlash modellarini

qurish edi. Keyinchalik ushbu tushunchalar turli xil tashkiliy va institutsional shakllarda ishlatilgan, masalan, iste'dodlarni aniqlashning milliy dasturlari Birlashgan Qirollik [2], Kanada [1], Qo‘shma Shtatlar va Avstraliya [4]. Yuqoridagi modellarning umumiy xususiyati sport natijalariga ta'sir qilishi mumkin bo‘lgan barcha parametrlarni kompleks tahlil qilish va tan olishdir. Ularning barchasi sportchi tanasining somatik, fiziologik va energetik xususiyatlariga, shuningdek psixo-motor jihatlariga, markaziy asab tizimining funktsiyalariga, psixologik xususiyatlarga va genetik xususiyatlarning ta'siriga qaratilgan.

"Chempion modeli" deb nomlangan murabbiylik amaliyoti shuni ko‘rsatadiki, ekspert tadqiqotlarisiz ilmiy tanlov haqiqiy iste'dodlarni aniqlash jarayonida muhim ma'lumotlarni o‘tkazib yuborishi mumkin. Tanlov jarayonidan o‘ta olmagan bir qator tinglovchilar keyinchalik yuqori sport natijalariga, shu jumladan jahon chempionatlariga erisha olmadilar. Bunday hollarda tanlov jarayoni iste'dodli shaxslarni tan olishdan ko‘ra kamsitishning bir shakli edi.

Ko‘rinib turibdiki, parametrlarni o‘rtacha baholashga qaratilgan statistik usullar faqat mavhum modellarni qurish uchun qulaydir. Bu, shuningdek, sport mashg‘ulotlari jarayonini optimallashtirish deb nomlanuvchi ehtimollik hisobi va boshqa matematik usullarga asoslangan iste'dodlarni tanlash va aniqlash usullari bilan bog‘liq.

Yuqoridagi tizimlarning jiddiy aybi ularning odatlarni o‘rganishga beparvoligi va yangi tajribalarni rivojlantirishga moyilligi bo‘lib, ular sportchilarning psixologik profillari va ularning sport musobaqalaridagi samaradorligi bilan birgalikda texnik va taktik tayyorgarlikning asosi bo‘lib xizmat qilishi kerak.

Ushbu omillar, ayniqsa, ochiq odatlarga ega bo‘lgan sport turlarida, shu jumladan jangovar sport turlarida juda muhimdir. Shuningdek, tanlov jarayoni chempionat bosqichiga kirishdan boshlab sport ontogenezi jarayonida iste'dodlarni rivojlantirishning davomi sifatida ta'kidlanishi kerak.

Ko‘plab mualliflar tomonidan olib borilgan qilichbozlarning kompleks tadqiqotlari [3] sportchilarning somatik xususiyatlari erishilgan sport natijalariga cheklangan ta'sir ko‘rsatganligini aniqladi. Ular sportchilarni alohida qilichbozlik qurollari toifalariga tasniflash uchun asos bo‘lib xizmat qilishi mumkin. Uzun bo‘yli va ingichka sportchilar (leptosomatik turlari) tez-tez folga qilichbozlarga aylanadi; qisqaroq va mushakli shaxslar esa shunchaki qilichbozlarga aylanadi.

VO2 max bilan o‘lchangan fiziologik parametrlar chempionlar va o‘rtacha darajadagi qilichbozlarni ajratib turadigan muhim omillari emas. Anaerob metabolizm sohasidagi predispozitsiyalar, ayniqsa qanot sinovi bilan o‘lchanadigan oyoqlardagi fosfagen tizimi bilan bog‘liq bo‘lishi mumkin. Biroq, yuqori sport natijalari va qilichbozlik iste'dodini bashorat qilishning asosiy sohasi odatlarni egallashning tezligi, aniqligi va chidamliligi va ularning sport ontogenezidagi o‘zgaruvchanligi kabi psixo-motor sharoitlari majmuasidan iborat [5].

Shubhasiz, ochiq odatlarga ega bo‘lgan sport turlarining ko‘pchiligida (jangovar sport turlari, jang san'atlari, jamoaviy o‘yinlar va raketka o‘yinlari) jismoniy kuch ma'lum bir sport turining texnik va taktik talablariga bo‘ysunadi yoki to‘ldiradi. Sport iste'dodini tan olish bunday hollarda juda qiyin, chunki vosita mahoratini rivojlantirish vosita mahoratining muhim tarkibiy qismlari bo‘lgan vosita odatlarini o‘rgatishga to‘g‘ri kelmaydi.

Harakatlarni o‘rganish doimiy xarakterga ega va tayyorgarlikning ilg‘or darajasida chempionatlarning atributlari endi jismoniy tayyorgarlik bilan emas, balki sport musobaqalarining taktik talablariga muvofiq o‘zgaruvchan sport jangovar sharoitlarida motor dasturlarini bajarishda mukammallikka aylanadi. Ushbu sohada olib borilgan keng ko‘lamli tadqiqotlarga qaramay, sport ontogenezida texnik ko‘nikmalarning o‘zgaruvchanligi va rivojlanishi hech qachon zamonaviy texnologiyalarni (biomexanik tahlil, videoyozuv, telemetriya, EMG) qo‘llashda ham baholash qiyinchiliklari bilan bog‘liq ob'ektiv sabablarga ko‘ra chuqur tahlil qilinmagan.

Ko‘rinib turibdiki, ushbu masalalarni puxta o‘rganish empirik yondashuvsiz mumkin emas, ekspert xulosalari va tadqiqot natijalariga alohida e'tibor qaratiladi.

Qilichbozlikdagi iste'dod-bu vosita dasturlari deb tushuniladigan vosita naqshlarini samarali egallash qobiliyati deb taxmin qilingan. Qilichbozlik iste'dodining ikkinchi mezoni-qilichbozlarning texnik-taktik profili va ularning sport natijalari o‘rtasidagi bog‘liqlik sifatida tushuniladigan sport janglarida motorli dasturlarning samarali bajarilishi. Ochiq odatlar bilan sportda iste'dodlarni aniqlash bo‘yicha quyidagi xulosalar chiqarish mumkin (yangi va ilg‘or qilichbozlar tahlili asosida):

1.Tadqiqot vizual stimullarga javob berishda oddiy va tanlangan reaktsiya vaqtining ahamiyatini isbotladi va natijalar ilg‘or qilichbozlarning yangi qilichbozlardan ustunligini (o‘rganilgan parametrlarning past qiymatlari) ko‘rsatdi. Shuningdek, axborot jarayonlarining tezligini o‘lchash (RT va MT) va oddiy reaktsiya va tanlov reaktsiyasi vaqti natijalarini tahlil qilish shuni ko‘rsatdiki, elita qilichbozlari sensorimotor javob berish vaqtini asosan o‘rta bosqichda qisqartirdilar, ya'ni,ular yangi qilichbozlarga qaraganda ancha tezroq qabul qiladilar va qaror qabul qiladilar.

Bu sport chempionatiga erishish jarayonida kechikish bosqichini qisqartirishning doimiy jarayoni bo‘lib, u ilg‘or qilichbozlarda pertseptiv jarayonlar samaradorligiga mutaxassislar tayyorgarligining ta'siriga ishora qiladi.

2.Ilg‘or qilichbozlarda fazoviy kutish signallariga reaktsiyalarning samaradorligi ancha yuqori edi. Xulosa qilish mumkinki, ilg‘or qilichbozlar signallarni juda erta qayta ishlaydi va dastlabki signallarga o‘z vaqtida javob beradi.

3.Statistik tahlil va murabbiylik tajribasi harakatlar miqdori (texnik naqshlar) va qilichbozning yuqori darajadagi musobaqalardagi reytingdagi o‘rni o‘rtasidagi bog‘liqlikni aniqlaydi. Chempionlar, optimal stimulyatsiya tufayli,

hatto intensiv ruhiy stress sharoitida ham o‘z ixtiyoridagi texnik elementlardan samarali foydalanishlari mumkin. Bu ilg‘or va yangi qilichbozlar o‘rtasidagi asosiy kamsituvchi omillardan biridir.

Xulosa: Qoraqalpog‘iston Respublikasida qilichbozlik sportini yosh avlod salomatligi va farovonligini oshirish vositasi sifatida qamrab olgan holda, jismoniy tarbiya, aqliy ziyraklik va xarakter kamolotini qadrlaydigan jamiyatni shakllantirish mumkin. Qilichbozlikning ilmiy pedagogik asoslari orqali yoshlarni sog‘lom turmush tarziga rag‘batlantirish, muhim hayotiy ko‘nikmalarni shakllantirish, jamiyatning yanada kuchli va hamjihatligiga hissa qo‘shish mumkin. Qoraqalpog‘istonda qilichbozlikning ahamiyatini e’tirof etish va yoshlarning porloq kelajagini ta’minlash uchun uni rivojlantirishga sarmoya kiritish zarur.

Foydalanilgan adabiyotlar:

1. Borysiuk Z, 2000. Qilichbozlar uchun tayyorgarlikning dastlabki va chempionat bosqichlarida sport ko‘rsatkichlari darajasini belgilovchi omillar. ECSS konferentsiyasi, Jyvaskyla.
2. Czajkowski Z., 2001. Energiya va muvofiqlashtirish qobiliyatlarining o‘ziga xosligi haqida. Sport Wyczynowy. Varshava
3. Gulbin, Jeyson P., (2004) Iste'dodlarni aniqlashda paradigmaning o‘zgarishi, materiallar, Olimpiya oldi Kongressi, Saloniki, p.77.
4. Lukovich I., 1986. Qilichbozlik. Alfoldi bosmaxonasi, Debrecen.
5. Malina, R.; Bouchard, C. (1991) O‘sish, kamolot va jismoniy faoliyat Champaign, Ill.: Inson kinetikasi kitoblari.
6. Platonow W., Sozanski H., (1990) Optymalizacja struktury treningu sportowego (Sport mashg‘ulotlari tuzilmasini optimallashtirish).RCMSzKFiS, Varshava.
7. Portier, B., (1996) Ta'lim, ishlash va iste'dodni rivojlantirishni rejalashtirish. ASCA konventsiyasi.
8. Rygula I., Borysiuk Z., 2000. Mashg‘ulotning usta bosqichida qilichbozlarning sport darajasining shartlari. Jurnal

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MANAGEMENT IN EDUCATIONAL ORGANIZATIONS

Abstract. The article «Management in educational organizations» examines issues related to the application of management in educational institutions. Definitions of the basic concepts and methods of management in the educational sphere are also given, as well as specific internal features of the organizational process, such as the management of an educational institution, the organization of the educational process, financial and economic management in the educational sphere and personnel management are discussed.

Keywords: economic management, educational institutions, technical staff, market needs.

Introduction

In today's culture, educational organisations play a critical role. The fields of pedagogy and theory of social management gave rise to the theory of pedagogical management. As is well understood, the production of science involves multiple stages: information acquisition, generalisation of empirical data, theoretical knowledge derivation, and finally, application of established technologies back to practice. Nowadays, management is a complicated socioeconomic issue that has an impact on practically every facet of societal life. Among the popular categories of management (banking, strategic, innovative, administrative, etc.) It engages with a range of social groups, including parents, teachers, students, trade unions, and students. As a result, managers need to be able to implement social policy, foster social interaction, and consider the needs and preferences of all parties involved.

Research results

An analysis of the specifics of management in the educational sphere shows that its features are related with the fact that the goal of organizations in this industry is not only to generate income, but and implementation of the educational process, which requires taking into account a number of features:

Value orientation.

1. Instead of focusing on making money, control educational organisations are developing their programmes around the principles found in both science and society. Distinguishing themselves from the management of other economic sectors, the management aims in these areas are tied to the provision of educational services, building scientific and technical capability, and human resources country.

2. Specific type of activity. The process of teaching is a distinct endeavor that transcends the final product. Thus, it is crucial to take into account a wide range of other aspects while managing educational institutions, including their mission, training initiatives, organisation accessibility, and high-quality instruction. etc.

3. Social character. This area is directly related to public interests and expectations, which means that there is a need for dialogue with the public, and taking into account citizens' views and participation in ***public discourse on issues related to education.***

4. High degree of responsibility. Educational organisations engage in socially conscious and responsible activities. This implies that a thorough control and evaluation of educational quality must be conducted as part of the process of administering this field.

5. Complexity and variety of tasks. In management of educational organizations presents complex and diverse tasks that require skills in developing and implementing training programs, monitoring the quality of teaching and forming educational standards.

6. Uniqueness of the selection and personnel management process. Certain standards must be met in this field for the hiring, training, and supervision of employees' professional activities.

Analysis of the specifics of management in in the educational field reveals that value orientation, a particular kind of activity, being public, a high level of responsibility, complexity and diversity of tasks, and the distinctiveness of the hiring and personnel management processes must all be taken into consideration during the management process. Let's present a few figures characterizing the importance of the role of management in the educational field:

- On average, there are from 3 to 10 employees per student at the university administrative and technical staff. Management must develop optimal organizational structures and processes to ensure efficient the work of all services of the institution.

- According to research, in higher educational institutions for each teacher accounted for 12.1 students in 2005, then in 2016 this figure amounted to 11.2 students. In tough conditions competition in the labor market, the management of educational institutions must provide high quality education and focus on market needs.

Assessing the effectiveness of the personnel management system in the educational sector can be produced based on advance certain criteria.

This includes the following steps:

1. Development of a strategy and plan for personnel management and educational process that should reflect the goals and the objectives of the institution, its mission and development strategy.

2. Determination of an educational process and personnel management strategy and plan that takes into account the institution's mission, development strategy, and goals and objectives, etc.

3. Development of a personnel performance assessment system, which should take into account not only professional skills and qualifications, but also the results of their work and contribution to the educational process.

4. Planning, coordination and control of the educational process, including curriculum development and plans, organizing events aimed at developing personal qualities of students.

5. Support and development of staff members by holding training sessions and seminars on innovative approaches to teaching and training, drawing in outside specialists and seasoned educators.

Conclusions

It should be mentioned that striking a balance between reaching financial objectives and raising educational standards is one of the biggest problems facing administrators of schools. An educational institution has to aim for both profit maximisation and efficient use of resources, just like any other business. Conversely, an educational institution's primary objective is to give pupils a top-notch education. Enhancing management procedures in the field of education can boost the organization's productivity and guarantee that development metrics rise. One of the most important components of management in the educational field is paying attention to the institution's employees. In order to attract and retain qualified employees, educational institutions should consider motivating staff, establishing qualifying requirements, and implementing an incentive system.

Thus, ensuring the institution runs well and serves the requirements of both students and society at large is the aim of management in the educational sector. Ensuring the best possible education at the lowest possible cost is the fundamental tenet of management in the field of education.

References:

1. Fayzullayeva N.S., Islamov A. //Ekonomika i menedjment obrazovaniya. Uch ebnoye posobiye. –
T.: IQTISODIYOT, 2019. – 199 c.
2. Seidova Z.M. Osobennosti funksionirovaniya menedjmenta v organizatsiyax obrazovatelnoy
sferi. // Journal of Monetary Economics and Management, 2023, № 2 c. 107-110
3. Iskrin N. S., Chichkanova T. A. Menedjment v obrazovanii: sistemniy podxod . //Obrazovaniye i nauka. 2015. № 1 (120)
4. Yue-Yi Hwa, Clare Leaver. // Management in education systems Oxford Review of Economic Policy, Volume 37, Number 2, 2021, pp. 368–371
5. Lyubchenko O. I., Karpova S. I. Modelirovanie sistemyi upravleniya sovremennoy obscheobrazovatelnoy shkoloy s pozitsii sistemnogo podhoda. [Modeling of a control system by a modern comprehensive school from a position of the system approach]. Vestnik Tambovskogo gosudarstvennogo universiteta.

Seriya: Gumanitarnyie nauki. [Bulletin of Tambov State University. Series: Humanities]. 2012. № 7 (111)
6. Educational management. USI Publications, Nehru Enclave, Kalkaji Ext., New Delhi-110019

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ANALYSIS OF THE DYNAMICS OF THE USE OF PRODUCTION CAPACITIES OF CONSTRUCTION MATERIALS INDUSTRY ENTERPRISES

Abstract. Assessment of the economic potential of enterprises are considered one of the important tasks on the agenda. In this regard, it is of scientific and practical importance. To study the existing approaches and methods of assessing the economic potential of the enterprise.

Keywords: economic potential of construction, direction - economic potentiometry, However, at the same time, most economists evaluate, the components of economic, potential according to a system of indicators, because economic potentia, cannot be evaluated with a single indicator.

Publications in local and foreign scientific literature testify to the extraordinary complexity of studying this issue, there are different opinions of scientists on the choice of the final measure of economic potential. Thus, according to EV Basalayeva, "It is not enough to define the economic potential theoretically, but it is necessary to develop reliable, understandable and convenient quantitative criteria for assessing its value. Therefore, it is necessary to urgently develop a new direction - economic potentiometry, the purpose of which is to study the qualitative and quantitative manifestations of economic potential. "

Some authors using labor resources, natural resources and cost indicators as evaluation criteria. The need to assess the economic potential of construction industry enterprises is that, on the one hand, it allows to determine the total value of all economic resources of the enterprise and at the same time to study the structure and dynamics of the components of economic potential, and on the other hand, it allows to compare the cost of resources with other economic indicators of enterprises. brings about. However, at the same time, most economists evaluate the components of economic potential according to a system of indicators, because economic potential cannot be evaluated with a single indicator, since the variety of properties and characteristics of various types of resources determine the level of economic development. will give. [1]

Today, the rapid economic development of the construction sector is explained by the growing role of this sector in the country's economy, including in the GDP. From our side, the vertical analysis method was used in the analysis of economic indicators in this sector. During the research, we believe that it is

appropriate to analyze economic indicators according to the coefficient of economic interest based on the approach presented in paragraph 1.3 of the first chapter. From the data in Table 3.1 below, it can be said that the growth of the construction industry in the studied period of 2011-2020 was rapid and the coefficient of interest was equal to 1.25. In turn, this means that in this period, it can be seen that the average interest rate of GDP in the country was also equal to 1.2. In addition, it can be seen that the coefficient of interest in the industrial sector was 1.23, and the average coefficient of interest in the sector of agriculture, forestry and fisheries was 1.19. From the analysis of the table, it can be seen that there is a difference between the coefficient of GDP and the income of the population, besides, there is a big difference between the coefficient of permanent population and the coefficient of employment in economic sectors. This also shows that today there is a big difference between population growth and employment growth. Another noteworthy aspect of this table is that during the 11 years under analysis, the average interest rate of investments in the construction sector in our country was equal to 1.67, which is higher than the index of interest of investments in all other industries and sectors. organized. The information in this table is not only general, but it is also possible to see how much the coefficient of interest has changed each year, and the information with all quantitative indicators of this table can be found in Appendix 1. [2]

Below shows the technological composition of investments in fixed capital in the form of percentages and their change in coefficients, where the main focus is on investments in fixed capital for construction and installation work, tools and equipment and all other Investments directed to capital works and expenses are presented in the form of a percentage and a ratio. It is noteworthy that the technological composition of capital investments in our country, i.e. investments for construction and assembly works, did not show a constant growth rate during the years 2013-2021, on the contrary, the highest rate was in 2016. it can be seen that it decreased a little in the following period, that is, it was 48.7 percent in 2012, 52.0 percent in 2016, and 44.1 percent in 2021. Correspondingly, the coefficients of change of the interest of investments in construction and assembly works were also different in different periods and were equal to 1.02 in 2013, 1.02 in 2016 and 1.08 in 2021. At the same time, we can see that the amount of investments made for tools and equipment has increased, i.e. 35.2% in 2013, 34.4% in 2016 and 48.4% in 2021, respectively. In addition, it can be seen that the coefficients of change of interest are different: 1.05 in 2013, 1.09 in 2016, and 0.98 in 2021. [3-4]

References:

1. Basalaeva, E.V. On the problems of studying economic potential and some ways to solve them / E.V. Basalaeva // Scientific session of MEPhI - 2006. T. 13 / All-Russian Correspondence Financial and Economic Institute. – M., 2006. – P.45-50

2.Golovnina L.A., Zhigunova O.A., Semenova S.V. Theoretical aspects of predicting the probability of bankruptcy and accounting related to bankruptcy procedures at enterprises: monograph. – M.: Oil and Gas, 2008. – 125 p. 61
3.Gunina I.A. Theoretical and methodological foundations for the formation of the concept of development of the economic potential of an enterprise // Mashinostroitel. – 2004. - No. 10. P.10-14
4. Zhigunova O.A. Theory and methodology of analysis and forecasting of the economic potential of an enterprise: monograph. – M.: Publishing House “Finance and Credit”, 2010. – 140 p.

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ROLE OF A TEACHER IN A CONSTRUCTIVIST CLASSROOM

Abstract. The article think about the essential part of an instructor is to construct a collaborative problem-solving environment in which learners appear dynamic support in their learning handle. From this perspective, a teacher acts as a facilitator of learning rather than an instructor. The teacher guarantees he/she knows around the students' preexisting information, and plans the instructing to apply this information and after that construct on it.

Key words: Authentic material, ESL classroom, context, teachable moment.

Framework could be a vital angle of successful educating, by which the grown-up habitually alters the level of bolster agreeing to the students' level of execution. Within the classroom, platform may incorporate displaying a capacity, giving signals or clues, and adjusting movement or fabric.

In a constructivist classroom, the teacher's part is to act as a facilitator or direct instead of a speaker or container of data. The teacher's primary duty is to form a learning environment that empowers understudies to develop their possess information through investigation and request.

This includes giving platform, which can take the frame of displaying a capacity, giving prompts or hints, and adjusting movement or fabric to meet desires of person understudies.

The instructor moreover energizes understudies to collaborate with one another, share their thoughts, and reflect on their learning encounters. By doing so, the instructor makes a difference understudies create basic considering abilities, problem-solving capacities, and a more profound understanding of the subject matter.

Another critical part of the educator in a constructivist classroom is to encourage the zone of proximal improvement (ZPD) for each understudy. This implies that the instructor makes a difference understudies work on errands that are fair past their current level of understanding, but still inside their reach with direction and back. By doing so, understudies are able to extend their capacities and create unused aptitudes, whereas feeling challenged and locked in within the learning handle. The educator may utilize an assortment of methods to encourage the ZPD, such as platform, modeling, and giving input. Academic Destinations of Constructivist Learning Environment.

Taking after are the academic goals of constructivist classrooms:

• To offer involvement nearby the information development prepare (learners choose how they will learn).

• To offer involvement in different measurements (attempting out elective arrangements).

• To empower learning in practical settings (truthful assignments).

• To energize students' choice and proprietorship within the learning handle (learning is student-centered).

• To incorporate social involvement in learning (collaboration).

• To consolidate different strategies of representation (content, sound, video etc.)

• To give an understanding of the information development prepare (metacognition, reflection).

• The negligible direction related with the constructivist learning hypothesis goes against the hypothesis of direct instruction which encompasses a part of evidence to bolster it. Instructing strategies such as disclosure based educating don't have as much experimental prove to bolster them.

• The success of such teaching techniques depends on an effective collaboration among learners. In case a learner isn't willing to require a central part and collaborate with others at that point the methodology might not work.

• Teachers act as a facilitator or direct;

• Small numbers of understudies in learning bunches;

• Shared knowledge between teachers and understudies;

• Sharing of specialist between understudies and instructors.

In expansion, you might need to think almost employing a mental representation such as Writer's Piece to bolster the dynamic development of information.

Constructivist classrooms are as a rule exceptionally distinctive from other sorts of classrooms. Constructivist classrooms pay consideration to understudies interface and intuitively learning. They include to students' pre-existing information and are student-centered. In valuable classrooms, instructors associated with understudies to direct them to construct their information, they energize transaction approximately what understudies got to accomplish victory and understudies for the most part work in bunches.

A constructivist approach to instruction sees learners as dynamic, competent, capable, and capable. It tends to persuade learners to memorize by ‘doing’, which leads to memory maintenance, basic considering and engagement. Taking after are the most benefits of utilizing Constructivism Learning Hypothesis in a classroom.

• Students are seen as able learners and are persuaded to apply autonomous, basic and inventive considering. This will bring more satisfaction to the learning prepare.

• Teachers recognize that learners require separated and focused on lessons concurring to their cognitive status.

• Through Piaget’s stages, new and fill-in instructors can rapidly figure a student’s capacity level based on his age.

• Developing understanding is regularly treated as a child-led learning travel.

• Students generally discover constructivist learning approaches to be more energizing and agreeable as they learn by doing instead of memorizing or sitting. The learning encounter is regularly more locks in.

One of the key figures within the improvement of constructivism is John Dewey, who accepted that instruction ought to be centered around the learner and their encounters. Dewey accepted that learning should be intelligently which understudies ought to be empowered to investigate and find modern data on their possess. This approach to instruction is adjusted with constructivism, which emphasizes the dynamic part of the learner within the learning prepare. By consolidating the standards of constructivism and the thoughts of John Dewey into the classroom, teachers can make an environment that cultivates basic considering, issue understanding, and imagination.

References:

1. Umida K. The Role of Teaching Compounds According to Types of Speech in Constructivism //Eurasian Journal of Learning and Academic Teaching. – 2022. – Т. 8. – С. 4-9.

2. Umida K. The ways of using constructivism to teaching phraseological units and vocabulary for efl //Academicia Globe: Inderscience Research. – 2022. – Т. 3. – №. 4. – С. 1-6. Retrieved from https://geniusjournals.org/index.php/ejlat/article/view/1325

3. Umida, Karimova. "The Role of Teaching Compounds According to Types of Speech in Constructivism." Eurasian Journal of Learning and Academic Teaching 8 (2022): 4-9. Retrieved from ISSN: 2795-739X.

4. Ochilovna K. U., Sameyevna M. Z. IMPROVING SPEAKING SKILL WITH THE HELP OF MODERN TECHNOLOGIES //Galaxy International Interdisciplinary Research Journal. – 2021. – Т. 9. – №. 12. – С. 367-369.

5. Ибаев, А. Ж. (2021). КОМПАРАТИВ СИНТАКТИК ҚУРИЛМАЛАР ТИЛШУНОСЛИКНИНГ ЎРГАНИЛИШ ОБЪЕКТИ СИФАТИДА. *МЕЖДУНАРОДНЫЙ ЖУРНАЛ ИСКУССТВО СЛОВА*, *4*(1-1).

УДК 618.2/616.33/34-005.

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WAYS TO ELIMINATE VARIOUS PATHOLOGIES OF PREGNANT WOMEN WITH PURULENT-INFLAMMATORY DISEASES OF THE UPPER RESPIRATORY TRACT

Resume. Acute respiratory diseases (ARI) are a group of diseases characterized by lesions of various parts of the respiratory tract, a short incubation period, short-term fever and intoxication. Acute respiratory diseases include diseases caused by acute respiratory viral infections and bacteria.

This article presents tips on the tactics of carrying pregnant women with purulent-inflammatory diseases of the upper respiratory tract.

Keywords: upper respiratory tract, purulent inflammation, gestation period, reproductive age of women.

Introduction. The treatment of respiratory diseases in pregnant women is far from an easy task, since some commonly used drugs can negatively affect pregnancy by penetrating the placental barrier, adversely affecting the fetus [3].

One of the frequent symptoms that attracts attention is shortness of breath [1].

During pregnancy, it usually occurs due to the action of mechanical, biochemical and hemodynamic factors. By the 12th week of pregnancy, more than 20% of women have it during rest, in 2-3 — due to tension. The frequency of shortness of breath increases from 15% in the first trimester to 50% by the 19th week and to 75% by the 31st week of pregnancy [5].

The upward displacement of the diaphragm due to the enlargement of the uterus causes a slight decrease in lung volume in the second half of pregnancy. Full-term pregnancy usually leads to a decrease in the reserve expiratory volume, residual volume and total lung volume [2]. However, this decrease does not cause a pathological clinical picture, since the diffuse volume does not change during the onset of pregnancy or increases slightly compared to that of a non-pregnant woman [6]. Then it decreases in the second half of pregnancy, and ventilation and, to a lesser extent, oxygen consumption increase during rest and exercise. The same thing happens during childbirth. Hyperventilation is a common occurrence during pregnancy, but the pH level remains constant due to an increase in the release of bicarbonate by the kidneys [7]. Changes in progesterone concentration also affect the occurrence of ventilation changes during pregnancy.

A few words about smoking during pregnancy. Clinical observations of children born to smoking mothers have demonstrated a clear relationship between maternal smoking and the incidence of acute respiratory and pulmonary diseases

such as stridor (shortness of breath) and asthma. A study comparing the children of smokers and non-smokers showed that maternal smoking caused serious violations of the expiratory flow in children, which can damage the intrauterine development of the respiratory tract or change the elastic properties of the lungs [4].

The purpose of the study. Improving the diagnosis of pregnancy and childbirth in pregnant women with purulent-inflammatory diseases of the upper respiratory tract

Materials and methods of research. To accomplish this task, we selected a total of 70 pregnant women with purulent-inflammatory diseases of the upper respiratory tract and improved their management of pregnancy and childbirth.

The results of the study. Of the total number of births (70) that occurred in maternity hospital No. 1 in Andijan in 2023, 70 cases (18.8±0.8%) were women with chronic or acute respiratory diseases during pregnancy (the main group).

The analysis of the features of the course of pregnancy and childbirth against the background of AML showed the following. Respiratory diseases were recorded throughout pregnancy, during childbirth, and occurred in mild and moderate forms. No severe or complicated forms were registered. At the same time, there were no significant differences in the effect on the course of pregnancy, both from the severity and from the time of transmission of the disease.

The maximum number of pregnant women who suffered acute respiratory infections of the upper respiratory tract, exacerbations of other diseases of the upper respiratory tract, was recorded in January, February, March, and November; with an exacerbation of chronic rhinitis, nasopharyngitis, pharyngitis and bronchial asthma - in May, July and August, which means that these diseases were pronounced seasonal nature. This is quite understandable in the first case by the effect of low temperatures and adverse weather conditions; in the second — by an increase in the concentration of allergens of plant origin in the air.

Given the seasonal nature of most nosological forms of respiratory diseases, it can be assumed that timely preventive measures have a positive effect in order to enhance the adaptive capabilities of the pregnant woman's body and increase its resistance to this pathology.

According to the international classification of diseases of the 10th revision, the class of respiratory diseases includes: acute respiratory infections of the upper respiratory tract and, it is they who occupy the leading place in the structure of AML (76±2D% - 292 women); other diseases of the upper respiratory tract amounted to 19±2.0% (74 women); chronic diseases of the lower respiratory tract pathways - 15± 1.8% (58 women); influenza and pneumonia - 1.3± 0.5% (2 and 3 women, respectively). Tuberculosis belongs to the class of some infectious and parasitic diseases, it was diagnosed in 6 ± 1.2% of pregnant women (women in labor, women in labor), which in absolute numbers amounted to 23 people.

Reproductive health (RH) is a state of complete physical, mental and social well—being, and not just the absence of diseases or ailments related to the reproductive system, its functions and processes. Reproductive health protection is defined as a combination of methods, methods and services that contribute to reproductive health and well-being by preventing and eliminating problems related to reproductive health [4].

RH consists of sexual health, safe family planning methods, as well as safe motherhood [4]. In the report of the UN National Academy of Sciences, reproductive health protection was defined as meeting human needs in the field of reproductive life, when every sexual contact should be free from coercion and infection, every pregnancy should be planned, and every birth should be safe [4]. The most complete description of reproductive health can be obtained by analyzing the implementation of a woman's generative function - childbirth. The RE of women has an age dependence. It is customary to distinguish adolescence (15-17 years according to WHO, or 15-19 years according to obstetric and gynecological classification), younger (20-25 years) and older reproductive age (36-45 years) at reproductive age [46, 228]. The age of women giving birth with AML in our study was recorded from 15 to 47 years (Table 3). Most of the births occurred in women in the early reproductive period (20-25 years) - 166 (43,2±2,5%), slightly less in women aged 26 to 35 years - 154 (40.1 ± 2.5%), in adolescence (15-19 years) childbirth occurred in 48 (12.5±1.6%), in the late reproductive period (36-49 years) -16 (4.1±1.0%) women. The age of women without AML taken as a control was also in the range of 15-44 years. There were no significant differences between the main and control groups. The social status of a pregnant woman determines many lifestyle factors: hygiene skills, attitude to their health and care for future offspring, work and lifestyle culture, the presence of industrial hazards that directly affect reproductive health

Conclusion. Childbirth in the acute period is associated with a high risk of labor abnormalities, bleeding, as well as postpartum purulent-septic complications. In this regard, it is better to carry out delivery after the acute infectious process has subsided.

In the absence of such an opportunity and the development of labor during the period of exacerbation of bronchitis, antibacterial and detoxification therapy is indicated in childbirth. In case of full-term pregnancy, it is preferable to conduct childbirth through the natural birth canal. Indications for cesarean section in patients with COPD and COPD are the presence of cardiopulmonary insufficiency, a decrease in forced expiratory volume <60% of the norm, the presence of spontaneous pneumothorax in the anamnesis, the presence of an untenable scar on the uterus, a narrow pelvis and other obstetric pathology

References:

1. Алпенидзе Д.Н., Борзанова М.В., Маклакова Е.В. с соавт. Современные подходы к терапии ОРВИ у взрослых: результаты клинического

исследования назального спрея интерферона α. Справочник поликлинического врача 2010, №9.
2. Белокриницкая Т.Е., Шаповалов К.Г. / Грипп и беременность ГЭОТАР-Медиа, 2015 г.
3. Костинов М.П., Мещерякова А.К., Фошина Е.П., Тарбаева Д.А., Сависько А.А., Зайцева Е.В. Клиническое течение острой респираторной инфекции и состояние микробиоценоза верхних дыхательных путей у беременных // «Журнал микробиологии, эпидемиологии и иммунобиологии», 2012. – № 5. – С. 12–16.
4. Зайцев А.А., Горелов А.В., Клочков О.И. Острые респираторные вирусные инфекции: перспективы противовирусной терапии. Вестник семейной медицины 2009, №5, с. 18-23
5. Мещерякова А.К., Костинов М.П., Магаршак О.О., Зайцева Е.В. Видовая и количественная характеристика микрофлоры слизистой оболочки глотки у беременных // Журнал микробиологии эпидемиологии и иммунобиологии, 2014. – № 2. – С. 93–97.
6. Hayden F.G., Albrecht J.K., Kaiser D.L. Prevention of natural colds by contact prophylaxis with intranasal alpha 2-interferon/ N. Engl. J.Med. 2016, Jan 9, 314(2): 71- 75.
7. Jefferson TO, Tyrrell D. Antivirals for the common cold. The Cochrane Database of Systematic Reviews.// 2019.- Issue 3.

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AHMED ZAKI: ON THE IDEAS OF THE PHILOSOPHY OF HISTORY

Abstract. The development of science, especially social sciences, was seriously hindered by the communist ideology, which was a powerful ideological weapon of the totalitarian regime. As a result, the opportunity to objectively study and research the national philosophy and its classical heritage was deprived. The physical and spiritual persecution against the intellectuals of the nation accelerated the moral decline of the society, including social sciences, which caused them to fall into the ignorance and violence. In this brief article, we will dwell on some of the ideas of the doctor of philosophy, professor Ahmed Zaki Validi Togon on the history of philosophy.

Key words: philosophy, history, government, revolution, national education.

Introduction. We consider it appropriate to pay attention to the following comments of professor, Doctor of Philosophy Ahmed Zaki Validi Togon: "The influence of Asian people on the relations of the outside world is now is attracting the attention of many scientists. Arabs and Turks not only believed in the cultural changes (movements) of other peoples but their actions had a great internal meaning, gave them spiritual and cultural strength." In 1917, Validi became a member of the Social-Revolutionary Party and the Provisional Bureau of Russian Muslims. In April 1917, he took part in the organization of the Council of Muslims in Tashkent. He was elected as a member of the II assembly from Turkestan. In May of this year, at the congress of Russian Muslims sent to Moscow, Validi supported the idea of national-territorial autonomy of the Russian Federal Republic and Muslim peoples, became a member of the executive committee of the All-Russian Muslim Council and the regional bureau of Bashkortostan. "Bashkort" newspaper published an article about Validi's death in Bashkortostan. 24 On July 20-27, 1917, he took part in the 1st Congress of Bashkortostan, held in Yarmbur, and was elected the deputy head of the Presidium and the head of the Central Council of Bashkortostan. Except for reports on state power (based on national-territorial autonomy) and "Land Affairs". In his second lecture, he defines the need to return the lands of Bashkortostan that were lost between the 17th and 20th centuries. On August 22-29, 1917, he participated in the Second Battle of Bashkortostan in Ufa. Here he created maps of "Greater Bashkortostan", "Little Bashkortostan" and "Federation of Muslim Autonomous

24 Zeki Velidi Togan. Der Islam und die geographische Wissenschaft // Hettners Geographische Zeitschrift. Heidelberg. 1934. Heft 10. S.361-372., Islam and the Science of Geography // Islamic Culture. Hyderabad. 1934. October. P.611-627.

States of the Soviet Union". After the establishment of the government of Bashkortostan, military departments were entrusted to Validi.

Methods. In November 1917, according to the list of federalist leaders of the Ufa governorate, he was elected as a delegate to the meeting. Participates in the establishment and signing of farms in one of the Central Councils of Bashkortostan. This year, the position of Bashkortostan in the political struggle and the autonomy of Bashkortostan within the federal government will be announced. On December 8-20, 1917, he took part in the III Bashkir army that went to Orenburg, and was appointed the chairman of the Presidium and body of Bashkortostan, as well as the head of the government and military department of Bashkortostan. In February 1918, he became a deputy of the National Assembly of Turko-Tatar Muslims of All Russia and Siberia, criticized the idea of a "single Turko-Tatar nation". He opposed the creation of the "Ural-Volga State". After S. M. Sviling, the head of the military-revolutionary committee of the governor of Orenburg, obeyed the order, in February 1918, the Bolsheviks arrested and imprisoned the members of the government of Bashkortostan, including Validi. In April 1918, during the attack of Orenburg Cossacks and Bashkir detachments, the head of the Bashkir government was released from prison. From June 1918 to February 1919, Validi was the head of the Bashkir Military Council and the commander of the Bashkir Army. All-Russian Organizational Assembly with the Government of Bashkortostan (KOMUCh). Validi organizes negotiations with V.I.Lenin and V.Stalin about the integration of the autonomy of Bashkortostan into the RSFSR. In February 1919, Validi managed to push the Bashkir army to the side of the Red Army. On March 20, 1919, he participated in the creation of the "Agreement on the Autonomy of the Bashkir Soviet between the Great Soviet Union and the Government of Bashkortostan", V. I. Lenin and Stalin did not agree to it. From April 1919, Validi was appointed as the military commissar of the Bashkortostan ASSR. In the spring and summer, the Red Army and the Bashkir cities of Amar, Saransk and Sterlitamak are engaged in building military bases. Participated in the establishment of the social party "Irek" of Bashkortostan. In the winter of 1919-1920, a struggle for autonomy took place in Moscow from the Bashkir Military-Revolutionary Committee of the RKP(b) Bashkir Regional Committee. In it, Validy opposes the idea of investigation. The Tatar-Bashkir Soviet Republic presents the project of the Kyrgyz-Bashkir Soviet Republic to V. I. Lenin.

Results and Discussion. In February 1920, he was appointed the head of the Military-Revolutionary Committee of Bashkortostan. In April of the same year, following the request of the head of the Russian Emergency Commission, Dzerzhinsky, he was sent to the Central Committee of the RKP(b) in Moscow. 1920 year. On May 19, local authorities of Moscow did not approve the decision "On the State Government of the Autonomous Soviet Republic of Bashkortostan", which was adopted unilaterally, and other state bodies resigned along with it. In June 1920, Validi quickly went to Baku, from there to Central Asia. Stalin sends

a letter to L. D. Trosky and A. I. Rykov exposing the great state policy of the Bolsheviks. He became one of the ideologues of the independence movement in Central Asia, and in July 1921 he was appointed the head of the Central Committee of the Turkestan National Federation. In February 1923, he wrote the famous "Letter to V.I. Lenin" and "Farewell Letter to the People of Bashkortostan". On February 21, 1923, he left Ashgabat for Iran with his friend Abdulkadir Inan. In March, he met his colleague Karim Hakimov at the consulate of the USSR in Mashhad, and in the city library he found the works of medieval Arab travelers Ibn Fazlan and Abu Dulaf, and the geographer Ibn al-Faqih. He will leave for Afghanistan in April. At the request of the King of Afghanistan, Amonullah Khan, he will leave for India in September, after preparing a project for the establishment of a university in Kabul. In November 1923, he went to Turkey, and in December to France, in Paris with French scientists (Paul Pelliot, Gabriel Frau, E. Bloch, etc.), and in February 1924 in Berlin with many scientists (E. Zahau, T Neldeke, A. Mordmann, F. Muller, von Lenock, I. Marquardt and others).

In June 1925, he received Turkish citizenship and started working in the authorship and translation committee of the Turkish Ministry of Education in Ankara. On July 31, 1925, Walidy was received by the President of the Republic of Turkey, Mustafa Kemal Atatürk.

In 1927, he founded the magazine "New Turkestan". In 1927-1932, he was the first to teach history at the Faculty of Mathematics at Istanbul University and received the title of professor. He was forced to leave Turkey on July 8, 1932 because he did not agree with Atatürk's teachings on scientific issues. From 1932 to 1935, he studied at the University of Vienna, Austria, defended his doctoral thesis. In 1934, a book titled "Seventeen Sand Cities and Sadri Maksudi Bey" was published in Istanbul. On July 7, 1935, the scientific council of the University of Vienna approved his doctoral dissertation on the topic of "Ibn Fadlan's travelogue". In accordance with the new law on surnames in Turkey in 1935, he adopted Togon as a nickname, a shortening of his ancestral name Eshtogon34.

In 1935-1937, Walidi received the title of professor in the field of Islamic history at the universities of Bonn, Germany, and in 1938-1939, Göttingen. In 1923, Walidy's work "Ibn Fadlan's travelogue" was found among the manuscripts of the Mashhad city library, it was translated into German and published in Leipzig in 1939. He taught at Istanbul University in 1939-1944 and 1948-1970. In 1940, "Turkistan and its recent history" (in Turkish) and "A View of the World" (in English) were published. On May 15, 1944, the Turkish government accused him of pan-Turkism.

In 1946, the book "Introduction to Turkish history" was published. On July 27, 1947, he was reinstated as a professor at Istanbul University. In 1950, the book "Tarikhda Usul" was published, and in 1951, the work "Khorazmian Translation of Muqaddimat al-Adab" was published. In July 1951, he presided over the XXII Congress of International Relations held in Istanbul.

In 1953, Walidy managed to establish the Islamic Research Institute at Istanbul University, which he headed until the end of his life. In 1954, he was appointed an honorary professor at the University of Manchester, Great Britain. In 1957, he gave lectures in the United States of America. In 1968-1970, he worked on the book "Oguz epic", and in 1969, the book "Memories" was published in Istanbul.

The family environment plays a big role in the formation of Ahmad Zaki Validi's views. The scientist writes that while his father was teaching at his madrasah, he turned a room into a "laboratory". It is noted that he used morse (a type of telegraph) between his home and the madrasa, taught madrasa students ilmi hayat, i.e. astronomy, and used Flamarion and the works of the Syrian Nadim Husayn al-Jisr-Luban (Lebanon) in these lessons. is enough. He also remembers that he visited the mausoleum of Imam al-Bukhari in the 60s of the 20th century. Ahmad Zaki Validy admits that he effectively used the works of Imam al-Bukhari in creating his works. He also writes the lessons in the form of questions and answers of two people named Ahmad and Said: "Kizir Mulla, who was well versed in geometry, taught geometry and Studied astronomy in Ulugbek. After the death of his teacher, he determined the Kaaba in the construction of mosques through the knowledge he gained through his method"36. Validi's interest in this matter was strong.

Validi's academic studies are devoted to the history of Iranian, Mongolian, Turkic peoples and the problems of the national liberation movement in Syria, archeography, "refugee" studies, ethnography and historical research methodology37. In 1923, he translated Ibn Fadlan's "Travels", found among the manuscripts of the Mashhad city library, into German and published it in Leipzig in 1939.

Conclusion. Ahmad Zaki Validi's views play a big role in the political history of Bashkortostan. He is the author of more than 400 works, including "Introduction to the History of All Turks" (1946), "Method in History" (1950) and other works. This work is a valuable reference on the history of the national liberation movement of the Muslim peoples of the Russian Empire and the USSR, and the establishment of the autonomy of Bashkortostan in the first half of the 20th century.

References:

1. А. З. Валидов – организатор автономии Башкортостана. У истоков федерализма в России (1917-1920). Документы и материалы. /Сост. Н. М. Хисматуллина, Р. Н. Бикметова, А. М. Галеева, Ю. Р. Сайранов. - Уфа: Китап, 2005. - Т. 1. - 392 с.
2. Ленинға хат // Йәшлек. Өфө. 22 декабрь Письмо Ленину // Яшлек. Уфа. 1923 г. 22 декабря См. также № 412.
3. Әхмәтзәки Вәлидисең башкорт халкына язған («Табак та табак») хушлашыу хаты // Диалог. Уфа. Декабрь. - (Приложение к журналу «Агидель»). № 409. 1923 г.

4. Азнагулов В. Г., Хамитова З. Г. Парламентаризм в Башкортостане: история и современность. - Уфа: ГРИ «Башкортостан», 2005. - С. 40-41.
5. Muminjon Isokhonovich Xujaev, Historical Philosophy of Ahmed Zaki Validi. Scientific and technical journal of Namangan institute of Engineering and Technology. Volume 1, Issue 12, article 23. 2019
6. Doniyorova G.Sh “Principles Of Teaching English For Special Purposes” Экономика и социум. Volume 12, Issue 115. 2023
7. G.Sh. Doniyorova “Teaching English for specific purposes for financial students: methods and analysis” Science and Education, Volume 4, Issue 6. Pages 736-739. 2023
8. Doniyorov Sh. O “Turkiston Muxtoriyati qismati” “Sharq yulduzi” jurnali, 1991 yil, 12-son https://n.ziyouz.com/portal-haqida/xarita/matbuot/qayta-qurish-davri-matbuoti/shoniyoz-doniyorov-muxtoriyat-qismati-1991

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SANOAT SUVLARINI TOZALASH USULLARINI TAKOMILLASHTIRISH

Annotatsiya. Ushbu maqolada sanoat chiqindi suvlarni qayta ishlash sistemasi, "MEXMASh" MChJ da Namangan shahrining kanalizatsiyasidan chiqadigan oqava suvlar va ularni qayta ishlash to'g'risida fikr yuritilgan.

Kalit so'zlar: chiqindi suvlar, "MEXMASh" MChJ, oqava suvlar, fosfatlash, moysizlantirish, dispers sistemalar, tozalash, ifloslovchi komponent, ohak suti.

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IMPROVEMENT OF INDUSTRIAL WATER TREATMENT METHODS

Abstract. In this article, an opinion is given about the industrial waste water treatment system, wastewater from the sewers of Namangan city and their processing at "MEXMASh" LLC.

Key words: waste water, "MEXMASh" LLC, wastewater, phosphating, degreasing, dispersed systems, cleaning, polluting component, milk of lime.

Kirish. Hozirgi kunda sanoat ishlab chiqarish tarmog'iga tegishli hamma korxonalarda suvlarni ishlatish aylanma ta'minlash sistemasidan foydalanishga o'tilmoqda. Suvni muhofaza qilish obyektlarining qurilishi va suvni qayta ishlatish tizimi quvvatini oshirish suv manbalarini umuman qurishdan yoki ifloslanishdan yaxshiroq muxofaza qilish, korxonalarda suvdan foydalanishning

nooqova tizimini qo‘llash va shuningdek, suv xo‘jaligi komplekslarini boshqarishning avtomatlashgan tizimini tashkil etish, mamlakatimizdagi suv resurslaridan to‘g‘ri foydalanish, ularni xo‘jalik, sanoat korxona chiqindilari orqali ifloslanishdan saqlash va suvni tozalash jarayonini yaxshi tashkil etish orqali amalga oshiriladi. Yuqoridagilardan ko‘rinib turibdiki atrof-muhitni va suv xavzalarini muhofaza qilish uchun oqova suvlarni havzalarga tashlashdan oldin chuqur tozalash kerak. Bundan tashqari ishlab chiqarish (sanoat) oqova suvlari juda zaharli xisoblanib, kimyoviy (reagent) elementlarga boy bo‘ladi. Shu sababdan ham ishlab chiqarish (sanoat) korxonalari oqova suvini qayta ishlashda yopiq tizim qo‘llanilsa maqsadga muvofiq hisoblanadi. [1]

Eksperimental qism. Biz eksperimentlarimizni Namangan viloyati “MEXMASh” MChJ sanoat ishlab chiqarish korxonasida metallar yuzasini korroziyaga chidamli qilish maqsadida kimyoviy ishlov berish, yani fosfat qoplama qilish jarayonida hosil bo‘lgan chiqindi suvni tozalash va texnologik jarayonga qaytarishdan iborat. Biz bilamizki sanoat ishlab chiqarishda hozirgi kunda chiqindisiz texnologiyaga asoslangan ishlab chiqarish jarayonlarini tashkil etish dolzarb mavzu sanalmoqda. Ayniqsa hozirgi kunda chuchuk suvga bo‘lgan extiyoj kundan kunga ortib bormoqda. Shunday ekan bizning oldimizga qo‘yilgan asosiy maqsadimiz ishlab chiqarish zonalarida ichimlik suvlaridan emas sanoat chiqindi suvlarini qayta ishlab texnologik jarayonga tadbiq qilishdan iborat.

Biz o‘rganayotgan “MEXMASh” MChJ korxonasida metallar yuzasini zanglashga qarshi ishlov berish natijasida hozirgi kunda juda ko‘p miqdorda chiqindi suvlar hosil bo‘lmoqda. Bu birinchi navbatda ichimlik suvi zaxirasini kamaytirsa, ikkinchi navbatda kimyoviy zararlangan chiqindi suvlarni kanalizatsiyaga oqizish natijasida atrof-muhitni ifloslashdan iborat.

Koagulatsiya. Ushbu jarayon suvdagi dispers zarralarning yiriklashishi, ularni o'zaro qo‘shilishi va assotsiatlarni hosil bo'lishidir. Koagulatsiya jarayoni oqova suvdagi mayda dispers zarralarning cho‘kishini tezlashtiradi. Oqova suvni tozalashda suvga maxsus koagulantlar qo‘shiladi. Koagulantlar ta’sirida mayda dispers zarralar suvda yirik pag‘a-pag‘a (chirigan sutdagi zarralar kabi) zarralarga aylanadi va ular o‘z og'irlik kuchi ta’sirida cho‘kadi. Bunda suvga koagulant qo'shilganda metall gidrooksidlari hosil bo'ladi, ular qisman musbat zaryadlangani uchun manfiy zaryadlangan kolloid va muallaq zarralami o‘ziga tortadi. Oqibatda zarralar o‘zaro toitishib yiriklashadi va suv tagiga cho‘kadi. Koagulant sifatida sanoatda aluminiy tuzlari, temir tuzlari va ulaming aralashmalari qo‘llaniladi. [2]

Ko‘pincha A12(S04)3 • 12H20, NaA102, Al2(OH)5Cl — aluminiy geksa xlorid va shu kabi tuzlar ishlatiladi. Ular ichida asosan AI2(S04)3 tuzi keng ishlatiladi (pH=5- 7,5). Uni quruq holda, yoki 50%li eritma holida ishlatiladi. Koagulatsiya jarayonida aluminiy sulfat suvdagi gidrokarbonatlar bilan birlashadi:

AI2(SO4)3+ 3Ca(HCO3)2 —>2A1(OH)3 + 3CaS04 + 6CO2

Al(OH)3 pag‘a-pag‘a cho‘kma hosil qiladi va sistemadagi dispers zarralami o‘ziga ilashtiradi va yiriklashib cho'kadi. Ortiqcha ishqoriy muhit kislota yoki tarkibida C 0 2 gazlari bo'lgan tutun gazlari yordamida neytrallanadi: [2]

2NaA1O2 + CO2 + H2O= Al(OH)3 + Na2CO3

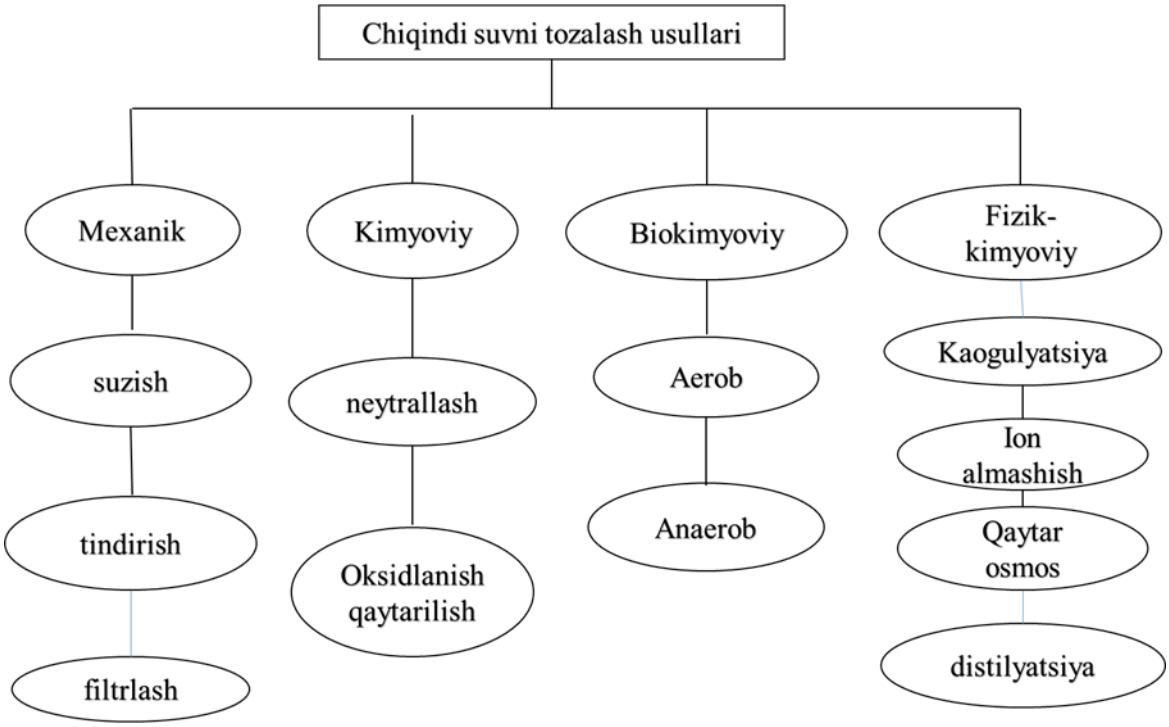
Koagulant sifatida temir tuzlari ham keng qo'llanadi. Temir tuzlari past temperaturada ham yaxshi ta’sir ko'rsatadi, pag'a-pag'a zarralari yirikroq va mustahkamroq bo'ladi, ulami turli tuzli eritmalarda qo'llash mumkin, suvning hidini yo'qotadi (H 2S ni yutadi). Kamchiligi — tozalash jarayonida rangli eritmalar hosil qilishi mumkin, hamda kislotaligi yuqori bo'ladi, pag'a zarralari yuzasi esa kamroq bo'ladi. Shuning uchun ko'pincha A12(SO4)3 va FeCl3 tuzlari birgalikda ishlatilib, suv tozalash jarayonlarida ulaming 1:1 dan 1:2 nisbatgacha aralashmalari yaxshi natijalami beradi. Polidispers sistemalarda koagulatsiya yaxshiroq boradi, chunki cho'kish paytida katta zarralar o'zi bilan kichik zarralami ham birga cho‘ktiradi. Zarralar formasi koagulatsiya jarayonida katta ahamiyatga ega. Cho'ziq zarralar sharsimon zarralarga nisbatan yaxshi koagulatsiyalanadi. [2]

Flokulatsiya. Ushbu jarayonda yuqori molekulali birikmalarga (flokulantlarga) oqova suvdagi kolloid zarralar ilakishib yiriklashadi. Flokulatsiya jarayonida koagulatsiya jarayonidan farqli ravishda zarralarning yiriklashishi flokulyant yuzasida adsorbsiyalangan molekulalami o‘zaro birlashishidan ham sodir bo‘ladi. Flokulatsiya jarayoni koagulatsiya jarayonini jadallashtirish uchun qo'llanib, cho‘kish tezligini oshiradi. Flokulant ishlatilganda koagulant dozasi kamayadi. Flokulatsiya jarayonida asosan tabiiy va sintetik flokulantlar ishlatiladi. Tabiiy flokulyantlarga kraxmal, dekstrin, efirlar, selluloza moddalari kiradi. Sintetik flokulyantlarga poliakrilamid (PAA) (-CH2-CH-CONH2)n, uniflok moddasi kiradi. PAA - lm 3 suvga 0,4— lg atrofida solinadi. PAA ta’sir doirasi keng bo‘lib, PH>9 bo‘lganda flokulatsiyalangan zarralarning cho‘kish tezligi kamayishi mumkin. PAA 7—9%h gel ko‘rinishda ishlab chiqiladi, suvga solinganda uning qovushqoqligi keskm oshadi. Oqova suvning koagulatsiya va flokulatsiya tozalash jarayoni quyidagi bosqichlardan iborat: 1) oqova suv bilan reagentlarni aralashtirish; 2) yirik zarralarning hosil bo'lishi; 3) hosil bo‘lgan zarralami cho'ktirilishi. Koagulantni va suvni aralashtirish uchun gidravlik va mexanik aralashtirgichlar ishlatiladi. [3]

Gidravlik aralashtirgichlarda aralashtirish jarayoni suv oqimining yo‘nalishini va tezligini o‘zgartirish hisobiga amalga oshiriladi. Mexanik aralashtirgichlarda esa aralashtirish jarayoni aralashtirgichni bir maromda sekin olib borish bilan amalga oshiriladi, chunki aralashtirgich tez aylantirilganda hosil bo'lgan yirik zarralar yemirilishi mumkin. Shundan keyin koagulant bilan aralashgan suv zarralar (pag'alar) hosil bo'lish kamerasiga yuboriladi. Bu yerda pag‘alarni hosil bo'lish vaqti 10—30 minutni tashkil etadi. Ushbu tozalash jarayonining texnologik sxemasi quyidagicha: Tindirgichda cho'ktirib ushlab qolingan cho'kmalar qayta ishlashga yuboriladi, tozalangan suv esa keyingi tozalash bosqichiga uzatiladi. [1]

Mexanik aralashtirgichlarda aralashtirish jarayoni mexanik aralashtirgichlar yordamida amalga oshiriladi. Lekin aralashtirishni ohistalik bilan bir maromda olib borish lozim, chunki tez aralashtinlganda hosil boMayotgan pag‘alar yemirilishi mumkin. Oqova suvni reagentlar bilan aralashtirilib bo'lingandan keyin, suvni pag‘a hosil qilish kamerasiga yuboriladi. Bu yerda pag‘a hosil bo‘lishi asta-sekin amalga oshadi.

Ushbu kamera qator ketma-ket joylashgan to‘siqlar bilan jihozlangan rezervuar bo'lib, unda koridor bo'ylab suvning harakat tezligi 0,2—0,3 m/s atrofida bo‘ladi.



1-rasm Oqava suvlarni tozalash usullari:

Bundan ko‘rinib turibdiki biz o‘rganayotgan sanoat chiqindi suvini tarkibidan kelib chiqib fizik kimyoviy usuldagi tozalash usulidan foydalanib kimyoviy zararlangan chiqindi suvimizni tozalaymiz. Chiqindi suvini tozalashdan asosiy maqsadimiz ichimlik suvi sarfini kamaytirish hamda chiqindi suv muammosini oldini olishdan iborat.

Muhokama va natijalar. Bu oqava suvlarni tozalash usullari juda samarali bo‘lib, ular kimyo va fizika fanlari ta’limotlariga asoslangan. Bu turlarga quyidagilar kiradi:

- Elektroliz - sanoat korxonalarida juda mashhur usul. Tozalash jarayonining asosi noorganik moddalarni ishlab chiqarish uchun suvning organik tarkibiy qismlarini parchalashni o‘z ichiga oladi.

- Koagulyatsiya - bu tarkibiy qismlar kuchlar ta’sirida bir-biriga yopishganda amalga oshiriladigan suvni tozalash. Jarayonning natijasi agregatning hosil bo‘lishidir.

- Metall gidroksid yordamida cho‘kishi- metallarni gidroksidlari yordamida kimyoviy eriydigan birikmalarni koagulyantlar yordamida cho‘ktirish.

Sanoat rivojlanishi natijasida cheklangan suv basseynining ifloslanishi, O‘zbekistonda tabiiy suvlarni muhofazalash muammosini o‘ta aktualligini ko‘rsatadi.

Suv resurslarini sanoat tomonidan ifloslanishidan muhofazalash quyidagi yo‘nalishlarda olib borilmoqda:

-korxonaning o‘zida oqava suvlarni kanalizatsiyaga tashlashdan oldin lokal tozalash inshootlarida tozalash;

- qaytar va berk suv ta’minotini joriy etish, tozalangan suvni qayta ishlatish;

-tozalashning kam chiqindili texnologiyasini qo‘llashdan iborat.

Sanoatda kimyoviy ishlov berish jarayonida hosil bo‘lgan chiqindi suvlarni tozalash texnologiyasini ishlab chiqarishda albatta uning tarkibi bo‘yicha aniq tushunchaga ega bo‘lish zarur. Demak biz o‘rganayotgan sanoat chiqindi suvining kimyoviy ishlab chiqarishdan kelib chiqib;

- Moysizlantirish – metallar yuzasidagi yog‘ va yog‘ mahsulotlarini tozalash
- Kimyoviy tozalash (travleniya) – Metallar yuzasidagi oksid pardani olib metallar yuzasida Fe^{3+} ionini hosil qilish.
- Aktivatsiya – bunda metallar yuzasida karriziya bardosh bo‘lishini to‘liq ta’minlash maqsadida yuza aktivligini oshirish.
- Qoplama – fosfat tuzlari yordamida aktiv holga kelgan detallar yuzasiga qoplama qilish.

“MEXMASh” MChJ sanoat ishlab chiqarish korxonasi oqava suvlarni sifat va miqdor tarkibi.

1-jadval

№	Jarayon nomi	Jihozlar soni	Vanna tarkibi%	Vanna hajmi m3	Oqib o’tish vaqti (suv)	Tozalash turi
1	Qaynoq moysizlantirish	2	35-45	0,822	2-3 hafta	Baraban
2	Zararlantirish (travlena)	2	22-28	0,822	2-3 hafta	Baraban
3	Yuza aktivatsiyasi	1	0,1	0,63	Har kuni	Baraban
4	Fosfatlash	2	40-50	1,164	Oyda	Baraban
5	Yuvish	6		0,63	Har doimiy	Baraban

Oqova suvlar tarkibidagi iflosliklar fizik holati bo‘yicha erigan, erimagan va kolloid ko‘rinishida bo‘ladi.

1. Oqova suvlar tarkibidagi erimaydigan moddalar qo‘pol bir-biriga singimaydigan bo‘lib, zarachalar qiymati 100-0,1 mk teng.

2. Kolloid moddalar (suvda quyuq eritma hosil qiladigan oqsil moddalar) zarrachalari 0,1 dan 0,001 (teng.

3. Erigan moddalar, molekulyar-dispersli (molekulyar mayda zarrachalar) zarrachalardan iborat bo‘lib, qiymati 0,001 (dan kichik (xaqiqiy eritma).

Shuningdek, oqova suvlar tarkibidagi suzib yuruvchi muallaq moddalar cho‘kadigan va cho‘kmaydigan bo‘ladi. Cho‘kadigan moddalarga oqova suvlarni yarim soat davomida tindirish natijasida hosil bo‘ladigan cho‘kma moddalar kiradi. Cho‘kmaydigan moddalarga esa shu davr davomida cho‘kmagan moddalar kiradi. Oqova suvlardagi moddalar kontsentratsiyasi asosan oqova suvlar me’yoriga bog‘liq bo‘ladi, yani oqova suvlar me’yori qancha ko‘p bo‘lsa, ularning ifloslik kontsentratsiyasi shuncha kam bo‘ladi.

Hulosa. Shunday qilib, “MEXMASh” MChJ korxonasida hosil bo‘ladigan oqava suvlarni moysizlantirish uchun quyidagi davriy rejim bo’yicha samarali texnologiya asosida amalga oshirish tavsiya etiladi: oqava suvlar oqimini kaltsiy gidrooksidi yordamida ishlov berish, so‘ng cho’kindilarni olib tashlash va tozalangan suvda pH miqdorini korrektirovka qilishdan iborat. [4]

Hozirgi kunda dunyo miqiyosida sanoat rivojlanishi, dunyo axolisi sonining ortishi, iqlim o’zgarishlari tufayli yuzaga kelayotgan global muammolar hamda dunyoda sanoatlashish va suv zaxiralarini bir tekis tarqalmagani, suv zaxiralari miqdorining cheklanganini inobatga olgan xolda nafaqat sanoat balki boshqa turdagi oqava suvlarni chuqur qayta ishlash juda muhim sanaladi. Shuningdek sug‘orish tizimlarini tomchilash mexanizmiga o‘tkazish boshqa turtdagi ishlab chiqarish jarayonlarida esa maksimal darajada suv aylanishining yopiq, intensiv sikliga o‘tkazish lozim. Sanoat oqava suvlarini tozalashda esa chiqayotgan chiqindi suvning tarkidan kelib chiqib tozlash usullarini tanlash maqsadga muvofiq bo‘ladi. [3]

Foydalanilgan adabiyotlar ro‘yxati:

1. Oqava suvlarni tozalash texnologiyasi Toshkent “Musiqa” nashriyoti 2010. – S.Turobjonov, T.Tursunov, X.Pulatov
2. Oqava suvlarni oqizish tarmoqlari “Cho‘lpon nomidagi nashriyot-matbaa ijodiy uyi” Toshkent. 2014– E.S.Buriyev, K.F.Yakubov
3. Sanoat chiqindilarini tozlash texnologiyasi asoslari “O'zbekiston faylasuflari milliy jamiyati nashriyoti” Toshkent. 2011– M.N.musayev
4. Xabibullayevich, M. M. (2023). SANOAT CHIQINDI SUVLARNI QAYTA ISHLASH SISTEMASI. *Journal of new century innovations*, *38*(2), 101-108.
5. Dadakhojhaev, A., Xamrakulov, M. A., Mirsaidov, M., & Abdulakimov, A. (2023). INCREASING IN FERTILITY, MELIORATIVE STATE OF SALINE SOILS DUE TO THE ORDER OF PRIORITY. SEEDING OF AGRICULTURAL CROPS. *Journal of new century innovations*, *38*(2), 96-100.
6. Maxmudjon, M., Numonjonovna, D. M., & Abdumutal o‘g’li, A. A. (2023). KALSIY VA AMMONIY NITRATLARNI ETANOL ISHTIROKIDA EKSTRAKTSIYALASHNI TADQIQ QILISH. *PEDAGOG*, *6*(11), 230-236.
7. Xabibullayevich, M. M., Numonjonovna, D. M., & Abdumutal o‘g’li, A. A. (2023). OHAKTOSH ASOSIDA KALSIY NITRAT ISHLAB CHIQARISH XOSSALARI VA TEXNOLOGIYASI. *PEDAGOG*, *6*(11), 225-229.

8. Hamza O‘G‘Li, B. H., Xabibullaevich, M. M., Qarshiboevna, E. M., & O‘G‘Li, D. M. K. (2023). NEFT VA GAZNING KIMYOVIY TARKIBI. *Yosh mutaxassislar*, *1*(03), 53-57.
9. Arifjanov, A., Juraev, S., Kosimov, T., Khaidarov, S., & Nodirov, J. (2022, June). Definitions of the bentonite filtration coefficient in the logon deposit in the fergana valley. In AIP Conference Proceedings (Vol. 2432, No. 1). AIP Publishing.
10. Shodmanov, K. O., Nodirov, J. M., & Narzullayeva, G. N. (2020). Professional ta’lim muassasalari ukuvchilarida kasbiy kompetensiyalarni shakllantirish. NamDU. Ilmiy axborotnoma.
11. Nodirov, J. M., & Shodmanov, Q. O. (2023). PROFESSIONAL TA’LIM MUASSASLARIDA TA’LIM-TARBIYA JARAYONINI TASHKIL ETISH VA BOSHQARISHGA OID XORIJIY MAMLAKATLAR TAJRIBALARINING QIYOSIY TAHLILI (YAPONIYA MISOLIDA). Ekonomika i sosium, (6-1 (109)), 313-321.
12. Nodirov, J. M., Xamrakulov, M. A., & Abdulakimov, A. A. (2023). PROFESSIONAL TA’LIM MUASSASALARIDA TA’LIM-TARBIYA JARAYONLARI SAMARADORLIGINI OSHIRISH. Journal of new century innovations, 38(2), 113-117.
13. Nodirov, J. M. (2023). PROFESSIONAL TA’LIM MUASSASALARIDA TA’LIM-TARBIYA JARAYONLARINI TASHKIL ETISH VA BOSHQARISHDA REFLEKSIV YONDASHUV. Novosti obrazovaniya: issledovaniye v XXI veke, 1(11), 894-900.
14. Muhammadali, R. A., Juraev, U. I. U., & Nurekeshev, S. S. O. (2021). Influence of seasonal mud of the Narin river for the coagulation process. ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH, 10(5), 69-72.
15. Abdullayev Muhammadali Rustamjonovich, Jorayev Ulugbek Inomiddin Ogli. (2022). AHOLINI TOZA ICHIMLIK SUVI BILAN TAMINLASHDA SUV OLISH MANBAALARINING ORNI. Ta’lim fidoyilari, 6(7)107-110.
16. Дедабоева, М. Н. (2022, October). МИКРОЎҒИТЛАРНИ ИШЛАБ ЧИҚАРИШ ВА УЛАРДАН ФОЙДАЛАНИШ ТАЛАБИ ВА КЎЛАМИ. In E Conference Zone (pp. 63-67).
17. Abdug’aniyeva, Z., Mamurov, B., & Dadaboyeva, M. (2023). BIOGOMUS VA BIOGOMUSDAN QISHLOQ XO’JALIGIDA FOYDALANISH. Молодые ученые, 1(5), 81-84.
18. Zokirov, M., Mamurov, B., & Dedaboyeva, M. (2023). KALIYLI O’G’ITLAR VA ULARNI QO’LLANILISHI. Молодые ученые, 1(7), 35-37.
19. Zokirov, M., Mamurov, B., & Dedaboyeva, M. (2023). SPIRT OLISHNING AN’ANAVIY VA ZAMONAVIY TEXNOLOGIYALARI. Бюллетень педагогов нового Узбекистана, 1(4 Part 2), 38-42.

УДК: 616.323-008.6-053.4

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THE IMPORTANCE OF STUDYING PERINATAL PATHOLOGIES IN THE FORMATION OF BIOELECTRIC BRAIN ACTIVITY IN CHILDREN

Resume. The aim of the work was a comparative study of the parameters of brain bioelectric activity (amplitude and frequency characteristics of alpha and beta rhythm, the nature of slow wave activity and its zonal distribution, reactions to photostimulation and hyperventilation) in patients with consequences of perinatal hypoxic involvement of the central nervous system.

Key words: brain dysfunction, bioelectrical activity, electr - encephalography, lesions, brain studies.

Introduction. The development of neurology has been marked by significant successes in the study of pathogenesis, clinic and treatment of diseases of the nervous system.

Against the background of a decrease in the birth rate, the number of children with CNS diseases remains high. There is an undoubted connection between pathological conditions of the perinatal period and a number of serious diseases of the nervous system, the symptoms of which appear after a long time [2,7].

A large number of publications have been devoted to the issue of so-called minimal cerebral dysfunction (MMD) [1,3,5], however, there are no unified approaches to the formulation of the diagnosis. There is a contradictory opinion about the etiology, pathogenesis and need for treatment of this pathology. For most pediatricians, psychologists and educators, the term itself and its content remain obscure, and children with such a diagnosis do not receive adequate treatment [5,6,]. It is assumed that, with MMD, children have dysfunction of the frontal lobes (prefrontal cortex), subcortical nuclei and the pathways connecting them. One of the confirmations of this assumption is the similarity of neuropsychological disorders in children with attention deficit disorder and in adults with damage to the frontal lobes of the brain [3,6]. Spectral tomography of the brain in 65% of children with attention deficit hyperactivity disorder revealed a decrease in blood flow in the prefrontal cortex under intellectual stress, whereas in the control group - only 5%.

The purpose of the study: To study the features of bioelectric brain activity in children with minimal brain dysfunction

Materials and methods of research: In order to study the bioelectric activity of the brain of MMD patients, we conducted a study of the structural features of the bioelectric activity of the brain in MMD children.

All subjects (n=55) were divided into two groups. The 1st group included children with MMD with attention deficit hyperactivity disorder - 38 people, the second group with attention deficit hyperactivity disorder – 16 people, aged 3-7 years, attending mass preschools.

According to the anamnesis in the postnatal period, the examined children were diagnosed with perinatal encephalopathy (PEP) and/or hyperexcitability syndrome, muscular dystonia syndrome, hypertension-hydrocephalus syndrome, or risk factors considered in neurology as threatening due to perinatal central nervous system damage (prolonged anhydrous period in childbirth, cyanosis of the skin of a newborn, etc.).

The EEG was recorded on a 16-channel encephalograph (Medicor), the location of the electrodes according to the 10-20 system, recording in the frequency band 1-70 Hz, mono- (relative to the ear electrode) and bipolar at rest and under functional loads (photostimulation at frequencies 1-20 Hz, at 2 min hypervetilation). A resting EEG fragment (2-4 min) was analyzed using the principles of structural EEG analysis [8]. The EEG indicators proposed by N.Yu.Kazhushko (2003) of this method for children aged 7-10 years were used as normative ones. In particular, for healthy children, as the age norm of mature EEG, the authors distinguish the dominance of a regular alpha rhythm with a frequency of 8-10 Hz with the assimilation of the flickering rhythm during photostimulation corresponding to this band. The maturity of the regulatory structures of the brain at this age is usually manifested by the absence of paroxysmal activity. For mature EEG of children aged 6-7 years with learning difficulties, the authors describe EEG with pointed forms of alpha activity, a decrease in the frequency of rest rhythm and rhythm assimilation during photostimulation, and paroxysmal activity.

When analyzing the features of the bioelectric activity of the brain, we also used an indicator of the amplitude level: background EEG in the range of up to 50 MV was described as low-amplitude, in the range from 50 to 100 MV - as high-amplitude, more than 100 MV - as excessively high.

To assess cerebral hemodynamics in children of group 1, we used the rheoencephalography (REG) method [3, 6,]. REG was recorded using the 4 RG-2M device in the fronto- and occipito-mastoidal leads bilaterally, at rest and with head rotation. REG complements the transcranial ultrasound indicators with data on the intensity of pulse blood filling in the basin of the internal carotid arteries (MENA) and the vertebral-basilar basin (VBB), which were evaluated in comparison with age norms.

Results and discussion: As the results of our research have shown, in children of the 1st group, the normative EEG parameters with a regular alpha rhythm of 8-10 Hz were detected only in 9 people (14.1% of cases), rhythm

assimilation in the frequency range of 8-10 Hz was detected in 3.8% of cases. In the remaining children, regular alpha activity of a pointed shape in combination with 9-activity (both irregular in nature and in the form of groups of high-amplitude theta waves), with acute waves, acute wave-slow wave complexes prevailed on the EEG in the parieto-occipital cortex of the large hemispheres

When studying the features of bioelectric brain activity in children of group 2, we found that high-amplitude EEG in 82% of cases is characterized by the presence of a spatially organized regular alpha rhythm with a frequency from 7-8 to 10 Hz. Just as in group 1, alpha activity on such EEGS was combined with slow and/or pointed forms of activity. Low-amplitude EEGS with spatially organized alpha activity were detected in only 45% of children.

Thus, the described types of EEG in children of both groups 1 and 2 do not actually meet the age criteria for the maturity of EEG in healthy children.

The use of cerebral blood flow indicators to assess the functional state of the central nervous system of children with MMD revealed the following features. In group 1, the studied parameters of cerebral blood flow through both vascular basins at rest and under stress were sufficient only in 5.1% of children. At rest, a deficiency in the intensity of pulse blood supply (Ahm) in the vertebrobasilar basin (VBB) was found in 34.6% of children, and in 7.6% it was also combined with a deficiency in the carotid basin (MENA). When loading with head rotation, the number of children with a deficiency in BBB increased by more than 2 times (up to 74.4%), by 30-80% of the initial value (with an acceptable reduction rate of 20%). This led either to a decrease in the initially sufficient blood flow to the level of deficiency, or aggravated the initial vascular inferiority. In 43.6% of group 1 children, the described changes were combined with a decrease in the reactivity of the vessels of the resistive bed to functional load, which indicated the depletion of regulatory mechanisms that allow maintaining an optimal level of blood flow.

Thus, children with MMD are characterized by the presence of specific features of the bioelectric activity of the brain and cerebral blood flow. They are manifested by the instability of the parameters of spontaneous bioelectric activity of the cerebral cortex in the range of the main rhythm in the form of the simultaneous presence on the EEG of the posterior cortex of fragments of the alpha rhythm and slower forms of activity of the theta range, pointed waves. In addition, a significant proportion of children showed a significant decrease in the intensity of blood filling in the vertebral artery basin (VBB) at rest and/or under functional loads.

Sufficient performance with such initial parameters of the functional state of the brain in the examined groups of children with MMD can be ensured due to the preservation (in our studies in 92.4% of children) of cerebral blood flow in the carotid basin, the action of mechanisms of autoregulatory effects on the resistive bed (56.4% of children). It is assumed that it is the compensatory capabilities of the child's brain and the plasticity of his vascular system in conditions of a certain

load regime that allow him to achieve sufficiently high performance when performing a leading age load. This happens as long as it does not deplete the functional reserves of the body in a highly stressful environment. In these cases, the combination of the described disorders of cerebral hemodynamics and the functional state of the central nervous system according to EEG data leads to complaints from children of increased fatigue after school, periodic headaches, drowsiness, restlessness, sleep disorders, i.e. latent vascular inferiority begins to "sound clinically".

A comparative analysis of complaints and features of spontaneous EEG shows a fundamental similarity in the prevalence of a number of complaints in children with different types of EEG. The most noticeable differences are observed in the frequency of occurrence of school difficulties, including dysgraphy, dyslexia, restlessness and distractibility, including in the structure of attention deficit hyperactivity disorder. As can be seen, in the group of children with low amplitude poorly organized (immature) The EEG clearly shows a tendency towards a comparative predominance of difficulties. It is possible that the brain mechanisms for the formation of a mature cortical rhythm structure in children at risk are relatively inert and, with age, cannot provide a sufficient basis for performing complex integrative activities (including educational ones).

The data we have obtained are informative due to the fact that according to an in-depth neuropsychological examination of first-graders in mass schools, up to 73% of children have an unformed state of certain higher mental functions (VPF), and to a large extent these are children with MMD.

The revealed features of the bioelectric activity of the brain in MMD children due to school difficulties can be interpreted in the light of the idea of the levels of central nervous system damage [8].

Conclusions: Thus, according to the results of a study of spontaneous bioelectric brain activity in children with MMD, an EEG pattern was revealed in the parietal-occipital and posterior-temporal cortex of the cerebral hemispheres in the form of coexistence of fragments of the main (alpha) rhythm in combination with slow and/or pointed forms of activity, which indicates the instability of the mechanisms of regulation of the functional state The Central nervous system. It was found that the formation of the described EEG pattern is associated with the influence of the hypoxia factor due to disorders of cerebral hemodynamics, mainly in the vertebrobasilar basin.

References:

1. Яременко, Б. Р. Минимальные дисфункции головного мозга у детей / Б. Р. Яременко, А. Б. Яременко, Т. Б. Горяинова. – СПб.: Салит-Медкнига, 2006. – 128 с.
2. Чутко Л.С. Синдром дефицита внимания с гиперактивностью и сопутствующие расстройства. — СПб., 2007. — 136 с.
3. Biederman J., Faraone S.V. Attention-deficit hyperactivity disorder // Lancet. — 2005. — Vol. 366, № 9481. — P. 237-248.

4. Mick E., Biederman J., Faraone S.V., Sayer J., Kleinman S. Case-control study of attention-deficit hyperactivity disorder and maternal smoking, alcohol use, and drug use during pregnancy // Journal of the American Academy of Child and Adolescent Psychiatry. — 2006. — Vol. 41, № 4. — P. 378-385.
5. Hirshfeld-Becker D.R. et. al. Pregnancy complications associated with child hood anxiety disorders // Depression and anxiety. — 2004. — Vol. 19, № 3. — P. 152-162.
6. Mick E., Biederman J., Prince J., Fisc her M.J., Faraone S.V. Impact of low birth weight on attention-deficit hyperactivity disorder // Journal of developmental and behavioral pediatrics: JDBP. — 2006. — Vol. 23, № 1. — P. 16-22.
7. Panaiyotopoulos C.P. A parcial guide to childhood epilepsies. — 2006. — UK: Medicina. — 220 p.
8. Still G.F. Some abnormal psychical conditions in children // Lancet. -2010 — Vol. 29. — P. 1008—1012.

DOI 10.5281/zenodo.10715972

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XORAZM TOPONIMIKASIDA TARKIBIDA GEOGRAFIK TERMINLARNING SHAKLLANISHI

Annotatsiya. Ushbu maqolada Respublika toponomiyasi tarkibida Xorazm viloyati toponimlarini tabiiy geografik jixatdan o'rganishda geografik terminlar bilan bog'liq joy nomlarning shaklanishi hamda tarqalishi tahlil qilingan.

Kalit so'zlar: toponim, topotermin, fitonim, oykonim, litologik, etnonim, gidronim.

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FORMATION OF GEOGRAPHICAL TERMS IN KHOREZM TOPONYMY

Abstract. This article analyzes the formation and distribution of place names related to geographical terms in the study of the toponyms of the Khorezm region from the natural geographical point of view within the Republican Toponomy.

Keywords: toponym, topothermic, phytonym, oykonym, lithological, ethnonym, hydronym.

Kirish Geografiyada Toponimika fani uchun geografik terminlarni o'rganish juda muhim chunki, ularda hudud, makon bilan bog'liq bo'lgan ko'plab ma'lumotlar mujassam.

Geografik terminlarni ilmiy asosda chuqur o'rgangan rus olimi E.M. Murzayev, toponimik tadqiqotlarda geografik terminlarning o'rni naqadar muhimligiga e'tibor qaratib, "har qanday toponimik tadqiqotlar geografik terminlarni o'rganishdan boshlanmog'i kerak".deb yozgan edi.

Atoqli geograf terminshunos E.M. Murazev aytganidek, turdosh otlar toponimlarning asosini tashkil etadi va tabiiy geografik ob'ektlarning turini ifodalaydi. Aksariyat joy nomlari asosida oddiy geografik terminlar yotadi.

Asosiy qism. Har bir fanning terminlarini o'rganuvchi terminshunoslik (atamashunoslik) fanlari mavjud. Geografik terminshunoslik geografik terminlarning ma'nosi, kelib chiqishi (etimologiyasi), o'zgarishi, to'g'ri yozilishi

va manbalarini o'rganadi. Har bir fanni chuqur o'rganish uning terminlarini qanchalik to'g'ri va to'liq bilishga bog'liq. [1]

O'zbek(turkiy) geografik terminologiyasining ilk manbai sifatida XI asrga oid Mahmud Qoshg'ariyning “Devonu lug'atit-turk” asaridan tortib XX asr boshlariga kelib yirik sharqshunoslardan V.V. Barto'ld va uning asarlarini ko'rishimiz mumkin bo'ladi. [3]

O'zbek geografik terminshunosligining tarixi va rivojlanishida geograf-terminshunos Hamidulla Hasanovning o'rni beqiyosdir. Uning “Geografiya terminlari lug'ati” 1964-yilda, geograf-terminshunos P.N. G'ulomovning “Geografiyadan qisqacha ruscha-o'zbekcha atamalar va tushunchalar lug'ati” 1993-yilda, “Jo'g'rofiya atamalari va tushunchalari izohli lug'ati” 1994-yilda, Shuningdek M.T. Mirakmalovning Xalq tabiiy geografik terminlari monografiyasi 2009 yilda va boshqa yana ko'plab terminologik lug'atlarning nashr etilishi juda katta e'tiroflarga sazavor bo'ldi.

Shu bilan birga Xorazm viloyati toponimlarini o'ganish jarayonida viloyatda uchraydigan ba'zi geografik terminlarni tahlil qilishga qaratildi.

Umuman olganda toponimik terminlarni (topoterminlar) o‘zi ifodalayotgan ob'ektlarga qarab guruhlashtiriladi: [1]

1. Geomorfologik topoterminlar alang, tepa, bag‘ir, do‘ng, ort, oshuv, chuqur, qir, qoratov, oltin, kumush, tosh, qum va boshqalar).

2. Gidrologik topoterminlar daryo, arna, ariq, yop, solma, ko‘l, buloq, quduq, ko‘prik, qayir, hovuz va boshqalar.

3. Floristik va faunistik topoterminlar-gujum, tol, terak, tut, jiyda, qoramon, olma, o‘rik va boshqalar.

4. Oykonimik topoterminlar -qal'a, qishloq, kat, ovul, mahalla, ko‘cha va boshqalar.

5. Etnonimik topoterminlar -o‘zbek, qipchoq, qangli, ming, nayman, qatag‘on, do‘rmon, arab, uyg‘ur va boshqalar.

6. Turli topoterminlar ob'ektning belgi–xususiyati, tomon, o‘rin–joy, hajm va boshqa xususiyatlarni ifodalovchi terminlar: obod, orqa, katta, kichik, o‘rta, yuqori, quyi, yangi, ko‘hna, eski, oq, qizil, achchiq, chuchuk, sho‘r, shirin va boshqalar.

Yer yuzasining relefi, tuzilishi bilan bog‘liq bo‘lgan terminlar geomorfologik topoterminlar deyiladi. Yer yuzasining turli xil shakllari joy nomlarining shakllanishiga sababchi bo‘ladi. Vaqt o‘tishi bilan relef shakli o‘zgarishi mumkin. Ayniqsa Xorazm viloyati hududining yer yzasi uzoq tarixiy rivojlanish davomida to'liq ozgarib ketgan. Lekin viloyat hududida o‘sha relefni ifoda etgan ba'zi nomlar saqlanib qolgan. Quyida turli geomorfologik topoterminlar yordamida yasalgan toponimlarni keltirib o‘tamiz:

“jar” topotermini yordamida, Qiziljar, Echkijarko‘l, Jarqishloq, Echkijar, Jarchilar va boshqalar;

“tepa” termini yordamida: Qumtepa, Qoratepa, Oqtepa, Mingtepa, Oltintepa, Ko‘ktepa, Qoratepa, Qoraultepa va boshqalar.;

“qum”-termini yordamida: Oltinqum, Yuqoriqum, O‘rtaqum, Qumbodoq, Oqqum, Amirqum, Qumravot, Vopqum, Qumyop, Qumoloqli, Oshoqqum, Qumonchilar terminlardan yasalgan joy nomlar geomorfologik topoterminlar asosida vujudga kelgan. [6]

Gidrologik toponimik terminlar. Gidrologik ob'ektlar, suv inshootlari bilan bog‘liq terminlar gidrologik topoterminlar deb yuritiladi. Nafaqat Respublikamiz balki Xorazm toponimlari tarkibida o'ziga xos ariq, arna, buloq, soy, ko‘l, daryo, quduq kabi terminlar ko‘p uchraydi.

"ariq"-termini yordamida Bo‘zariq, Beshariq, Yangiariq, Angariq, Qatariq, Xonariq va boshqa gidronimlar yasalgan;

Arna-termini Xorazmda katta ariq ma'nosiga ega. Sharqshunos olim V.V.Bartold arna so‘zi qadimgi xorazmiylar tiliga mansub ekanligini uqtiradi. Arna Xorazmdan tashqari, Jizzax viloyatining ayrim tumanlarida soy, jar ma'nolarida qo‘llaniladi. Z.Do‘simovning fikricha, arna so‘zi ar-eroniy tillarda suv o‘zagi orqali yasalgan.

"arna"-termini yordamida yasalgan gidronimlar: Urgancharna, Mang‘itarna, Arnabo‘yi, Arnasoy, Paxtaarna, Shovotarna va boshqalar;

"ko‘l"-termini yordamida vujudga kelgan toponimlar: Ayronko‘l, Chakkako‘l, Sho‘rko‘l, Achchiqko‘l, Sujiko‘l, Kattako‘l, Devonko‘l, Chuqurko‘l, G‘ovukko‘l, Kumishko‘l, Oshiqko‘l, Xo‘ppishko‘l, Jirmizko‘l va boshqalar.

Floristik va faunistik topoterminlar. Floristik va faunistik topoterminlar toponimlar tarkibida ishtirok etib, joy nomlarining atalishida o‘simlik va hayvonot olami turlarini ifoda etdi. Gujum, jiyda, tol, tut, qayrag‘och, olma, chinor, terak, o‘rik, anjir kabi o‘simlik va qo'y, bo'ri, shag'al, baliq kabi hayvonot olami turlarini ifoda etib, toponimlar tarkibida ko‘p uchraydi [7]:

"gujum"-termini yordamida: Yakkagujum, Beshgujum, Qirqgujum, Gujumlik va boshqalar;

"jiyda"-termini yordamida: Jiydali, Jiydaqishloq, Jiydazor, Jiydalik va boshqalar;

"tol"-termini yordamida: Yakkatol, Beshtol, Uchtol, To‘ptol, Tolzor, To‘rttol va boshqalar;

"terak"-termini yordamida: Ko‘kterak, Qatorterak, Beshterak, To‘pterak, Teraktagi, Terakmozor va boshqalar;

"tut"-termini yordamida: Yakkatut, Uchtut, Mingtut, Tutzor, Qoratut, Sertut va boshqa toponimlar yasalgan.

Tuyamo‘yin, Karkuldak (qush), Bo‘riyotoq, Baliqqirgan, Kaptarxona, Qashqaldoqlar, Echkijar, Echkilar, Shag‘allar kabi toponimlar faunistik topoterminlar yordamida yasalgan.

Oykonimik topoterminlar. Bu guruh toponimik terminlarga qishloq, qal'a, ovul, obod, guzar, kent (kat, kand), mahalla, qo‘rg‘oncha kabi terminlar kiradi. Ular oykonimlarni ifodalovchi muhim belgilardan hisoblanadi.

"qal'a"-termini yordamida: Tuproqqal'a, Qo‘hnaqal'a, Bo‘zqal'a, Gujumqal'a, Sho‘rqal'a, Katqal'a, Chig‘atoyqal'a, Shovotqal'a, Qoramonqal'a, Oshoqqal'a, Qozoqqal'a, Shog‘olqal'a kabi toponimlar;

"obod"-termini yordamida: Bekobod, Yangiobod, Paxtaobod, Chinobod, Cho‘lobod, Xayrobod, Xonobod, Fayziobod, Gulobod, Nurobod, Qulobod va boshqalar toponimlar oykonimlar asosida yasalgan.

Etnonimik topoterminlar. Toponimlar tarkibida ishtirok etgan urug‘, qabila, millat, xalq nomlari etnonimik topoterminlar deb yuritiladi. Xozirda respublikamiz toponimiyasi tarkibida etnonimik topoterminlarning kattagina qismi saqlanib qolganligi, ushbu hududida turli millatlar, xalqlar tarqalganligi hamda yashaganligi haqida ma'lumotlar beruvchi toponimlarni ham uchratish mumkin.

Qabilalarning eng yiriklari-qipchoq, qangli, qatag‘on, kenagas, nayman, do‘rmon, saroy va ular tarkibiga kiruvchi urug‘lar nomlari joy nomlarida ko‘plab uchraydi. [4]

Qangli-etnik guruhi ham o‘zbek xalqining qadimiy qabilalaridan bo‘lib, bu qabila bilan bog‘liq Qangli, Kattaqangli, Kichikqangli kabi qishloqlar mavjud.

Nayman-qabilasi bilan atalgan toponimlar ham ko‘p: Nayman, Naymanbo‘yi Naymanko‘l, Naymanqir, Naymantepa va boshqalar.

Qatag‘on–o‘zbek xalqi tarkibidagi qabilalardan bo‘lib, ularning ko‘p qismi o‘z urug‘larini unutib yuborishgan. O‘zbekistonning Farg‘ona, Qashqadaryo, Namangan, Samarqand viloyatlarida Qatag‘on nomli qishloqlar shu erlarda qatag‘onlar yashaganligidan dalolat beradi. Xorazm viloyatining Qo‘shko‘pir tumanida Qatag‘on nomli qishloq mavjud.

Do‘rmon-qabilasi yashagan hududlarda shu qabila nomi bilan ataladigan toponimlar saqlanib qolgan. Farg‘ona vodiysi, Xorazm, Buxoro viloyatlarida do‘rmon etnotoponimi bilan yasalgan toponimlarni uchratishimiz mumkin: Do‘rmon, Do‘rmoncha, Pastki Do‘rmon, Yuqori Do‘rmon, Yonbosh Do‘rmon, Toza Do‘rmon, Oyoq Do‘rmon va boshqalar. "Do‘rmonlarning quyli, uvoq, uch urug‘, ko‘kchelak, sakson, no‘g‘oy, gurdak, oytamg‘ali kabi urug‘lari bo‘lgan".

Yuzlar- Yuzqishloq, Yuzovul kabi toponimlar yuz etnonimik topotermini asosida vujudga kelgan.

Ming-qabilasi nomi bilan Mingo‘rik, Mingtepa, Mingchinor, Mingtut, Mingbotmon, Mingotliqlar, Mingbuloq kabi oykonimlar nomlangan. Minglar Samarqand, Jizzax, qisman Farg‘ona vodiysida, Buxoro vohasida, Surxondaryo hamda Xorazmda yashaganlar.

Mang‘it-qabilasi asosan viloyatda Oqmanng‘it, Mang‘ittepa, Mang‘it, Mang‘ityop, Mang‘itobod, Mang‘itsolma kabi toponimlar shu qabila nomi bilan yuritilgan.

Turkman-nomi bilan Turkmanovul, Yovmutturkman, Turkmanlik, Takaturkman singari toponimlarni viloyatning Hazarasp, Qo‘shko‘pir, Shovot tumanlarida va boshqa xududlarda kuzatishimiz mumkin.

Qiyot-o‘zbek qavmlari qatorida tilgan olingan urug‘lardan biri bo‘lib, ular Buxoro, Navoiy, Samarqand, Namangan hamda Xorazm viloyati hududlarida tarqalgan. Viloyatimiz tumanlarida Qiyot, Chandiqiyot, Eskiqiyot, Tozaqiyot, Yuqoriqiyot kabi etnotoponimlar bilan bog‘liq joy nomlarini ko‘rishimiz mumkin.

Arab-etnonimik topotermini yordamida Arabqishloq, Arabxona, Arablar, Arabmahalla, Arabko'cha kabi toponimlar yasalgan.

O‘zbek-topoterminidan O‘zbek, O‘zbekyop kabi toponimlar vujudga kelgan.

Uyg‘ur-topotermini yordamida uyg‘ur, uyg‘uryop etnonimik topoterminlari ishtirokida yasalgan.

Qirg‘iz-topotermini yordamida Qirg‘izlar, Qirg‘izyop, Qirg‘izmahalla va boshqa toponimlar vujudga kelgan.

Ko‘rinib turibdiki, etnonimik topoterminlar yordamida vujudga kelgan toponimlarning ko'pchiligi oykonimlardan iborat.

Ular etnooykonimlar deb yuritiladi hamda bunday toponimlar ma'lum hududlarda qadim zamonlardan boshlab hayot kechirgan urug‘-qabilalar, xalqlarga oid muhim ma'lumotlarni beradi.

Turli topoterminlar ob'ektning belgi–xususiyati, tomon, o‘rin–joy, hajm va boshqa xususiyatlarni ifodalovchi terminlar: obod, orqa, katta, kichik, o‘rta, yuqori, quyi, yangi, ko‘hna, eski, oq, qizil, achchiq, chuchuk, sho‘r, shirin va boshqalar.

Chinobod, Cho‘lobod, Xayrobod, Xonobod, KattaJirmiz, Kattabog‘, Katta-sho‘rko‘l, Kichik Qangli, Kichik Juvorxos, O‘rtaqishloq, O‘rtayop, O‘rtabog‘, Yuqori Qiyot, Yuqori Boshqir, Yuqoriqal'a, Yuqoribog‘, Qo‘hnaqal'a, Oqyop, Oqoltin, Oqdaryo, Qizilqum, Qizilravot, Sho‘rqal'a, Shirinquduq, Chakkako‘l, Sho‘rko‘l, Achchiqko‘l, Sujiko‘l va boshqa turli topoterminlar ob'ektning belgi–xususiyatlarini ifodalaydi.

Xulosa o‘rnida shuni aytishimiz mumkin bo‘ladiki Xorazm viloyati toponimlarini tadqiq qilish jarayonida albatta geografik terminlarni toplash o‘rganish va izohlash nazarda tutiladi. Shundan kelib chiqib kelgusida Xorazm toponimikasi tarkibidagi geografik terminlarni yanada chuqurroq o‘rganishni talab etadi.

Foydalangan adabiyotlar:

1. G`ulomov P, Mirakmalov M Toponimika va geografik terminshunoslik – T.2005.
2. Do'simov Z. Xorazm toponimlari. -T.: «Fan». 1985.
3. Mirakmalov M.T. Xalq tabiiy geografik terminlari. -T.2009.
4. Otajanova A. Xorazm etnotoponimlari. -T.: «Fan». 1997.
5. "O’zbekiston joy nomlarining izohli lug’ati" -Toshkent-2022.
6. Kutlimuratov A. Jumaniyazov T Journal of Universal Science Research» ilmiy-uslubiy jurnali: – 2023.

7. Kutlimuratov A. Jumaniyazov T "Science and Education" Scientific Journal-2023

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OLIY TA’LIMDA O‘QITUVCHINING INNOVATSION FAOLIYATNI SHAKLLANTIRISH

Annotatsiya. Maqolada oliy ta’limda tashkil qilinadigan zamonaviy darslarda o‘qituvchining innovatsion faoliyatini shakllantirishga qo‘yiladigan talablar yoritib berilgan. O‘qituvchi shaxsining ijtimoiy-madaniy, intellektual va axloqiy imkoniyatlari yuksak ahamiyatga molik bo‘ladi va o‘qituvchining innovatsion faoliyatiga nisbatan yondoshuvlari tahlil qilinadi

Kalit so‘zlar: sifat ko‘rsatkichi, gumanistik aksiologiya, akmeologik yondashuv, kreativ yondashuv, refleksiv yondashuv, shaxsning o‘z-o‘zini boshqarishi, pedagogik yangilik.

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FORMATION OF INNOVATIVE ACTIVITIES OF TEACHERS IN HIGHER EDUCATION

Annotation. The article highlights the requirements for the formation of innovative activities of teachers of higher educational institutions in the modern educational process. The sociocultural, intellectual and moral abilities of the teacher’s personality are of great importance, and the teacher’s approach to innovation is analyzed.

Key words: quality indicator, humanistic axiology, acmeological approach, creative approach, reflective approach, personal self-government, pedagogical novelty.

Innovatsion ta’lim – bu bo‘lajak mutaxassislarni joylarda ishlashga tayyorlovchi jarayon bo‘lib, u avval olgan bilimlar asosida ta’limni takomillashtirish va samarali yangicha yondashuv qilishdan iborat. Unda ta’lim – tarbiyada yangicha sifat ko‘rsatkichiga erishib, yuqori samaradorlikni qo‘lga kiritish amalga oshiriladi va ijodkorlikka yo‘naltiriladi hamda ta’lim texnologiyalarini yangicha sifat bosqichiga ko‘tarish, shuningdek, ta’lim – tarbiyada zamonaviy yondashuvlarni tashkil qilib borishni ta’minlaydi.

Innovatsion ta’limda zamon bilan hamnafas ta’lim texnologiyalarini yaratish bilan shug‘ullanishga doim imkoniyat yaratilib boriladi.Oliy maktab innovatsion jarayonlari negizida quyida quyidagi yondashuvlarni belgilash mumkin:

- madaniyatshunoslik jihatidan (insonni bilishning ustuvor rivoj-lanishi) yondashuv;

- shaxsiy faoliyat jihatidan (ta’limdagi yangi texnologiyalar) yondashuv;

- ko‘p subyektli (dialogik) yondashuv, kasbiy tayyorgarlikni insonparvarlashtirish;

- individual - ijodiy (o‘qituvchi va talabalarning o‘zaro muno-sabatlari) yondashuv.

Oliy maktabda innovatsion faoliyatning subyekti o‘qituvchi hisoblanadi. Bunda o‘qituvchi shaxsining ijtimoiy-madaniy, intellektual va axloqiy imkoniyatlari yuksak ahamiyatga molik bo‘ladi va o‘qituvchining innovatsion faoliyatiga nisbatan yondoshuvlari quyidagicha talqin qilinadi

Gumanistik aksiologiya - aksiologiyaga insonga oliy qadriyat va ijtimoiy taraqqiyotning birdan –bir maqsadi sifatida qaraydi. Innovatsion faoliyatga aksilogik yondoshuv insonning o‘zini yangilik yaratish jarayoniga baxshida qilishi, uning tomonidan yaratilgan pedagogik qadriyatlar majmuasini anglatadi.

Akmeologik yondashuv - akmeologiya *(akme*) – yunoncha oliy nuqta, o‘tkir, gullagan yetuk, eng yaxshi davr degan manolarni bildiradi.

Kreativ yondashuv – termini AQSHda XX asrning 60-yillarda paydo bo‘ldi. U individning yangi tushuncha yaratishi va yangi ko‘nikmalar hosil qilish qobiliyati, hislatilini bildiradi.

Refleksiv yondashuv – (lotincha *reflixio* - ortga qaytish) subyektning o‘z (ichki) psixik tuyg‘u va holatlarini bilish jarayoni sifatida qaraladi.

Innovatsion pedagogik jarayonning muhim unsurlari shaxsning o‘z-o‘zini boshqarishi va o‘zini- o‘zi safarbar qila olishi hisoblanadi. Uning eng muhim yo‘nalishlaridan biri talabalarning bilish faoliyatini rivojlantirish.

Bunday yo‘nalish talabalarning o‘quv ishlarini faollashtirish, ularning kasbiy ixtisoslashishini aniqlab olish faolligini o‘z ichiga oladi.

Innovatsionlik pedagogik jarayonni ifodalab, nafaqat uning didaktik qurilmasiga, balki o‘qituvchining ijtimoiy mohiyatli natijalari va ruhiy qiyofasiga ham taalluqlidir. Innovatsionlik ochiqlikni, boshqalar fikrining tan olinishini bildiradi. O‘qituvchining innovatsion faoliyati turli xildagi qarashlarning to‘qnashuvi va o‘zaro boyitilishi dinamikasida amalga oshishini ko‘zda tutadi.

O‘qituvchining innovatsion faoliyatini samarali amalga oshirish bir qator shart-sharoitlarga bog‘liq. Unga o‘qituvchining tayinli muloqoti aks fikrlarga nisbatan beg‘araz munosabat, turli holatlarda ratsional vaziyatning tan olinishini uqtirishga tayyorligi kiradi. Buning natijasida o‘qituvchi o‘z bilim va ilmiy faoliyatini ta’minlaydigan keng qamrovli mavzu (motiv)ga ega bo‘ladi.

O‘qituvchi faoliyatida o‘z-o‘zini faollashtirish, o‘z ijodkorligi, o‘z-o‘zini bilishi va yaratuvchiligi mavzu (motiv)lar muhim ahamiyat kasb etadi.Bu esa o‘qituvchi shaxsining kreativligini shakllantirish imkoniyatini beradi. Innovatsion faoliyat quyidagi asosiy funksiyalar bilan izohlanadi:

- kasbiy faoliyatning ongli tahlili;

- me’yorlarga nisbatan tanqidiy yondashuv;

- kasbiy yangiliklarga nisbatan shaylik;

- dunyoga ijodiy yaratuvchilik munosabatida bo‘lish;

- o‘z imkoniyatlarini ro‘yobga chiqarish, o‘z turmush tarzi va intilish-larini kasbiy faoliyatida mujassam qilish.

Demak, o‘qituvchi yangi pedagogik texnologiyalar, nazariyalar, konsep-siyalarning muallifi, ishlab chiqaruvchisi, tadqiqotchisi, foydalanuvchisi va targ‘ibotchisi sifatida namoyon bo‘ladi.

Hozirgi jamiyat, madaniyat va ta’lim taraqqiyoti sharoitida o‘qituvchi innovatsiya faoliyatiga bo‘lgan zaruriyat quyidagilar bilan o‘lchanadi:

• ijtimoiy-iqtisodiy yangilanish ta’lim tizimi, metodologiya va o‘quv jarayoni texnologiyasining tubdan yangilashni talab qiladi. Bunday sharoitda o‘qituvchining innovatsiya faoliyati pedagogik yangiliklarni yaratish, o‘zlashtirish va foydalanishdan iborat bo‘ladi;

• ta’lim mazmunini insonparvarlashtirish doimo o‘qitishning yangi tashkiliy shakllarini, texnologiyalarini qidirishni taqozo qiladi;

• pedagogik yangilikni o‘zlashtirish va uni tatbiq etishga nisbatan o‘qituvchining munosabati xarakteri o‘zgarishi.

O‘qituvchining innovatsion faoliyati tahlili yangilik kiritishning samaradorligini belgilovchi muayyan me’yorlardan foydalanishni talab qiladi. Bunday me’yorlarga - yangilik, maqbullik, yuqori natijalilik, ommaviy tajribalarda innovatsiyani ijodiy qo‘llash imkoniyatlari kiradi. Yangilik pedagogik yangilik me’yori sifatida o‘zida taklif qilinadigan yangini, yangilik darajasi mohiyatini aks ettiradi.

O‘qituvchining innovatsion faoliyati o‘z ichiga yangilikni tahlil qilish va unga baho berish, kelgusidagi harakatlarning maqsadi va konsepsiyasini shakllantirish, ushbu rejani amalga oshirish va tahrir qilish, samaradorlikka baho berishni qamrab oladi. Innovatsion faoliyatning samaradorligi pedagog shaxsiyati va xislatlari bilan belgilanadi:

•shaxsning ijodiy-motivatsion yo‘nalganligi, bu – qiziquvchanlik, ijodiy qiziqish; ijodiy yutuqlarga intil ish; peshqadamlikka intilish; o‘z kamolotiga intilish va boshqalar;

• kreativlik, bu – xayolot (fantastlik), faraz; qoliplardan holi bo‘lish, tavakkal qilish, tanqidiy fikrlash, baho bera olish qobiliyati, o‘zicha mushohada yuritish, refleksiya;

• kasbiy faoliyatni baholash, bu - ijodiy faoliyat metodologiyasini egallash qobiliyati; pedagogik tadqiqot metodlarini egallash qobiliyati;

•mualliflik konsepsiyasi faoliyat texnologiyasini yaratish qobiliyati, ziddiyatni ijodiy bartaraf qilish qobiliyati; ijodiy faoliyatda hamkorlik va o‘zaro yordam berish qobiliyati;

• o‘qituvchining individual qobiliyati, bu - ijodiy faoliyat sur’ati; shaxsning ijodiy faoliyatdagi ish qobiliyati; qat’iyatlik, o‘ziga ishonch; mas’uliyatlilik, halollik, haqiqatgo‘ylik, o‘zini tuta bilish va boshqalar.

Innovatsion faoliyat tadqiqotlari o‘qituvchining innovatsion faoliyatga hozirligi me’yorlarini belgilashga imkon berdi:

• innovatsion foliyatga bo‘lgan zaruriyatni anglash;

• ijodiy faoliyatga jalb qilinishiga shaylik;
• shaxsiy maqsadlarni innovatsion faoliyat bilan moslashtirish;
• ijodiy muvaffaqiyatsizliklarni yengishga shaylik;
• innovatsion faoliyatni ijro etish uchun texnologik shaylik darajasi;
• innovatsion faoliyatning kasbiy mustaqillikka ta'siri;
• kasbiy refleksiyaga bo'lgan qobiliyat.

Oliy maktabdagi innovatsiya jarayonlari xarakteri kiritilgan yangiliklar xususiyatlari, o'qituvchilarning kasbiy imkoniyatlari, yangilik kiritish tashabbuskorlari va ishtirokchilarining innovatsion faoliyatlari xususiyatlari bilan belgilanadi.

Innovatsion faoliyatda eng muhim masalalardan biri - o'qituvchi shaxsidir. O'qituvchi-novator sermahsul ijodiy shaxs bo'lishi, kreativlikni, keng qamrovli qiziqish va mashg'ullikni, ichki dunyosi boy, pedagogik yangiliklarga o'ch bo'lishi lozim.

O'qituvchini innovatsion faoliyatga tayyorlash ikki yo'nalishda amalga oshirilishi lozim:

• yangilikni idrok qilishga innovatsion shaylikni shakllantirish;
• yangicha harakat qila olishga o'rgatish.

Innovatsion faoliyatni tashkil etishda talabalarning o'quv-bilish faoliyati va uni boshqarish alohida ahamiyatga ega. Innovatsiya jarayonlari, ularning funksiyalari, rivojlanish qonuniyatlari, mexanizmlari va uni amalga oshirish texnologiyalari, boshqarish tamoyillarining pedagogik asoslarini o'rganish oliy maktab o'quv jarayonini zamonaviy pedagogika hamda psixologiya fanlari yutuqlari asosida jahon standartlari darajasida tashkil etish imkonini beradi.

Adabiyotlar:

1. N.Egamberdiyeva.Ijtimoiy pedagogika. - T.: Alisher Navoiy nomidagi O'zbekiston Milliy kutubxonasi nashriyoti. 2009.
2. N.N.Azizxodjayeva "Pedagogik texnologiya va pedagogik mahorat" Cho'lpon: 2005y
3. O'.Tolipov, M.Usmonboyeva "Pedagogik texnologiyalarning tadbiqiy asoslari" Toshkent: 2006y.
4. Кузибаева М.М. «Экономика и социум» Электронное научно-практическое периодическое международное издание. № 7 (74) 2020 стр 213-217.

УДК 614.2

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INNOVATIVE TECHNOLOGIES IN NURSING EDUCATION AND PRACTICE

Abstract. Technology is changing the world at an incredible pace, and nowhere is this more evident than in medical facilities. In an increasingly crowded world, people rightly expect medical care to meet their needs quickly. New technologies are helping to deliver these elements, putting the power back in the hands of the patient. If medicine is to achieve a significant improvement in quality, it must be transformed, and information technology will play a key role, especially in terms of safety.

Keywords: nursing, education, nursing practice, technology.

Technology in nursing has been around for a long time, in fact nurses have been able to use and incorporate sophisticated technology into nursing practice for several hundred years, at least since Florence Nightingale of Great Britain and even earlier when Jeanne Mance founded the first hospital in Montreal, Canada, in 1642. Various manipulations using mechanical equipment such as ventilators and physiological monitors were first performed in intensive care units and are now used in an adapted form in less urgent areas, even in home care [1].

There are many different forms that e-health can take, for example: telephone consultation between a patient and a health care provider to provide advice on the use of medicines or monitoring of vital signs, text on health promotion recommendations, remote consultation between a patient and a doctor using videoconferencing [2].

Technological innovation and improved globalisation are closely linked and nursing education must respond in a measured and careful manner to remain relevant. Incorporating information management and interactive technologies promotes student engagement, critical thinking, and improved clinical judgement.

There are many new technologies that will change nursing practice over the next decade. Bioprinters using "bioinks" made from mixtures of living cells can create a 3D structure of cells, layer by layer, to form human tissue and eventually human organs for replacement [3]. Healthcare is just beginning to explore the limits of this technology. There are limitations to the materials that can be used for printing and materials science is lagging behind in 3D printing.

Robotics can provide improved diagnostic capabilities, a minimally invasive and more comfortable experience for the patient, and the ability to perform smaller and more precise interventions simultaneously. In addition,

robots can be used as auxiliary health care providers to provide some physical and mental health services [4].

There are several different types of less invasive meters being developed to monitor blood glucose levels. One of them involves a kind of nano-tattoo and Symphony® CGM system. It was developed by a medical device company with expertise in advanced skin penetration technologies (Figure 1).

Рисунок 1. Система Symphony ® CGM [5]

Information and communication technologies (ICTs) embody all digital technologies that support the electronic collection, storage, processing and exchange of information for health promotion, disease prevention, disease management, chronic disease management and so on.

In the health sector, ICT refers to a set of projects or services that enable remote nursing (telemedicine), interdisciplinary clinical support, and knowledge transfer [6].

The AS introtek non-invasive droplet detection sensor measures instantaneous droplet velocity by accurately delivering a pulse for each drop of liquid.

It is intended to be used as a method to monitor the flow rate of media during intravenous infusion of a patient. The sensor can be used to improve infusion therapy, fluid dosing and pharmaceutical production [5].

The health information management (HIM) profession is dedicated to the effective management of patient information and healthcare data needed to provide quality treatment and care to the public. HIM professionals play a critical role in the successful implementation of electronic health records and ensure that providers, healthcare organisations and patients have access to the right health information when and where they need it, while maintaining the highest standards of privacy and security [6].

Hands-free communication devices (HFCDs) are an information and communication technology consisting of wearable "badges" and server software.

The technology is characterised by three features: 1. It uses Voice over Internet Protocol (VoIP) and wireless local area networks (WLAN);

2. The communication devices are wearable; 3. The technology has voice control capability.

Hands-free communication devices are increasingly being used in healthcare settings, especially among nursing staff.

Student access to technology is no longer a privilege: it is now a prerequisite for full participation in high quality educational opportunities.

Increasingly, important learning resources used by students and teachers are becoming digital, making access to the Internet as basic as access to a library. Access to technology is becoming increasingly important to the college experience itself, as well as enabling students to find and enrol in educational programmes such as summer professional development and college scholarship programmes. Modern technological tools that enable design, media creation, self-expression, research, analysis, communication, collaboration, and programming are commonplace in a variety of professions and disciplines, and the use of these tools is an integral part of students' lives. Engagement with digital learning environments that support the development of deeper learning skills such as problem solving, critical thinking, and enquiry is also critical. The use of innovative technologies in the daily practical activities of nurses makes their work more professional, comfortable, provides safety and convenience in performing basic professional duties, reduces labour costs, allows for quick and high-quality implementation of the therapeutic and diagnostic process.

References:

1. Kasimovskaya N.A. Organisation of nursing service. Textbook / N.A. Kasimovskaya, V.E. Efremova. - Moscow: Medical Information Agency, 2015. - 440 c.
2. Choshanov, M.A. Didactic design of flexible learning technology // Pedagogy. 1997. - № 2. - c. 21-29.
3. Shampaner G.M. Pedagogical bases of creation and use of multimedia technology in the educational process: abstract of dissertation for the degree of candidate of pedagogical sciences, -Barnaul, 2000. 25 c.
4. Abdullayev, S. S., et al. "Cyclic Technology for Obtaining Double, Triple Superphosphate and Concentrated Nitrogen-Phosphorus Fertilizer from Low-Grade Phosphorites of Central Kyzylkum." Eurasian Journal of Physics, Chemistry and Mathematics 6 (2022): 49-54.
5. Abdullaev, S. S. "RATIONAL SOLUTION OF THE ISSUE OF PROCESSING OFF-BALANCE ORE INTO CONCENTRATED NITROGEN-PHOSPHATE FERTILIZERS USING CYCLIC METHOD." Экономика и социум 5-1 (108) (2023): 4-9.
6. Abdullaev, S. S. "ON A NEW MULTILAYER TECHNOLOGY FOR SQUEEZING LEATHER SEMI-FINISHED PRODUCTS." Доктор экономических наук, профессор ЮВ Федорова Доктор философии

педагогических наук (PhD), доцент, Мухаммадиев КБ Доктор социологических наук, доцент ТВ Смирнова (2023): 3.
7. Abdullaev S.S. INNOVATIVE APPROACH TO HOUSEHOLD BIOLOGICAL WASTE TREATMENT: DESIGN AND TECHNICAL SOLUTION OF A BIOGAS PLANT // Universum: технические науки: электрон. научн. журн. 2023. 12(117). URL: https://7universum.com/ru/tech/archive/item/16409 (дата обращения: 15.01.2024).
8. Salman A.Kh. A PROMISING GREEN LUBRICANT FOR THE FUTURE // Universum: технические науки: электрон. научн. журн. 2023. 12(117). URL: https://7universum.com/ru/tech/archive/item/16554 (дата обращения: 15.01.2024).

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INFORMATIKA O‘QITUCHILARINI KASBIY FAOLIYATGA TAYYORLASHDA KOMPYUTER TA’MINOTI FANINI O‘QITISHNING METODIK TA’MINOTI

Annotatsiya. Ushbu maqolada bo‘lajak informatika fani o‘qituvchilarini kasbiy faoliyatga tayyorlashda majburiy fanlar blokidagi kompyuter ta’minoti fanini o‘qitishni yangi metodik tizimi bayon etilgan, chet-el olimlarini fikr mulohalari keltirilgan, kompyuter ta’minoti fanining umumlashtirilgan strukturasi, fandi o‘qitishdan maqsad blok sxema asosida yoritib berilgan va kompyuter ta’minoti fanining ta’lim mazmuni batafsil yoritib berilgan.

Kalit so‘zlar:.Quizlet, Padlet, MinMap, Integrallashgan ta’lim, Global komptensiya, Loyihaga asoslangan ta’lim, Blended learning, tayanch, bazaviy va maxsus kompetensiyalar.

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METHODOLOGICAL PROVISION OF TEACHING COMPUTER SCIENCE IN THE PREPARATION OF IT TEACHERS FOR PROFESSIONAL ACTIVITY

Abstract. This article describes a new methodological system for teaching computer science in the block of compulsory subjects in the preparation of future computer science teachers for professional activities, comments of foreign scientists are presented, a generalized structure of computer science, science teaching the purpose is explained on the basis of block diagram and the educational content of computer science is explained in detail.

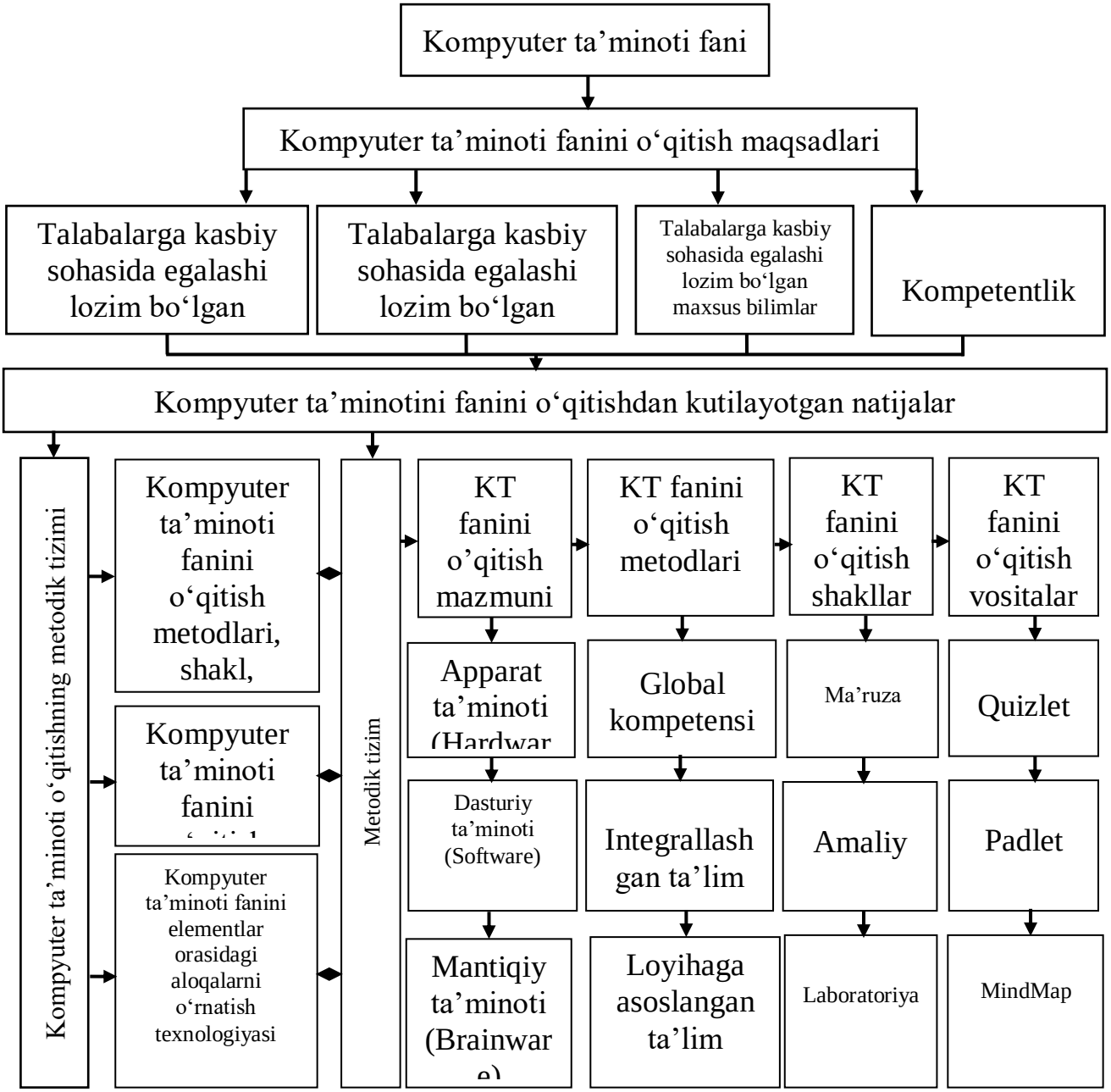
Key words: Quizlet, Padlet, MinMap, Integrated education, Global competence, Project-based education, Blended learning, basic, basic and special competencies.

Uzluksiz ta’lim tizimida yuqori malakali kompyuter fanlari o‘qituvchilarining yetishmasligiga duch kelamiz, bu esa kompyuter fanlari kengayishida katta qiyinchiliklarga olib keladi. Yaxshi tayyorlangan va bilimli o‘qituvchi keng tarqalgan o‘qitiladigan fanlar bo‘yicha o‘qitishning eng muhim komponentidir [44, 45].Yuqoridan kelib chiqqan holda bo‘lajak o‘qituvchilarning

zarur kompyuter fanlariga oid bilim va koʻnikmalaridagi katta kamchiliklar borligi aniq [44]. Misol uchun, Qoʻshma Shtatlardagi boshlangʻich maktab oʻqituvchilari oʻrtasida oʻtkazilgan soʻrovda faqat 10 foizi hisoblash fikrlash kontseptsiyasini tushunishlarini aytdilar (Campbell & Heller, 2019). Olti yil oldin AQShdagi oʻqituvchilarning 75 foizi “kompyuterda hujjatlar yoki taqdimotlar yaratish” ni kompyuter fanlari kursida oʻrganiladigan mavzu sifatida notoʻgʻri koʻrib chiqishgan, bu kompyuter fanlari oʻrtasidagi farqni va kompyuter savodxonligini yaxshi tushunmaganligini koʻrsatadi. Boshqa amaliy tadqiqotlar, soʻrovlar va intervyular shuni koʻrsatdiki, Hindiston, Saudiya Arabistoni, Buyuk Britaniya va Turkiyadagi oʻqituvchilar oʻzlarining kompyuter fanlarini tushunishlariga ishonchlari pastligi haqida aytishadi [44].Ushbu muammolarni hal qilish uchun maktab tizimlari uzluksiz kasbiy rivojlanish, oliy ta’lim hamda oliy ta’limdan keyingi sertifikatlash dasturlari va oʻqituvchilar ta’limi darajasi dasturlari tomonidan chiqarilgan kompyuter fanlari sertifikatlarini egallashlari va xar bir boʻlgʻusi informatika fani oʻqituvchilari oʻzlari ustida uzluksiz ishlagan holda bilimlarini yangilab va mustahkamlab borishlari lozim [37, 38].Yangi chiqayotgan dasturiy vositalarni oʻrganish, oʻzlashtirish va dars jarayonlariga tadqiq qilish informatikada keng tarqalgan yondashuvlardir. Shu bilan birga koʻpgina ta’lim muassasalarida ta’lim muassasasidan tashqaridan ixtisoslashgan oʻqituvchilarni jalb qilish oʻrniga, maxsus koʻnikmalarga boʻlgan ehtiyojni qondirish uchun mavjud oʻqituvchilar ishchi kuchidan foydalanadilar.

Boʻlajak informatika oʻqituvchilarini kasbiy faoliyatga tayyorlashda Kompyuter ta’minoti fanini oʻqitishning metodik tizimi quyidagilarni oʻz ichiga oladi:

Kompyuter ta’minoti fanini oʻqitishdan maqsad- talabalarga kasbiy sohasida egalashi lozim boʻlgan bilimlar, olgan bilimlarini amalda qoʻllash uchun koʻnikma hosil qilish, malakalarini shakllantirish va rivojlanitrishlari lozim. Unda har bir kasb egasining faoliyati kasbiy motivatsiya va intellektual qobiliyatlar uygʻunligini ta’minlashga dinamik ustuvorlik berish asosida kerak boʻlgan tayanch nazariy va amaliy ma’lumotlarni oʻz ichiga oladi. Ushbu maqsaddan kelib chiqqan holda Kompyuter ta’minotini fanini oʻqitishdan kutilayotgan natijalari quydagilardan iborat:



1-rasm. Kompyuter ta’minot fanini o‘qitishning metodik tizimini umumlashtirilgan tuzilmasi

Kompyuter ta’minoti o‘qitishning metodik tizimi o‘zida Kompyuter ta’minoti fanini o‘qitish metodlari, shakl, vositalarini tanlash texnologiyasi, Kompyuter ta’minoti fanini o‘qitish mazmuni, Kompyuter ta’minoti fanini elementlar orasidagi aloqalarni o‘rnatish texnologiyasini jamlaydi.

Kompyuter ta’minoti fanini o’qitish mazmuni- uch qismga bo‘linib, apparat ta’minoti, dasturiy ta’minoti va mantiqiy ta’minotlarga bo‘lingan holda o‘qitiladi.

Kompyuter ta’minoti fanini o‘qitish shakllari- ma’ruza, amaliy va laboratoriya mashg‘ulotlarida turli interfaol metodlar orqali o’qitish nazarda tutilib, ilmiy-tadqiqot ishida asosan, nazariy mashg‘ulotlarni o‘zlashtirishda global kompetensiya metodi, amaliy mashg‘ulotlarni o‘tishda inregrallashgan

ta’lim metodi va laboratoriya mashg‘ulotlarini olib borishda loyihaga asoslangan ta’lim metodlaridan foydalanildi [18].

Kompyuter ta’minoti fanini o‘qitish shakllari ma’ruza, amaliy va laboratoriya mashg‘ulotlarida Aralash ta’lim (Blended learning) ning Rotation modelidan foydalanildi.

Kompyuter ta’minoti fanini o‘qitish vositalari sifatida Quizlet, MindMap, Padlet dasturlaridan foydalanildi.

Bo‘lajak informatika o‘qituvchilarini Kompyuter ta’minot fanidan o‘quv jarayonini amalga oshirishning berilgan shart-sharoitlarni hisobga olgan holda o‘quvchilarning o‘qitish mazmunini idrok etishga tayyorligi yoki pedagog (yoki bo‘lajak informatika o‘qituvchisi) ning shaxsiy qobiliyatlari [19, 106].

O‘qitishning metodik tizimidan Kompyuter ta’minoti faniga o‘tishni amalga oshirish uchun odatda o‘qitishning metodik tizimiga tegishli maqsadlari shaklida ifodalanadi [19,106] (1-rasm).“Bo‘lajak informatika fani o‘qituvchisi bo‘yicha tahsil olayotgan bo‘lajak informatika o‘qituvchilarini kasbga tayyorlash tizimi uchun Kompyuter ta’minoti fani shaklida taqdim etilgan” [19, 35].

Bundan tashqari yuqoridagi taklif etilayotgan konsepsiyada oltita pedagogik qoidalar - ta’limning kasbiy pedagogik yo‘naltirilganligi tamoyillari hisobga olinadi [94]:

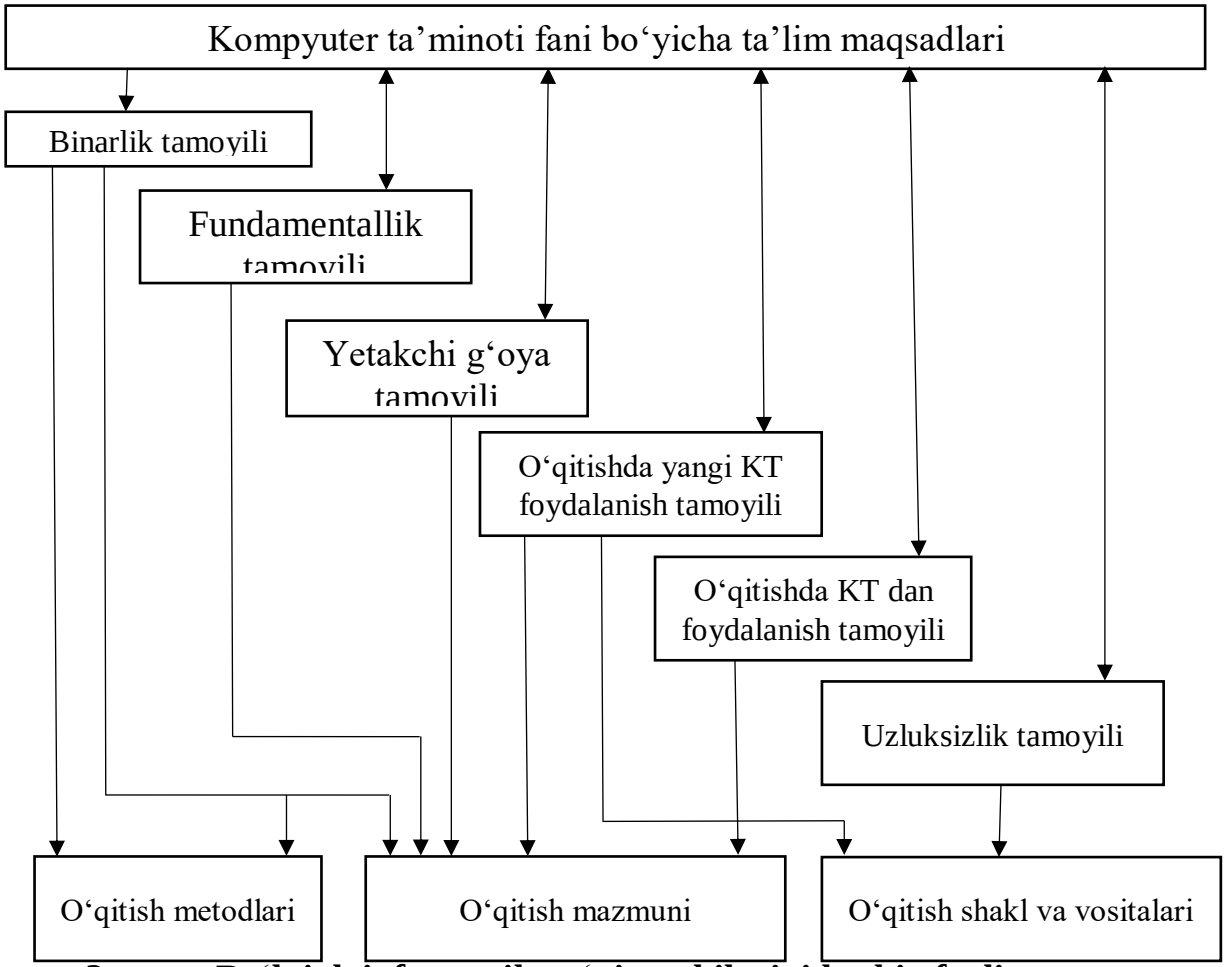
1. Fundamentallik tamoyili. Bo‘lajak o‘qituvchini informatika sohasida tayyorlash Kompyuter ta’minoti doirasidan tashqariga chiqadigan samarali bilimlarni ta’minlashi va egallanayotgan kasb ehtiyojlariga moslashtirilishi kerak.
2. Binarlik tamoyili. Kompyuter ta’minoti fanining metodik tizimini umummilliy dasturlari mutaxassislikka kirish va kompyuter ta’minoti fanini yo‘nalishlarni birlashtirish.
3. Yetakchi g‘oya tamoyili. Oliy ta’lim muassasalari va maktablar o’rtasidagi shartnomalar asosida o’tkaziladigan pedagogik amaliyotlarda o‘rganilayotgan “Pedagogik ta’lim sifatini oshirish va pedagog kadrlar tayyorlovchi oliy ta’lim muassasalari faoliyatini yanada rivojlantirish chora-tadbirlari to‘g‘risida”gi O‘zbekiston Respublikasi Prezidentining qarori asosida pedagog kadrlar tayyorlovchi oliy ta’lim muassasalari kunduzgi ta’lim shaklida tahsil olayotgan 2-4-bosqich talabalari uchun haftalik o‘quv mashg‘ulotlari “4+2” tartibida, shu jumladan darslarning 4 kuni oliy ta’lim muassasasida, 2 kuni maktabgacha va umumiy o‘rta ta’lim muassasalarida amaliyot o‘tash tartibida olib borilishini ta’minlash asosiy g‘oyasi bo‘lishi kerak [94].
4. Uzluksizlik tamoyili. O‘rganilgan kasbiy va mutaxassislik fanlari bo‘lajak informatika o‘qituvchilarning pedagogik faoliyat elementlarini uzluksiz o‘rganish jarayonida ishtirok etishi zarur. Chunki bu fan bazaviy fan sifatida shakllantiriladi va boshqa fanlar mazmuni uzviylashtiriladi [94].
5. Bo‘lajak o‘qituvchining pedagogik faoliyatida zamonaviy texnik va dasturiy texnologiyalaridan foydalanish tamoyili.

6. Metodik ta’minotdan foydalanish Kompyuter te’minoti fanini o‘qitishda Interaktiv texnologiyalardan (elektron doska, planshet, mobil ta’lim texnologiya) lardan foydalanish tamoyili.

O‘qitishning kasbiy-pedagogik yo‘naltirilganligining barcha oltita tamoyili O‘MT -o‘quv maqsadlarining tizimini shakllantiruvchi komponenti bilan bog‘liq. Har bir komponent uchun yetakchi g‘oya tamoyili va yagona axborot tizimidan foydalanish tamoyili o‘qitish mazmunini tanlashda; uzluksizlik tamoyili - o‘qitish shakllari va vositalarini tanlashda. Kompyuter ta’minoti fanini o‘qitishda ta’lim tizimida yagona axborot tizimidan foydalanish tamoyili mamlakatimiz oliy ta’lim muassasalarining barcha komponentlariga ta’sir qiladi [38]. Ko‘rgazmalilik uchun hukmron ta’sir yo‘nalishlari rasmda ko‘rsatamiz (2-rasm).

Bo‘lajak informatika o‘qituvchilarini kasbiy sohaga tayyorlashda birinchi va ikkinchi qoidalardan foydalanish maqsadga muvofiq va mumkin deb hisoblaymiz, ya’ni, mazmun va axborot o‘zaro faoliyatini refleksiv faoliyatning turli xillari bilan birgalikda qadam-baqadam o‘zlashtirish [35].

Paradigmalararo refleksiya tamoyilini tavsiflashdan oldin ta’lim mazmunining quyidagi asosiy paradigmalarini butun strukturaviy to‘laligi bilan inson madaniyatiga xos bo‘lganligida iborat madaniyatshunoslik konsepsiya.



2-rasm. Bo‘lajak informatika o‘qituvchilarini kasbiy faoliyatga tayyorashda Kompyuter ta’minoti fanini o‘qitishda ta’lim maqsadlari

Paradigmalararo refleksiya tamoyilida quyidagi tamoyillardan foydalaniladi:

1) kuzatuvchining paradigma jihatdan kechinishi;

2) obyekt tavsiflarining ko‘pligining paradigmaga tegishliligi bilan solishtirilganligi;

3) obyekt haqidagi bilimlarning to‘liqligini qayta qurish imkoniyati;

4) semiotikani paradigmalararo refleksiya metodi vositasi sifatida ishlatish.

Kasbiy tayyorgarlik mazmuni birligi sifatida kasbiy vazifaning strukturasiga misol keltirishadi:

a) vazifaning umumlashtirilgan ifodasi;

b) asosiy vazifa;

v) vazifani yechish konteksti;

g) yechimga (mahsulotga)olib keladigan vazifalar;

d) baholash mezonlari.

O‘qituvchilarni kasbga tayyorlash mazmunini kasbiy vazifalar asosida qurish o‘qitish mazmuni bo‘lajak informatika o‘qituvchilar oldiga vazifani qo‘yishdan ishga tushishini nazarda tutadi. Bu vazifa bevosita ifodalash mumkin, muammo sifatida ham taqdim etilishi mumkin. Bunday holda, hal qilinishi kerak bo‘lgan vazifalarni tahsil oluvchilarning o‘zlari ifodalaydilar. Tahsil oluvchilar vazifalarni ularga berilgan ma’lumotlardan o‘zlari tanlashlari mumkin. Tahsil oluvchilar o‘qitiladigan matnni transformatsiya qilish uchun axborotning birlamchi tahlilini o‘zaro qimmatli fikr almashish, shaxsiy nuqtayi nazarlardan baholash: o‘z tajribasi, qadriyat yo‘nalishlari va boshqalar orqali o‘tkazadilar. G‘oya va konsepsiyalar tushuntirish va muhokama qilish maqsadida terminologik lug‘atga kiritib qayta ishlanadi. Keyingi bosqich-amal va yechim. Ularni ta’lim mazmunining elementlari sifatida hisoblash mumkin va zarur. Ular fikr, loyiha, dastur va boshqalar shaklida shakllanadigan axborotni ifodalaydi va bu keyingi - munozara, taqdimot, mulohaza bosqichiga olib keladi. Natijada, yangi ma’lumotlar massivi hosil bo‘ladi va ular bilan ishlash ko‘rsatilgan mantiqda amalga oshirilishi mumkin [35].

Bo‘lajak informatika o‘qituvchilarini tayyorlash bo‘yicha F.M.Zakirovaning ta’kidlashicha “metodik tayyorgarlikning asosiy maqsadi sifatida o‘qituvchining kasbiy va uslubiy rivojlanishi jarayonida ta’limni axborotlashtirish sharoitida ijodiy faoliyat yuritadigan yuqori malakali mutaxassis sifatida shaxsini rivojlantirish” [81] deb hisoblaydi.

Informatika va AKTni o‘rganish obyekti, predmeti va metodlarini o‘quv va kasbiy vazifalar yig‘indisi bilan birgalikda hisobga olish tamoyili. “Bo‘lajak informatika o‘qituvchilarining ta’lim sohasida, o‘qitish mazmunini DTSda belgilangan bazaviy fanlar ta’limi mazmuni hisobga olgan holda qaratilishi zarur” [94].

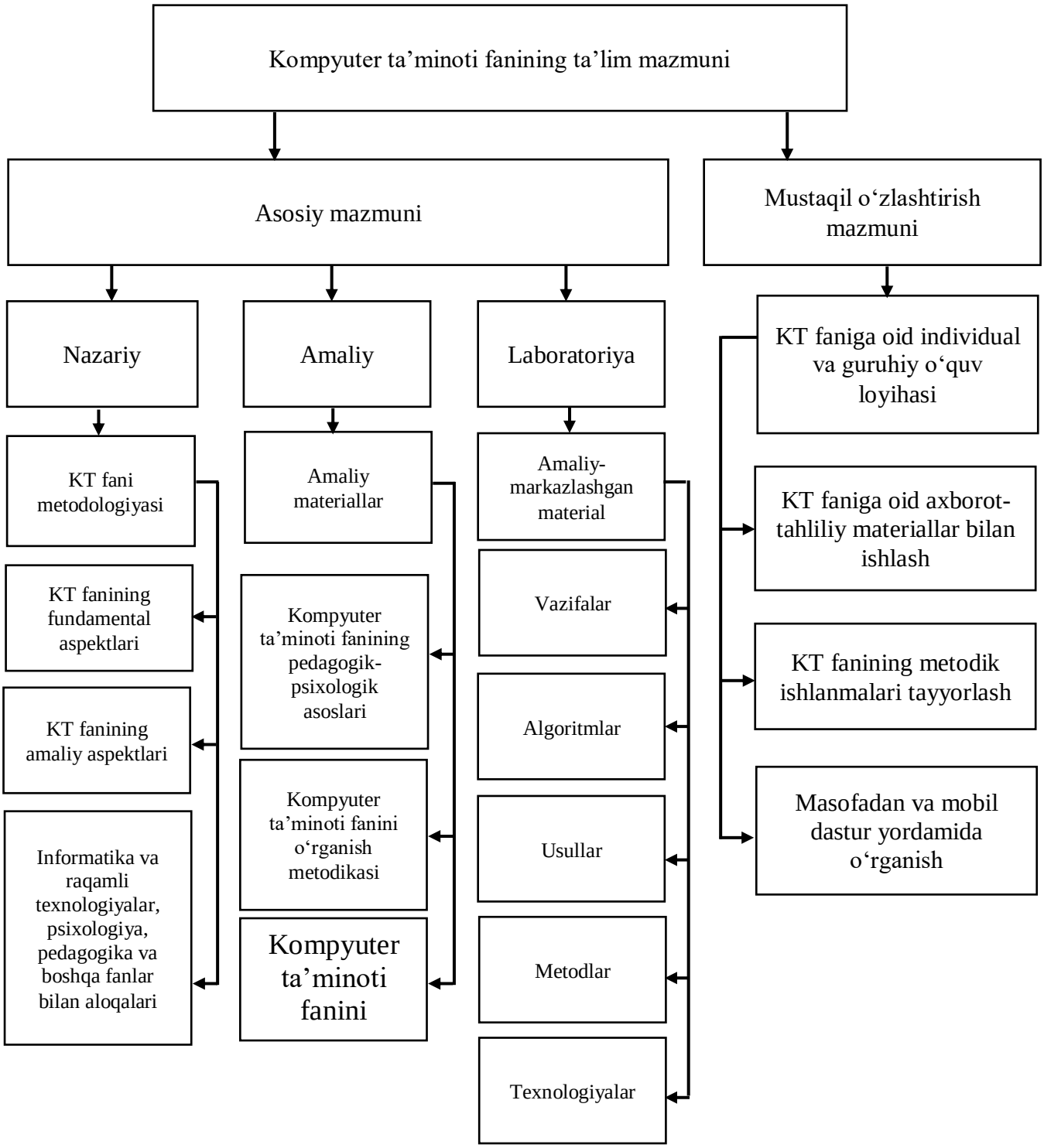
Amaliyotga yo‘naltirish tamoyili. Ta’lim mazmuni, amaliy ko‘nikmalarni o‘zlashtirish kabi ta’lim maqsadining erishilishini ta’minlash.

Modullilik tamoyili ta’lim mazmunini modulli struktura shaklida ifodalash.

Ochiqlik tamoyili ta’lim mazmuniga kelgusida axborot va ta’lim texnologiyalarining ta’lim sohasida kasbiy faoliyatni takomillashtirishga yordam beradigan vositalarni yanada rivojlantirish bilan bog‘liq holda paydo bo‘ladigan yangi ta’lim elementlarini kiritishni nazarda tutadi.

Shunday qilib, bo‘lajak informatika o‘qituvchisining ta’lim sohasidagi kasbiy faoliyatga tayyorligini shakllantirishni ta’minlaydigan ta’lim mazmunini tanlashda ushbu tamoyillarni hisobga olish yuqorida aytib o‘tilgan sohada o‘qituvchilarni texnologik ta’limini yaxshilashga yordam berishi kerak, bu esa, o‘z navbatida, oliy ta’lim muassasalarida informatikaga oid ta’limni amalga oshirishning samaradorligini oshirishni ta’minlashi zarur [37].

Bo‘lajak informatika o‘qituvchilarini metodik tayyorlashning taqdim etilgan maqsad va vazifalarini amalga oshirish uning professor-o'qituvchilarning uzluksiz ta’lim tizimidagi roli va o‘rnini mustahkamlaydi va uning yangi funksiyalarini tavsiflaydi [81]: - nafaqat informatika o‘qituvchisining shaxsini, balki zamonaviy AKT muhitini takomillashtirishga qaratilgan rivojlanish [81]; - informatika o‘qituvchisining ijtimoiy ahamiyatini ta’minlashga qaratilgan ijtimoiy rivojlanish [81]; - ta’lim jarayoniga zamonaviy AKTni joriy etish bo‘yicha innovatsion faoliyatga yo‘naltirilgan rivojlanish [81]; - zamonaviy AKTdan foydalangan holda bo‘lajak informatika o‘qituvchilarning tashqi va ichki motivatsiyasini rivojlantirish vositasi sifatida foydalanishga qaratilgan [81].



3-rasm. Bo‘lajak informatika o‘qituvchisini tayyorlashda Kompyuter ta’minoti fanining ta’lim mazmuni

Informatika o‘qituvchilarini kasbiy faoliyatga tayyorligini takomillashtirishda tabaqalashgan yondoshuvlarga ko‘ra tayanch, bazaviy va maxsus kompetensiyalari bosqichma-bosqich ta’limiy maqsadga muvofiqlashtirishga ega fan sifati va oliy ta’lim tizimida o‘qitilishida barcha mavzularni qamrab olgan kasbiy motivatsiya va intellektual qobiliyatlar uyg‘unligini ta’minlashga dinamik ustuvorlik berish asosida “Kompyuter

ta’minoti fanidan bo‘lajak informatika o‘qituvchisining kasbiy kompetentligi va yaxshi tashxis qilsa bo‘ladigan bilimlarga nazariy materiallar va amaliyotga yo‘naltirilgan materiallarni kiritish zarur deb taklif kiritdik. Bunda, biz uning asosiy va mustaqil o‘zlashtirish mazmuni bloklarini ajratdik (3-rasm).

Xulosa

Kompyuter ta’minoti fani bo‘lajak informatitka o‘qituvchilarining kasbiy faoliyati kerak bo‘lgan tabaqalashgan yondoshuvlarga ko‘ra tayanch, nazariy va amaliy bilimlar, ko‘nikmalar hamda ilmiy dunyoqarashini shakllantirish kasbiy motivatsiya va intellektual qobiliyatlar uyg‘unligini ta’minlashga dinamik ustuvorlik berish asosida vazifalarini bajaradi.

Bo‘lajak informatika o‘qituvchisining ta’lim sohasidagi kasbiy faoliyatga tayyorligini shakllantirishni ta’minlaydigan Kompyuter ta’minoti fanini o‘qitish mazmunini tanlashda yuqoridagi tamoyillarni hisobga olish, o‘qituvchilarni zamonaviy yondashuvlar, texnologik ta’limini yaxshilashga yordam berishi kerak, bu esa, o‘z navbatida, oliy ta’lim muassasalarida informatikaga oid ta’limni amalga oshirishning samaradorligini oshirishni ta’minlashi zarur.

Foydalanilgan adabiyotlar:

1. Campbell C. (2019). Social capital, social movements and global public health: Fighting for health-enabling contexts in marginalised settings. Social Science & Medicine, 112153. https://doi.org/10.1016/j. socscimed.2019.02.004
2. Маллаев Р.Қ. Бўлажак информатика ўқитувчиларининг касбий фаолиятга тайёрлигини шакллантиришга йўналтирилган ўқитишнинг методлари // ТДПУ илмий ахборотлари. – Т., 2022. – 11-сон. – Б. 141-146. (13.00.00. № 32)
3. Маллаев Р.Қ. Информатика фани ўқитувчисини ихтисослаштирилган таълим шароитларида касбий фаолиятга тайёрлаш // Муҳандислик фанларини ўқитишнинг долзарб муаммолари ва ечимлари: Республика илмий-техник анжумани материаллари. – 2022 йил 4-5 ноябрь, Термиз, 2022.-Б.526-529.
4. Mallayev R.Q. Informatika o‘qituvchilarining kasbiy kompetentligini takomillashtirishda zamonaviy yondashuvlar // TDPU ilmiy axborotlari.-T.,2022.-10-son.-B.205-210. (13.00.00. № 32).
5. Mallayev R.Q. Ixtisoslashtirilgan maktablarda informatika o’qituvchisini tayyorlash // Raqamli iqtisodiyot sharoitida oliy ta’limning transformatsiyasi: Respublika ilmiy-amaliy anjumanining ilmiy maqolalar va ma’ruza tezislar to’plami. – 2022 yil 18 noyabr, Toshkent, 2022.- B.332-333.
6. Пышкало А.М. Методическая система обучения геометрии в начальной школе: Автореферат дис. на соискание ученой степени доктора педагогических наук. (130002) / АПН СССР. Науч.-исслед. ин-т содержания и методов обучения. - Москва: [б. и.], 1975. - 60 с.
7. Лаптев В.В. Методическая система фундаментальной подготовки в области информатики: теория и практика многоуровневого педагогического

университетского образования / - СПб.: Издательство Санкт-Петербургского университета, 2000. - 508 с.
8. Закирова Ф.М. Теоритические и практические основы методической подготовки будущих преподавателей информатики в педагогических вузах: Автореф.дис…док.пед.наук. - Т.: ТГПУ, 2008. - 42 С.
9. Mallayev R.Q. Bo‘lajak informatika o‘qituvchilarini kasbiy faoliyatga tayyorlash metodikasini takomillashtirish: Avtoreferat. dissertatsiya…pedagogika fanlari bo‘yicha falsafa doktori, PhD.-T.: TDPU, 2023.-47 b.

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SAFETY PRECAUTIONS WHEN USING MACHINES AND MECHANISMS ON LIVESTOCK FARMS

Abstract. In this article the machine anddedicated to safety precautions when using machinery, with all machinery, machinery and equipment of a livestock farmabout industrial hazards and measures to prevent them information provided.

Key words: Risk, safety methods, loading operations, equipment repair, equipment adjustment, maintenance, electrical equipment.

The main goal of state policy in the field of labor protection is to preserve the life and health of workers in the process of their work.

To achieve this goal, it is necessary to create a coherent occupational safety and health management system (OSMS) and ensure the smooth functioning of all its constituent links - management entities both at the federal level and at the levels of constituent entities and municipalities.

The objects of management are enterprises, organizations, institutions where issues of preserving the life and health of workers in the process of work are practically resolved.

An OSMS in an organization is understood as part of the overall management system of the organization, ensuring the management of risks in the field of health and safety associated with the activities of the organization.

Organizations form their own OSMS aimed at implementing labor protection requirements. The system is an organizational structure that carries out planning activities, distribution of responsibilities, development, implementation and achievement of goals, analysis of the effectiveness of labor protection policies and measures in the organization.

The head of the organization responsible for labor protection, in accordance with established regulatory requirements, ensures the development, implementation and operation of an OSMS mainly with the help of labor protection specialists. The tasks of the latter include organizing employees' compliance with labor protection requirements, monitoring their compliance, preventing accidents and occupational diseases, preventing workers from being exposed to hazardous and harmful production factors, informing the employer and employees on labor protection issues, as well as disseminating and promoting advanced achievements. in the field of labor protection.

Vehicles used on a livestock farm must meet the requirements of technical documentation, be in good condition and driven by an employee who has the right to drive a tractor.

Loading and unloading operations must comply with all requirements and standards developed for the livestock industry, and equipment for milking cows must also meet the requirements of technical documentation. If the refrigerator is used in a livestock farm, technical requirements and safety regulations must be observed during its installation and use.

All equipment, machinery and fixtures of the livestock farm must be periodically inspected by appropriate specialists within the established time limits. When performing other work related to inspection, adjustment, repair and maintenance, it is necessary to stop mechanisms and machines and turn off electrical devices.

After turning off the machines, when checking, adjusting or repairing the cutting devices of the machines, it is necessary to securely secure all working parts to prevent spontaneous rotation of this mechanism.

Before starting the machine, it is necessary to check the reliability of fastening of the opening part of the cutter body. When preparing the grinder for work, it is necessary to check the balancing of the working disk, the fastening of its blades, as well as the hammer and cutting bar. In this case, it is necessary to check the serviceability and reliability of fastening the grinding chamber cover and protective devices to the gears.

In the process of checking, adjusting, lubricating the grinder, for example, replacing screens, tightening bolted connections, cleaning magnetic separators, the machine must be stopped and disconnected from the power supply. Root cutters, root washing machines and other machines for processing root crops should be installed on leveled (concreted) areas. All machines must meet sanitary requirements and comply with technical documentation. Before using the root cutting washer, you must carefully check its operation, the fastening of all parts, especially the adjustment of the cutting apparatus. Repair, inspection and adjustment of these machines are carried out when they are completely stopped. A separate room is required to install the root trimming washer. Space heating and wastewater drainage are required. The passages in this room must be comfortable and filling them with root vegetables and other foreign objects is strictly prohibited.

Livestock farms use ground transportation.

When installing rails and conveyors, the following requirements must be observed:

1) taking into account slopes that can lead to independent movement of strollers;

2) monitoring the serviceability of load-bearing columns, the strength and reliability of suspension fastening.

When moving carts, workers must be behind the cart in the direction of travel. Each wheelchair must have a maximum load capacity marked on it. Corridors should be illuminated for night work. Special stops must be installed at the ends of railway tracks to prevent the possibility of trolleys derailing.

To check, adjust, lubricate, clean, tighten or repair a conveyor chain, first disconnect it from the power supply, i.e. should be stopped completely.

The paths for transferring manure to the conveyor must be equipped with barriers made of steel pipes or fittings; their height must be more than 1.6 m. When starting the conveyor, it is necessary to ensure that there are no foreign objects on it.

Livestock farm equipment may be equipped with automatic devices, the functionality of which should be checked at least once a year. The operation of remote devices should be checked daily. It is strictly forbidden to use faulty automatic devices.

Using portable electric flashlights with a voltage of no more than 12 V, electric lamps can be replaced by pocket or battery-powered flashlights when inspecting the internal parts of compressors and apparatus. It is strictly forbidden to use open flames or smoke while performing this work.

Only workers who are familiar with their equipment and the rules for its maintenance are allowed to service milking machines on a livestock farm. Insulation of electrical cables and wires of the device must be intact, undamaged and protected from possible mechanical damage. Electrical equipment and vacuum devices must be properly grounded. It is prohibited to use milking machines unless these requirements are met. To avoid accidents if the insulation of the electrical parts of the milking machine is broken, a 0.5 m long rubber tube (or other insulating material) should be installed between the electrical wiring and the vacuum pump. Do not work without safety glasses when cutting glass pipes.

When using strong cleaning agents, as well as disinfectants and other chemicals on a livestock farm, workers must be provided with the necessary personal protective equipment. This could be rubber gloves, boots, aprons and other special clothing.Accidents can be prevented by following these safety rules when using machinery on livestock farms.

References:

1.Мамадалиев, Ш. М. (2022, December). ҲАЁТ ФАОЛИЯТИ ХАФВСИЗЛИГИ ФАНИНИ ЎҚИТИШДА ИНТЕРФАОЛ МЕТОДЛАРДАН ФОЙДАЛАНИШНИНГ АҲАМИЯТИ.In Proceedings of International Educators Conference (Vol3, pp.155-165)

2. Akhmadzhanovich, T. A. (2022, December). INTERACTIVE LEARNING METHOD. In Proceedings of International Educators Conference (Vol. 3, pp. 517-527).

3. Akhmadzhanovich, T. A. (2023). The Role of Chemistry in the Development of Industry and Economy. Web of Semantic: Universal Journal on Innovative Education, 2(3), 168-174.

4.Мамадалиев, Ш. М. (2017). Касбий таълим ишлаб чиқариш таълими категорияси сифатида. Фан ва таълим ютуқлари, (2 (15)), 43
5.Мамадалиев, Ш. М. (2023). ҚИШЛОҚ ХЎЖАЛИГИ МАШИНАЛАРИГА ТЕХНИК ХИЗМАТ КЎРСАТИШ ВА ТАЪМИРЛАШ ИШЛАРИДА МЕҲНАТ МУҲОФАЗАСИ. Новости образования: исследование в XXI веке, 1(11), 904-912.
6.Мамадалиев, Ш. М. (2023). ЭКИШ МАШИНА-ТРАКТОР АГРЕГАТЛАРИНИ ИШЛАТИШДА ХАВФСИЗЛИК ТЕХНИКАСИ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(3), 208-214.
7.Bakhriddinov, N. S., Mamadaliev, A. T., & Turgunov, A. A. (2023). PEDAGOGICAL FOUNDATIONS OF TEACHING. Экономика и социум, (5-2 (108)), 59-63.
8. Mashrabboevich, M. S. (2023). Development of Safety Technique Rules When Using Plant-Tractor Units. Web of Semantic: Universal Journal on Innovative Education, 2(3), 159-164.
9. Рахманов, Ш. В., & Тургунов, А. А. (2021). Табиатни муҳофаза қилиш-ҳар бир фуқоронинг бурчидир. International Journal of Discourse on Innovation, Integration And Education, 2(1), 97-98.

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TEACHING WITH THE SUPPORT OF INTERACTIVE METHODS AS AN EXAMPLE OF INTRUSIVE AND EFFUSIVE ROCKS

Abstract. This article highlights the possibilities of using interactive methods in practice on the example of intrusive and effusive rock formations.

Key words: Interactive method, theoretical understanding, practical skills, logical, critical, analytical, creative thinking, educational system, pedagogical technology, technological approach, igneous rocks, venn diagram, sinkvein, cubic strategy.

Theoretical and practical works of great importance are being carried out in our republic in order to raise spirituality, improve the national education system, strengthen its national ground, bring it to the level of world standards based on the harmonization with the requirements of the times., great attention is paid to the training of competent, independent thinking, willing, selfless and initiative personnel.

Developmental education is an educational theory that ensures the educational, educational, spiritual, mental and physical development of students at a certain time, as well as their adaptation to society and life in a rapidly changing world. Every country thinking about its future should be able to purposefully direct all the social influences affecting the individual in the life of the society for the development of the person, for him to realize and express his identity. When developing educational technologies are used, the interest of students increases, knowledge turns into skills, and the quality of knowledge increases.

Educational technologies and methods that enhance teaching can be applied to almost all disciplines, including Engineering Geology. In this article, on the example of the phrase "intrusive and effusive" from the science of engineering geology, educational models are created, the specified goals are developed based on «Bloom's taxonomy», and the interactive methods «Venn diagram», «Cubic strategy» and «Sinkwein» are used on the example of the phrase «Intrusive and effusive rocks» on the subject. the content and essence of the topic is revealed during the teaching process. In addition, the use of the method of working in small groups was shown in the teaching of this subject.

1. **With the help of «Venn diagram»,** the signs or characteristics of 2 concepts that are unique and common to both are determined. Below is a Venn diagram for the concepts of Intrusive Rocks and Effusive Rocks:

Intrusive rocks	Commonalities and differences	Effusive rocks
Reasons for its formation: 1. ("intrusion" means that magma cools and solidifies in the lithosphere layer without reaching the surface of the earth). 2. Granite, granodiorite 3. Forms of intrusive rock formations Batholith, stock, laccolith, lopolyte, dyke, sill 4. Structure and texture of intrusive rocks - the student fills in	1. It is formed by solidification of various gaseous substances and water vapors at very high pressure and temperature. 2. Sour rocks SiO2 75-65% 75-65%. Feldspar, quartz, mica, fake ice 3. Occupies large areas. 4. The student finds common and different aspects of these rocks.	Reasons for its formation 1. (from the Greek "effusio" - poured out, overflowed), that is, it is formed from the solidification of magma that has erupted on the surface of the earth. 2. Liporite, quartz porphyry 3. Formations of effusive rocks Cover, dome 4. Structure and texture of effusive rocks - the student fills in

Completing the Venn diagram can be used as a basis for teacher assessment of how much knowledge a student has about a new topic and how well he has mastered the topic.

Apply the cube strategy.

A) **«Define». Intrusive** («intruzio»-cracking in place) means magma is formed by cooling and solidifying in the lithosphere layer without reaching the earth's surface. When magma cools and crystallizes in the deep part of the Earth's crust, under high pressure and temperature, the atoms and molecules that make up it are completely crystallized and fully crystalline rocks are formed, and they are called intrusive igneous rocks.

Effusive (from the Greek «effusio» - poured out, overflowed), that is, it is formed by the solidification of magma that has erupted on the surface of the earth. Effusive rocks are formed when magma erupts on the surface of the earth or solidifies at the bottom of seas and oceans. Volatile components in magma quickly disappear, low pressure and temperature cause it to solidify quickly. As a result, the rocks do not have time to fully crystallize. Because of this, some of the volcanic lava solidifies as crystalline, and some as amorphous. The part that has come to the surface is completely amorphous and hardens into a glassy color.

B**) «Compare».** The structure of intrusive rocks is fully crystallized (granular) because the magma solidifies very slowly in the deep layers of the earth's crust. Rocks are divided according to the size of the mineral particles. Coarse-grained (>5mm), medium-grained (1-5mm) and fine-grained (<1mm). Fine-grained rocks have a high degree of strength.

The structure of effusive rocks is very different from the structure of intrusive rocks. Porphyry structure. This type of structure is characteristic of

interveinal and effusive rocks, examples of which are porphyry and porphyrite. Basalt enters the medium crystalline structure, and the crystalline particles of the rock can be observed only through a microscope. Glassy and porous structure. As a result of the cooling of the magma, the mineral particles take a glassy flat amorphous form without having time to crystallize. An example of this group is volcanic glass, obsidian.

In most cases, **the texture of intrusive rocks** is massive (uniform, dense). Many cracks appear from the solidification of magma. As a result, the massifs of intrusive rocks are separated into separate pieces in various forms along the cracks. For example, basalt-pillar, granite-palaxa, diabase-ball form. Intrusive rocks have tectonic cracks and faults, weathering cracks, and other types of cracks, in addition to individual cracks.

The texture of effusive rocks is characterized by massive, porous, slag and almond appearance. Effusive igneous rocks are prone to cracks like intrusive rocks. Due to the solidification of the lava, it has vertical and horizontal cracks, its mass is divided into separate pieces in various forms along the cracks. Discrete fractures reduce the strength of rock masses and increase water permeability

V) **«Association».** Typical representatives of superbasic rocks are dunite, peridotite and pyroxenite. The basic rocks are composed of gabbro, labradorite, basalt and diabase. Typical representatives of medium rocks include syenite, diorite, trachyte, andesite, porphyry with feldspar, porphyrite, and granite, rhyolite, and quartz porphyry. Metamorphic rocks consist only of pegmatites. Rock-forming minerals, which make up about 99% of the total composition of igneous rocks, include quartz, potassium feldspars, plagioclase, leucite, nepheline, pyroxenes, amphiboles, micas, and olivine.

G) **«Analysis»** The formation of intrusive and effusive rocks has its own characteristics and differs from each other in terms of structure and texture.

3. Syncway - the interactive method helps to develop students' thinking ability based on a different approach to the problem in the process of disseminating and summarizing information.

1. ___ noun (who, what);
2. ___ ___ quality (how, what);
3. ___ ___ ___ verb (task, function);
4. ___ ___ ___ association (imagination, what came to mind)
5. Synonym (similarity) of the noun ___.

For example: let's make a sinquevein for the phrase "Granite":

1. "Intrusive rock"
2. Mainly composed of quartz and feldspar;
3. Basic raw materials in construction;
4. Fully crystallized;
5. Granodiorite

In conclusion, it can be said that the use of Venn diagram, "Cubic strategy" and "Sinquain" interactive methods from educational technologies that develop

students in the process of teaching serves as the main factor for students to master the subject well.

References:

1. Мамадалиев, А. Т. (2023). ФАВҚУЛОДДА ВАЗИЯТЛАР ВА ФУҚАРО МУҲОФАЗАСИ ФАНИНИ ЎҚИТИШДА ИНТЕРФАОЛ УСУЛЛАРДАН ФОЙДАЛАНИШ ИМКОНИЯТЛАРИ. Экономика и социум, (1-2 (104)), 365-372.

2.Tukhtamirzaevich, M. A. (2023). Interactive educational methods in teaching the subject of physicochemical properties of minerals. Scientific Impulse, 1(6), 1718-1725.

3.Tukhtamirzaevich, M. A. (2023). Possibilities of Using New Pedagogical Technologies in Teaching the Subjects of Emergency Situations and Civil Protection. Web of Synergy: International Interdisciplinary Research Journal, 2(2), 451-457.

4.Tukhtamirzaevich, M. A. (2022). NATURALLY OCCURRING CARBONATE MINERALS AND THEIR USES. Scientific Impulse, 1(5), 1851-1858.

5.Mamadaliyev, A. T., & Bakhriddinov, N. S. (2022). Teaching the subject of engineering geology on the basis of new pedagogical technology. Scientific Impulse, 1(5).

6.Мамадалиев, А. Т. (2023). КАРБОНАТНОЕ МИНЕРАЛЬНОЕ СЫРЬЕ И ИХ ЗНАЧЕНИЕ В НАРОДНОМ ХОЗЯЙСТВЕ. Modern Scientific Research International Scientific Journal, 1(4), 46-57.

7. Tukhtamirzaevich, M. A. (2022, December). DIMENSIONS AND JUSTIFICATION OF OPERATING MODES FOR PANING DEVICE OF HAIRED COTTON SEEDS WITH MACRO AND MICRO FERTILIZERS. In International scientific-practical conference on" Modern education: problems and solutions" (Vol. 1, No. 5).

8. Tukhtamirzaevich, M. A. (2023). SPIRITUAL PREPARATION OF THE POPULATION WHEN EMERGENCY SITUATIONS OCCUR. PEDAGOG, 6(6),84-93

9.Мамадалиев, А. Т. (2022, December). ИНЖЕНЕРЛИК ГЕОЛОГИЯСИ ФАНИ МАВЗУСИНИ ЯНГИ ПЕДАГОГИК ТЕХНОЛОГИЯ АСОСИДА ЎҚИТИШ. In Proceedings of International Educators Conference (Vol. 1, No. 3, pp. 494-504).

9.Бахриддинов, Н. С., & Мамадалиев, А. Т. (2023). ИСПОЛЬЗОВАНИЯ ИНТЕРАКТИВНЫХ МЕТОДОВ В ОБУЧЕНИИ ТЕМЫ «ПРОМЫШЛЕННАЯ ПЫЛЬ» И «ПРОМЫШЛЕННЫЕ ЯДЫ». World of Science, 6(7), 32-40.

10.Мамадалиев, А. Т., & Ахунов, Д. Б. (2023). Минералогия, кристаллография ва кристаллокимё фани мавзусини интерфаол таълим методлари асосида ўқитиш. PEDAGOG, 6(3), 63-73.

11.Tukhtamirzaevich, M. A., Karimov, I., & Sadriddinovich, B. N. (2022). TEACHING THE SUBJECT OF ENGINEERING GEOLOGY ON THE BASIS OF NEW PEDAGOGICAL TECHNOLOGY. Scientific Impulse, 1(5), 1064-1072.
12.Мамадалиев, А. Т. (2023). МИНЕРАЛЛАРНИНГ ФИЗИК КИМЁВИЙ ХУСУСИЯТЛАРИ МАВЗУСИНИ ИНТЕРФАОЛ ТАЪЛИМ МЕТОДЛАРИ АСОСИДА ЎҚИТИШ. STUDIES IN ECONOMICS AND EDUCATION IN THE MODERN WORLD, 2(4).
13.Мамадалиев, А. Т. (2023). ПРЕПОДАВАНИЕ ТЕМЫ “ФИЗИКО-ХИМИЧЕСКИЕ СВОЙСТВА МИНЕРАЛОВ” НА ОСНОВЕ ИНТЕРАКТИВНЫХ ОБРАЗОВАТЕЛЬНЫХ МЕТОДОВ. Экономика и социум, (2 (105)), 789-794.
14.Мамадалиев, А. Т. (2023). ЧЎКИНДИ ТОҒ ЖИНСЛАРИ МАВЗУСИНИ РИВОЖЛАНТИРУВЧИ ТАЪЛИМ ТЕХНОЛОГИЯЛАРИ АСОСИДА ЎҚИТИШ. SO ‘NGI ILMIY TADQIQOTLAR NAZARIYASI, 6(7), 57-67.
15.Мамадалиев, А. Т. (2023). МАГМАТИК ТОҒ ЖИНСЛАРИ МАВЗУСИНИ РИВОЖЛАНТИРУВЧИ ТАЪЛИМ ТЕХНОЛОГИЯЛАРИ АСОСИДА ЎҚИТИШ. WORLD OF SCIENCE, 6(12), 136-144.

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JARROHLIK BO'LIMIDAGI TIBBIY XODIMLARIDAN AJRATILGAN STAFILOKOKKLARNING TARQALISHI VA BIOLOGIK XUSUSIYATLARI

Annotatsiya. Jarrohlik bo'limlari va tug'ruqxonalarning tibbiyot xodimlari orasida patogen stafilokokklarni tashish, ko'plab tadqiqotchilarning fikriga ko'ra, ko'pincha jarrohlik amaliyotidan keyingi asoratlarni keltirib chiqaradigan tillarang stafilokokkning asosiy manbai hisoblanadi. Shu bilan birga, turli toifadagi tashuvchilarning epidemiologik noaniqligini yodda tutish kerak. Jami 200 kishidan ajratilgan stafilokokklarning jami 747 kulturasi o'rganildi. Barcha tekshirilganlar tashuvchilar toifalariga bo'lingan: 49 kishi 1-guruh tashuvchilarga, 31 kishi 2-guruhga biriktirilgan (ular S. aureus, fagotiplarda farq qiladi); 3-guruhda - 50 kishi. 70 kishida stafilokokklar bir marta ham ajratilmagan.

Kalit so'zlar: kultura, tillarang stafilokokklar, S. aureus, fagotip, koagulaza-musbat shtammlar, sezuvchanlik, pathogen, antibiotiklar.

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DISTRIBUTION AND BIOLOGICAL CHARACTERISTICS OF STAPHILOCOCCI ISOLATED FROM MEDICAL STAFF IN THE SURGERY DEPARTMENT

Abstract. Carriage of pathogenic staphylococci among medical staff of surgical departments and maternity hospitals is, according to many researchers, the main source of staphylococcus aureus, which often causes complications after surgery. At the same time, the epidemiological uncertainty of different categories of carriers should be kept in mind. A total of 747 cultures of staphylococci isolated from 200 people were studied. All the examined were divided into carrier categories: 49 people were assigned to group 1 carriers, 31 people were assigned to group 2 (they differ in S. aureus, phagotypes); In group 3 - 50 people. In 70 people, staphylococci were not isolated even once.

Key words: culture, staphylococci aureus, S. aureus, phagotype, coagulase-positive strains, sensitivity, pathogen, antibiotics.

Kirish: Staphylococcus aureus ning sog'lom tashuvchilar tomonidan tashilishi ushbu mikroblar keltirib chiqaradigan infektsiyalar epidemiologiyasining eng muhim omillaridan biridir [1]. Jarrohlik bo'limlari va tug'ruqxonalarning tibbiyot xodimlari orasida patogen stafilokokklar tashuvchisi, ko'plab tadqiqotchilarning fikriga ko'ra, operatsiyadan keyingi asoratlarni keltirib chiqaradigan S. aureusning asosiy manbai hisoblanadi [2-4]. Shu bilan birga, turli toifadagi tashuvchilarning epidemiologik noaniqligini yodda tutish kerak [5]. Infektsiyaning asosiy manbalarining roli klinikalar xodimlari orasidan "kasalxona shtammlari" ning doimiy yoki rezident tashuvchilariga tegishli [4, 6].

Tadqiqotning maqsadi. Tibbiyot xodimlari orasida S. aureus tashuvchisining tarqalish chastotasini aniqlashdir.

Materiallar va usullar. Samarqand tumani QFY poliklinikasida faoliyat yuritayotgan 200 kishini 3 marta ko'rikdan o'tkazdik. Materialni olish pastki burun yo'llarining shilliq qavatidan steril paxta tomponi bilan amalga oshirildi va tuxum sarig'ig'ining tuzli agariga (TSTA) ekildi. 37°C haroratda 48 soat termostatda saqlangandan so'ng, stafilokokklarning massiv o'sishi qayd etildi va biologik xususiyatlarni keyinchalik o'rganish uchun alohida koloniyalar (2-3) joylashtirildi. Barcha ajratilgan shtammlarda plazmokoagulaza faolligi aniqlandi, so'ngra koagulazopozitiv shtammlar quyidagi biologik xususiyatlar bo'yicha o'rganildi: lesitovitellaza, DNaza, gemolizinlar, lizotsimga o'xshash ferment ishlab chiqarish, ko'p valentli faglarning Xalqaro to'plamining stafilofaglari tomonidan kulturalarning fag-lizabilligi, shuningdek, standart disklar usuli bilan 7 ta antibiotikga sezgirligi. Tanlangan shtammlar to'plamining bir qator biologik xususiyatlarini aniqlashda biz etalon yoki standart shtampidan foydalandik; antibiogrammani aniqlashda kulturalarni tezlashtirilgan ekish usuli qo'llanilgan.

Natijalar va muhokama. Jami 200 kishidan ajratilgan 747 stafilokokk kulturasi o'rganildi. Tekshirilganlarning barchasi tashish toifalariga bo'lingan. 49 (24,5%) kishi 1-guruhdagi "o'ta xavfli" tashuvchilarga kiritilgan. Ushbu shaxslarda 1,5–2 oylik interval bilan 3 martalik tekshiruv vaqtida, xuddi shu fagotipdagi S. aureus aniqlangan. 2 - guruhda - "doimiy" tashuvchilar – 31 (15,5%) kishi, ularning fagotiplari bilan ajralib turadigan S. aureus ajratilgan. 3-guruhi "Vaqtinchalik" tashuvchilar 50 (25%) kishidan iborat edi. 70 (35%) odamda stafilokokklar bir marta ham ajratilmagan. Tekshiruvdan o'tgan shaxslarni kasbiga qarab tashish toifalari bo'yicha taqsimlanganda shifokorlar orasida 43 (33,1%) tashuvchilar, 64 (49,2%) hamshiralar va 23 (17,7%) kichik tibbiyot xodimlari borligi ma'lum bo'ldi. "o'ta xavfli" tashuvchilar guruhi 45,5% shifokorlar, 33,7% hamshiralar va 20,8% kichik tibbiyot xodimlaridan iborat; "doimiy" - 40,2% shifokorlar, 30,9% hamshiralar va 29,4% kichik tibbiyot xodimlari. Shunday qilib, "o'ta xavfli" tashuvchilarning eng katta qismi shifokorlarga, "doimiy" tashuvchilar - kichik tibbiyot xodimlariga to'g'ri keladi. 130 ta tashuvchidan S. aureusning 320 shtammi ajratildi va o'rganildi, shu jumladan, 155 tasi "o'ta xavfli" tashuvchilardan, 88 tasi "doimiy" va 77 tasi "vaqtinchalik" tashuvchilardan. "O'ta xavfli" tashuvchilardan ajratilgan

shtammlar biologik faollikka ega bo'lish ehtimoli ko'proq edi. DNAaza faolligi, α - gemolizinlar ishlab chiqarish, shuningdek, lesitovitellaza va plazmakoagulaza faolligi o'rtasida korrelyatsiya qayd etildi. “Doimiy” va “vaqtinchalik” tashuvchilardan ajratilgan shtammlar biologik xossalari bo‘yicha kamroq faol bo‘lgani aniqlandi.

Xulosa. Shunday qilib, " o’ta xavfli " tashuvchilarning eng katta qismi shifokorlarga, "doimiy" tashuvchilar - kichik tibbiyot xodimlariga to'g'ri keladi. 130 ta tashuvchidan S. aureusning 320 shtammi ajratilgan va o‘rganilgan, shu jumladan “o’ta xavfli” tashuvchilardan 155 ta, “doimiy” tashuvchilardan 88 ta, “vaqtinchalik” tashuvchilardan 77 ta. “O’ta xavfli” tashuvchilardan ajratilgan shtammlar ko‘proq biologik faollikka ega bo‘lgan. DNAaza faolligi, α - gemolizinlar ishlab chiqarish, shuningdek, lesitovitellaza va plazmakoagulaza faolligi o'rtasida korrelyatsiya qayd etildi.

Adabiyotlar:

1. Мамарасулова Н.И. Распространение и биологические свойства стафилококков, выделенных от медицинского персонала хирургических клиник. Бактериология. 2022; 7(2): 39–41. DOI: 10.20953/2500-1027-2022-2-39-41
2. Одилова Г., Шайкулов Х., Юсупов М. Клинико-бактериологическая характеристика стафилококковых диарей у детей грудного возраста //Журнал вестник врача. – 2020. – Т. 1. – №. 4. – С. 71-74.
3. Одилова, Г.., Мамарасулова, Н.., Саидов, С.., Турдиев, Ш.., Холбоев, Р.., & Хамраев, Г.. (2022). СЫВОРОТОЧНЫЕ ИММУНОГЛОБУЛИНЫ ПРИ САЛЬМОНЕЛЛЕЗНОЙ ИНФЕКЦИИ У ДЕТЕЙ. Eurasian Journal of Academic Research, 2(11),1197–1199. Извлеченоот https://inacademy.uz/index.php/ejar /article/view/8830
4. Одилова, Г. М., Рустамова, Ш. А., Мамарасулова, Н. И., & Болтаев, К. С. (2019). Клинические особенности течения ветряной оспы у взрослых в современных климатических условиях. Вопросы науки и образования, (28 (77)), 70-78.
5. Sultonovich, B. K., Isrofilovna, M. N., Abdusalomovna, J. F., & Olimovna, O. P. (2022). A comparative study of nematoda facilities of shortage plants and trees in zarafshan forest biotopes. Academicia Globe: Inderscience Research, 3(5), 1-5.
6. Sultonovich, B. K., Abdusalomovna, J. F., Isrofilovna, M. N., Mansurovich, U. F., & Sultanovich, K. (2022). A COMPARATIVE STUDY OF NEMATODA-FAUNA OF PASTURAL PLANTS IN FOREST BIOTOPES. Academicia Globe: Inderscience Research, 3(05), 41-45.
7. Хужакулов, Д. А., Юсупов, М. И., Шайкулов, Х. Ш., & Болтаев, К. С. (2019). Состояние внешнего дыхания у больных детей со среднетяжелым течением пищевого ботулизма. Вопросы науки и образования, (28 (77)),79-86.

8.ЭКОЛОГИЧЕСКОЕ ГРУППИРОВАНИЕ НЕМАТОДОФАУНЫ ТУГАЙНЫХ РАСТЕНИЙ КС Болтаев, к. б. н., доц., СамГМИ, Самарканд ФА Жамалова, ассистент-стажер, СамГМИ, Самарканд НИ Мамарасулова, ассистент-стажер, СамГМИ, Самарканд //ХОРАЗМ МАЪМУН АКАДЕМИЯСИ АХБОРОТНОМАСИ. – 2021. – С. 33.
9. Sh, S. H., & Mamarasulova, N. I. (2023). ANTIBIOTIKLAR VA ANTIBIOTIKOREZISTENT LAKTOBAKTERIYALARNI BIRGALIKDA BOLALARDAGI ESHERIXIOZ KASALLIKLARNI DAVOLASHDA QO ‘LLANISHI.
10. Sh, Shayqulov H., and N. I. Mamarasulova. "O ‘TKIR DIAREYALARDA ESHERIXIYALARNING AJRALISHI." (2023).
11. Shodiyeva, D. G., Annayev, M. G. o‘g‘li, Mamarasulova, N. I., & Odilova, G. M. (2023). BERBERIS INTEGERRIMA BUNGENING IKKILAMCHI METABOLITLARINING DORIVORLIK XUSUSIYATLARI VA BIOTEXNOLOGIK AHAMIYATI. GOLDEN BRAIN, 1(10), 33–43. Retrieved from https://researchedu.org/index.php/goldenbrain/article/view/2998

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MANTIQ FALSAFASI

Annotatsiya: Ushbu maqolada mantiq falsafasiga har tamonlama yondashilgan uning tafakkur bilan bog'liqligi fanlar bilan bog'liqligi yoritilgan. Maqolada mantiq falsafasining mazmun-mohiyati yoritilib berilgan. Shuningdek, to'g'ri fikrlash, to'g'ri xulosa chiqarish va mantiqiy haqiqat muammosini òz ichiga olgan. Mantiq falsafasining tarixiy taraqqiyoti ham keng mushohada etilgan. Ushbu maqolada mantiq falsafasi haqida adabiyotlardan foydalanilgan holda keng ma'lumotlar berib o'tilgan.

Kalit so'zlar: Dekart, Metallogiya, Mantiq, Ontologiya, E. Yu. Yusupov.

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PHILOSOPHY OF LOGIC

Abstract. In this article, a comprehensive approach to the philosophy of logic, its connection with thinking, and its connection with science are highlighted. The article describes the essence of the philosophy of logic. It also includes the problem of correct reasoning, correct reasoning, and logical truth. The historical development of the philosophy of logic is also widely observed. This article provides extensive information about the philosophy of logic using literature.

Key words: Descartes, Metallogy, Logic, Ontology, E. Yu. Yusupov.

Kirish: Mantiq falsafasi, XX-asrda turli xil mantiqiy rasmiy tizimlar,

Mantiq falsafasi - mantiqning koʻlami va tabiatini oʻrganadigan falsafa sohasi.asosan, umumiy va yakka tushunchalarning oʻzaro munosabati doirasida oʻrganildi. Yangi davrda R. Dekart, F. Bekon, T. Gobbs, V. Leybnits va boshqa mantiq ilmi turli yoʻnalishlarining yaratilishiga asos soldilar.

U mantiq tomonidan koʻtarilgan falsafiy muammolarni, masalan, mantiq nazariyalarida va ularni qoʻllashda koʻpincha bilvosita ishlaydigan prezaziyalarni oʻrganadi. Bu mantiqni qanday aniqlash kerakligi va turli mantiqiy tizimlar bir-biri bilan qanday bogʻlanganligi haqidagi savollarni oʻz ichiga oladi. U mantiq tomonidan qoʻllaniladigan fundamental tushunchalarning tabiatini va mantiqning boshqa fanlar bilan aloqasini oʻrganishni oʻz ichiga oladi. Umumiy tavsifga koʻra, falsafiy mantiq mantiq falsafasining falsafiy muammolarga mantiqiy usullarni qoʻllashni oʻrganadigan qismi boʻlib, koʻpincha modal mantiq kabi kengaytirilgan mantiqiy tizimlar shaklida. Ammo boshqa nazariyotchilar mantiq falsafasi va falsafiy mantiq oʻrtasidagi farqni boshqacha koʻrsatadilar yoki

umuman yo‘q. Metallogiya mantiq falsafasi bilan chambarchas bog‘liqdir, chunki mantiqiy tizimlarning izchillik va to‘liqlik kabi xususiyatlarini o‘rganadi. Akademik adabiyotlarda mantiq tabiatining turli tavsiflari mavjud.

Mantiq ko‘pincha fikrlash qonunlari, to‘g‘ri fikrlash, to‘g‘ri xulosa chiqarish yoki mantiqiy haqiqatni o‘rganish sifatida qaraladi. Bu rasmiy fan bo‘lib, xulosalar mavzudan neytral tarzda, ya’ni muhokama qilinadigan aniq mavzudan mustaqil ravishda qanday qilib binolardan kelib chiqishini o‘rganadi. Mantiqning tabiatini o‘rganishning shakllaridan biri turli mantiqiy rasmiy tizimlar o‘rtasidagi umumiyliklarga va ularning mantiqiy bo‘lmagan rasmiy tizimlardan qanday farq qilishiga qaratilgan. Bu boradagi muhim mulohazalar, ko‘rib chiqilayotgan rasmiy tizim fundamental mantiqiy sezgilarga mos keladimi yoki to‘liqmi. Mantiqning turli xil tushunchalari mantiqni to‘g‘ri xulosani yoki mantiqiy haqiqatni o‘rganish sifatida belgilaydimi-yo‘qligiga qarab farqlanishi mumkin. Mantiq tushunchalari orasidagi yana bir farq sintaksis yoki semantika nuqtai nazaridan to‘g‘ri xulosa va mantiqiy haqiqat mezonlari aniqlanganligiga asoslanadi. Mantiq falsafasi mantiqning asosiy tushunchalarining tabiati va falsafiy oqibatlarini ham o‘rganadi. Bu haqiqat muammosini, ayniqsa, mantiqiy haqiqat muammosini o‘z ichiga oladi, bu faqat ishlatiladigan mantiqiy atamalarning ma’nolariga qarab haqiqat sifatida belgilanishi mumkin. Yana bir savol, binolar va xulosalarning tabiati, ya’ni ularni fikr, mulohazalar yoki jumlalar sifatida tushunish kerakmi va ular qanday qilib oddiyroq tarkibiy qismlardan tuzilganligi bilan bog‘liq. Binolar va xulosa birgalikda xulosani tashkil qiladi, u haqiqatni saqlovchi yoki yangi va ehtimol yolg‘on ma’lumotlarni kiritishiga qarab deduktiv va amplativ bo‘lishi mumkin.

Mantiqdagi asosiy masala deduktiv xulosaning haqiqiy yoki noto‘g‘ri ekanligi. Haqiqiylik ko‘pincha zarurat nuqtai nazaridan aniqlanadi, ya’ni xulosa faqat va agar asoslarning to‘g‘ri bo‘lishi mumkin bo‘lmasa va xulosa noto‘g‘ri bo‘lsa, haqiqiy hisoblanadi. Boshqa tomondan, noto‘g‘ri xulosalar va dalillar o‘z xulosalarini tasdiqlay olmaydi. Ular rasmiy yoki norasmiy mantiqqa tegishli ekanligiga qarab rasmiy yoki norasmiy noto‘g‘ri deb tasniflanishi mumkin Mantiq asosan aniqlovchi qoidalar bilan, ya’ni argumentning to‘g‘ri yoki noto‘g‘riligini qaysi xulosa qoidalari aniqlaydi, degan savol bilan shug‘ullangan. So‘rovning alohida mavzusi mantiqning strategik qoidalariga taalluqlidir: ma’lum binolar to‘plamini hisobga olgan holda mo‘ljallangan xulosaga qanday erishishni tartibga soluvchi qoidalar, ya’ni u erga kelish uchun qanday xulosalar chiqarish kerak.

Mantiq metafizikasi mantiq qonunlari va ob’ektlarining metafizik holati bilan bog‘liq. Bu sohadagi muhim bahs mantiq ongdan mustaqil bo‘lgan faktlarga asoslanadi, deb hisoblaydigan realistlar bilan mantiq qonunlari tildan foydalanishni tartibga soluvchi konventsiyalarga asoslangan deb hisoblaydigan konventsionalistlar kabi antirealistlar o‘rtasida bo‘ladi. Mantiq turli fanlar bilan chambarchas bog‘liq. Ontologiya bilan bog‘liq asosiy masala mantiqdan foydalanish bilan bog‘liq ontologik majburiyatlarga taalluqlidir, masalan;;alohida

atamalar va ekzistensial kvantlar bilan. Matematikadagi muhim savol-barcha matematik haqiqatlarni to‘plamlar nazariyasi bilan birga mantiq aksiomalariga asoslash mumkinmi? Boshqa tegishli sohalarga kompyuter fanlari va psixologiya kiradi.

Yevropada mantiq masalalari, asosan, umumiy va yakka tushunchalarning o‘zaro munosabati doirasida o‘rganildi. Yangi davrda R. Dekart, F. Bekon, T. Gobbs, V. Leybnits va boshqa mantiq ilmi turli yo‘nalishlarining yaratilishiga asos soldilar. 18 — 19-asrlar falsafiy fikrida I. Kant va V. F. Gegel yaratgan mantiqiy tizimlar muhim o‘rin tutadi. Gegel fikricha, falsafa mantiq shaklida mavjud, uning o‘rganish ob’yektini tafakkur tashkil etadi. Mantiqning asosiy vazifasi haqiqatni aniqlash, unga erishish yo‘llarini o‘rganishdir. Mantiq tafakkurning namoyon bo‘lish shakllari va taraqqiyotini, shu jumladan, fikrlar o‘rtasidagi aloqadorlikni ko‘rsatadigan qonun qoidalar yig‘indisini o‘rganadi. Mantiqning vazifasi — chin fikrni, haqiqatni aniqlash. Mantiq ilmining o‘rganish ob’yekti tafakkurdir Tafakkur 3 xil shaklda: tushuncha, hukm (mulohaza) va xulosa chiqarish shaklida mavjud bo‘ladi. Muhokama yuritish ana shular va ularning o‘zaro aloqalarga kirishishi natijasida vujudga keladigan boshqa mantiqiy tuzilmalar (mas, muammo, gipoteza, nazariya, g‘oya va boshqalar)da amalga oshadi. Muhokama yuritishda ishonchli natijalarga erishishning zaruriy sharti qatoriga fikrning chin bo‘lishi va formal jihatdan to‘g‘ri qurilishi kiradi. O‘zi ifoda qilayotgan predmetga muvofiq keluvchi fikr — chin fikr deb ataladi (qarang Isbot).

Fikrni to‘g‘ri qurishga tafakkur qonunlari talablariga rioya qilgandagina erishish mumkin. Tafakkur qonunlari (qarang Ayniyat qonuni, Ziddiyat qonuni, Yetarli asos qonuni, Uchinchisi istisno qonuni) mu-hokama yuritish jarayonida fikrlar (fikrlash elementlari) o‘rtasidagi mavjud zaruriy aloqalardan iborat. Tafakkur ko‘p qirrali jarayon bo‘lib, uni turli tomondan, xususan, mazmuni va shakli (tuzilmasi) bo‘yicha yoki kelib chiqishi va taraqqiyotida olib o‘rganish mumkin. Bularning barchasi mantiq ilmining vazifasini tashkil etadi, uning turli metodlaridan (qarang Induksiya, Deduksiya) foydalanishga, har xil yo‘nalishga ajralishiga sabab bo‘ladi. Hozirgi paytda mantiqning formal mantiq, dialektik mantiq, matematik mantiq kabi yo‘nalishlari bor.

Formal mantiq tafakkur strukturasini fikrning anik, mazmuni va taraqqiyotidan chetlashgan holda, nisbatan mustaqil ravishda o‘rganadi. Uning diqqat markazida muhokamani to‘g‘ri qurish bilan bog‘liq qoidalar va mantiqiy amallar yotadi. Dialektik mantiq tafakkurni uning mazmuni va shakli birligida hamda taraqqiyotida olib o‘rganadi. Matematik mantiq tafakkurni matematik metodlar yordamida tadqiq etadi. U hozirgi zamon mat. sining muhim yo‘nalishlaridan biri bo‘lib, tafakkurni yuqori darajada abstraktlashgan va formallashgan sistemada tahlil qiladi. 20-asrda noan’anaviy mantiqning turli yo‘nalishlari, xususan, ko‘p qiymatli mantiqiy sistemalar (Y. Lukasevich, Geyting, Reyxenbaxning uch qiymatli mantiqiy sistemalari, Postning nqiymatli

mantiqiy sistemasi va shahrik.), konstruktiv mantiq lar (A. N. Kolmogorov, A. A. Markov variantlari) va modal mantiq kabi nazariyalar vujudga keldi va rivojlandi.

O‘zbekistonda mantiq masalalari bilan dastlab mantiq Mantiq Xayrullayev, E. Yu. Yusupov, V. Qobulov shug‘ullangan. Keyinchalik I. Rahimov, mantiq Sharipov, O. Imomxo‘jayeva, D. Fayzixo‘jayeva va boshqa mantiqga oid ilmiy izlanishlar olib borishdi.

Xulosa qilib shuni aytish mumkinki, juda keng hamda inson olaming eng asosiy usurlaridan biri hisoblanib, fikrlar o’rtasidaki aloqadorlikni ko’rsatadigan qonun qoidalar yig’indisi ekan.

Foydalanilgan adabiyotlar:

1.Xayrullayev mantiq Mantiq, Haqberdiyev mantiq, Logika, Toshkent, 1984.
2.Sharipov mantiq, Fayzixo‘jayeva D., Mantiq (ma’ruzalar matni), Toshkent, 2001.
3.O‘zME. Birinchi jild. Toshkent, 2000.
4.Рузавин Г.И., Таванец П.В. Основные этапы развития формальной логики //Философские вопросы современной формальной логики. - М., 1962.
5.Умаржонов, С. С. (2021). Ижтимоий фанларни ўқитишда Фахриддин Розий асарларининг ўрни ва аҳамияти. “Янги Ўзбукистон иқтисодиётини ривожлантиришнинг илмий инновацион йўналишлари” халқаро илмий-амалий анжумани мақолалар тўплами (2021-йил 21-ноябрь). – Т.: “IQTISODIYOT”,
6.. Safarov. M., Umarjonov, S. (2022). Matter of consciousness in the philosophy of Ar-Roziy and its current importance. WayScience,
7. Саифназаров. И, Умаржонов. С. (2022). Янги Ўзбекистонда давлат ва дин муносабатлари.

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TRIGONOMETRIYANING ASOSIY AYNIYATLARI

Annotatsiya. Ushbu maqolada zamonaviy ta’lim jarayoniga berilayotgan imkoniyatlar hamda trigonometriyaning asosiy ayniyatlari, misollarni yechish uchun berilgan formulalar haqida so’z boradi.

Kalit so’zlar: islohot, trigonometrik ayniyatlar, matematika, pedagog, trigonometriya.

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BASIC POINTS OF TRIGONOMETRY

Annotation: this article will talk about the opportunities given to the modern educational process, as well as about the main features of trigonometry, the formulas given for solving examples.

Keywords: reform, trigonometric identities, mathematics, educator, trigonometry.

“Matematika fanlar ichida shox,
uning sirlaridan bo’lingiz ogoh”.
Qori Niyoziy

Zamonaviy ta’limni tashkil etishga qo‘yiladigan muhim talablardan biri bu- ortiqcha ruhiy va jismoniy kuch sarf etmay, qisqa vaqt ichida yuksak natijalarga erishish hisoblanadi.

Qisqa vaqt ichida muayyan nazariy bilimlarni tahsil oluvchilarga yetkazib berish, ularda ma’lum faoliyat yuzasidan ko’nikma va malakalarni hosil qilish, shuningdek, tahsil oluvchilar faoliyatini nazorat qilish, ular tomonidan egallangan bilim, ko‘nikma hamda malakalar darajasini baholash o‘qituvchidan yuksak pedagogik mahorat shu bilan birga ta’lim jarayoniga nisbatan yangicha yondoshuvni talab etadi.

Bugungi kunda barcha sohalarda olib borilayotgan islohotlar natijasi ta’lim tizimi oldiga ham ulkan vazifalarni qo‘ymoqda. Ayni vaqtda matematika fanini rivojlantirish, iqtidorli yoshlar orasidan ushbu sohaning malakali kadrlarini tayyorlash, o‘sib kelayotgan yosh avlodni matematika o‘rganish bo‘yicha

xalqimizning tarixiy an’analariga sadoqat ruhida tarbiyalash, iqtidorli yoshlarning matematika faniga bo‘lgan qiziqishlarini oshirish maqsadida yurtimizda matematika faniga bo‘lgan e’tibor tobora kuchayib bormoqda.

Ushbu maqolada trigonometriyaning asosiy ayniyatlariga batafsil to’xtalamiz, **Trigonometriya** (yunonchadan "trigon" - uchburchak, "metrezis" - o'lchash so'zlaridan olingan bo'lib, o'zbek tiliga "uchburchaklarni o'chash" deya tarjima qilinadi) - matematikaning asosiy bo'limlaridan biri hisoblanib, uchburchak tomonlari va burchaklari orasidagi bog'lanishlar, trigonometrik funksiyalarning xossalari va ular o'rtasidagi bog'lanishlarni o'rganadi.25

Trigonometrik ayniyatlar – trigonometrik tenglik α burchagiga mos keluvchi barcha qiymatlar uchun ahamiyatga ega, ya’ni chap va o‘ng qismi o‘zaro teng ma’noga ega bo‘lgan trigonometriyaning asosiy bo‘limi.26

Trigonometrik ifodalarni qiymatini topish, soddalashtirish o‘quvchidan qisqa ko‘paytirish formulalarini, trigonometrik formulalarni va trigonometrik funksiyalarning qiymatlar jadvalini puxta bilishni talab etilsa, trigonometrik tenglama va tengsizliklarni yechish esa trigonometrik funksiyalarning xossalarini (aniqlanish va qiymatlar sohasini, o‘sish va kamayish oraliqlarini, davriyligini, juft-toqligini, eng katta va eng kichik qiymatini, nollarini va h.k.), tenglamani (tengsizlikni), eng sodda trigonometrik tenglama ko‘rinishiga keltirib, yechimlarini (yechimlar to‘plamini) topish formulalarini bilishni, tenglamani yechish jarayonida ildizlarning yo‘qolib ketish hollarini yoki begona ildizlarning paydo bo‘lib qolish hollarini tahlil qilishni talab etadi.

Asosiy Trigonometrik **ayniyatlar**:

№	Formula	Qiymatlar sohasi
1.1	$\sin^2\alpha+\cos^2\alpha=1$	$alpha$ (barcha qiymatlarda α ma’noga ega)
1.2	$\operatorname{tg}^2\alpha+1=\dfrac{1}{\cos^2\alpha}=\sec^2\alpha$	$\alpha\neq\dfrac{\pi}{2}+\pi n,\ n\in\mathbb{Z}$
1.3	$\operatorname{ctg}^2\alpha+1=\dfrac{1}{\sin^2\alpha}=\operatorname{cosec}^2\alpha$	$\alpha\neq\pi n,\quad n\in\mathbb{Z}$
1.4	$\operatorname{tg}\alpha\cdot\operatorname{ctg}\alpha=1$	$\alpha\neq\dfrac{\pi n}{2},\quad n\in\mathbb{Z}$

Qo‘shish va ayrish formulasi

25 https://uz.wikipedia.org/wiki/Trigonometriya
26 https://uz.wikipedia.org/wiki/Trigonometrik_ayniyatlar

№	qo‘shish va ayrish formulalar
2.1	$\sin(\alpha \pm \beta) = \sin\alpha\cos\beta \pm \cos\alpha\sin\beta$
2.2	$\cos(\alpha \pm \beta) = \cos\alpha\cos\beta \mp \sin\alpha\sin\beta$
2.3	$\operatorname{tg}(\alpha \pm \beta) = \dfrac{\operatorname{tg}\alpha \pm \operatorname{tg}\beta}{1 \mp \operatorname{tg}\alpha\operatorname{tg}\beta}$
2.4	$\operatorname{ctg}(\alpha \pm \beta) = \dfrac{\operatorname{ctg}\alpha\operatorname{ctg}\beta \mp 1}{\operatorname{ctg}\beta \pm \operatorname{ctg}\alpha}$

Trigonometiyaning yechimlari formulasi

- $\sin x = a.$

  Agarda $|a| > 1$ – haqiqiy yechimlari yo‘q.

  Agarda $|a| \leqslant 1 - x = (-1)^n \arcsin a + \pi n,, n \in \mathbb{Z}.$ da yechimga ega.

- $\cos x = a.$

  Agarda $|a| > 1$ – haqiqiy yechimlari yo‘q.

  Agarda $|a| \leqslant 1 - x = \pm \arccos a + 2\pi n,\ n \in \mathbb{Z}.$ da yechimga ega.

- $\operatorname{tg}\ x = a.$ da yechimga ega.

  $x = \operatorname{arctg}\, a + \pi n,\ n \in \mathbb{Z}.$ da yechimga ega.

- $\operatorname{ctg}\ x = a.$

  $x = \operatorname{arcctg}\, a + \pi n,\ n \in \mathbb{Z}.$ da yechimga ega.

Foydalanilgan adabiyotlar:

1. Algebra va analiz asoslari. Akademik litseylar uchun qo‘llanma (R.X.Vafoyev, J.X.Xusanov va boshqalar). - T.: O’qituvchi, 2003-368 b.
2. Algebra va matematik analiz asoslari. I k. Akademik litseylar uchun qo’llanma (A. Abduxamidov, A. Nasimov va boshqalar). - T.: O’qituvchi, - 2007. 462 b.
3. Matematika. I, II qism. Kasb-hunar kollejlari uchun qo’llanma (A. Meliqulov va boshqalar). - T.: 2003.

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EXPERIENCE OF SOME FOREIGN COUNTRIES IN THE APPLICATION OF CORRECTIONAL MEANS FOR CONVICTS

Annotation. In this article, the author covered the experience of some foreign countries in the application of correctional means for convicts.

The author notes that World experience shows that in many foreign countries, the issues of the development and implementation of the most effective, at the same time, promising methods and methods of influencing convicts serving the sentence of imprisonment have been solved in different ways.

In particular, in Finland, Switzerland, the Federal Republic of Germany, the United Kingdom and the United States, rich practical experience has been accumulated in the formation of various systems of penal institutions and bodies, the development and application of scientifically based methods of dealing with convicts during the period of serving sentences, categorization of convicts and a differentiated approach to them.

Key words: reforming the judicial system, types of jails, convict, place of residence of convicts, nutrition of convicts, material and household provision, primary need, provision of clothing, criminal liability measures.

In the years of independence, measures to liberalize the penal system and expand the use of convicted Correctional means are considered by the leadership of our country as an issue of enormous social and socio-political importance. This, in turn, assumes the solution of the task of improving the moral correction of the convicted person and studying, analyzing the experience of foreign countries in this area, if necessary, applying the positive aspects of the experience in our republic as well.

World experience shows that in many foreign countries, the issues of the development and implementation of the most effective, at the same time, promising methods and methods of influencing convicts serving the sentence of imprisonment have been solved in different ways.

In particular, in Finland, Switzerland, the Federal Republic of Germany, the United Kingdom and the United States, rich practical experience has been accumulated in the formation of various systems of penal institutions and bodies, the development and application of scientifically based methods of dealing with convicts during the period of serving sentences, categorization of convicts and a differentiated approach to them.

In Finland, the system of stays is under the Ministry of Justice, with a total of 23 stays (17 in closed form and 6 in open form) in the country as of 2005, and 36 institutions holding about 3,000 prisoners in total. In addition, a mental health

hospital for convicts and a turma hospital operate in Turku. The number of storage space in the stands is 3,438, of which 29% falls on open facilities. The number of employees is 2,544 people, 599 Finnish marks ($90.8) are spent on one convicted person per day, and every one hundred thousand inhabitants (Finnish population is 5 million. person) there are 46 convicts. Closed-type stands hold an average of 50 to 250 convicts, open-type stands hold 16 to 31 convicts, and vary according to order type as follows:

- tightly ordered (enhanced security);
– General Order (Safety average);
- open stands.

Strict supervision of convicts is established in strict orderly stands, which are kept in complete isolation from society and other convicts.

In general-order stands, convicts can communicate among themselves. At the same time, within the framework of the turma area, it is allowed to walk on the watch of Supervisors.

In open stands, no special engineering and technical devices have been additionally built to prevent convicts from escaping (there are fences and iron bars, of course), convicts live in chamber-view rooms with door keys in them, have the opportunity to freely move around the territory of the institution and walk in clothes of a civil pattern.

Each convict is placed in separate cells with a bed, table, chair, wardrobe for personal clothing, shower and toilet, and is allowed to use television, tape recorder, book, educational equipment, computer games.

Each penal institution under the Ministry of Justice of Finland employs one to three welfare workers and psychologists. Although the state of welfare workers was introduced in the 40s of the 20th century, it was not until 40 years later that training in this specialty was established.

In Finland, like all skandivanian countries, convicts must engage in socially useful activities: work or study, and in both cases are paid by the state. The working day is set at 40 hours a week. Production mainly covers the areas of metalworking, construction, agriculture, handicrafts and daily work in the institution. The organization and establishment of training courses is carried out by the social welfare workers of Thurman in cooperation with local authorities. On Saturday and Sunday, convicts rest like citizens of the country. There are also such types that convicts are only on the land at night, work in normal production enterprises, like other citizens during the day, or are educated in educational institutions.

The training of convicts is officially carried out according to the general legislation of the state of Finland on secondary and Secondary Education. However, the leadership of the penitentiary system of the country is looking for new forms and methods of education by organizing special training courses for convicts and developing specific training programs. About 50% of the financial costs for convict education are borne by the bodies of the maorif and the

municipality (the administration that governs cities and villages itself), and the rest by the administration of turma.

The task of training qualified personnel for the tours is assigned to the training center of employees of the penitentiary institution, which is considered the leading (at the same time the only) educational institution of the Ministry of Justice of Finland and has been operating since 1976.

The procedure for submitting and receiving documents to the educational center is carried out on the basis of the general requirements for the country's educational system, and those who have successfully passed the entrance exams are issued the usual document (student certificate) introduced. Enrolments are also required to have the same age (not younger than 19 years), health (physically healthy), education (at least the second stage of general education or high school education) and other qualities as in other states. The base courses of the training center are completed annually by an average of 40-60 cadets, and the average age of learners is 24-26 years, or one in three, by women.

From 1988 to 2005, only 10% of total applicants with different professions who applied with the desire to study at the training center were enrolled. The duration of study consists of 40 Study weeks, including theoretical and practical training, as well as 13 weeks of work practice.

In addition, more than 100 different types of seminar sessions are organized during the year in order to improve the qualifications of the staff of the tour.

It is worth saying that Finland has long been progressive in the organization of the execution of punishment in the history of deprivation of liberty, and at the same time it is a state where it is possible to study its advanced experience in this area. In Finnish law, it is noted separately that the conditions for keeping convicts in a dwelling should not differ in any way from the way of life in their liberation. At the same time, it is a notable aspect that the sentence of imprisonment in Finland is considered one of the most severe types of punishment, and it is not advisable to aggravate it again with some kind of behavior that looks degrading to human dignity [1].

We should note that Switzerland is a state with several common features, at the same time with special differences, as in other European countries, regarding the organization of the execution of punishment in the subject of deprivation of Liberty. One of the main differences is that this state does not have a single criminal-executive legislation.

In total, the administration of the estates in 26 counts (provinces) [2] in Switzerland sets the rules of procedure for organizing the execution of punishment in the history of deprivation of Liberty based on restrictions in criminal law, the only one for the country [3].

Convicts sentenced to imprisonment are kept in cells with small windows, which are not very large and are designed for one person (many people do not have molded cameras). It is allowed to store TV and music apparatus in the cells where convicts, showing themselves from positive behavior, are kept. Convicts

can rent these apparatus from the turma administration, paying 20 Swiss francs (about US $ 10) per month. About 30 programs are broadcast on television in German, French and Italian.

In case of violation of regime requirements by the convict (when evading forced labor, violating the agenda), the turma administration, as a disciplinary punishment, can deprive him of the right to watch TV shows. Convicts are kept in cells only at night. The rest of the time (8 hours of working day and one and a half hours of lunch time are introduced) is involved in production and study. The extreme modernity of production equipment and equipment has a positive effect on the quality of the products being prepared, in turn, competitiveness.

One of the peculiarities in the organization of convict labour in Switzerland is that one sector of production, like in other states, is not monopolized (for example, forestry or wood processing, like in Russia, metal processing, like in Finland, etc.k.). Convicts work mainly in not very large workshops, and given the interest and aspiration of convicts, they are taught the necessary professions, and the main purpose of this should serve and contribute to the search for their future lives with the help of the professions that the convicts occupy even after their release.

Analysis of the literature shows that in recent years, the average monthly salary of each convicted person serving a sentence in the ranks of deprivation of Liberty in Swiss settlements was US $ 60. Convicts were allocated to detachments, and it was established that the number of convicts in each detachment would not exceed 30 men. Ensuring the safety of the Jail does not cause much difficulty even because it is done by observing the entire jail area using telecamera.

The involvement of convicts ' free time in socially useful activities is a constant focus of the turma administration, this activity is carried out by the involvement of convicts in forced labor, the establishment of general and vocational education, the implementation of sports, religious – spiritual and similar activities. Of those shown, only Labour is compulsory for convicts, and may volunteer for the rest. In Swiss law, the active participation of convicts in such activities plays a leading role in determining their positive behavior, determining the degree of moral recovery, and increases the possibility of early parole of a convict [4].

In addition, the active participation of convicts in programs for treatment courses against alcoholism, drug addiction or poisoning, in programs at the stage of preparation for release, in religious-spiritual programs is also the basis for stimulation.

It should be noted that in Switzerland, when attracting convicts with socially useful activities, high-level equipped sports fields, schools, prayer rooms and existing libraries filled with literature written in different languages are used productively. The peculiarity of the activities of the country's system of

derivatives is that serious attention is paid to the life of convicts not only in the process of serving their sentence, but also in their lives after their release [5].

The experiences accumulated in the Federal Republic of Germany regarding the organization of the execution of punishment in the history of deprivation of Liberty have been recognized by most countries in Europe for their large number of positive aspects. The country's penal system is part of the Ministry of Justice, one of the specific aspects of which is the use of social assistance personnel, priests and psychologists as the main specialists in the conduct of measures of interaction with convicts. One of the main principles in the activities of these employees is the fact that in the process of working with convicted convicts sentenced to imprisonment, they sooner or later, anyway, realized and recognized that they would return to society and become its equal member. Another consideration is that the role of religion in penal institutions in the history of deprivation of Liberty is of paramount importance. That is why each penal institution has its own Catholic and protestant priest, who continue their assistance to the convicts even after they are released [6].

From the experience of the Germans it is possible to know that, as in other areas, long-sighted work is carried out in attracting convicts who are held in penal institutions to socially useful activities. In particular, convicts are trained in highly qualified specializations such as atomic reactor welder, automatic line tuner, and the main purpose of this is to be able to easily work in high-tech-based production enterprises once the convict is released. That is why correctional institutions in Germany are practically a place for preparing a reserve of highly qualified personnel, and this thing, as German experts believe, increases the chances of preventing relapse crime.

In addition, the turma administration is in close cooperation with Labor exchanges and conducts an in-depth study and analysis of what specialists are in great need in the labor market, in which areas there is a need for qualified labor in the future, and other similar issues.

Serious emphasis is also placed on the education and vocational training of convicts in Jail. Trained convicts are conditionally divided into the following two categories:

- illiterates studying in elementary education (reading, writing, arithmetic) courses;
- literates who receive education on reduced programs of general education.

In recent years, there has been a growing interest in the introduction of distance (long-distance) training in German residential communities. This, in fact, makes it possible to realistically master the training programs that are given through the telemarkets of several European countries by convicts. At the same time, the isolation of convicts from society when passing tests and exams in distance learning is causing some complications. The period of serving the sentence of convicted persons in the history of imprisonment is conditionally divided into the following three stages: adaptation of the order and conditions of

serving the sentence (adaptation); Correctional Institution; preparation for release. Also, prominent public figures of the city where the turma is located (doctor, educator, worker, etc.k.) a board of Trustees is formed, this board is actively involved in the areas of activity in all aspects carried out by the turma administration, as well as assisting in preparing for the life of the daily lifestyle in freedom [7].

In the United Kingdom, the system of stays is administered by the Home Office rather than by the Ministry of Justice, as in most European states, and consists of the following three independent networks:

Northern Ireland tours service;

Scottish tours service;

Tours service of England and Wales.

There are the following types of residential institutions:

- Central prisons are designed to house convicts sentenced to imprisonment for long periods, i.e. three years or more;

- regional (territorial) types, serving several administrative-territorial units and specially selected, designed to house convicts sentenced to first time trial and imprisonment for 12 months or more;

- the correctional Penitentiary institutions, that is, consisting of sections of the tours or tours, are designed to house recidivistic convicts over the age of 21, who have entered the path of moral recovery;

- local estates, an institution that serves one administrative area, to which convicts convicted for the first time are sent.

There are borstal correctional facilities and schools in England to house young convicts under the age of twenty-one. In addition, a system of correctional and educational centers operates to keep minor offenders for a short period of time [8].

The period of serving the sentence in the history of imprisonment of convicts is divided into:

trial period (convict kept individually);

moral recovery period (kept in common rooms together with other convicts through forced labor involvement);

a period of parole before the deadline (for convicts who have served at least three-quarters of the sentence).

Between the period of moral recovery and early parole from punishment, another stage is envisaged – the transfer to a semi-open type of storage conditions (exit to work without a guard, free communication with the outside world) (the existing address in our republic-similar to the storage conditions in the colonies). These storage conditions are successfully used in the penitentiary system of other countries, including in the penal system of our country. Because such storage conditions provide a convenient opportunity for freed convicts to quickly and easily adapt to free life in society.

Under the British rules of stay, every convict is required to have access to knowledge. Evening training programs are developed in all tours, and those who wish can either increase their level of knowledge in the form of correspondence or evening training, or undergo professional training in absenteeeism. If all the conditions for professional training are sufficient, this preparation is organized in the hours allotted for labor and the salary is paid. The process of education for convicts in UK Penitentiary institutions is organized at a high level, where it is possible to get from primary education to higher education. The forms of education are also colorful: evening education, full-time education organized on certain days of the week, correspondence education in open universities and colleges, study in special courses, separate training courses for women. While education for convicts is mostly free at the expense of sponsors as well as charities, some educational services are monetary. It is a notable aspect that the interruption of the educational process is ensured not only during the period of serving the sentence, but also after the end of the sentence. All this seriously contributes to the adaptation of the freed convict to society [9].

In the United Kingdom, a specific mechanism for controlling the system of derivatives has been formed. That is, there is a system of committees for inspecting tours. Each of the estates operates a council composed of local citizens of respect and consideration, appointed by the minister of the interior and performing the duties specified in the law. The College of inspectors is made up of individuals who are not affiliated with the system of standing, and are also sometimes referred to as supervising Magistrates. Their principal obligations are set out in paragraph 94 of the rules of tours as follows: "collegiate inspectors must personally make sure that the condition of the buildings of tours, the rules of the management of tours and the treatment of convicts are observed at the required level" [10].

Members of the collegium have the right to inspect the desired location of the stands, to chat with convicts and staff in an anonymous manner. It should be noted that such a form of control over the system of types in the United Kingdom is a kind of experience in ensuring the effective organization of the execution of punishment in the country's history of imprisonment, in the moral correction of convicts, in the Prevention of crimes, in the protection of the rights, freedoms and legitimate interests of convicts.

The implementation of leadership over places of deprivation of Liberty in the United States was entrusted to the chief attorney [11]. Also, management over penal institutions is carried out by bilateral, that is, local (municipality) bodies, as well as the Directorate of penitentiary institutions of the district.

There are three main categories of jails in the US:

1) protection in maximum security types is organized in such a way that convicts are provided with a whole separation from society, as well as employees of the institution;

2) although the average level of security is in some ways similar to the maximum level of security, however, convicts will have more access to hiking, household services and library [12];

3) in minimum security tours, convicts are kept in common sleeping areas, have the right to move freely in the territory of the settlement (similar to the address-colonies in our republic).

Prisoners held in moderate to minimal security tours will have the right to use the services of welfare workers, the help of a lawyer, a psychiatrist, receive general and higher education in school and university programs, undergo professional training [13], receive treatment from alcoholism and drug addiction, as well as participation in religious groups. Penal institutions have developed a number of programs to moralize convicts and reduce crime rates [14]. These include:

1) programs of a spiritual nature-applicable to convicts who do not confess to the crime they committed, or convicts who cannot attend other programs because their sentences are too short;

2) intensive (long-term) programs-aimed at recidivists, drug addicts and perpetrators of the crime of sexual harassment;

3) transitional (adaptation) programs-developed for convicts passing the last 9 months of punishment [15];

4) extended programs – provide for work with convicts with a low level of intelligence.

One of the peculiarities of organizing the execution of punishment in the history of imprisonment in the USA is the presence of private tours. Criminologist scientist at the University of Oslo (Norway) N. Christy believes that in the United States, since the 80s of the last century, the activities of private tours have been widely used. In particular, 3,000 convicts were held in private stands in 1987, while by 1996 the number had grown to 85,000 [16]. According to a" USA Today " report on June 5, 1996, it was predicted that this figure would reach 360,000 people over the next decade. To date, along with the fact that this forecast finds its confirmation in life, private dwellings have become a separate layer of industry and economy of the country. At the moment, US tours are not without the following problems found in the penitentiary systems of other countries: violation of the norms of the place intended for the detention of convicts, failure to provide convicts with full jobs in penal institutions, insufficient performance of work on the protection of the rights and freedoms of convicts and their legal interests, etc.

References:

1. Social work in the penal enforcement system: A textbook / Under the general editorship of Yu.I.Kalinin. – Ryazan, 2005. – p.315.

2. Makhibrova M.I. Specificity of social work in the process of execution of criminal penalties not related to imprisonment in Finland // Social work in the Criminal Justice System: Materials of the International scientific and Practical conference – Ryazan, 2003. – pp. 133-136.

3. Hochstresser F. Cooperation between the Higher School of Training of Social Workers and the Ryazan Institute of Law and Economics of the Ministry of Justice of the Russian Federation: stages of formation and partnership // Man: crime and punishment. – 2000. – No. 1. – p. 21.
4. Kazantsev V.N. Social work in the educational institutions of Switzerland and the Russian Federation // Man: crime and punishment. - 2001. – No. 3. – p. 43. 78
5. Kuznetsov M. Organization of social services in Swiss penitentiary institutions // Crime and punishment. – 2003. – No.11. – pp.26-29.
6. Morozov A.M. On the organization of social work with convicts in Germany // Social work in the Criminal Justice System: Materials of the international scientific and practical conference – Ryazan, 2003. – pp. 136-146.
7. Social work in the penitentiary System: Tutorial / Under the general editorship of Yu.I.Kalinin. – Ryazan, 2005. – p.289.
8. Kuznetsov M.I., Kazantsev V.N., Ivashin D.V. Social work in penitentiary systems of foreign countries: A textbook. – Ryazan, 2004. – p.98. 81
9. Social work in the penal enforcement system: A textbook / Under the general editorship of Yu.I.Kalinin. – Ryazan, 2005. – p. 324.
10. Vivien Stern. Sin against the future / Fragments / Translated from English – M., 2000. – p. 82.
11. Christie N. Fighting crime as an industry. Forward to the Gulag of the Western model / Trans. from English – M., 2001. – p. 119. 84.
12. N.S.Salayev, A.K.Rasulev. Jinoyat-ijroiya huquqi. Ma’ruza va amaliy mashg‘ulot o‘tkazish bo‘yicha o‘quv-uslubiy qo‘llanma. Mas’ul muharrir: yu.f.d., prof. Q.R.Abdurasulova. –T.: TDYUI nashriyoti, 2013. – 300 b. (N.S.Salayev, A.K.Rasulev. Criminal Executive law. Educational-methodical manual on lecture and practical training. Responsible editor: DSc. prof. Q.R.Abdurasulova. - T.: TSIL publishing house, 2013. pp 300.)
13. Salaev, N. (2017). Differentiation, individualization, execution of criminal punishments and its goals: way to success. Review of law sciences, 1(1), 25.
14. Казанцев В.Н. Социальная работа в ИУ Швейцарии и РФ // Человек: преступление и наказание. – 2001. – № 3. – С. 43.-78. (Kazantsev V.N. Social work in the penal institution of Switzerland and the Russian Federation // Man: crime and punishment. - 2001. – No. 3. – p. 43.-78.)
15. Мурод Уразалиев. Совершенствование системы принудительного исполнения приоритетная задача в области судебного права // ОИИ. 2021. №1. URL: https://cyberleninka.ru/article/n/sovershenstvovanie-sistemy-prinuditelnogo-ispolneniya-prioritetnaya-zadacha-v-oblasti-sudebnogo-prava.
(Murod Urazaliev. Improving the system of compulsory enforcement is a priority task in the field of judicial law // OII. 2021. No. 1.) URL: https://cyberleninka.ru/article/n/sovershenstvovanie-sistemy-prinuditelnogo-ispolneniya-prioritetnaya-zadacha-v-oblasti-sudebnogo-prava.

16. Kurbanov, M. (2021). Criminal-Legal Mechanisms For Protecting The Activities Of Business Entities In Uzbekistan. PSYCHOLOGY AND EDUCATION, 58(1), 2123-2135.

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OSIYO XALQARO UNIVERSITETI Ta'lim va tarbiya nazariyasi (boshlang'ich ta'lim) mutaxasisligi 1-bosqich magistranti

BOSHLANG‘ICH SINF O‘QUVCHILARINING IJODIY TASAVVURLARNI BOYITISHDA BOLALAR ADABIYOTI NAMUNALARIDAN FOYDALANISH. BOLALAR ADABIYOTI FANINI O‘RGANISH MASALALARI

Annotatsiya. Ushbu maqola orqali siz boshlang‘ich sinf o‘quvchilarining ijodiy tasavvurlarni boyitishda bolalar adabiyoti namunalaridan foydalanish, bolalar adabiyoti fanini o‘rganish masalalari haqida ma’lumotlarga ega bo‘lasiz.

Kalit so‘z: ishchi o‘quv reja, boshlang‘ich ta‘lim, ta‘lim-tarbiya, Adabiyot nazariyasi, Bolalar adabiyoti, taraqqiyot, ma’rifatparvarlik, milliy adabiyot.

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USE OF SAMPLES OF CHILDREN'S LITERATURE IN ENRICHING THE CREATIVE IMAGINATION OF PRIMARY CLASS STUDENTS. ISSUES OF STUDYING THE SCIENCE OF CHILDREN'S LITERATURE

Abstract. Through this article, you will get information about the use of examples of children's literature to enrich the creative imagination of elementary school students, and the issues of studying the science of children's literature.

Key words: working curriculum, primary education, education, Literary theory, Children's literature, development, enlightenment, national literature.

Kirish: Ta‘lim tizimidagi islohotni quyi bo‘g‘indan boshlash maqsadga muvofiqmi yoxud yuqoridan, degan savol barchani o‘ylantiradi, albatta. Nazarimizda, dastavval oliy ta‘lim dasturlarini qayta ko‘rib chiqish va bo‘lajak mutaxassislarga e‘tibor qaratish zarur. Shu nuqtai nazardan, oliy ta‘lim muassasalarining maktabgacha tarbiya va boshlang‘ich ta‘lim yo‘nalishida mutaxassislik fanlari qatorida o‘qitiladigan ona tili va adabiyot fani dasturi jiddiy tahrirni talab qiladi. Avvalo, bu ikkita mustaqil fanning sun‘iy ravishda qo‘shilib o‘tilishi qator yillardan buyon talay muammolarga sabab bo‘lmoqda. Masalan, boshlang‘ich ta‘lim va sport-tarbiyaviy ish ta‘lim yo‘nalishining 1-kurs talabalari uchun tuzilgan to‘rt yillik ishchi o‘quv rejasida umumkasbiy fanlar qatori ona tili va adabiyotga 712 soat (190 soat ma‘ruza, 228 soat amaliy mashg‘ulot (bu 2—4-

kurslar o‘quv rejasida ham bir xil), 294 soat mustaqil ta‘lim ajratilgan. Bu ko‘rsatkich maktabgacha ta‘lim-tarbiya yo‘nalishida ham 200 soatdan oshadi.27 Ona tili va adabiyot fani yetti semestrda o‘qitishga mo‘ljallangan bo‘lsa-da, uning faqat bittasida adabiyot fani(bolalar adabiyoti)ni o‘tish rejalashtirilib (bu 36—40 soatni tashkil qiladi), qolgan oltitasida faqat ona tili fani o‘qitiladi.Albatta, ikkala fan ham birdek muhim bo‘lib, uzoq asrlik boy tarixga ega, ilmiy-nazariy yutuqlari behisob. Ularni puxta o‘rganish orqali yosh avlod idroki, ma‘naviyati, so‘z boyligi, tamaddun va taraqqiyot haqidagi qarashlari shakllanadi. Ammo ularning mohiyati, mazmun-mundarijasi, ob‘ekti bir-biridan farqlanishini bilaturib, bir fan doirasida o‘rganish maqsadga muvofiq emas. Shu bois milliy adabiyotimiz va ona tilimiz oliy o‘quv yurtlarida mustaqil fan sifatida ajratilib, hajmi o‘quv jarayoni bo‘yicha teng taqsimlanishi fanga oid o‘quv qo‘llanma va darsliklar yaratish, innovatsion loyihalar ustida ishlash imkoniyatini kengaytiradi.Hozirgi holatda ayrim oliy o‘quv yurtlarida ona tili va adabiyot fani taqsimotining har xilligi mutaxassislarning yagona dastur asosida ilmiy-ijodiy ish olib borishiga to‘sqinlik qilmoqda. Chunki barcha tilshunos olimlarning ham adabiyotni mukammal egallash imkoniyati bo‘lmaganidek, ayrim adabiyotshunoslar fanning ona tili qismida ikkilanadi. Bundan tashqari, adabiyot fanining o‘zi ham “Adabiyot nazariyasi”, “Adabiyot tarixi”, “Mumtoz adabiyot”, “Milliy uyg‘onish davri adabiyoti”, “XX asr adabiyoti”, “Hozirgi adabiy jarayon” singari alohida nomlar bilan tarmoqlanadi.

Tadqiqot metodlari. Maktabgacha va boshlang‘ich ta‘lim yo‘nalishlarida umumadabiyotning tarkibiy qismi bo‘lgan bolalar adabiyoti o‘qitilishi rejalashtirilgan ekan, fan dasturiga ham ushbu fan albatta kiritilishi lozim. Zero, bolalar bilan ishlaydigan pedagogni tayyorlashda bu fandan voz kechib bo‘lmaydi.Maktabgacha ta‘lim muassasalarining bo‘lg‘usi tarbiyachilari hamda boshlang‘ich sinf o‘qituvchilari oliy o‘quv yurtida bu fanni puxta o‘rganmas ekan, kichkintoylarni savodga o‘rgatish yoxud boshlang‘ich sinf “O‘qish kitob”laridagi badiiy ijod namunalarini keng tahlil qilish malakasini qanday egallaydi? Bolalar adabiyotining muhim qismi sifatida xalq og‘zaki ijodi, chet el bolalar adabiyoti, ifodali o‘qish, adabiy tur va janrlar haqida tushuncha beradigan tanlov fanlarga ham ehtiyoj kata Bolalar adabiyotining shakllanishi deyarli barcha xalqlarda asosan ma’rifatparvarlik va maktab-maorif tizimi islohotlari bilan chambarchas bog‘liq. O‘zbek Bolalar adabiyotining barqarorlashuvi ham 19-asr 2 yarmi – 20-asr boshlaridagi ma’rifatparvarlik harakatiga borib taqaladi. Saidrasul Aziziy, Munavvarqori, Abdulla Avloniy, Hamza Hakimzoda Niyoziy va boshqa o‘nlab ma’rifatparvarlarning „Yangi usul“ („usuli jadidiya“)dagi o‘zbek maktablari talabalari uchun yaratgan ellikka yaqin alifbo va o‘qish kitoblari o‘zbek Bolalar adabiyotining tom ma’nodagi yorqin namunalari hisoblanadi. Bolalar adabiyotiga bolalar uchun maxsus yaratilgan asarlar sifatida qarash, uning o‘ziga xos tamoyillarini belgilash 20-asr boshlariga xosdir. Sharq adabiyoti eng yaxshi

27 https://lex.uz/docs/-5705038 Oliy ta’limning davlat ta’lim standarti. Asosiy qoidalar” o‘zbekiston respublikasining davlat standartini tasdiqlash to‘g‘risidagi 2021-yil 27-oktabrdagi qarori.

namunalarini arab, fors tilidan tarjima qilish Bolalar adabiyoti tarjimachiligidagi bir yo‘nalish bo‘lsa, G‘arb adabiyoti, xususan rus adabiyoti namunalarini o‘zbekchalashtirish ikkinchi yo‘nalishni tashkil etdi. I. A. Krilov masallari, A. S. Pushkinning „Baliqchi va baliq haqida ertak“ asari, K. D. Ushinskiy hamda L. N. Tolstoyning bir qancha hikoya, ertaklari va boshqa ayni shu davrda tarjima qilinib, yangi usuldagi maktablar alifbo va o‘qish kitoblariga kiritildi. Ijodkorlar tarjima vositasida realistik Bolalar adabiyotining o‘ziga xos xususiyatlarini yanada mukammal egalladilar, bolalar uchun yozuvchi adiblar guruhi shakllandi.

Tadqiqot natijalari. Bolalar adabiyotida badiiylik bilan bir qatorda ma’rifiylik ham yetakchi o‘rin tutadi. Chunki Bolalar adabiyoti namunalari yoshlarni insoniy fazilatlar ruhida tarbiyalashga ham xizmat qiladi. Barcha davrlar Bolalar adabiyotining taraqqiyot tamoyillari, avvalo, ma’rifiylik va tarbiyaviylikda aks etadi. Biroq Bolalar adabiyoti rivojlanib borgani sari uning sof badiiyat unsurlarini egallashga intilishi va umumadabiyot taraqqiyot tamoyillari bilan hamkorligi ham ko‘zga tashlanadi. Jumladan, 20-asr boshlarida o‘zbek Bolalar adabiyotida ko‘proq ma’rifatparvarlik g‘oyalari yetakchilik qilsa, 30-yillar Bolalar adabiyotida realistik adabiyot tamoyillari ustuvor, 50-60- yillar Bolalar adabiyoti da sarguzasht fantastik adabiyot elementlari kuchaydi. 80-yillar Bolalar adabiyotida psixologizmning kuchayishi, yosh qahramon talqinida uni yosh bola tarzida emas, hayotga tobora jadal kirib kelayotgan, o‘z qarashlariga ega bo‘lgan shaxs sifatida tasvirlashga intilish ruhi mavjud.

Tadqiqot munozaralari Uzluksiz ta‘limning boshqa bosqichlaridan farqli o‘laroq, boshlang‘ich sinflarning o‘qish darslarida o‘quvchilarning o‘qish malakasini shakllantirish, asar matni ustida ishlash ta‘limning didaktik maqsadi hisoblanadi. Shunga ko‘ra, o‘qish darslarining yetakchi xususiyati o‘quvchilar savodxonligini ta‘minlash bilan birga, badiiy adabiyot olamiga olib kirish, yuksak axloqiy qadriyatlar ruhida tarbiyalashga asoslangan.O‘qish fani bo‘yicha davlat ta‘lim standartlarida hikoya, ertak, maqol, topishmoq, doston, tez aytish, she‘r, latifa, lof kabi janrlar namunasini o‘qitish; o‘zbek va xorijlik bolalar yozuvchilari asarlarini o‘qish; yozuvchilar va ular asarlari haqida to‘laroq tushuncha hosil qilish; badiiy asarlar sharhi, ifodali o‘qish; asar mazmuni va voqealari o‘rtasidagi bog‘lanishni, qahramonlar fe‘l-atvorini aniqlash, qiyosiy tavsiflash; badiiy asarlarni estetik tahlil qilish; nasriy asar mazmunini to‘liq, qisqartirib, shaxsini o‘zgartirib hikoya qilish; badiiy asarlarni o‘zaro qiyoslab, tegishli xulosalar chiqarish kabilar alohida ta‘kidlab ko‘rsatilgani ham bejiz emas. Bundan tashqari, 1—4-sinf o‘quvchilari 540 soatdan ziyodroq o‘qish darslarida o‘zbek va jahon bolalar adabiyoti, xalq og‘zaki ijodi namunalari bilan tanishadi. Adabiy janrlarni kuzatib, ifodali o‘qish ko‘nikmasiga ega bo‘ladi. Demak, bu malakani bo‘lg‘usi boshlang‘ich sinf o‘qituvchisi, avvalo, o‘zi egallamog‘i lozim. Shu ma‘noda, adabiyot darslari uzviyligini boshlang‘ich sinflar “O‘qish kitob”lari belgilaydi, o‘quvchilar hikoya va qissa namunalarini mutolaa qilish, she‘rlarni ifodali aytish bilan birga, uning mazmunini teran idrok etishi bundagi zarur jarayondir.Binobarin, boshlang‘ich ta‘lim yo‘nalishidagi ixtisosliklarda fanning

uzviyligini ta‘minlovchi “Ifodali o‘qish” va “Adabiyot qoidalari” (1-kurs), “Xalq og‘zaki ijodi va bolalar kitobxonligi” (2-kurs), “O‘zbek bolalar adabiyoti” (3-kurs), “Jahon bolalar adabiyoti” (4-kurs) qismlarini mukammal o‘rganish orqali ko‘zlangan maqsadga erishish mumkin. O‘tgan asr boshlaridayoq adabiyotni o‘qitish masalasiga alohida diqqat zarurligini anglagan ulkan shoir va ma‘rifatparvar Abdulhamid Cho‘lpon: “Adabiyot yashasa — millat yashar!” degan umumbashariy shiorni ko‘targan edi. Bu haqiqat bir asrdan ortiq muddat mobaynida sinovdan o‘tdi. Demak, badiiy adabiyot bilan tanishuv boshlanmasi va umumkitobxonlik ostonasi bo‘lgan “Bolalar adabiyoti” fanini mutaxassislik ta‘lim yo‘nalishlarida tiklash asosiy muammo bo‘lib, o‘zbek va jahon bolalar adabiyoti hamda folklori, uning tarixiy-tadrijiy taraqqiyoti hamda yangi tamoyillarini izchil o‘rganish ertangi kun tarbiyachilari uchun birinchi darajali vazifadir.

Foydalanilgan adabiyotlar:

1. Suyumov A., Kichkintoylar adabiyoti, T., 1962;
2. Jahongirov F., O‘zbek bolalar folklori, T., 1975;
3. Bolalar adabiyoti va zamonaviylik, T., 1981;
4. Safarov O., O‘zbek bolalar poetik folklori, T., 1985;
5. O‘zbek bolalar adabiyoti va adabiy jarayon, T., 1989;
6. Barakayev R., Jonajonim, she’riyat, T., 1997.
7. https://uz.wikipedia.org/wiki/Bolalar_adabiyoti#

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IMPORTANCE OF TOURISM SERVICES IN THE REGION

Annotation. Tourism as a set of practical actions and activities is an important means of physical education. Its educational and health-enhancing properties have an important place in the development of society in terms of form and content. That is, it directly serves to improve the quality of production and the formation of a healthy lifestyle by improving knowledge and practical skills in the process of travel. As we have mentioned, tourism expresses its form in excursions and trips. This article discusses the potential of tourism and their origin, their importance in the activity of our region is studied.

Key words: tourist services, organizational mechanism, innovations, characters of tourist services, types of tourist services.

Until now, a number of studies have been carried out on the development of tourism in the region scientific approaches differ in the direction. Russian economist Ye.A.Zaliznyak "Regional tourism is each other necessary for the satisfaction of tourism needs in a certain area and its development performing functions related to is a complex system organized for given by".28

Tourism in the development of regional tourism market is important. Russian economist according to I.T.Balabanov, "Tourism market is touristic" between consumers and sellers of products it consists of the sum of economic relations commented".29

One of the main objects of the regional tourism market one is tourist services, Russian economists I.V.Zorin and V.A.Kvartalnov they define as follows: "Tourist services are basic, additional, meeting tourist needs and is a complex set of services. They are necessary for the organization and transfer of tourism to basic services services, including travel to additional services30 in the place of rest if not received and needed provided services, to comprehensive services a set of tourist services guaranteed in the ticket" - introduced by.

Nowadays, among the daily news media and the scientific community different approaches and interpretations about the concept of the region continue. This leads to unique confusion and difficulties in scientific research. That's it Therefore, every researcher has a clear idea about the concept of the region important for In the five-volume explanatory dictionary of the Uzbek language,

28Zorin I.V., Kvartalnov V.A. Entsiklopediya turizma. — M.: Finans i statistika, 2003. – 368 s.
29 Zaliznyak Ye.A., Regionalny turizm: Osnovne priznaki i usloviya razvitiya, Vestn. Volgogr. gos. un-ta. Ser. 3, Ekon. Ekol. 2011. № 2 (19).
30 Balabanov I.T., Balabanov A.I. Ekonomika turizma: Ucheb. pos. — M.: Finans i statistika, 2003. - 176 s. 6.

the word “region” comes from the Arabic language that it has the meaning of a belt, a belt, a climatic region, a field, a circle recorded.

In addition, two interpretations of this word are mentioned in the dictionary.

1. Geographical. Between two neighboring parallels of the Earth’s surface, from each other each part differs in climate.

2. A part of the earth’s surface that is distinguished by some feature, a zone recorded.

These two interpretations are controversial and need explanation. The first interpretation is sectoral, that is, directly related to the science of geography. Earth the climate that encircles the planet like a belt and the geographical one formed on this basis are regions. They are seven, as they say seven climates, from the poles of the globe are located one after the other towards the equator. These are arctic (antarctic), subarctic (subantarctic), temperate, subtropical, tropical, subequatorial, equatorial regions.

These regions are the entry and return of solar energy to the earth’s surface (balance), and is characterized by regional atmospheric currents. For example, the territory of Uzbekistan is within the temperate and subtropical climate regions is located. The second interpretation of the term region is essentially the natural, political-administrative (individual state, interstate) and administrative-territorial (state inside) has content, has no similar, and is large in scope are (non-local) regions. For example, mountain and plain, desert and oasis (irrigated lands), Central Asia, Baltic Sea, Aral Sea, South-East such as Asian regions.

Opportunities for tourism development in our country is the leader among the Central Asian countries. Tourism tourists is an activity aimed at satisfying the need. Specialists tourists 6 main separates the needs:

1. Recreation, recreation;
2. To see relatives and acquaintances;
3. On work and professional goals;
4. Treatment;
5. On religious and pilgrimage;
6. Based on the physical, economic and spiritual needs of people, etc according to the goals.

Satisfying the above needs includes implementation of tourist activities. This, in turn, is considered economic tourism, based on those who put it is formed:

- development of tourist services;
- formation of a tourist product;
- sale of tourist products;
- meeting tourist needs.

Tourism is an economic category, local to tourists from countries sells the service, creates working conditions for its workers, incoming earns currency. On the one hand, the tourism sector is a direct service to tourists offers a network, on the other hand, it is directed to the tourism market of interconnected industries such as service and material production defines an interconnected system.

Tourism is production and is a unanimous process of the consumer. Consumer object tourist goods and services satisfaction of the consumer with these goods and services during the period of consumption must In this case, the consumption value of tourism is useful goods, convenience and comes from the nature scenes and different way of service. Tourist consumption is one to have goods and paid services on the one hand, and goods on the other a place that does not have a view contains a good environment. Economic tourism is directly related to the number of effective tourists. Increasing number of tourists income from tourism will also increase. In turn, tourists objects whose number increases touristic interest, i.e. touristic resources depends.31

When talking about the country's tourism industry, regional aspects in tourism development must be taken into account. Tourism in the region taking into account the special characteristics of the region in the development of the market, taking the regional policy requires going. How active this regional policy is placement of tourism firms in regional areas and monitoring the results of their territorial activities the positive solution of issues such as conducting provides. Specific to the region in the development of tourism taking into account the features, there are opportunities to use the potential of tourism sufficiently comes out. The tourism industry in our country is developing year by year and is the leader of the economy is becoming one of the networks. In these cases, the development of the tourism sector, it is appropriate to fully demonstrate its capabilities.32

Tourism on April 26, 2023 under the chairmanship of President Shavkat Mirziyoyev measures to expand the scope of services and develop infrastructure a meeting of video selectors was held on the development of tourist services possibilities are defined.

Tourism means character, experience, regardless of what motivates you to travel for most people, this concept means a good mood, vacation, romance, with sea, sun, mountains, delicious food, history, flying, adventure depends.33

The restrictions imposed during the pandemic in the world are decreasing one after another thanks to which the tourism industry is starting to recover. To our country in the first quarter of this year 610 thousand people from abroad or more than 2 times compared to the same period last year tourists have arrived. Ordering of services, transportation, accommodation and all other formalities, all types of transportation, transfer, meals, excursions and attractions, medical examination and insurance, translator services, meetings, etc. Services included the service of the group leader and the service of the tour guide can also be included. The interaction of this content forms a tourist service. Touristic the uniqueness of services in determining the nature and composition of the services

31 Xidirova G.R. Mintaqada turizmni rivojlantirishning o'ziga xos usullari. monografiya/-Buxoro 2018.-76 b. 14.
32 Komilova F.K., Xalqaro turizm bozori. O`quv qo`llanma T.,TDIU2006. 191 b.
33 Лексин В. и др. Экономические отношения и управления в регионах. Вопросы экономики №9, 2004 г. 15.

market disclosure is appropriate. Based on this, tourist services are as follows will have seven distinct characteristics:

- non-maintenance;
- imperceptibility of services;
- seasonal influence;
- no change in tourist services;
- the time difference between the sale of a tourist service and its consumption;
- regional between the consumer and the producer in the tourism market division;
- the tourist is distinguished from the place where tourist services are provided and consumed.

Other sectors of the tourism economy due to foreign currency inflows to the budget also affects the development, infrastructure of regions, creation of new jobs, allows to restore the historical and cultural heritage of the Uzbek people Tourism has a great contribution to the increase of the prestige of Uzbekistan in the international arena must be.

A third of the tourist product is brought to our country by foreigners and it is an attraction that attracts local tourists. Historical monuments in our country, different national culture in the regions tourism, our natural resources and other such tourists to our country is recognized as the main factor of interest. The 3 main tourist regions in our country are Samarkand, Bukhara and Khorezm. Wide use of tourism regions is desirable. Domestic tourism is traditional from opportunities in natural habitats and shrines that have been widely developed to develop international tourism in these places with more productive use it is necessary to pay attention.34

Service in the conditions of modernization of the economy and improvement of the welfare of the population increasing employment in the field of display is the front of the country's economy today is one of the important issues. In particular, that the main driving force of ownership determining the prospect of increasing employment in the recognized service sector, improvement of organizational and economic mechanisms and in this matter from a scientific point of view. The development of based proposals and practical recommendations is an important direction today is considered taking this into account, from the first years of independence in our country from the beginning to the present, organize tourist services that meet the requirements of the time. The reforms being carried out in the field of education and development are positive giving results. In this regard, the President of the Republic of Uzbekistan Sh.M. Mirziyoyev.

34 Charles A. Goeldner, J.R. Brent Ritchie. Tourism Principles, Practices, Philosophies, New Jersey, John Wiley & Sons, 2012.

A tourist should travel and not wander in internal affairs offices. If we are tourism if we say that we will create jobs at the expense of tourists, we are not imposing conditions on tourists, but creating conditions necessary.

Economic literature on various aspects of the development of tourist services theoretical and methodical on in Article 3 of the Law, the concept of tourist services is defined as “Tourist services accommodation, catering, transport, information and advertising of tourist activity subjects services show other services aimed at”.35

Tourist services in Uzbek literature – meeting the needs of tourists and excursionists and a set of actions aimed at providing a single goal in the field of service and they are tourism goals, character and direction of tourist service should respond and not be against universal human principles. Through this, tourism the concept of services can be imagined more clearly. In foreign literature, tourist services are intangible product, it cannot be viewed and stored. This type of service is required by the tourist can be done. A tourist service unit is one at a given time is a set of services provided to the consumer. Tourist services unit tourist belongs to the services.

The tourist service includes ordering services, transportation, accommodation, etc all formalities, all types of transportation, transfer, catering, excursions and attractions, medical examination and insurance, translation services, meetings and includes providing with others. The services include a guide with the service of a group leader the services of an interpreter may also be included. The interaction of this content is touristicforms the service.

To the services themselves in determining the nature and composition of the tourist services market it would be appropriate to reveal its characteristics. Based on this, tourist services will have the following seven distinct characteristics:

- non-maintenance;
- imperceptibility of services;
- seasonal influence;
- no change in tourist services;
- the time difference between the sale of a tourist service and its consumption;
- territorial division between consumer and producer in the tourism market;
- the distance between the tourist service provided and the place of consumption pass.

A group of scientists have defined tourist services as an economic phenomenon, the concept of tourism, that is, they connect with the activities of tour operators and travel agencies. This is a Russian point of view some experts agree and some of the organizations are only tourists for intended they emphasize.

These features include:

35 Маслов А.Г., Константинов Ю.С., Дрогов И.А. Полевые туристские лагеря. – М.: Владос, 2000.

- non-maintenance of tourist services. This means that these services cannot be maintained.

The life cycle of tourism services is fundamentally different from tangible goods, in particular, storage stage there is that it was not with touristic it requires a thorough study of the business environment, the balance of supply and demand, because it is not an expense that remains in “warehouses” until services are required.

- imperceptibility. Tourist services are an intangible product. They are social-will belong to the cultural or intangible spheres, because the socio-cultural of the consumer physical, ethnic-intellectual, spiritual and other needs for services determines the performance of service providers. Especially at the time of shopping cannot be viewed or rated. The object of such services is the individual consumer;

- simultaneous occurrence of service and consumption process. Consumer services and tourist services as a result of the interaction of the executive the display process occurs in parallel with consumption.

- non-constant quality. The quality of services in most cases depends on the condition of the resource, its it depends on professional experience and mood.

A tourism product is a good, a service, or a package of goods and services for people to purchase while visiting a new destination. Tourism products and services help visitors explore the destination that they are visiting by offering them the chance to view attractions, shop for souvenirs, take tours, or purchase experiences. Tourism products are much more than just the tangible souvenir tourists take home to their friends and families; they are the experiences that they have in the NWT and at your business. As a tourism operator, you supply the tourism products. For example, say you are the owner and operator of the Mountain Biking Tour Company, which provides biking tours to active cyclists. Your tourism product would then be mountain biking tours. Keep this company in mind as we will refer to this in later examples. Sometimes product development involves creating a totally new experience. It may also involve expanding or enhancing an existing product. Expansion of products can focus on new tourist markets, improved product lines, or seasonal experiences. You may want to expand your business by offering a diverse array of tourism products that cater to different types of tourists. This could improve sales, strengthen your current market position or take advantage of new market opportunities.

References:

1. Zorin I.V., Kvartalnov V.A. Entsiklopediya turizma. — M.: Finans i statistika, 2003. – 368 s.
2. Zaliznyak Ye.A., Regionalny turizm: Osnovne priznaki i usloviya razvitiya, Vestn. Volgogr. gos. un-ta. Ser. 3, Ekon. Ekol. 2011. № 2 (19).
3. Balabanov I.T., Balabanov A.I. Ekonomika turizma: Ucheb. pos. — M.: Finans i statistika, 2003. - 176 s. 6.

4. Xidirova G.R. Mintaqada turizmni rivojlantirishning o’ziga xos usullari. monografiya/-Buxoro 2018.-76 b. 14.
5. Komilova F.K., Xalqaro turizm bozori. O`quv qo`llanma T.,TDIU2006. 191 b. Лексин В. и др. Экономические отношения и управления в регионах. Вопросы экономики №9, 2004 г. 15.
6. Charles A. Goeldner, J.R. Brent Ritchie. Tourism Principles, Practices, Philosophies, New Jersey, John Wiley & Sons, 2012.
7. Маслов А.Г., Константинов Ю.С., Дрогов И.А. Полевые туристские лагеря. – М.: Владос, 2000.
8. Erkaeva, G. P. (2021). Innovative Methods of Foreign Countries to Increase the Investment Attractiveness of Regions. Academic Journal of Digital Economics and Stability, 522-528.
9. Узаков, Н. У., Эркаева, Г. П., Косимов, Ж. Р., & Кодиров, Л. Х. (2014). ИСПОЛЬЗОВАНИЕ ФИНАНСОВЫХ РЕСУРСОВ ДЛЯ РАЗВИТИЯ СФЕРЫ ОБСЛУЖИВАНИЯ. In ФЕНОМЕН РЫНОЧНОГО ХОЗЯЙСТВА: ОТ ИСТОКОВ ДО НАШИХ ДНЕЙ (pp. 369-372).
10. Хромова, Г. А., Мухамедова, З. Г., & Юткина, И. С. (2016). Оптимизация динамических характеристик аварийно-восстановительных автомотрис. Монография. Научный журнал: “Fan va texnologiya”, Ташкент–2016.–253 с.
11. Yakubov, M. S., Mukhamedova, Z. G., Isroilov, U. S., & Fayzullaev Zh, S. (2018). Methodological aspect of continuous monitoring of traction electrical equipment diagnostics using spectral analysis methods. International periodical journal “Chemical Technology Control and Management, (3), 67-73.

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CURRENT ISSUES OF ORGANIZING A HEALTHY LIFESTYLE

Abstract. This article discusses the current problems of organizing a healthy lifestyle. The role of a healthy lifestyle in living a quality life is analyzed.

Key words: Healthy lifestyle, physical education, sports, bad habits, longevity, health, proper nutrition.

Population health is the most important factor in successful social development and national security, an important resource for ensuring the stability of the state, and the level of quality of life and health status of the population can be used to judge the effectiveness of state policy in the social sphere. The unsustainable development of the country's economy, insufficient legal, resource, information and financial support for measures to preserve the health of the child population and develop healthcare, and protracted reforms have contributed to a significant deterioration in the health of the population. In the life of modern society, problems associated with smoking, poor nutrition and alcohol consumption have become especially acute. Typically, children and young people are not inclined to think seriously about their health, even when they get sick. Unfortunately, in most families, a healthy lifestyle is not a priority. A healthy lifestyle is a rational lifestyle, an integral feature of which is active activity aimed at maintaining and improving health. A lifestyle that promotes public and individual health is the basis of prevention, and its formation is the most important task of the state's social policy in protecting and strengthening the health of the people. Preserving the health of the people and especially children's health in conditions of a negative natural balance is the most important state task. Only healthy people are able to study, work, develop socio-economic potential, and protect the interests of the country. With the help of epidemiological, socio-hygienic and other modern studies, numerous evidence has been obtained of the direct impact of conditions and lifestyle on children's health. Most often, unhygienic, medical and environmentally illiterate behavior, non-compliance with the regime and daily routine, nutrition, work, rest, drinking alcoholic beverages, smoking, low physical activity (inactivity), psycho-emotional overload, etc., which are in In some cases they are causes of diseases, in others they are risk factors for health problems.

The relevance of the topic is due to the fact that the health of the population of our country is currently characterized as critical, therefore the search for effective methods for improving it is an urgent public and state problem.

Promoting a healthy lifestyle is one of the main tasks of medical workers in promoting the health of patients. Currently, in this direction, the emphasis is on increasing the role of the nurse in creating a healthy lifestyle for the child population. The style of a healthy lifestyle is determined by the personal and motivational characteristics, capabilities and inclinations of a person. It involves active work to preserve and strengthen one's own health, in which the following main components can be distinguished: •conscious, targeted use of various forms of physical activity; •targeted development of hygienic and health skills; •use of natural factors in promoting health (hardening) and a civilized attitude towards nature; •active fight against bad habits and their complete eradication; •activities to promote and introduce a healthy lifestyle into the life of every person and society. An individual style of healthy lifestyle is understood as a way of organizing life activities inherent in a particular person, taking into account individual interests, needs, capabilities and connections with his educational, professional and everyday activities. Thus, a healthy lifestyle is a regime of restrictions combined with an optimal regime of physical activity. Human physical activity is one of the main factors in maintaining and strengthening health, an irreplaceable universal means of preventing illnesses and slowing down the aging process of the body. A person's motor pattern is not the same at different ages. However, the general thing is that physical activity is absolutely necessary for a child, an adult, or an elderly person. It must be a constant factor in life, the main regulator of all body functions. An important component of a healthy lifestyle is rational nutrition. It ensures proper growth and formation of the body, helps maintain health, high performance, and prolong life.

A healthy lifestyle is unthinkable without observing the rules of personal hygiene: daily routine, body care, clothing, shoes, etc. The daily routine is of particular importance. When compiled correctly and strictly implemented, a clear rhythm of the body's functioning is developed. And this, in turn, creates optimal conditions for fruitful work and high-quality recuperation.

The following main directions in activities to promote a healthy lifestyle can be identified: 1. Creation of an information and propaganda system for increasing the level of knowledge of all categories of the population about the negative impact of risk factors on health and the possibilities of reducing it. 2. The second important area of developing a healthy lifestyle is the so-called "health education". Comprehensive educational, 17 training and educational activities aimed at increasing awareness of health issues and its protection, developing health promotion skills, creating motivation for leading a healthy lifestyle, both for individuals and for society as a whole. 3. Measures to reduce the prevalence of smoking and consumption of tobacco products, reduce alcohol consumption, and prevent drug use. 4. Encouraging the population to have a physically active lifestyle, physical education, tourism and sports, increasing the availability of these types of health improvement. [16] The formation of a healthy lifestyle, therefore, is a whole system of public and individual types, methods, forms of

activity, activities aimed at overcoming risk factors for the occurrence and development of diseases, optimal use in the interests of protecting and improving social, psychological and natural health conditions and lifestyle factors.

An effective lever for the formation of a healthy lifestyle should be hygienic education of the population. Territorial health centers, medical and physical education dispensaries (departments, offices), cosmetology clinics (departments, offices), health promotion offices of various medical institutions must make the basis of the content of their activities the promotion of the principles of forming a healthy lifestyle, nurturing a system of behavioral reactions that have a beneficial effect on the health of all people, starting with infancy. The formation of a healthy lifestyle is a national task, and healthcare workers who stand at the outpost of this national program should themselves be an example of compliance with a healthy lifestyle.

References:

1. Nurmatova, M. (2021). Family economy: Sources of incomeand types of costs. Asian Journal of Research in Business Economics and Management, 11(11), 69-73.
2. Ilxamovna, N. M. (2022, December). Zamonaviy ta'limda iqtisodiy fanlarni o'qitish usullari tahlili. In Conference Zone (pp. 79-81).
3. Расулов, И. И. (2021). Фразеологические единицы русского и узбекского языков со значением качественной оценки лица. In Система непрерывного филологического образования: школа–колледж–вуз. Современные подходы к преподаванию дисциплин филологического цикла в условиях полилингвального образования (pp. 420-423).
4. Inamovich, R. I. (2021). The Concept of "Community/World" in the Linguistic and Cultural Aspect. Middle European Scientific Bulletin, 16.
5. Расулов, И. И. (2016). Наречные фразеологизмы русского языка с имплицитно выраженным значением. In Молодежь и наука: реальность и будущее (pp. 275-277).
6. Расулов, И. И. (2016). Особенности учебного перевода фразеологических сочетаний. In Молодежь и наука: реальность и будущее (pp. 330-332).
7. Расулов, И. И. (2019). О применении кейс-метода в учебном процессе. In Молодежь и наука: реальность и будущее (pp. 464-467).
8. Хамзаевна, Р. М. (2021). Современные педагогические технологии на уроках русского языка. EPRA International Journal of Multidisciplinary Research (IJMR), 7(4), 148-150.
9. Мирзаюнусова З. И. Расулова М. Х. (2011) Роль образа исторической личности в воспитании гармонично развитой личности. молодежь и наука: реальность и будущее Материалы IV Международной научно-практической конференции, (572-573)

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WAYS TO EASILY TEACH ROBOTICS TO SCHOOLCHILDREN IN EXTRACURRICULAR ACTIVITIES

Abstract. This article briefly discusses the orientation of school students to a number of science clubs for their extra knowledge in their spare time. The article details easy ways to teach robotics to kids and recommends several web apps to help teach robotics.

Key words: robotics, program, coding, programming, STEAM, circle, science, creativity, code.

Extracurricular science clubs can be a fantastic way to engage schoolchildren in hands-on learning and foster their interest in STEM (Science, Technology, Engineering, and Mathematics). Here are some types of science clubs that are often appropriate for schoolchildren:

Robotics Club:	Science Olympiad Team:	Young Engineers Club:
□ Focuses on building and programming robots. □ Provides a hands-on experience with electronics, sensors, and programming.	□ Participates in competitions covering various science disciplines. □ Encourages teamwork and problem-solving skills.	□ Involves hands-on engineering projects and challenges. □ Introduces basic engineering principles through creative activities.

Astronomy Club:	Coding Club:	Environmental Science Club:
□ Explores the wonders of space and astronomy. □ Includes stargazing sessions, planetarium visits, and discussions.	□ Teaches computer programming skills through fun projects. □ Encourages creativity in developing software applications and games.	□ Focuses on understanding and addressing environmental issues. □ Involves projects like community cleanups, planting trees, and studying ecosystems.

When establishing or joining a science club, it's essential to consider the age group and interests of the schoolchildren. Additionally, ensuring that the activities are hands-on, engaging, and aligned with the curriculum can enhance the learning experience. Collaborating with teachers, parents, or local STEM professionals can also provide valuable support and resources for the science club.

Teaching robotics to kids can be a fun and rewarding experience. Here are some easy and engaging ways to introduce robotics to kids:

Use Educational Kits:	Start with robotics kits designed for kids, such as LEGO Mindstorms, Ozobot, or Dash and Dot. These kits often come with building blocks and simple programming interfaces.
Storytelling with Robots:	Create stories or scenarios where robots play a role. Encourage kids to design robots that fit into these narratives, fostering creativity and imagination.
Hands-On Building:	Begin with simple robot builds using everyday materials like cardboard, paper cups, and craft supplies. This hands-on approach helps kids understand the basic mechanics of robots.
Introduce Basic Programming:	Use visual programming languages like Scratch or Blockly to teach kids the fundamentals of programming. Many educational robots have user-friendly interfaces that make coding accessible to young learners.
Robotics Challenges:	Pose challenges or tasks that require the use of robots. For example, create a maze for the robot to navigate or design a challenge where the robot must pick up objects.
Robot Art:	Combine robotics with art by creating drawing robots. Kids can build a robot that moves with markers to create unique artworks.
Interactive Games:	Develop games that involve robot interactions. For instance, create a game where robots respond to certain commands or navigate through obstacles to reach a goal.
Robot Dance Party:	Program robots to move and dance in sync with music. This activity combines coding, creativity, and movement.

Collaborative Projects:	Encourage teamwork by assigning group projects. Kids can work together to build and program robots, fostering collaboration and communication skills.
Field Trips and Guest Speakers:	Arrange visits to science centers, robotics labs, or invite guest speakers who work in the robotics field. Real-world exposure can inspire and motivate kids
Robot Storytime:	Read books or stories related to robots and then have discussions or activities that relate to the storyline. This can make learning about robotics more engaging.

Remember to adapt the complexity of the activities based on the age group and skill level of the children. The key is to make the learning experience enjoyable, hands-on, and interactive.

Several software and web apps are designed specifically to teach robotics to kids in a fun and interactive way. Here are some popular ones:

- Scratch: Scratch is a visual programming language developed by MIT. It's great for beginners and allows kids to create interactive stories, games, and animations. Many robotics platforms, like LEGO Mindstorms, have Scratch integration.
- Blockly: Blockly is a visual programming language that uses blocks to represent code. Blockly Games provides a series of educational games that teach programming concepts and can serve as an introduction to robotics programming.
- Tynker: Tynker is an educational platform that teaches coding through interactive games and activities. It offers courses on robotics, including programming robots like Sphero, Minecraft mods, and more.
- Robot Virtual Worlds: Robot Virtual Worlds offers simulated environments where students can program and test their robots virtually. It's a useful tool for learning and experimenting with programming before applying it to physical robots.
- Cognimates: Cognimates is a platform that integrates AI and machine learning into coding education. It allows kids to program and train their own AI models, offering a unique approach to understanding the intersection of robotics and AI.
- Ozobot Blockly: Ozobot Blockly is designed for use with Ozobot robots. Kids can drag and drop blocks to create programs and learn basic coding concepts. It's a good introduction to programming for younger children.
- EV3 Programming: LEGO Mindstorms EV3 robots have their own programming environment. It's suitable for older kids and provides a visual programming interface to control and program LEGO robots.
- MBlock: mBlock is a programming platform that supports both graphical and text-based programming. It's compatible with various robotics kits, including Makeblock's mBot.

• Code.org - CS Discoveries: Code.org offers various courses, including CS Discoveries, which introduces students to computer science concepts. The platform includes hands-on activities and coding challenges.

Before choosing a specific platform, consider the age group, the robotics kit or platform you're using, and the learning objectives. Many of these resources are designed to be user-friendly and engaging for kids, making the process of learning robotics enjoyable and educational.

References:

1 . D. X. Makhkamova. “THE IMPORTANCE OF DISTANCE LEARNING TECHNOLOGIES IN THE TRAINING OF FUTURE INFORMATICS TEACHERS”. Academia Repository, vol. 4, no. 10, Oct. 2023, pp. 86-89, https://academiarepo.org/index.php/1/article/view/3.

2 . D. X. Makhkamova. “METHODOLOGY FOR TEACHING FUTURE INFORMATICS TEACHERS TO PROPERLY DESIGN A LESSON AND EFFECTIVELY ORGANIZE A REINFORCEMENT SECTION OF THE LESSON”. Academia Repository, vol. 4, no. 10, Oct. 2023, pp. 355-9, https://academiarepo.org/index.php/1/article/view/214.

3 . D. X. Makhkamova. “IMPROVING THE METHODOLOGY OF USING SOFTWARE TOOLS FOR THE FUTURE INFORMATICS AND INFORMATION TECHNOLOGY TEACHER”. E Conference Zone, Jan. 2023, pp. 64-69, https://econferencezone.org/index.php/ecz/article/view/1912.

4 . D. X. Makhkamova. “THE ADVANTAGES OF USING THE POSSIBILITIES OF INFOGRAPHICS IN THE WORK OF FUTURE INFORMATICS AND INFORMATION TECHNOLOGY TEACHERS”. *Open Access Repository*, vol. 9, no. 3, Mar. 2023, pp. 291-8, doi:10.17605/OSF.IO/K4UWE.

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ARDUINO UNO PLATASI BILAN TANISHISH VA UNGA DASTUR YOZISHNI O'RGANISH

Annotatsiya. Hozirgi vaqtda avtomatika sohasi juda tez suratlar bilan rivojlanmoqda va buni Arduino yordamida amalga oshirrish juda qulay va arzon hisoblanadi. Arduino qurilmalari ichida eng qulayi Arduino UNO hisoblanadi shuning uchun bu qurilma bilan tanishib chiqamiz.

Kalit so'zlar. Arduino Uno, yorug'lik diodi, qarshilik, bredbord, va manba.

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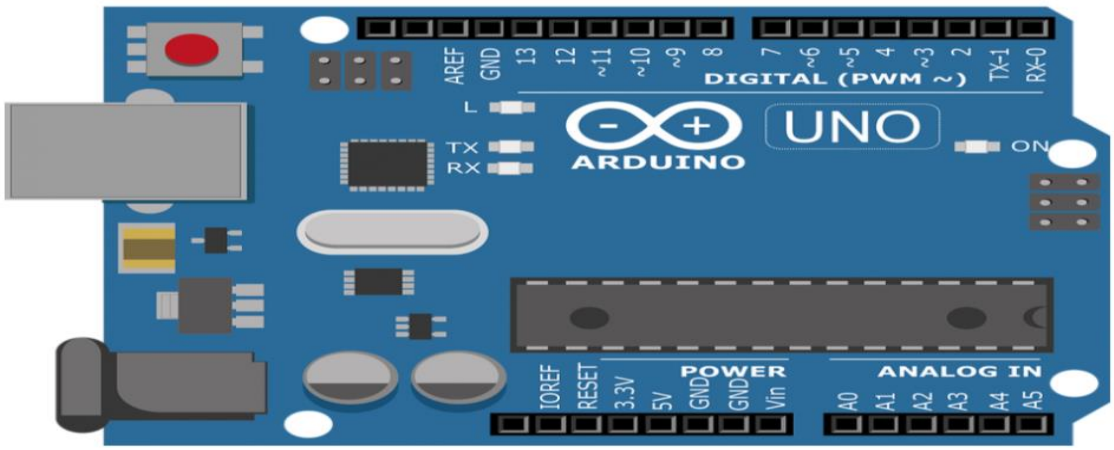
GETTING TO KNOW THE ARDUINO UNO BOARD AND LEARNING HOW TO PROGRAM IT

Abstract. Nowadays, the field of automation is developing very quickly with pictures, and it is very convenient and cheap to do it with Arduino. The most convenient of Arduino devices is Arduino UNO, so let's get acquainted with this device.

Keywords. Arduino Uno, LED, resistor, breadboard, and source.

"*Arduino - katta imkoniyatlarga ega, kichik mo'jiza!"*

Arduino UNO - bu unchalik katta bo'lmagan plata bo'lib o'zining protsessori (mikrokontrolleri) va xotirasiga ega bo'lgan qurilma hisoblanadi.



Arduino Uno - professional bo'lmagan robototexnika ishqibozlari uchun dasturiy va texnik ta'minotlar yig'indisi. Arduino mutloq ochiq arxitektura. Undagi barcha loyihalar qismlari (asosan, dasturiy ta'minot) ochiq tarqatiladi. U

o‘zining platasi va IDE-dasturlash muhitiga ega.Arduino 2003-yili Italiyalik olimlar Massimo Banzi, Devid Mellis va Devid Kvartilerlar tomonidan kashf etilgan [1].

"Uno" so'zi Italyanchada bir degan ma'noni anglatadi. Bu bejis emas, Arduino Uno yaratuvchilari bu yangi kontroller Arduino kontrollerlar oilasida yangi burilish va yangi flagman yaratishga harakat qilishgan va buni uddalaganlar. Sababi, Arduino Uno Arduino kontrollerlar oilasidagi boshqa "aka"lariga nisbatan ancha ixcham, qulay, tez, oddiy va albatta arzonroq hisoblanadi.

Arduino hozirda hayotimizning barcha sohalarida ishlatishimiz mumkin masalan: yorug‘lik chiroqlar, datchiklar, rele modullari, tarmoqlar (Wi-fi, Bluetooth, Internet), sensorlar, motorlar, magnit eshik qulflari va elektr energiyasi bilan ishlaydigan barcha narsalar.

-Arduino yordamida raqamli va analog signallar bilan ishlashimiz mumkin.

- DC motorlari, servo dvigatellar va displeylar va turli xil aktuatorlarni boshqarish. - Radio modullari yordamida simsiz Arduino platformalari o'rtasida ma'lumot almashishni amalga oshirish [2].

Arduino Uno platformasining texnik ko’rsatkichlari

• Mikrokontroller: ATmega328;

• Ishlash kuchlanishi: 5 V;

• Kirish kuchlanishi(tavsiya etilgani): 7-12 V;

• Kirish kuchlanishi(eng yuqori): 6-20 V;

• Raqamli kirish/chiqish: 14 ta

• Analog kirish: 6 ta;

• Kirish/chiqish orqali o'zgarmas tok: 40 mA;

• 3.3 V kiritish uchun o'zgarmas tok: 50 mA;

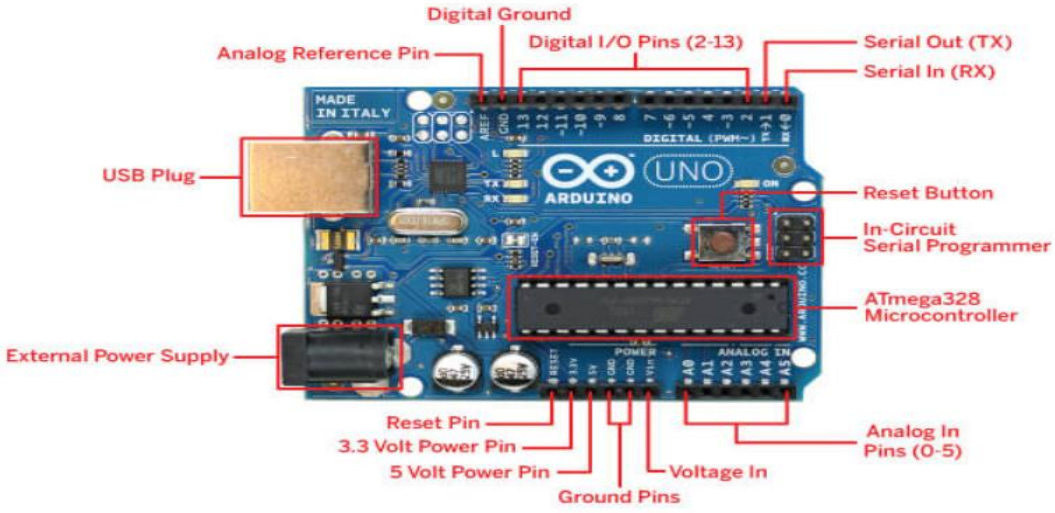
• Flesh xotira: 32 KB(ATmega328) undan 0.5 KB yuklovchi sifatida foydalaniladi;

• Tezkor xotira: 2 KB(ATmega328);

• EEPROM: 1 KB(ATmega328);

• Chastota: 16 MGs; [3]

Bundan tashqari, Arduino Uno qurilmasi unga ulangan USB yoki tashqi manbadan kuchlanish olishi mumkin. Bunda, agar manba bir nechta bo'lsa, ulardan biri avtomatik tanlanadi.



Bunda pinMode(), digitalWrite() va digitalRead() funksiyalaridan foydalaniladi. Bunda har bitta chiqish joyi 20-50 kOm qarshilikka va 40 mAgacha tok kuchi o'tkazishi mumkin.

Arduino Uno kontrolleriga Arduino dasturi yordamida dastur yaratiladi. Buning uchun Arduino dasturida menyuda Tools>Board va u yerdan "Arduino Uno" tanlanadi.

Yuqorida aytilganidek, bu kontroller juda ixcham o'lchamlarga ega bo'lib, uning tomonlari 6.9 va 5.3 smga teng. Bu esa o'z navbatida uni yanada qiziqarli qiladi [4].

Arduino dasturi ikkita asosiy funksiyani o'z ichiga oladi:

- void setup ()
- void loop ()

Dastur ishga tushirish uchun *void setup()* funksiyasidan foydalanishingiz mumkin. Ushbu funksiya faqat bir marta dastur ishga tushirilganda amalga oshiriladi.

void loop() funksiyasi *void setup()* funksiyasi tugallangandan so‘ng bajariladi va *void setup()* funksiyasidan farqli o‘laroq, u uzluksiz ishlaydi.

Arduino IDE ni kompyuterga o’rnatish uchun uni avvalo https: //www.arduino.cc/en/software veb sahifasidan yuklab olish zarur.

Adabiyotlar:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.

2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. Universum: технические науки, (11-3 (104)), 5-8.

3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.

4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. НАНОЭЛЕКТРОНИКИ», 1(A4), 241.
7. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
8. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
9. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
10. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
11. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
12. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023):
13. Mirzaev, U., Abdullaev, E., Kholdarov, B., Mamatkulov, B., & Mustafoev, A. (2023). Development of a mathematical model for the analysis of different load modes of operation of induction motors. In E3S Web of Conferences (Vol. 461, p. 01075). EDP Sciences

УДК 621.38

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MICROPROCESSOR KP580VM80A PRINCIPLE OF OPERATION

Abstract. Nowadays, there is probably no area where the computer has not reached. Hush what is the basis of these computers. Of course, if we include the KP580VM80A microprocessor among these devices, it will not be a mistake. The KR580VM80A chip is a functionally complete single-chip microprocessor with persistent instruction system used as a central processor in data processing and control devices.

Keywords: KR580VM80A, 6 micro n-MDS, frequency, ALU, Buffers and registers.

According to the specification, it was recommended to use an external chip to generate clock signals KR580GF24, but in fact the processor is not important for the shape and state of the clock pulses [1,2]. Most local home computers do not use the KR580GF24 because its division factor of 9 makes it unsuitable for synchronous graphics machines. The use of KR580GF24 in one of the earliest home PCs, "IRISHE", did not allow the processor and video controller to work in sync and caused the computer to slow down significantly, so the KR580GF24 was produced in the future [3,4]. Not used in graphics computers, always replaced by low-integrated counters or register-based circuitry (division factor equal to 8). Like the 8080A prototype, the processor required three power supplies: −5V, +12V, and +5V. It has also been reported that the KR580VM80A can operate in abnormal mode from a single +5V supply. It is supplied instead of +12V, "ground" instead of -5V and lowers the clock frequency to 1.4-1.5 MHz [5,6].

The processor is not an exact clone of the 8080A, due to the difference in technology. The local crystal is larger, which makes it possible to create a high-level water system. The commercial industrial consumer computer Vektor-06T also has a processor running at 3 MHz, which is 20% higher than the maximum allowed. The KR580VM80A (like the 8080 prototype) has 12 undocumented

instructions. Codes #08, #10, #18, #20, #28, #30, #38 are analogues of the NOP operation; opcode #CB similar to JMP; Opcodes #DD, #ED, #FD are analogues of CALL; opcode #D9 is similar to RET [7,8]. On the Radio 86RK computer, the interrupt enable output was used as a one-bit output port for sound production.

The presence of a stack operation flag in the "processor status word" issued by the SYNC signal makes it possible to allocate a separate memory bank for the stack, but this is rarely used. In the amateur computer "UT-88" this feature is used to organize the electronic disk [9,10].

Programmers have found unconventional uses of the stack in memory block copy and fill/clear procedures where maximum performance is required. This made it possible to speed up screen scrolling, cleaning and filling by ~25%, which is important for graphics machines. For example, the graphics screen of the Corvette PC8010/PC8020 computer has a size of 48KB - cleaning and changing such a size takes a lot of CPU time [11,12].

The eight-bit arithmetic-logic unit of the microprocessor provides arithmetic and logical operations on double data expressed in two's complement codes and such processing of binary-decimal packed bits. The first register block contains 16-bit registers, address pointers (IP), 16-bit registers, stack pointers (SP), 16-bit registers, time save (WZ), 16-bit bit, increment and decrement circuits, and six. 8-bit bits. General Purpose Registers (V S D E N L) Three 16-bit registers (VS DE HL) can be used. The microprocessor executes commands in machine cycles. The number of cycles required to execute the command depends on its type and can be from one to five. Machine cycles are executed in machine cycles. The number of cycles in the cycle is determined by the command. performed and can be up to five from the track. The duration of the level cycle. the cycle clock frequency is 500 ns at a frequency of 20 MHz. In the first cycle of the machine operation, the microprocessor generates a synchronization signal, which can be combined with it. used to organize other signals and different operating modes [13,14].

When executing commands, the microprocessor can go into one of three states: “wait,” “capture,” and “stop:,” the duration of which is determined by external control signals.

A high level signal at the RDY input ensures that program commands are automatically executed by the microprocessor at the clock frequency. If the RDY pin is set to a low level signal, the microprocessor goes into the “Standby” mode and generates a high level output signal W1 [15].

The RDY signal can be used to coordinate the operation of a microprocessor with the operation of slow-moving devices if their circulation cycle duration is more than one clock period, as well as to organize step-by-step (in cycles) execution of a command or instruction-by-instruction execution of a program.

When a high-level signal is applied to the HLD input, the microprocessor goes into the “capture” state and confirms the transition to this state by generating a high-level signal at the HLDA output [16,17].

The address and data channel buffer circuits of the microprocessor are switched to a high-resistance state, and the output control signals are switched to a low-level state (except for TR and HLDA signals). The microprocessor enters the “Capture” state in the GB cycle if a read cycle is performed and there is a high-level signal at the RDY input, and in the cycle following the TC cycle if a write cycle is performed. The HLD and HLDA signals allow you to organize a direct memory access mode for any external device that generates the HLD signal [18].

When the HLT instruction is executed, the microprocessor enters the "stop" state and places the address and data channel buffer circuits into a high-resistance state. The microprocessor exits the “stop” state when there is a high-level signal at one of its inputs:

at the SR input - the microprocessor starts working from cycle T\ cycle Ml,

at the HLD input - the microprocessor goes into the “capture” state, and after the HLD signal goes low, it returns to the “stop” state,

at the INT input - the microprocessor starts executing the interrupt cycle when stopping from the GI clock if the HLT command was preceded by the E1 “interrupt enable” command, otherwise it remains in the “stop” state [19].

References:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.

2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.

3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.

4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.

5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.

6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).
17. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. Universum: технические науки, (11-8 (104)), 43-47.

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MA’LUMOTLARNI QAYTA ISHLASHDA KP580VM80A MIKROPROTSESSORINING O’RNI

Annotatsiya. Hozirgi kunda kompyuter yetib bormagan soha bo’lmasa kerak. Hush bu kompyuterlarni asosi nimalardan iborat. Albatta KP580VM80A mikroprotsessorini bu qurilmalar qatoriga qo‘shsak xato bo’lmaydi. KR580VM80A mikrosxemasi ma'lumotlarni qayta ishlash va boshqarish qurilmalarida markaziy protsessor sifatida qo‘llaniladigan, doimiy ko‘rsatmalar tizimiga ega bo‘lgan funksional jihatdan to‘liq bitta chipli mikroprotsessordir.

Kalit so‘zlar: KR580VM80A, 6 mikro n-MDS, chastota, ALU, Buferlar va registrlar.

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THE ROLE OF THE KP580VM80A MICROPROCESSOR IN DATA PROCESSING

Abstract. Nowadays, there is probably no area where the computer has not reached. Hush what is the basis of these computers. Of course, if we include the KP580VM80A microprocessor among these devices, it will not be a mistake. The KR580VM80A chip is a functionally complete single-chip microprocessor with persistent instruction system used as a central processor in data processing and control devices.

Keywords: KR580VM80A, 6 micro n-MDS, frequency, ALU, Buffers and registers.

Spetsifikatsiyaga muvofiq soat signallarini yaratish uchun tashqi mikrosxemadan foydalanish tavsiya etildi KR580GF24, lekin aslida protsessor soat impulslarining shakli va holati uchun muhim emas. Ko‘pgina mahalliy uy kompyuterlarida KR580GF24 ishlatilmaydi, chunki uning bo'linish koeffitsienti 9 ga teng bo'lganligi sababli u sinxron grafik mashinalar uchun mos emas. KR580GF24- ni eng qadimgi maishiy shaxsiy kompyuterlardan biri “IRISHE” da qo‘llash protsessor va video kontrollerning sinxron ishlashiga imkon bermadi va kompyuterning ishlashini sezilarli darajada sekinlashishiga olib keldi, shuning uchun kelajakda KR580GF24 ishlab chiqarildi [1]. Grafik kompyuterlarda ishlatilmaydi, har doim uni past integral hisoblagichlar yoki registrlarga asoslangan sxema bilan almashtiradi (bo‘linish koeffitsienti 8ga teng). 8080A prototipi singari, protsessorga uchta quvvat manbai kerak edi: −5V, +12V va +5V. Shuningdek, KR580VM80A +5V kuchlanishli bitta +5V manbadan g‘ayritabiiy

rejimda ishlashi mumkinligi haqida xabar chop etildi. +12V o‘rniga beriladi, -5V o‘rniga “tuproq” va soat chastotasini 1,4-1,5 MGs ga tushiradi [2].

Protsessor 8080A ning to‘liq kloni emas, bu texnologiyadagi farq bilan bog‘liq. Mahalliy kristal kattaroqdir, bu yuqori darajali havsizlik tizimini yaratish imkoniyatini yuzaga keltiradi. Savdoda ishlab chiqarilgan sanoat iste‘molchi Vektor-06T kompyuterida ham protsessor 3 MGs chastotada ishlaydi, bu ruxsat etilgan maksimal qiymatdan 20% yuqori. KR580VM80A (8080 prototipi kabi) 12 ta hujjatsiz buyruqlarga ega. #08, #10, #18, #20, #28, #30, #38 kodlari NOP operatsiyasining analoglari; opcode #CB JMP ga o'xshash; #DD, #ED, #FD opkodlari CALL ning analoglari; opcode #D9 RETga o'xshaydi. Radio 86RK kompyuterida uzilishni yoqish chiqishi ovoz ishlab chiqarish uchun bir bitli chiqish porti sifatida ishlatilgan.

SYNC signali tomonidan chiqarilgan “protsessor holati so'zida” stek operatsiyasi bayrog'ining mavjudligi stek uchun alohida xotira bankini ajratish imkonini beradi, ammo bu juda kam qo'llaniladi. “UT-88” havaskor kompyuterida bu xususiyat elektron diskni tashkil qilish uchun ishlatiladi [3].

Dasturchilar maksimal ishlash talab qilinadigan xotira bloklarini nusxalash va to'ldirish/tozalash protseduralarida stekdan noan‘anaviy foydalanishni topdilar. Bu ekranni aylantirish, tozalash va to'ldirishni ~25% ga tezlashtirish imkonini berdi, bu grafik mashinalar uchun muhim. Misol uchun, Corvette PC8010/PC8020 kompyuterining grafik ekrani 48KB hajmga ega - bunday hajmni tozalash va o'zgartirish protsessorga juda ko'p vaqtni oladi [4].

Adabiyotlar:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.

2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. Universum: технические науки, (11-3 (104)), 5-8.
3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. Science and innovation, 1(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. НАНОЭЛЕКТРОНИКИ», 1(A4), 241.
7. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
8. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
9. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
10. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
11. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
12. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023):
13. Mirzaev, U., Abdullaev, E., Kholdarov, B., Mamatkulov, B., & Mustafoev, A. (2023). Development of a mathematical model for the analysis of different load modes of operation of induction motors. In E3S Web of Conferences (Vol. 461, p. 01075). EDP Sciences

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O‘ZBEKISTON RESPUBLIKASIDA YER UMUMMILLIY BOYLIK SIFATIDA QISHLOQ XO‘JALIGIGA MO‘LJALLANGAN YERLAR VA EKIN MAYDONLARIDA MONITORING ISHLARINI AMALGA OSHIRISH

Annotatsiya. O‘zbekiston respublikasida yer umummilliy boylik sifatida alohida e’tirof etiladi. Shunday ekan uning nazorati va boshqaruv tizimlari davlat tomonidan turli huquqiy, normativ me’yoriy hujjatlar asosida amalga oshiriladi. Respublikadagi yer borasidagi boshqaruv va nazorat tizimi esa yer monitoringini yuritish asosida quriladi.

Kalit so‘zlar: Yer monitoringi, nazorat tizimi, kuzatuv, respublika monitoringi, mintaqaviy monitoring, mahalliy monitoring, yer monitoringining kichik tizimlari.

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IMIMPLEMENTATION OF MONITORING WORKS ON AGRICULTURAL LANDS AND CROP AREAS IN THE REPUBLIC OF UZBEKISTAN AS A NATIONAL WEALTH

Abstract. In the Republic of Uzbekistan, land is recognized as a national wealth. Therefore, its control and management systems are implemented by the state on the basis of various legal and regulatory documents. The land management and control system in the republic is built on the basis of land monitoring.

Key words: Land monitoring, control system, surveillance, republic monitoring, regional monitoring, local monitoring, small systems of land monitoring.

Monitoring yerlardan foydalanish maqsadini hisobga olgan holda olib boriladi va yer fondi toifalariga muvofiq bo‘lgan quyidagi kichik tizimlarga bo‘linadi:

qishloq xo‘jaligi maqsadidagi yerlar monitoringi;

aholi punktlari yerlari monitoringi;

sanoat, transport, aloqa, mudofaa va boshqa maqsadlardagi yerlar monitoringi;

tabiatni muhofaza qilish, sog‘lomlashtirish, rekreatsion maqsadlardagi yerlar monitoringi;

tarixiy-madaniy maqsadlardagi yerlar monitoringi;

o‘rmon fondi yerlari monitoringi;

suv fondi yerlari monitoringi;

zaxira yerlar monitoringi.

Respublikada yer monitoringining asosiy vazifalari quyidagilar hisoblanadi:

yer fondi holati o‘zgarishlarini o‘z vaqtida aniqlash ustidan kuzatishlar tizimini tashkil etish va amalga oshirish, ularni baholash, salbiy jarayonlarni prognozlash hamda ularning oldini olish va bartaraf etish bo‘yicha tavsiyalar ishlab chiqish;

davlat yer kadastri yuritilishini, yerdan foydalanishni, yer tuzishni, yer fondidan maqsadli va oqilona foydalanish, yerlarni muhofaza qilish va yer resurslarini davlat tomonidan boshqarishga doir boshqa funksiyalar ustidan davlat nazoratini axborot bilan ta’minlash.

Hududiy qamrab olinishiga ko‘ra yerlarning respublika, mintaqaviy va mahalliy monitoringi amalga oshiriladi.

Respublika monitoringi O‘zbekiston Respublikasining butun hududini qamrab oladi.

Mintaqaviy monitoring fizik-geografik, ma’muriy va boshqa chegaralar bilan chegaralangan hududlarni qamrab oladi.

Mahalliy monitoring alohida yer uchastkalari va manzara-ekologiya komplekslarini qamrab oladi.

Yer monitoringi mazmuni yer fondi holatini maxsus tashkil etilgan muntazam kuzatishlar (suratga olish, tekshirish va qidiruv) dan, quyidagilar o‘zgarishlarini aniqlash, baholash va prognozlashdan iborat bo‘ladi:

yerga egalik qilish, yerdan foydalanish, ekinzorlar, dalalar, uchastkalar, manzara-ekologiya komplekslarining holati;

erlar unumdorligining o‘zgarishiga, ularning tanazzuli va destruksiyasi (aridizatsiya va cho‘llanishi, suv, irrigatsiya va shamol eroziyasi, chirindi miqdori o‘zgarishi, tuproq tarkibining o‘zgarishi, ohakliligi, begona o‘t bosganligi, sho‘rlanganligi, qishloq xo‘jaligi yerlarining o‘t bosganligi, yerlarning pestitsidlar, og‘ir metallar, radionuklidlar va boshqa toksik moddalar, sanoat, maishiy va boshqa chiqindilar bilan ifloslanishi) ga ta’sir qiluvchi jarayonlar (omillar);

tabiiy ozuqabop o‘tlar qoplami holatining o‘zgarishi (o‘simliklar tarkibi, tuzilishi, hosildorligi, sifati va to‘yimliligining o‘zgarishi) bilan bog‘liq jarayonlar;

daryolar qirg‘oqlarining, Orol dengizi, ko‘llar, suv omborlari, irrigatsiya va gidrotexnika inshootlarining holati;

aholi yashash joylari, neft va gaz qazib olish, tozalash inshootlari, go‘ngxonalar, axlatxonalar, yonilg‘i-moylash materiallari, o‘g‘itlar, zaharli ximikatlar omborlari, toksik sanoat chiqindilari va radioaktiv materiallar ko‘milgan joylar, shuningdek boshqa sanoat obyektlari yerlarining holati.

Qishloq xo‘jaligi ekinlari — texnik ekinlar (g‘o‘za, kanob, kannabis, tamaki, supurgi), boshoqli don ekinlari (bug‘doy, arpa, makkajo‘xori don uchun, oq jo‘xori, sholi, tariq, suli, javdar), sabzavot (pomidor, bodring, piyoz, sabzi, karam, baqlajon, qalampir, sarimsoqpiyoz, osh lavlagi, turp, sholg‘om, ko‘katlar), poliz (qovun, tarvuz, oshqovoq), kartoshka, moyli ekinlar (kungaboqar, soya, yer yong‘oq, kunjut, zig‘ir, masxar), dukkakli ekinlar (no‘xat, loviya, mosh), ozuqa ekinlari (beda, makkajo‘xori silos uchun, xashaki lavlagi, bir yillik o‘tlar (raps, perko, tritikali, sudanka), rezavor ekinlar (qulupnay, malina) va boshqalar;

qishloq xo‘jaligi ekinlari monitoringi — ekinlarni joylashtirish ko‘rsatkichlari asosida qishloq xo‘jaligi ekinlari ekilgan maydonlarni o‘lchash, shuningdek, ekin maydonlarida o‘tkaziladigan erga ishlov berish bilan bog‘liq agrotexnik tadbirlarning o‘z muddatlarida bajarilishi yuzasidan kuzatuv olib borish;

qishloq xo‘jaligiga mo‘ljallangan yerlar monitoringi — mulkchilik shaklidan qat’i nazar, yer fondining barcha toifalaridagi qishloq xo‘jaligiga mo‘ljallangan yerlarda, jumladan, haydaladigan ekin yerlari, ko‘p yillik daraxtzorlar, bo‘z yerlar, pichanzor va yaylovlar, shuningdek, ularga xizmat qiluvchi boshqa yer turlarining (ariq, zovur, yo‘l va boshqalar) holati bo‘yicha kuzatuv tizimi (fuqarolarga yakka tartibda uy-joy qurish va uy-joyni obodonlashtirish uchun berilgan yer uchastkalari bundan mustasno);

1-rasm Ekin yerlarning monitoring qilishda uchuvchisiz uchish qurilmasi yordamida olingan surat.

qishloq xo‘jaligiga mo‘ljallangan yerlar — yer fondining barcha toifalaridagi qishloq xo‘jaligi ehtiyojlari uchun berilgan yoki ushbu maqsadlarga mo‘ljallangan yerlar (sug‘oriladigan va sug‘orilmaydigan yerlar, haydaladigan yerlar, pichanzorlar, yaylovlar, ko‘p yillik mevali dov-daraxtlar egallagan yerlar).

Qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringi mulkchilik shakli, huquqiy rejimi, xususiyati va foydalanish muddatlaridan qatiy nazar, yer fondining barcha toifalaridagi qishloq xo‘jaligiga mo‘ljallangan yerlarda amalga oshiriladi va ular monitoring obyekti hisoblanadi.

Qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringi O‘zbekiston Respublikasi Milliy geografik axborot tizimidagi davlat yer kadastrining qishloq xo‘jaligiga mo‘ljallangan yerlar bo‘yicha yer turlari, maydoni, yer egalari, yerdan foydalanuvchilar va ijarachilar to‘g‘risidagi ma’lumotlar asosida amalga oshiriladi.

Qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringi ushbu yerlarning tuproq, geobotanika va boshqa tadqiqotlar materiallaridan foydalangan holda, qishloq xo‘jaligiga mo‘ljallangan yerlar va ekinlarni monitoring qilish orqali amalga oshiriladi.

2-rasm Ekin yerlarning monitoring qilishda uchuvchisiz uchish qurilmasi yordamida olingan surat.

Qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringi Qishloq xo‘jaligi vazirligi, viloyatlar qishloq xo‘jaligi boshqarmalari va tuman qishloq xo‘jaligi bo‘limlari, shuningdek, “O‘zdaverloyiha” instituti va uning hududiy bo‘linmalari tomonidan amalga oshiriladi.

Quyidagilar qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringining asosiy vazifalari hisoblanadi:

qishloq ho‘jaligiga mo‘ljallangan yerlarning turlari bo‘yicha ularning maydoni va ushbu yerlardan foydalanish holati yuzasidan monitoring tizimini tashkil etish va amalga oshirish;

qishloq xo‘jaligiga mo‘ljallangan yerlardan belgilangan maqsadlarda foydalanilishini ta’minlash;

yer to‘g‘risidagi qonunchilik hujjatlari talablarining buzilish holatlarining oldini olish va aniqlangan holatlar yuzasidan tegishli choralar ko‘rish maqsadida qishloq xo‘jaligiga mo‘ljallangan yerlarni muhofaza qilish bo‘yicha vakolatli idoralarni axborot bilan ta’minlash.

Xulosa: Qishloq xo‘jaligiga mo‘ljallangan yerlar va ekin maydonlari monitoringini O‘zbekiston Respublikasi Milliy geografik axborot tizimidagi davlat yer kadastrining qishloq xo‘jaligiga mo‘ljallangan yerlar bo‘yicha yer turlari, maydoni, yer egalari, yerdan foydalanuvchilar va ijarachilar to‘g‘risidagi ma’lumotlari asosida amalga oshirish maqsadga muvofiq bo‘ladi;

Adabiyotlar ro‘yhati:

1. Yer manitoringi o‘quv qo‘llanma R.A.Turayev 2022 yil
2. Xudoyberdiyev, F. Sh., Bobojonov, S. O‘, & Muxamadov, Q. M. O‘. (2022). Markaziy osiyo mamlakatlarida chiqindi obyektlarini boshqarishning bugungi holati. Oriental renaissance: Innovative, educational, natural and social sciences, 2(5), 967-976.
3. O‘zbekiston Respublikasi Vazirlar Mahkamasining qarori qishloq xo‘jaligiga mo‘ljallangan yerlarda monitoring ishlarini amalga oshirish, yerlarni muhofaza qilish va yer tuzish faoliyatini tartibga soluvchi normativ-huquqiy hujjatlarni tasdiqlash to‘g‘risida
4. Mirziyoyev SH.M. 2022 — 2026-yillarga mo‘ljallangan Yangi O‘zbekistonning taraqqiyot strategiyasi to‘g‘risida.
5. O`zbekiston Respublikasining Yer kodeksi. 1998.(2011-yil1-martgacha bo`lgan o`zgartirish va qo`shimcha bilan) – T.: “Adolat”, 2011.- 152 bet.
6. O`zbekiston Respublikasining “Fermer xojaligi to`g‘risida”gi qonuni 1998. (2011-yil 1-martgacha bo`lgan o`zgartirish va qo`shimcha bilan) – T.: “Adolat”, 2011.
7. Avezbayev S.A., Volkov S.N. YER tuzishni loyihalash / Darslik. T.: Yangi asr avlodi, 2006. - 445 bet.
8. Bobojonov A,R., Rahmonov Q.R., Gofirov A.J. Yer kadastri / Darslik. – T.: TIMI. 2008. – 212 bet.
9. I.Ixlosov.D.M.Rizayeva Davlat kadastr asoslari/o‘quv qo‘llanma-T:Nashir:2019.
10. A.R.Bobojonov. D.M.Kamalova. S.B.Ro‘ziboyev. Yer kadastri/darslik-T:2015.
11. A.R.Bobojonov. D.M.Kamalova. S.B.Ro‘ziboyev. Yer kadastri/darslik-T:2016.
12. Mirzaabdullayeva M. R. Muqumov A. M. Hamidov F. R.Uzakova G.Sh. Yer huquqi/darslik-T:2020

13. Q. Rahmonov Sh.K. Narbayev Z.M. Muqimov. Yer resurslarini boshqarish/o‘quv qo‘llanma-T:2019

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CAUSES OF TRAFFIC CONGESTION ON CITY STREETS

Abstract. The article describes the causes and consequences of traffic jams in city streets, which are considered to be one of today's urgent problems.

Key words: traffic, cars, public transport, car roads, noise, road environment, factories.

Japan is the largest producer of cars. The number of cars produced in Japanese car factories is 8.0 million units per year. The second place is the USA with 6.5 million units, and the third place is Germany with 5.0 million units. The position of Uzbekistan in the production of light cars is not low.

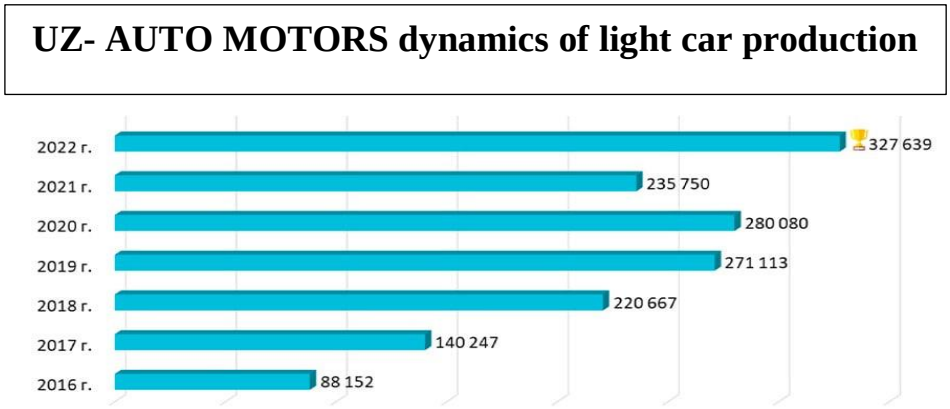

Figure. 1. Change of car production in Uzbekistan by years

Among the SNG countries, in the first 6 months of 2022, Uzbekistan took the lead in the production of passenger cars and put 160,000 passenger cars on sale. It is clear that the automobile industry makes a great contribution to the economic development of countries, but the problems in the process of their operation, that is, the increase in the number of cars from the capacity of large city streets and the increase in traffic caused by improper traffic management. in the (Figure 3).

Figure 2. Traffic jams on city streets

According to the analysis, traffic jams are caused by several reasons.

- intersection of roads with unequal carrying capacity according to the road category;
- non-observance of traffic rules;
- the width of the carriageway of the road (incorrect design of the road);
- moving at very low speed;
- exceeding the load level of the road;
- increase in traffic flow density.

Traffic flow density plays an important role in creating traffic jams on road networks and is determined by the following formula:

$$q = \frac{N}{V}, \text{ avt/km;}$$

N- amount of traffic in one lane,

V- speed of traffic flow, km/soat;

The maximum theoretical carrying capacity of the highway is also expressed as follows, gaining importance in the formation of traffic jams in the street-road networks.

$$P = \frac{1000V}{L_d}, avt/soat;$$

V- the speed of cars moving in the lane, km/soat;

L_d - dynamic gauge of cars, m;

In addition, the size of the carriageway is one of the factors that prevent the occurrence of traffic jams in the city's road networks.

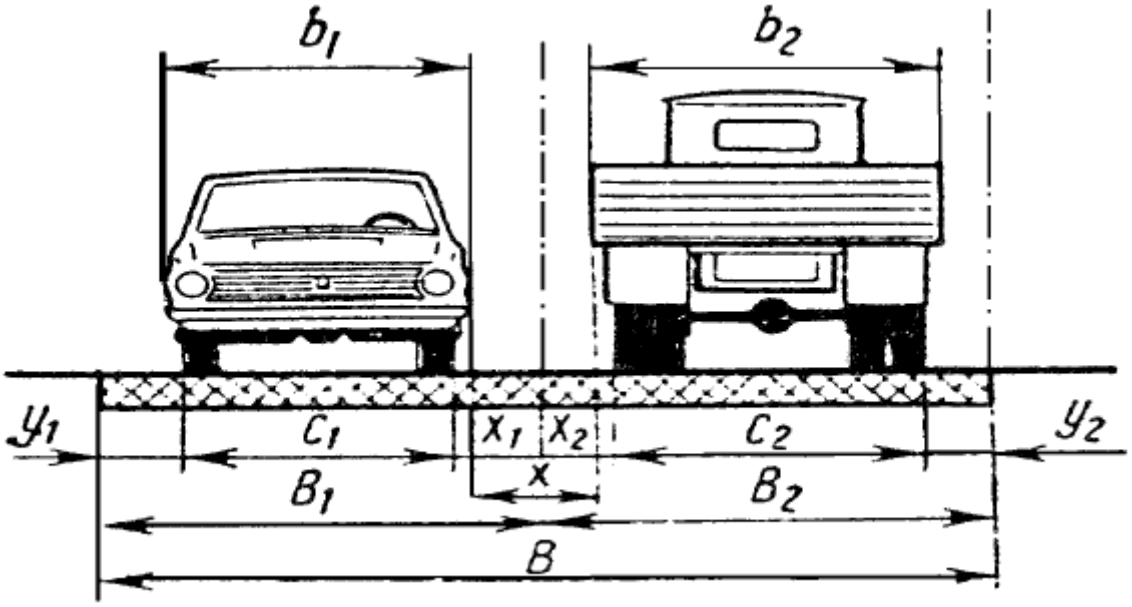

Figure 3. Determining the traffic section of the road

Determining the safe distance between oncoming vehicles

$$X = 0.3 + 0.1\sqrt{V_1 + V_2}\ ;$$

The distance between the outer wheel of the vehicle and the edge of the pavement $Y = \sqrt{0.1 + 0.0075V}$;

Conclusion

In conclusion although the developing automobile industry makes a great contribution to the development of the economy of the countries, their exploitation process is becoming more difficult day by day, that is, as a result of traffic jams due to the increase in the number of cars in large cities, the demand for using new approaches to traffic on the streets is increasing. causing them to be scientifically based. Our main goal is to provide a solution to traffic jams in our country.

References:

1. Dvigatel konstruktsiyasi va ish jarayonlarini boshqarishni mukammallashtirish" (2022). Scientific Impulse, 1(4), 536–542. Retrieved from http://nauchniyimpuls.ru/index.php/ni/article/view/17642 Mizrabov Ulug'bek Boliqul o'g'li Jizzax Politexnika instituti asisstanti Sultanov Azizbek Ismoiljon o'g'li Jizzax Politexnika instituti asisstanti.

2. "Jamoat transportlari yo'nalishlarida harakat miqdori tarkibini tatqiq qilish", Научный импульс № 7 (100) Февраль 2023 г http://nauchniyimpuls.ru/index.php/ni/article/view/1764 Mizrabov Ulug'bek Boliqul o'g'li Assistant of Jizzakh Polytechnic Institute "Studying the Quantity and Composition of Traffic in Public Transport Directions" Genius Journals Publishing Group, Brussels, Belgium.

3. “Road traffic safitey and it’s impact on the devolopment of moderin road transport expertise” Mizrabov Ulug‘bek Boliqul o‘g‘li Jizzax Politexnika instituti asisstanti //Spectrum Journal of Innovation, Reforms and Development. – 2022. – T. 7. – C. 157- 164.
4. Mizrabov Ulug‘bek Boliqul o‘g‘li, Sultanov Azizbek Ismoiljon o‘g‘li “Avtomobillar xarakat xavfsizligiga fal ta’sir qiluvchi ekspluatatsiyaviy ko‘rsatkichlari”. // Механика и технология. 2022. №Спецвыпуск 2. URL: https://cyberleninka.ru/article/n/avto mobillar-xarakat-xavfsizligiga-faol-tasir-qiluvchi-ekspluatatsiyaviy-korsatkichlari (дата обращения: 26.02.2023).

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VILOYAT MARKAZLARI IQTISODIY-IJTIMOIY RIVOJLANISHINING ASOSIY MASALALARI (QARSHI SHAHRI MISOLIDA)

Annotatsiya. Maqolada Qarshi shahrini iqtisodiy-ijtimoiy rivojlanish holati va istiqbollari, demografik ko'rsatkichlari, mehnat resurslaridan foydalanish holati, shaharning ijtimoiy infratuzilmasi bayon qilingan.

Kalit so'zlar: shahar, sanoat uzeli, mehnat resurslari, migratsiya, aholi bandligi, infratuzilma, ijtimoiy soha, diversifikatsiya.

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MAIN ISSUES OF ECONOMIC-SOCIAL DEVELOPMENT OF REGIONAL CENTERS (IN THE EXAMPLE OF KARSHI CITY)

Abstract. The article describes the status and prospects of economic and social development of the city of Karshi, demographic indicators, the state of use of labor resources, and the social infrastructure of the city.

Key words: city, industrial center, labor resources, migration, population employment, infrastructure, social sphere, diversification.

Ma'muriy markaz nafaqat ma'muriy-hududiy tuzilmaning, balki mamlakat butun iqtisodiy tizimining ajralmas qismidir. Tabiiy, ijtimoiy-iqtisodiy geografik, demografik va boshqa xususiyatlar bilan belgilanadigan ishlab chiqaruvchi kuchlar aglomeratsiyasini ifodalovchi ma'muriy markaz davlat miqyosida iqtisodiy rivojlanishning markaziy bo'g'ini vazifasini bajaradi. Har bir ma'muriy markaz mustaqil rivojlanib, inqirozlarni yengib, izchil faoliyat yuritib, butun mamlakat iqtisodiyotini rivojlantirishga hissa qo'shadi. Shu sababli, iqtisodiyotdagi chuqur o'zgarishlar uni turli omillar ta'siriga beriluvchan qilib qo'ygan hozirgi davrda hududlarni, jumladan, ma'muriy markazlarni barqaror rivojlantirish muammolarini dolzarb bo'lib qolmoqda.

Qarshi Janubiy O'zbekistonning yirik shahri va Qashqadaryo viloyatining markazi hisoblanadi. Aholining soni jihatidan respublika shaharlari orasida 8-

o‘rindadir. Shaharning iqtisodiy geografik o‘rni juda qulay. Viloyatning va o‘zlashtirilgan Qarshi dashtining deyarli markazida asosiy temir va avtomobil yo‘llari kesishgan yerda, qadimdan dehqonchilik intensiv rivojlangan voha bilan keng yaylovlar Qarshi-Zarafshon, Surxon-Sherobod vodiysi oralig’ida va qulay sanoat uzelida joylashgan. Ayni vaqtda respublika miqyosidagi ishlab chiqarish kuchlari tez rivojlanayotgan hududda o‘rnashgan.

Qashqadaryo sharoitida mehnat resurslaridan to‘g‘ri va oqilona foydalanish ishlab chiqarish kuchlarini rivojlantirish va tabiiy boyliklardan unumli foydalanish imkoniyatini yaratadi. Shaharda mehnat resurslarining o‘sishi, aholi sonining o‘sishi uning tarkibi va migrasion harakatiga bog‘liq. Shahar aholisining o‘sishi 1960 yillardan keyin tez ko‘payib bordi. Masalan, 1959 yil aholi ro‘yxati bo‘yicha shaharda 33 ming kishi yashagan bo‘lsa, 2022 yilda 289,6 ming kishiga yetdi. Aholining bunday ko‘payishi birinchi navbatda Qarshi cho‘lini o‘zlashtirish munosabati bilan hamda viloyat hududidan tabiiy manbalarning ko‘plab topilishi shahar xo‘jaligining rivojlantirish imkonini yaratadi, bu esa shaharga ko‘plab kishilarning kelib joylashishiga sabab bo‘ldi.

Aholining ko‘payishi bilan mehnat resurslari (158,6 ming kishi) ham ko‘payib bordi. Umumiy aholining 47,1 % ijtimoiy mehnatda band. Qolgan qismi yosh bolalar, o‘smirlar, nafaqaxo‘rlar hisoblanadi. Qarshi shahrida mehnatga layoqatli yoshlarni umumiy soni (165,5 ming kishi) o‘sib bormoqda. Shuning uchun ham yoshlarni ish bilan ta’minlash maqsadida shaharda tadbirkorlikni shakllantirish o‘rta va kichik biznes va boshqa sohalarni rivojlantirishni talab etadi. Mana shu yo‘l bilan o‘sib kelayotgan mehnatga layoqatli aholini ish bilan ta’minlashda xalq iste’mol buyumlarini ko‘proq ishlab chiqarish imkoniyatini tug‘diradi.

O‘zbekistonning janubiy mintaqa shaharlariga xos bo‘lgan xususiyatlardan biri aholining tabiiy o‘zgarishi bo‘lib shahar aholisi turmush sharoitini yaxshilanganligi tug‘ilishni o‘sib borganligidan dalolat beradi. Qarshi shahrida tug‘ilish darajasi (har 1000 kishiga nisbatan) 29,7 promilleni, o‘lim darajasi 5,5 promille bo‘lib, tabiiy o‘sish 24,2 promilleni tashkil etdi.Shaharda kelganlar 2751 kishi, ketganlar 3231 kishini tashkil etdi.

1-jadval

Qarshi shahri aholisining tabiiy harakati ko’rsatkichlari

Ko‘rsatgichlar	2002	2005	2007	2009	2010	2018	2022
Tug‘ilish	17,9	17,0	20,2	20,7	20,4	20,7	29,7
O‘lim	4,5	4,3	4,2	3,9	3,9	4,3	5,5
Tabiiy o‘sish	13,4	12,8	16,0	16,8	16,5	16,4	24,2

Manba. Qashqadaryo viloyati statistika ma’lumotlaridan olingan.

Qarshi shahar aholisi yildan-yilga o’sib borayotganligi munosabati bilan mehnat resurslari ham ko’payib borganligini ko‘rish mumkin. Bunday holatda bozor munosabatlari sharoitida ko‘payib borayotgan aholini ish bilan ta’minlash muammosini keltirib chiqaradi. Ana shunday muammolarga duch kelmaslik

uchun aholi bandligini ta’minlash va yangi ish joylarini yaratish dasturi bo‘yicha ish olib borish zarur. Buning uchun yangi ishlab chiqarish obyektlarini ishga tushirish, ishlab turgan korxonalarni modernizatsiya qilish va kengaytirish, kichik korxona va mikrofirmalar tashkil etish, yakka tartibdagi tadbirkorlikni tashkil etish, ishlab chiqarish, ijtimoiy va bozor infratuzilmasini rivojlantirish ayrim ishlamayotgan korxonalar faoliyatini tiklash va boshqa tadbirlarni amalga oshirish, yangi ish o‘rinlarni yaratish imkoniyatini vujudga keltirish mumkin.

O‘zbekiston Respublikasi Prezidentining “Shaharlar, shaharchalar va qishloq aholi punktlarining bosh rejalarini ishlab chiqish va amalga oshirish jarayonlarini takomillashtirish chora tadbirlari to‘g‘risida”gi qarori bo‘yicha Qarshi shahrida olib borilayotgan bunyodkorlik ishlari viloyatimiz markazi-Qarshi shahrining bosh rejasi 2013 yil 13 sentabrda ishlab chiqilgan. Unga ko‘ra, shaharning chegaraviy chizig‘i maydoni 7551 gektarga teng. Shaharda ko‘p qavatli – 9-4 qavatli, kamqavatli – 2-3 qavatlli hamda alohida 1-2 qavatli turar-joy binolari qurilishi ko‘zda tutilgan. Har bir hududdagi aholi soniga qarab, maktab, bog‘cha, mahalla guzarlari, kichik xiyobonlar yaratish mo‘ljallangan. Qarshining tarixiy-me’moriy qismi atrofida muhofaza hududi tashkil etish rejalashtirilgan. Yodgorliklar yaqinida reklama taxtalari, tarixiy imoratlarga muvofiq kelmaydigan turli binolar qurishga chek qo‘yiladi. Avtomobil yo‘llari transporti muassasalari (avtovokzal, avtobekatlar, avtomobil yo‘llari servis xizmati) qo‘shimcha yangilanishlarga ega bo‘ladi.Shahardagi mavjud magistral yo‘llarni yanada kengaytirish, keyinchalik shahar chekkasidagi aylanma yo‘llarga chiqish va Shahrisabz, G‘uzor, Koson, Yangi Nishon kabi viloyatdagi boshqa aholi punktlariga yo‘lovchilarni tashish nazarda tutilgan.

Bugungi Qarshi ko‘p funksiyali shahar hisoblanadi. Shahardagi sanoat tarmoqlari tarkibida yengil sanoat va oziq-ovqat sanoati yetakchi o‘rin tutadi. Paxta tozalash zavodi, yog‘-sut zavodi, tikuv fabrikasi, qurilish materiallari, metallarga ishlov beruvchi kombinatlar viloyat iqtisodiyotining rivojiga munosib ulush qo‘shib kelmoqda. Hozirgi vaqtda Qarshi shahrida 20 dan ortiq qo‘shma korxona faoliyat ko‘rsatadi. "Mevalar kamalagi” O‘zbekiston-Britaniya, "Qarshiyog‘” O‘zbekiston-Singapur qo‘shma korxonalari mahalliy xomashyoni qayta ishlash yo‘li bilan mahsulot ishlab chiqaradi. Qarshi va uning tevaragida paxta, ipak, yog‘ zavodlari, metal ishlash korxonalari, tikuvchilik fabrikalari, binokorlik materiallari kombinati kabi korxonalar qurilib, Qarshi sanoat tuguniga aylandi. Cho‘lni o‘zlashtirishda Qarshi tayanch manzil hisoblanadi. Temiryo‘l va avtomobil yo‘llari Qarshida birlashadi. Bu hol Nishon, Talimarjon, Koson kabi shahar va shaharchalarning ishlab chiqarish aloqalarini rivojlantiradi.

Demak, ma’muriy markazlarni ijtimoiy-iqtisodiy rivojlanishida iqtisodiy o'sishni shunday iqtisodiy faoliyat orqali ta'minlashi kerakki, bu o'z tuzilishi va mazmuni bo'yicha barqaror rivojlanish tamoyillariga mos kelishi, ijtimoiy hayot uchun qulay shart-sharoitlarni yaratishga yordam berishi, aholi farovonligi, uning darajasini oshirish, balki ekologik xavfsizlik darajasiga ham amal qilishi lozim. Bu muammoni hal etish uchun hududning ijtimoiy-iqtisodiy tizim sifatida

samarali faoliyat yuritishi va rivojlanishini bugungi davrning barcha talablariga mos ravishda ta’minlash chora-tadbirlarini ishlab chiqish, davlat darajasida ma’muriy markazlarni barqaror rivojlantirish Konsepsiyasini qabul qilish zarur.

Foydalanilgan adabiyotlar:

1. Ковалев С.А. Сельское расселение. – М.: МГУ, 1963. – 370 с.
2. Крупко А.Э. Теоретические аспекты изучения территориальной организации населения и расселения // Журнал «Вестник ВГУ», 2007. - с. 65-69.
3. Муродова Д.С. Основные особенности демографической ситуации в Кашкадарьинской области // Электронное научно-практическое периодическое издание. Экономика и социум № 1(92), 2022. – С. 72-78
4. Муродова.Д.С. Ҳудуднинг демографик сиғимини аниқлашда экологик масалалар (Қашқадарё вилояти мисолида) // Замонавий ижтимоий-иқтисодий география: ютуқлар, муаммолар ва истиқболлар. Республика илмий-амалий конференцияси материаллари. – Тошкент, 2013. – Б. 229-230.
5. Тожиева З.Н. “Ўзбекистон Республикасида демографик жараёнлар ва уларнинг ҳудудий хусусиятлари”. Геог. фан. докт. дисс.... автореф.... – Тошкент: Ўзбекистон Миллий университети, 2017. – 67 б.
6. Murodova D.S. Economic geographical factors affecting the formation of city addresses // ACADEMICIA: An International Multidisciplinary Research Journal.Volume 12,.India, 2022. – P. 29-34.
7. Murodova D.S. Main Characteristics Of The Demographic Situation And Economic And Social Development Of Kashkadarya Region // Eurasian Journal of History, Geography and Economics. Volume 16, Belgium, 2023.- P. 32-35.

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QASHQADARYO VILOYATI AHOLI ZICHLIGI VA DEMOGRAFIK SIG'IMINING IQTISODIY GEOGRAFIK JIHATLARI

Annotatsiya. Maqolada Qashqadaryo viloyati aholi joylashuvi bilan bog'liq hududning demografik sig'imi, aholi joylashuviga ta'sir qiluvchi tabiiy va iqtisodiy omillarning ta'siri, aholi zichligi bilan bir qatorda demografik sig'imni aniqlashning zarurati to'g'risida bayon qilingan.

Kalit so'zlar: aholi joylashuvi, aholi soni, aholi zichligi, demografik sig'im, ekologik vaziyat.

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ECONOMIC GEOGRAPHICAL ASPECTS OF POPULATION DENSITY AND DEMOGRAPHIC CAPACITY OF KASHKADARYA REGION

Annotation. The article describes the demographic capacity of the area related to the population location of Kashkadarya region, the influence of natural and economic factors affecting the population location, the need to determine the demographic capacity along with the population density.

Key words: population location, population size, population density, demographic capacity, ecological situation.

Aholini iqtisodiy geografik jihatdan o‘rganishda uning joylashuvi asosiy hisoblanadi. Ma'lumki, aholining joylashuvi ko‘pincha hududning tabiiy va iqtisodiy imkoniyatlariga to‘la bog‘liq. Mamlakatda aholining ko‘payishi va hududda aholi sonining ko‘p to‘planishiga sabab bo‘ladi. Bu esa hududlar doirasida qancha aholining yashashi imkoniyatlari borligini, aniqrog‘i hududning demografik sig‘imini (HDS) aniqlash uchun ilmiy tadqiqotlar olib borish zaruratini taqozo etadi. Mamlakatning demografik sig‘imini aniqlashda birinchi navbatda yer, suv va rekreatsion zaxiralar asosiy ko‘rsatkich hisoblanadi.

Aholining hudud bo'ylab taqsimlanishi aholi va aholi punktlarining joylashuvi bilan bog'liqdir. O'z navbatida aholi punktlari shakllanishi aholi taqsimlanishining hududiy shaklidir. Aholi o'sishi va joylanishining muhim

masalalaridan biri aholi punktlari joylanishining yagona tizimini barpo etishdir. Bunda aholi punktlari ishlab chiqarish, transport aloqalari, umumiy infratuzilma tarmoqlari, ijtimoiy-madaniy va dam olish joylari uzviy o'zaro bog'liq holda birlashgan bo'ladi. Ikkinchidan, aholi punktlari joylanishida tayanch markazlarni tashkil etishdir. Bu tayanch nuqtalar shaharlar, katta va yirik shaharlar, shahar aglomeratsiyalari, megalopolislar bo'lishi mumkin. Ba'zan, kichik aholi punkti uchun rayon markazi yoki kichik shahar aholi punkti tayanch vazifasini o'taydi. Aynan mana shu ilmiy qarash mazmun-mohiyati jihatdan amalda uzoq vaqtdan beri o'z mavqeini saqlab kelmoqda [11].

Geografiyada bo'lgani kabi iqtisodiyotda ham aholi zichligiga alohida e'tibor qaratiladi. Aholi zichligi ma'lum bir hududda joylashgan aholi sonini ifodalovchi iqtisodiy geografik mezon bo'lib, u resurslar manbai hisoblangan hududdagi kishilarning hayot kechirishi va ishlab chiqarishi uyg'unlashgan munosabatni ifodalaydi. «Aholi zichligi» hududning sig'imini tavsiflaydigan ma'lum ko'rsatkich – bu aholi soniniing u egallagan hududga bo'lgan nisbatida namoyon bo'ladi [6]. Umuman olganda aholi va aholi punktlari murakkab obyekt sifatida namoyon bo'ladi. O'z navbatida bunday murakkab obyektlarni kompleks o'rganishda tizim-tarkib, iqtisodiy-matematik, taqqoslash, hududiy tahlil, statistik, bashoratlash va kartografik usullar asosida tadqiq etishni talab etadi [2; 11].

Aholining hududiy tarkibini iqtisodiy geografik jihatdan tadqiq etishning bir necha yo'nalishlari ajratiladi. Bu yo'nalishlarni bir-biri bilan uyg'un, chambarchas bog'liq holda olib borish ilmiy va amaliy ahamiyatga ega. Aholining hududiy tarkibini tahlil etish bilan bog'liq demografik, geografik, tarixiy, antropologik, etnografik, sotsiologik, iqtisodiy, matematik, statistik, ekologik, shaharsozlik, mintaqaviy rejalashtirish kabi usullar ajratiladi. Dastlabki, aholining hududiy tarkibini statistik tahlil qilish usulida hududdagi aholi soni dinamikasining maydon birligiga mosligi o'rganiladi. Hududning demografik sig'imini, aholi zichligini hisoblash birinchi bo'lib P.P.Semenov Tyan-Shanskiy tomonidan taklif etilgan [5].

Hududdagi demografik jarayonlarda aholining yer (hudud) bilan ta'minlanganlik masalalarini tadqiq etishda asosiy e'tibor quyidagi jihatlariga qaratiladi: - aholi soni va zichligining ortib borishi hamda demografik jarayonlarning hududiy tafovutlari; - aholi jon boshiga to'g'ri keladigan sug'oriladigan yerlar maydoni va 1 ga maydonga to'g'ri keluvchi aholi soni; - aholi jon boshiga to'g'ri keladigan tomorqa yerlar maydoni va uning o'zgarishlari; - aholining joylanishidagi hududiy farqlar va o'zgarishlar. Bugungi kunda esa aholi zichligini o'rganishga alohida va o'ziga xos yangicha geografik yondashuv zarurligi kuzatilmoqda. Chunki aholi zichligini hisoblash iqtisodiyotda ma'muriy-hududiy birliklar doirasida va yalpi ko'rsatkichlarda qabul qilinadi. Bu ayni vaqtda hududlarning aniq tafovutlarini ochib bermaydi, balki hudud haqidagi birlamchi ko'rsatkichlarni beradi xolos. Aslida esa ma'lum bir ma'muriy birlikning turli relyef, iqlim, tuproq zonalari bo'yicha alohida-

alohida aholini zichligini hisoblash katta amaliy ahamiyat kasb etishi mutaxassislar tomonidan ancha oldindan taklif etilmoqda [3; 1; 12; 4].

Bunday nomutanosiblikni hal etish uchun esa aholi zichligi tahlil etishda avvalo har bir ma'muriy tumanning tabiiy-landshaft birliklari doirasida o'rganilib, so'ngra olingan natijalarni ma'muriy birliklar bilan bog'lash taklif etiladi. Shu asosda aholi jon boshiga to'g'ri keladigan yerlar miqdorini o'rganish, aholining hudud (maydonga) bo'lgan tabiiy ehtiyojini hisoblash, oziq-ovqat va boshqa qishloq xo'jaligi mahsulotlari yetishtirish imkoniyatlari baholash maqsadga muvofiq bo'lishi ta'kidlanmoqda [10]. Bundan tashqari, yangi yondashuvda olingan ko'rsatkichlar aholi va ishlab chiqarish tarmoqlarining yer bilan ta'minlanganlik darajasini ham aks ettiradi.

Hududning barcha omillarini hisobga olgan holda, aholini ma'lum meyorda joylashtira olishi uning demografik sig'imi deb ataladi. Bu sig'im yer, suv, ish o'rinlari, dam olish zonalari, ekologik holatning ijobiy tomonga o'zgarishidan va ta'minlanganidan kelib chiqib aniqlanadi va uning miqdoriy ko'rsatkichi vaqt o'tishi bilan o'zgarib turadi. Boshqacha qilib aytganda, demografik sig'im mazkur hudud hozirgi vaziyatini saqlab qolgan taqdirda qancha aholini sig'dira olishi (boqa olishi), uning bu boradagi imkoniyatini bildiradi.

Ba'zi rayonlarda demografik sig'im nihoyatda keskinlashgan bo'lib, ularda nafaqat aholining nisbiy ko'pligi, balki uning mutloq ortiqchaligi ham kuzatiladi. Albatta, shunga o'xshash hududlarda aholining nihoyatda zich joylashganligi, yer,suv va ish o'rinlari bilan yetarli darajada ta'minlanmaganligi ijtimoiy muammolarni keskinlashtiradi, turli xil salbiy oqibatlarga, hududning zo'riqishiga olib keladi.

Aholining zich joylashuvi hudud ekologik holatining antropogen omil asosida keskinlashuviga sabab bo'ladi. Bunday sharoitda sanitariya-gigiyena holati ham murakkab bo'lib, yuqumli kasalliklarning tarqalish imkoniyati esa kengdir. Aholi joylashuvi yoki uning hududiy tarkibi shahar va qishloq joylar bo'yicha taqsimoti bilan ham tavsiflanadi. Rivojlangan mamlakatlarda aholining ko'pchiligi shaharlarda istiqomat qiladi, rivojlanayotgan mamlakatlarda, aksincha, qishloq aholisi ustun turadi. Qashqadaryo viloyatida 57,2 % aholi qishloqlarda yashaydi. Bu esa qishloq infratuzilmasi va madaniyati, sanoati va transportini rivojlantirishni dolzarb muammo qilib qo'yadi. Shu nuqtai nazardan qishloq joylarni ijtimoiy-iqtisodiy rivojlantirish davlat mintaqaviy siyosatining ustuvor yo'nalishi hisoblanadi.

Hududda qancha aholini joylashtirish zaxiralar hisobiga hududning ekologik vaziyatini saqlagan holda, aholining eng asosiy hayotiy ehtiyojini qondirish iloji bo'lgan soni hududning demografik sig'imi deyiladi. Hududning demografik sig'imini aniqlash faqat tabiiy zaxiralarga to'la bog'liq emas, balki hududning geografik o'rni, tabiiy zaxiralarining sifati, miqdori va ulardan foydalanishning qulayligiga ham bog'liq. Demak, hududning demografik sig'imi (HDS) deganda hudud maydoni qancha aholini joylashtirishi uchun uning tabiiy zaxiralarining sifatiga, miqdoriga va geografik o'rnining qulayligiga, hamda

boshqa iqtisodiy imkoniyatlari, hududning ekologik muvozanatini saqlagan holda aholining eng asosiy ehtiyojini qondirish imkoniyatiga ega bo‘lgan soni tushuniladi. Bu son bir xil bo‘lmay, u doimo o‘zgarib turadi.

HDSning o‘zgaruvchanligi hududda ishlab chiqarish kuchlarining rivojlanishi, tabiatga va iqtisodiyotga fan-texnikaning ta’sirining samaradorligi ortib borishi bilan demografik sig‘im ko‘lami kengayib boradi. Masalan, Qashqadaryo viloyatida 508 ming kishilik (1959 y) aholining iqtisodiy turmushi va ijtimoiy sharoiti hozirgi 3408,3 ming *(2022)* aholi turmushidan bir necha barobar past bo’lgan. XX asrning 70-90 yillaridagi yangi yerlarning o’zlashtirilishi, irrigatsiya-melioratsiya infratuzilmasining shakllanishi, yer osti boyliklarining ochilishi, qayta ishlash sanoat korxonalarining qurilishi natijasida hududning demografik sig‘imi kengaydi. Bu jarayon respublikamizning mustaqil bo‘lishi munosabati bilan yanada kengayib bordi, chunki mamlakat tabiiy resurs zaxiralari ichki ehtiyojni qondirish maqsadida o’zlashtirila boshlandi va qayta ishlandi. Hudud demografik sig’imi ko’rsatkichlari shartli ravishda aniqlanadi. Bu davlat va uning mintaqalarida ishlab chiqarish kuchlari taraqqiyotini ekologik tadbirlar bilan birga olib borilishini taqozo qiladi [9, 15].

Aholi joylashuvining eng muhim xususiyati uning zichlik ko‘rsatkichi orqali ifodalanadi. Zichlik brutto va netto (toza) ko‘rinishida bo‘ladi. Birinchisi mamlakat yoki rayon hududining umumiy maydoniga nisbatan hisoblanadi va 1 km^2 ga necha kishi to‘g‘ri kelishini ko‘rsatadi. Masalan, O’zbekistonda o‘rtacha aholi zichligi 1 km^2ga 78,6 kishini tashkil etsa, Qashqadaryo viloyatida bu ko’rsatkich 119,1 kishini tashkil etib, mazkur ko’rsatkich bo’yicha respublikada 9-orinda turadi (2022 y.). Agar mazkur ko‘rsatkich faqat aholi yashaydigan hududlarga, xususan sug‘oriladigan yerlarga nisbatan hisoblab chiqilsa, u sof yoki netto ko‘rinishiga ega bo‘ladi. Ekin ekiladigan maydonlar bo‘yicha zichlik, odatda, qishloq aholisi uchun ahamiyatlidir. Demografik zichlik bilan ishlab chiqarishning joylashuvi, ixtisoslashuvi va hududiy mujassamlashuvi, iqtisodiy zichlik o‘rtasida ma’lum darajada aloqadorlik mavjud. Bu ikki ko’rsatkich bir-biriga teskari proportsianallikda rivojlanadi. Ya’ni, aholi jon boshiga to’g’ri keluvchi sug’oriladigan yerlar qancha kamaysa, 1 ga maydonga to’g’ri keluvchi aholi soni ortib boradi.

Qashqadaryo viloyatining umumiy yer maydoni 2856,8 ming ga ni tashkil etadi. Bu esa jami respublikaning 44892,4 ming ga yeriga nisbatan 6,4 foizni tashkil etib, eng katta yer maydoni Dehqonobod tumaniga to’g’ri kelib (395,7 ming ga) deyarli Sirdaryo (427,6) va Andijon (430,3 ming ga) viloyatlari maydoniga yaqindir. Mirishkor (312,5 ming ga), Muborak (307,0 ming ga), Chiroqchi (283,7 ming ga) tumanlarida ham yer maydoni katta bo’lib, bu tumanlar guruhi viloyat jami maydonining 45,5 foizini tashkil qiladi.

Qashqadaryo viloyatida mavjud sug’oriladigan yerlar 514,1 ming gektarni tashkil etib, u respublika (4312,9 ming ga) sug’oriladigan yerlarining 11,9 foizini tashkil etadi. Bundan ko’rinadiki, viloyat respublika umumiy maydonining 6,4 foizini egallallagani holda sug’oriladigan yerlarning 12 foiziga egalik qiladi.

Maydoni jihatidan viloyatda birinchi o'rinni band etgan Dehqonobod tumani sug'oriladigan yerlari jihatidan esa oxirgi o'rinni egallagan.

Viloyatning 64,0 foiz sug'oriladigan yerlari tekislik, ya'ni Qarshi cho'li o'zlashtirilishi va qadimdan o'zlashtirilgan hududlarda tashkil topgan tumanlarga (Koson, Mirishkor, Kasbi, Qarshi, Muborak) to'g'ri keladi. Qashqadaryo viloyatida 2022 yil 1 yanvar holatiga ko'ra 3408,3 ming kishi istiqomat qilmoqda. Bu esa respublika aholisining 9,7 foizi demakdir. Aholi zichligi bo'yicha viloyatning ma'muriy tumanlari tahlil etilganda eng yuqori ko'rsatkich Kasbi (313,8), Qarshi (285,0), Yakkabog' (246,3) tumanlariga to'g'ri kelsa, eng past ko'rsatkich Muborak (29,4), Dehqonobod (38,2), Mirishkor (38,6) tumanlariga tegishlidir (1-jadval).

Qashqadaryo viloyati mamuriy tumanlarining umumiy va sugoriladigan maydon boyicha zichlik tafovutlari tahlil qilinganda o'ziga xos farqlarni ko'rish mumkin. Bu bevosita viloyatda 4 ta balandlik mintaqasining (cho'l, adir, tog', yaylov) mavjudligi, qulay tabiiy va iqtisodiy geografik joylarning borligi, daryo vodiylari va sug'oriladigan yerlarning mavjudligi bilan izohlanadi. Xususan, aholi zichligi bo'yicha birinchi o'rinda turadigan Kasbi tumani (313,8 kishi) 1 ga sug'oriladigan yerga to'g'ri keluvchi aholi soni bo'yicha esa 9-o'rinni (4,0) egallagan. Aholi zichligi bo'yicha oxirgi o'rinlarda turgan Dehqonobod tumani 1 ga sug'oriladigan yerga to'g'ri keluvchi aholi soni bo'yicha (52,3) birinchi o'rinda turibdi.

1-jadval.

Qashqadaryo viloyati ma'muriy tumanlarining umumiy va sug'oriladigan maydon bo'yicha zichlik tafovutlari

1 km^2 maydonga			**1 ga sug'oriladigan yerga**		
O'rni	**Ma'muriy tuman**	**Aholi zichligi**	**O'rni**	**Ma'muriy tuman**	**Aholi zichligi**
1	Kasbi	313,8	1	Dehqonobod	52,3
2	Qarshi	285,0	2	Chiroqchi	4,2
3	Yakkabog'	246,3	3	Kitob	3,3
4	Koson	158,2	4	Shaxrisabz	8,8
5	Kitob	154,9	5	Qamashi	8,0
6	Chiroqchi	152,1	6	Yakkabog'	7,8
7	Shahrisabz	137,1	7	G'uzor	6,0
8	Qamashi	105,4	8	Koson	4,0
9	G'uzor	80,1	9	Kasbi	4,0
10	Nishon	75,4	10	Nishon	2,7
11	Mirishkor	38,6	11	Muborak	2,5
12	Dehqonobod	38,2	12	Mirishkor	1,9
13	Muborak	29,4	13	Qarshi	1,9
Viloyat bo'yicha		**119,1**	**Viloyat bo'yicha**		**8,2**

Tahlillar shuni ko'rsatmoqdaki, zichlikning eng yuqori ko'rsatkichlari qayta ishlash sanoati rivojlangan hududlarda, shahar atrofida, qadimdan sug'orma dehqonchilik tarqalgan voha va vodiylarda, agrosanoat rayonlarida kuzatiladi

(Kasbi, Qarshi, Yakkabog). Tabiiyki, bunday hududlarga ishlab chiqarish rivojlanishining intensiv yo‘nalishi xosdir. Ayni chog‘da ekstensiv xo‘jalik tizimiga ega bo‘lgan chorvachilik, ayniqsa yaylov chorvachiligi hamda tog‘-kon sanoati rayonlarida aholi zichligi ancha past (Muborak, Dehqonobod, Mirishkor). Bunda tabiiy sharoit, relyef xususiyatlari va balandlik mintaqalari ham katta tasir korsatadi.

Qashqadaryo viloyatining maydoniga ko‘ra eng katta – Dehqonobod (4,0 ming km^2), Mirishkor (3,21 ming km^2) va Nishon (2,11 ming km^2) tumanlarining demografik salohiyati nisbatan kichik. Dehqonobod tumanida 153,1 ming kishi, Mirishkor tumanida 124,1 ming kishi va Nishon tumanida 159,2 ming kishi yashaydi, viloyatning tog‘li va cho‘l hududlaridagi tumanlar eng kam aholi yashaydigan tumanlardir. Viloyatda aholi salmog‘iga ko‘ra G‘uzor (212,4 ming kishi), Kasbi (204,0 ming kishi), Qarshi (259,4 ming kishi) tumanlari o‘rtacha ko‘rsatkichga ega. Ayni vaqtda Qarshi (0,9 ming km^2) va Kasbi (0,7 ming km^2) tumanlarining yer maydonining kichikligi sababli aholi zichligi viloyat darajasida eng yuqori ko‘rsatkichga ega (tegishlicha 285,0 va 313,8 kishi 1 km^2 ga). Umuman olganda, yuqori mintaqa (Shahrisabz, Yakkabog‘ va Kitob tumanlari) ko‘p jihatdan Respublikamizning aholisi zich voha va vodiylariga o‘xshab ketadi. Ammo, ta’kidlash joizki, zichlik quyi mintaqaning ayrim tumanlarida (Kasbi, Qarshi) ham ancha yuqori, ya’ni 250-300 kishiga teng [8, 14].

Hududning demografik sig’imi aholining yashashi uchun eng muhim bo’lgan quyidagi tabiiy va iqtisodiy imkoniyatlarni tahlil qilish orqali aniqlanadi. Ma’muriy hududlar uchun eng qulay bo’lgan yer-suv resurslari, xususan, shaharlar, sanoat, uy-joy qurilishi uchun qulay bo’lgan maydonlar, shahar atrofida joylashgan va shaharni dehqonchilik va chorvachilik mahsulotlari bilan ta’minlaydigan unumdor sug’oriladigan yerlar, yer usti va yer ostidagi suv zaxiralari hamda ommaviy dam olish uchun qulay maydonlar va boshqalar [13].

Ba’zi rayonlarda demografik sig’im nihoyatda taranglashgan bo’lib, ularda nafaqat aholining nisbiy ko’pligi, balki uning mutloq ortiqchaligi kuzatiladi. Albatta, shunga o’xshash hududlarda aholining nihoyatda zich joylashganligi, yer, suv va ish o’rinlari bilan yetarli darajada ta’minlanganligi ijtimoiy muammolarni keskinlashtiradi, turli xil salbiy oqibatlarga olib keladi. Aholiining zich joylashuvi hudud ekologik holatini antropogen omil asosida keskinlashuviga sabab bo’ladi. Shuningdek, bunday sharoitda sanitariya-gigiena holati ham qoniqarli darajada bo’lmaydi. Yuqumli kasalliklarning tarqalishi imkoniyati esa kengroq bo’ladi.

Bu ko’rsatkich bo’yicha viloyatning hozirgi yer va suv resurslaridan foydalanish darajasi bo’yicha demografik sig’imi 5 millionga yaqin aholini o’zida joylashtirish imkoniyatiga ega. Yuqorida qayd qilinganidek, bu HDS shartli ravishda aniqlanadi. Viloyat tabiiy zaxiralaridan iqtisodiy sohalarda foydalanishda fan-texnika taraqqiyoti yutuqlarining tadbiq etilishi bilan bu raqam ortib boraveradi. Bundan tashqari demografik sig’imi katta bo’lgan mintaqalardagi xom ashyolarni qayta ishlash sanoat korxonalarini HDS kichik

hududlarga joylashtirish kabi tadbirlarni amalga oshirib borish orqali viloyat hududlarida aholining joylashuvini ekologik jihatdan to'g'ri amalga oshirish lozim.

Foydalanilgan adabiyotlar:

1. Аҳмадалиев Ю.И. Ер ресурсларидан фойдаланиш геоэкологияси. – Тошкент: Fan va texnologiya, 2014. – 340 б.
2. Аҳмадалиев Ю.И., Абдувалиев Ҳ.А. Фарғона водийсида аҳоли жойлашувини ландшафт омили асосида такомиллаштириш. – Фарғона: "Classic", 2021. – 140 бет.
3. Жумаханов Ш. Наманган вилояти аҳолисининг ҳудудий таркибини такомиллаштириш. Геог. фан. ном....дис. Т., 1998. -178 б.
4. Кашин А.А. Исследование ландшафтной организации территории Удмуртии как фактора хозяйственного освоения и расселения населения. Дисс.... канд. геог. наук. –Ижевск, 2015. – 184 с. (https://www.dissercat.com)
5. Ким В.Ч. Концепция системы эконом-географических кадастров - Т.: Академия МВД Республики Узбекистан, 1998. - 64 с
6. Ковалев С.А. Сельское расселение. – М.: МГУ, 1963. – 370 с.
7. Крупко А.Э. Теоретические аспекты изучения территориальной организации населения и расселения // Журнал «Вестник ВГУ», 2007. - с. 65-69.
8. Муродова Д.С. Основные особенности демографической ситуации в Кашкадарьинской области // Электронное научно-практическое периодическое издание. Экономика и социум № 1(92), 2022. – С. 72-78
9. Муродова.Д.С. Ҳудуднинг демографик сиғимини аниқлашда экологик масалалар (Қашқадарё вилояти мисолида) // Замонавий ижтимоий-иқтисодий география: ютуқлар, муаммолар ва истиқболлар. Республика илмий-амалий конференцияси материаллари. – Тошкент, 2013. – Б. 229-230.
10. Раҳматуллаев А. Ўрта ва Қуйи Зарафшон воҳа геосистемаларида экологик вазиятни географик оптималлаштириш. Геогр. фан. док. (DSc)... дисс. автореф. – Т., 2018. – 59 б.
11. Тожиева З.Н. "Ўзбекистон Республикасида демографик жараёнлар ва уларнинг ҳудудий хусусиятлари". Геог. фан. докт. дисс.... автореф.... – Тошкент: Ўзбекистон Миллий университети, 2017. – 67 б.
12. Шарипов Ш. Аҳоли зичлигини ҳисоблашда ландшафт-типологик карталардан фойдаланиш // Ўзбекистон География Жамияти ахбороти, 34-жилд. –Т., 2009. -Б. 166-168.
13. Янгибоев М. Ер юзасининг демографик сиғимини аниқлаш. -Т.:1995. – 23 б.
14. Murodova D.S. Economic geographical factors affecting the formation of city addresses // ACADEMICIA: An International Multidisciplinary Research Journal.Volume 12,.India, 2022. – P. 29-34.

15. Murodova D.S. Main Characteristics Of The Demographic Situation And Economic And Social Development Of Kashkadarya Region // Eurasian Journal of History, Geography and Economics. Volume 16, Belgium, 2023.- P. 32-35.

УДК 621.38

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ELECTRONIC PROPERTIES OF NANOSCALE STRUCTURES FORMED ON THE GAAS SURFACE BY IMPLANTATION OF LOW-ENERGY IONS

Annotation. This article fully reveals the physical essence of devices based on the structures of electronic properties of nano-sized structures formed on the surface of the film by the implantation of heterostructures and a low-energy ion, compares and analyzes the properties of devices based on heterostructures and nano-sized structures.

Keywords: GaAs heterostructure, nanofilm, nanoelectronic, GaAlAs, DBE, optoelectronic, MLE, A3B5, IVE, monocrystalline, singularities.

Three-component heteroepitaxial layers of types created on the basis of A2B5 semiconductors, in particular GaAs, have been comprehensively studied in recent years, due to their wide application in various micro- and optoelectronics devices. Multilayer structures of the GaAlAs type, which are cured on the GaAs surface, are of the most practical interest, since their crystal structures and lattice parameters coincide well with each other [1,2]. Calculations have shown that the compound Al_x Ga_{1-x} As is straight-band at x less than 0.4 non-straight-band and at x greater than 0.45. It follows from this that the optical, electrical and other properties of epitaxial structures depend on X. It is known that with perfect growth MLE, continuous layers are formed at $d \geq 10$-15 nm. However, for the creation of a new generation of optoelectronic and nanoelectronic devices, A3B5 layers with a $d \leq 10$ nm are of particular interest [3,4].

Thus, the composition, atomic and electronic structure, as well as the physico-chemical properties of multicomponent and multilayer systems based on GaAs are well studied. In recent years, the method of implantation of low-energy ions has been widely used to obtain quantum-dimensional structures on GaAs surface layers. The physical properties of Ga_{1-x} Al_xAs nanostructures in the near-surface region of GaAs were obtained and studied by implantation of Al+ ions followed by annealing (laser + temperature) [5,6].

The SEM image and the DBEO pattern (insert) of the GaAs and GaAlAs surfaces are shown in Figure 1.1. It can be seen that the substrate has a smooth microrelief, and the GaAlAs surface consists of separate single-crystal nanoblocks with dimensions d = 10-20 nm. Apparently, the crystallographic orientations of individual monocrystalline blocks at the boundaries differ from

each other; therefore, reflections typical of textured films appear in the DBE picture [7,8].

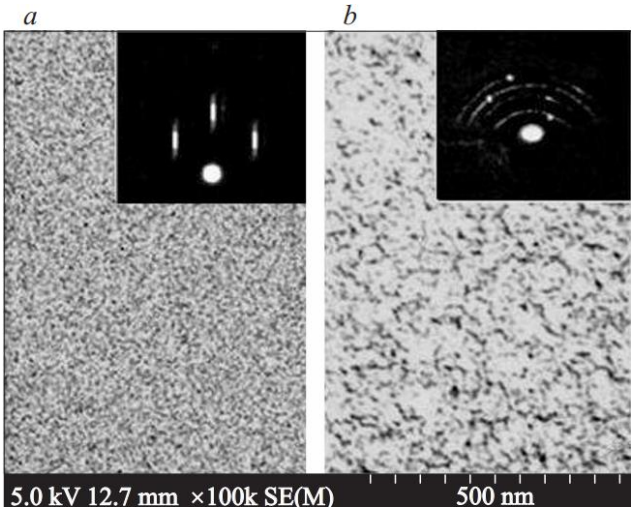
Table 3.1 shows the values of thermal and photoelectronic output operation (eφ and eΦ), the maximum value of δm and the corresponding Epm, as well as the value of the coefficient n measured at an energy of 800 eV, as well as the quantum yield of photoelectrons v, for a pure GaAs single crystal and GaAlAs/GaAs film with d ~ 50 A. The main emission characteristics of GaAs (p-type) and GaAlAs films [9,10].

It can be seen that the presence of a GaAlAs film leads to a noticeable increase in δm and K, and eφ increase insignificantly. The authors argue that the growth of δm and K is associated with a noticeable increase in Ed and λ IVE. Figure 1.2 shows the angular dependences σ taken at an energy of 800 eV of GaAlAs films created by ion implantation methods with a combination of annealing and MPE

Table 1. Main emission characteristics of GaAs (p-type) and GaAlAs films

The object under study	e_{φ}, эВ	e_{Φ}, эВ	E_g, эВ	E_{pm}, эВ	δ_m	H	*K*, (hν = 10,8 эВ)
GaAs	5	5,1	1,4	500	1,1	0,26	$3 \cdot 10^{-3}$
$Ga_{0,5}Al_{0,5}As$	5,1	5,3	2,1	550	1,4	0,25	$6 \cdot 10^{-3}$

It can be seen that all the curves σ(φ) have a non-monotonic character. The positions of the maxima and minima correspond to certain crystallographic directions [11]. The positions of the singularities on the curve σ(φ) of the GaAlAs film obtained by ion implantation coincide well with the positions of the singularity of pure GaAs, i.e. epitaxial growth is observed. The study of the dependencies σ(φ) showed that the value of λ at an energy of 200 eV is ~ 50 Å..



1.1. SEM and DBE patterns of GaAs (a) and GaAlAs (b). A three-component film was obtained by implantation of Al+ with an energy of 1 keV at D = 4 - 1020 m-2. With subsequent heating at T = 800 K [12].

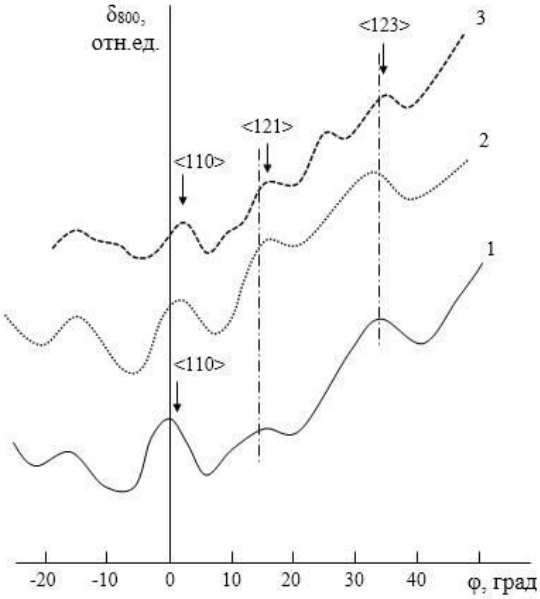


Fig. 1.2. Dependences δ 800 (φ) for: 1) pure GaAs; 2) GaAlAs/GaAs films with d 50 Å obtained by ion implantation; 3) obtained MPEs.The angle φ was determined relative to the normal of the sample.

At the same time, GaAs maxima and minima disappear, and the intensity of GaAlAs maxima and minima increases significantly. Apparently, in the case of the growth of MBE, the three-component compound GaAlAs film and GaAs substrate have a high monocrystalline with practically the same lattice constants, however, their crystal orientations at the boundary do not completely coincide [13]. Note that in the ion implantation process, the thickness of the disordered substrate layers reaches 350-500 Å, i.e. 3-5 times greater than the thickness of ion-doped layers. When heated, the amorphous GaAs layers crystallize simultaneously, and the ion-implanted GaAs layers crystallize and simultaneously the ion-implanted layer forms $Ga_{0,5}$ $Al_{0,5}$ As compounds. This contributes to the formation of an epitaxial $Ge_{0.5}$ $Al_{0.5}$ As film, the crystal orientation of which coincides with the orientation of the substrate [14].

References:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.

4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
14. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
15. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

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READ DATA FROM KEYBOARD AND OUTPUT TO LCD DISPLAY. CODE LOCK

Abstract. This article discusses the code lock that shows how to read data from the keyboard and output it to the LCD screen, and the connection schemes are explained and analyzed in detail.

Keywords: LCD, HD44780, Arduino, Circuit), String, Genuino, I2C, IIC, LED, USB, SDA, SCL, motherboard, Sketch, digitalWrite.

Theoretical information.

Liquid crystal indicators display symbolic information. They come in different sizes, measured by the number and length of lines displayed. Some are backlit and allow you to choose the color of the characters and background. Any LCD display with a compatible HD44780 interface and a 5V backlight supply voltage can work with the Arduino board.

The I2C adapter module allows you to connect the character display to the Arduino board with just two signal wires. I2C is a serial two-wire bus for communicating integrated circuits inside electronic devices, known as I 2 C or IIC (Inter-Integrated Circuit). I2C was developed by Philips in the early 1980s. as a simple 8-bit bus for internal communication between circuits in control electronics, such as computers on motherboards, mobile phones, etc. (Fig. 1.).

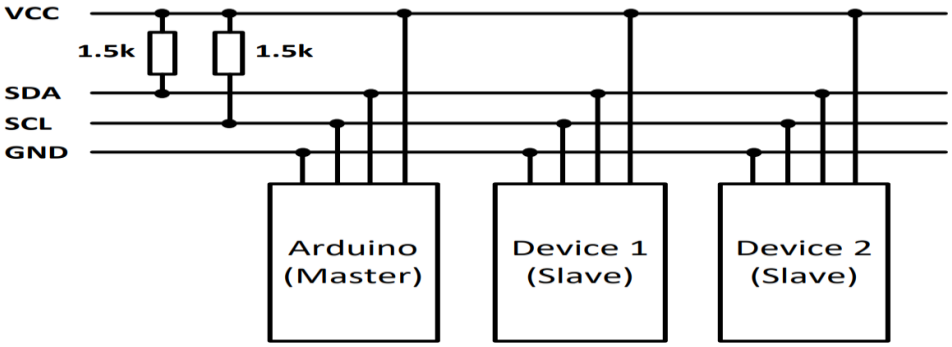

Fig.1. Connecting multiple devices to the I2C bus

The LCD display with I2C adapter module connects to the Arduino with only 4 wires - 2 data wires and 2 power wires.

To connect an LCD display to Arduino via an I2C adapter module, you need to install the LiquidCrystal_I2C library. You also need the Wire library, which is already installed in the standard Arduino IDE program.

LiquidCrystal_I2C library.

The LiquidCrystal_I2C(address, col, row) constructor creates an object of type LiquidCrystal_I2C and accepts display connection parameters (I2C address and display size).

Connecting a membrane matrix keyboard to Arduino.

In projects where the Arduino is not connected to a computer, you need to be able to enter characters, such as a secret code, to turn something on or off. To do this, use a matrix keyboard (Fig.2).

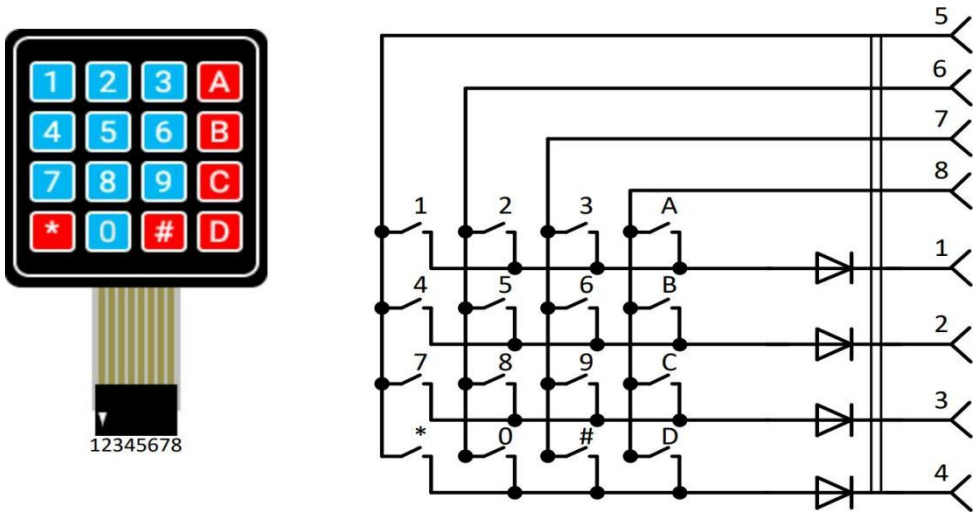

Fig.2. Matrix keyboard and its circuit

The advantage of such a keyboard is that only 8 contacts are used instead of 16. For this circuit to work, it is necessary to use dynamic polling of the keyboard. The Arduino pins to which keyboard pins 1, 2, 3 and 4 are connected are configured as digital outputs, and the pins to which 5, 6, 7 and 8 are connected are configured as inputs. A low voltage level is alternately applied to pins 1, 2, 3 and 4 of the keyboard. Pins 5, 6, 7 and 8 are under control. If the button is pressed, the Arduino will determine which line the 42nd level was low on and from which line it came to the Arduino input. As a result, the coordinates of the button will be determined.

Description of the demo program.

The program simulates the operation of a combination lock. Connected to Arduino:

− 4x4 matrix keyboard, the pins of which are connected to digital pins 2..9 of Arduino;

− 16×2 LCD display, which is connected to Arduino via an I2C adapter board; The riser board is connected to pins A4 (SDA) and A5 (SCL) of the Arduino;

− two LEDs LED1 and LED2, which are connected to pins 10 and 11 of the Arduino, respectively.

After power is applied, the Arduino LED lights up, which is connected in-circuit to pin 13. The INSERT CODE message is displayed on the top line of the

display, and the cursor blinks on the bottom line. LED1 also lights up, which means the lock is closed.

After dialing the code 8888, press # to confirm. If the code is entered correctly, the message CORRECT CODE is displayed on the top line of the display and the entered code on the bottom line is deleted. The lock opens for 4 seconds, which means that LED1 goes out and LED2 lights up. After 4 seconds, LED2 goes out and LED1 lights up again. The INSERT CODE message appears again on the top line of the display. If the code is entered incorrectly, INCORRECT CODE appears on the top line of the display. After 2 seconds, the information on the display is cleared and the INSERT CODE message appears again. After the third attempt, a 30-second countdown begins: INCORRECT CODE is displayed on the top line of the display, and WAIT XX SECONDS is displayed on the bottom line, where XX seconds (30, 29, 28, etc.). After 30 seconds have passed, the message INSERT CODE is displayed on the top line of the display and the program again waits for the code to be entered.

References:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. *Евразийский журнал академических исследований*, *2*(11), 190-193.
2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
3. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. *Science and innovation*, *1*(A6), 374-377.
4. Irisboyev, F. (2022). YARIMO ‘TKAZGICHLI MODDALARDAN TAYYORLANADIGAN KUCHAYTIRGICHLARNING PARAMETRLARI VA XARAKTERISTIKALARI. *Science and innovation*, *1*(A6), 374-377.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. *Modern Science and Research*, *2*(10), 127-129.
6. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. *НАНОЭЛЕКТРОНИКИ»*, *1*(A4), 241.
7. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
8. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
9. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108

10. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
11. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
12. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023):
13. Mirzaev, U., Abdullaev, E., Kholdarov, B., Mamatkulov, B., & Mustafoev, A. (2023). Development of a mathematical model for the analysis of different load modes of operation of induction motors. In E3S Web of Conferences (Vol. 461, p. 01075). EDP Sciences

УДК 621.38

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MULTISIM DASTURIDA BIR KASKADLI KUCHAYTIRGICH SXEMASINI TADQIQ QILISH

Annotatsiya. Maqolada bir kaskadli operatsion kuchaytirgichli (OK) signal kuchaytirgich sxemasini Multisim dasturida yig‘ish, uning parametrlarini sozlash, amplituda-chastota xarakteristikasini tadqiq qilish kabi usullar ko‘rsatib o‘tilgan.

Tayanch so‘zlar: amplituda-chastota, kaskad, Multisim, operatsion kuchaytirgich.

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RESEARCH OF SINGLE STAGE AMPLIFIER CIRCUITS IN THE MULTISIM PROGRAM

Annotation. In the paper presents methods for assembling a signal amplifier circuit of a single-stage operation amplifier (OA) in the Multisim program, setting its parameters and research the amplitude-frequency response.

Key words: amplidude-frequency, cascade, Multisim, operation amplifier.

Zamonaviy tibbiy asboblar (qon tomirlarining pulsini tekshiruvchi asboblar, qon bosimini olchaydigan asboblar, yurak kardiogrammasi va h.k.), nazorat-o’lchov asboblari (datchiklar, tarozilar, manometrlar, tebranishlarni qayd qiluvchi qurilmalar va h.k.) ning asosiy ishlash prinsipi kuchsiz mexanik harakatlarni sezish va ularni qayd etishga asoslanadi [1,2]. Bunday o’lchov asboblarning ishlash prinsipi kuchsiz mexanik harakalarni elektr signaliga aylantirish va signal amplitudasini kuchaytirish orqali ma’lumotlarni uzatishga

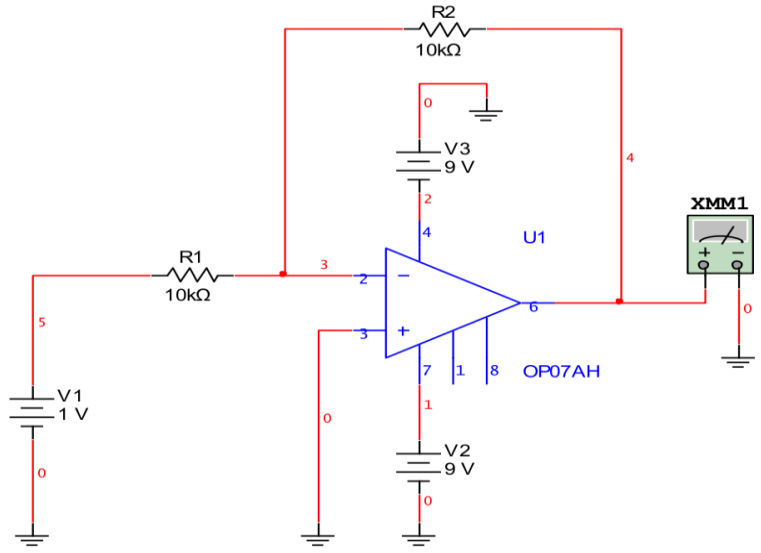
asoslangan. Signallarni kuchaytirish vazifasini operatsion kuchaytirgichlar amalga oshadi [3,4]. Shuning uchun operatsion kuchaytirgichlar sxemalarini tadqiq qilish va ularnini loyihalash bugungi kunda sanoat elektronikasi oldida turgan dolzarb masalalardan biri hisoblanadi [5].

Kuchaytirgichlar deb, berilgan past quvvatli signalning fazasi, chastotasi va shakliga ta’sir qilmagan holda signalning quvvatini kuchaytirib beruvchi elektron qurilmalarga aytiladi. Dastlabki kuchaytirgichlar vakuumli elektron asboblar asosida yig’ilgan [6,7]. Vakuumli elektron asboblar asosida tayyorlangan kuchaytirgichlar quvvat isrofining kattaligi, gabarit o’lchamlarining kattaligi va boshqa bir qator kamchiliklari tufayli ulardan hozirgi kunda deyarli foydalanilmaydi [8].

Yarimo’kazgichli asboblar texnologiyasining rivojlanishi signal kuchaytirgichlar ishlab chiqarishning yangi bosqichini ochib berdi. Ushbu maqolada Multisim dasturida bir kaskadli operatsion kuchaytirgichli kuchaytirgich sxemasini yig’ish va tadqiq qilishning bosqichlarini ko’rib chiqamiz.

1. Multisim dasturi ishga tushiriladi va yangi ishchi oyna ochiladi.

2. Rasmda ko’satilgan kuchaytirgich sxemasi Multisim dasturida yig’iladi (1-rasm) [9,10].



1-rasm. Inverslangan bi kaskadli OKli kuchaytirgich sxemasi.

3. Operatsion kuchaytirgichli kuchaytirgichning teskari kirishli sxemalari uchun amplituda-chastota xarakteristikasi olinadi.

- *“Opamp”* katalogidan OP07AH tanlab olinadi. E'tibor berish kerak, quvvat manbai 4-va 7-pinga ulangan. V3 manbaning manfiy 9V kuchlanishli qismi 4-pinga va V2 manbaning musbat 9 V qutbi pin 7ga ulangan [11]. Kirish kuchlanishini 1 V qadam bilan -9 V dan 9 V gacha o'zgartirib natijalar olinadi.

Bu sozlashlar orqali kuchaytirgichning kirish va chiqish kuchlanishlari orasidagi teskari aloqaning qiymatlari sozlanadi. Qiymatlar sozlanganidan so’ng kuchaytirgichning amplituda-chastota xarakteristikasi olinadi.

- Chiziqli rejimda va chiziqli bo'lmagan rejimlar uhun natijalar olinadi.

- Kirish kuchlanishining yuqori chegarasi va uning qiymatlarini sozlash orqali uzatish koeffitsiyenti uchun R_1=10 kOm bo'lganda R_2 ning qiymati hisoblanadi [12].

4. Ikki qutbli manba ulanganda signal ikki takti ham chiqishda kuchgayib chiqadi, yani musbat davr ham manfiy davr ham chiqishda bir xilda kuchayib chiqadi.

Xulosa

Elektron qurilmalarining modelini yaratish, elektron sxemalarni yigi'ish va hisoblash, ularni virtual modelini loyihalash kabi amaliy masalalarni hal qilishda zamonaviy kompyuter texnologiyalari imkoniyatlaridan foydalanish maqsadga muvofiq. Ushbu maqolada operatsion kuchaytirgichli kuchaytirgich sxemalarini o'rganishda Multisim dasturidan foydalanib, uni hisoblashning samarali usullari ko'rsatib o'tilgan [13].

Xulosa qilib shuni aytish mumkin-ki, kuchaytirgichlar sxemalarini Multisim dasturida virtual shaklda loyihalash orqali raqamli hisolash texnikalarining ishlash prinsipini o'rganish va uni ishlab chiqarishda qo'llay olish kabi bilim va ko'nikmalarga ega bo'lish mumkin.

Adabiyotlar:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). "MAPLE" DA SO'NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI "MULTISIM" DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
5. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
6. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
7. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.

8. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
9. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.

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MUHAMMAD SODIQ QOSHGARIY VA UNING "ODOB AS-SOLIHIN" (YAXSHI KISHILAR ODOBI) ASARI, ASARDA ILGARI SURILGAN XULQ-ODOB ME'YORLARI

Annotatsiya. O'zbek xalqi turli an'analariga boy, milliy qadriyatlari keng ma'no va chuqur tarixga ega. Mustabid tuzum davrida toptalgan qadriyatlarni qayta tiklash uchun barcha imkoniyatlar yaratilgan bugungi kunda odob-axloq va yoshlarni tarbiyalashda qadriyatlarimizga oid manbalarni o'rganish va hayotga tatbiq etish dolzarb ahamiyat kasb etmoqda. Muhammad Sodiq Qoshg'ariy (1740-1843) ning "Odob as-solihin" ("Yaxshi kishilar odobi") kitobidir. Mazkur asar kundalik turmushimizda har kuni har daqiqada bilish zarur bo'lgan turmush odobiga oid xulq-odob qoidalarining majmuidir. Bu asar XIX asr boshlarida xalqimizning odob-ahloq me'yorlari va milliy qadriyatlarini o'zida mujassamlashtirgan.

Kalit so'z: "Odob as-solihin", pedagog olim, "Zubdat al-masoyil", "Axloqi Muhsiniy", "Axloqi Jaloliy", "Axloqi Nosiriy", bob salomlashish, ko'rishish, qo'l olishish, ruxsat so'rash.

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MUHAMMAD SADIQ KASHGARI AND HIS WORK "ODOB AS-SALIHIN" (THE ETIQUETTE OF GOOD PEOPLE), THE STANDARDS OF BEHAVIOR ADVANCED IN THE WORK

Abstract. The Uzbek people are rich in various traditions, national values have a wide meaning and a deep history. Today, when all the opportunities have been created to restore the adriats lost during the regime, learning and implementing the sources of our values in the education of young people is of

urgent importance. It is the book "Odob al-Salihin" ("Etiquette of good people") by Muhammad Sadiq Kashgari (1740-1843). This work is a set of rules of conduct related to the manners of life that we need to know every minute of our daily life. This work embodies the moral standards and national values of our people at the beginning of the 19th century.

Key words: "Etiquette as-Salihin", pedagogue scientist, "Zubdat al-Masoyil", "Ethics of Muhsini", "Ethics of Jalali", "Ethics of Nasiri", chapter greeting, seeing, shaking hands, permission to ask.

Kirish. Muhammad Sodiq Qoshg‘ariy haqida bizgacha juda oz ma’lumot etib kelgan. Lekin hozirgi paytda bizga ma’lum bo‘lgan “Odob as-solihin” asarining o‘ziyoq bizga uni mashhur pedagog olim sifatida tanitadi. Muhammad Sodiq Qoshg‘ariy 1740 yilda Qoshg‘arda kambag‘al dehqon oilasida tug‘ilgan va 1843-yilda u shu erda vafot etgan. Biz olimning qay darajada tarbiyashunos ekanligini u tomonidan yaratilgan asarlarning mazmunidan bilamiz. Bizgacha uning “Odob as-solihin” (“Yaxshi kishilar odobi”), “Zubdat al-masoyil” (“Masalalarning qaymog‘i”), “Dur al-muzoxir” (“Ko‘makdoshlarning durdonasi”) hamda “Tazkirai xojagon” (“Xojalar tazkirasi”) nomli asarlari etib kelgan. Sharqning buyuk allomalari Yusuf Xos Hojib, Imom Ismoil al-Buxoriy, Ahmad Yassaviy, Sa’diy SHeroziy, Xusrav Dehlaviy, Abdurahmon Jomiy, Alisher Navoiy va boshqalar yuksak ahloqiylikni shakllantirishga oid yirik asarlar, hikmatlar yaratganlar. SHu bilan birga hulq-odob tarbiyasiga oid “Axloqi Muhsiniy”, “Axloqi Jaloliy”, “Axloqi Nosiriy”, “Qobusnoma” kabi asarlar yaratilgan. O‘zida shaxs va uning tarbiyasini yo‘lga qo‘yish masalalarini aks ettiruvchi asarlarni yaratish an’anasi mavjud bo‘lgan davrda Muhammad Sodiq Qoshg‘ariy tomonidan turkiy tilda “Odob as-solihin” (“YAxshi kishilar odobi”), “Zubdat as-masoyil” (“Masalalarning qaymog‘i”) nomli asarlar yaratildi.

Tadqiqot metodlari. “Odob as-solihin” asari 5 marta, 1889 hamda 1901-yillarda Toshkent shahrida va 1891-1892 hamda 1986-yillarda Istambul shahrida qayta nashr etilgan. Asarning nomi va mazmunidan ham anglanib turganidek, unda ilgari surilgan g‘oyalar insonning hayoti davomida zarur ahamiyat kasb etuvchi hulq-odob qoidalari xususida kishilar, shu jumladan, yoshlarga muayyan darajada ma’lumotlar berishga xizmat qiladi. “Odob as-solihin” asarida ijtimoiy hayot hamda kundalik turmushda har bir inson tomonidan qat’iy amal qilinishi zarur bo‘lgan zohiriy (tashqi) va botiniy (ichki) odob va ahloq qoidalari, ularning ijtimoiy ahamiyati, yoshlar tarbiyasini yo‘lga qo‘yishdagi o‘rni va roli borasida batafsil so‘z yuritiladi. Muhammad Sodiq Qoshg‘ariy tomonidan yaratilgan “Odob as-solihin” asari muallifning o‘zi ta’kidlab o‘tganidek, muqaddima va 7 bobdan iborat bo‘lib, har bir bob o‘zida 4 faslni aks ettiradi. Muqaddimada asarning maqsadi ochib beriladi. Asarning yozilishidan ko‘zda tutilgan maqsad borasida so‘z yuritilar ekan, insonning ijobiy hulq-atvorga ega bo‘lishini taqozo etuvchi ijtimoiy zaruriyat mohiyati batafsil ochib beriladi. Asarda ilgari surilgan asosiy g‘oya – insonlarning ijobiy xulq-atvorga ega bo‘lishlari jamiyatda ruhiy

xotirjamlik va moddiy farovonlikni qaror toptiruvchi asosiy omil ekanligini asoslashdan iboratdir. Alloma mazkur g‘oya mohiyatini sharhlar ekan, inson odob-axloq qoidalarini egallay olmasa hamda ijobiy hulq-atvori bilan muaddab (odobli) va muzazzab (toza) bo‘lmasa, nafaqat o‘zi, balki butun dunyoga yomonlik tarqatadi degan qarashni ilgari suradi. Ayi o‘rinda quyidagi masnaviyni keltiradi: Beadab tanho va xudro dosht bad, Balki otash dar hama ofoq zar.

Tadqiqot natijalari. Har bir inson ichki hamda tashqi odob qoidalarining mohiyatini to‘laqonli ravishda anglab, ularga qat’iy amal qilishi zarur. Inson odob-axloq qoidalarining mohiyatidan qanday yo‘l va usullar orqali boxabar bo‘lishi mumkin degan savolga javob berar ekan, alloma ular yetuk mutafakkirlar tomonidan qimmatli, mo‘tabar kitoblarda jam etganligi, mazkur kitoblarning mazmuni bilan tanishish orqali odob-axloq qoidalari va ularga amal qilish shartlari xususida muayyan ma’lumotlarga ega bo‘lish imkoniyati mavjudligini alohida ta’kidlab o‘tadi. Asarda komil inson bo‘lib etishishda kundalik hayot hamda amaliy turmushda o‘ziga xos ahamiyat kasb etuvchi botiniy (ichki) va zohiriy (tashqi) odob-axloq qoidalari: salomlashish, ruxsat so‘rash, muloqot, uxlash, yo‘l yurish, mehmon kutish, ziyofat, ovqatlanish, shuningdek, er-xotin munosabatlarini yo‘lga qo‘yish odobi va ularga amal qilish shartlari borasida so‘z yuritiladi. Suhbat ahlining o‘zini tutishi, tozalik, ozodalik hamda safarga chiqish qoidalari ham asar mazmunining markaziy qismidan o‘rin olgan. Birinchi bob salomlashish, ko‘rishish, qo‘l olishish hamda ruxsat so‘rash qoidalari to‘g‘risida ma’lumotlar berishga yo‘naltirilgan bo‘lib, mazkur bob to‘rt fasldan tashkil topgan. Ikkinchi bobda uxlamoq, kiyim kiyish, yo‘l yurish odoblari haqida fikr yuritiladi. Masalan, uxlash oldidan eshiklarni mahkamlab yopish, idishlarning og‘zini berkitish, o‘rnidagi ko‘rpa-to‘shaklarni bir bora qoqib yozish, o‘choqdagi olovni hamda chiroqni o‘chirish, uxlaydigan o‘rnini yumshoq qilmaslik, o‘ng qo‘lga bir oz suyanib yotish tavsiya etiladiki, ushbu qoidalarning ahamiyati ularga rioya qilmaslik natijasida ro‘y bergan noxush voqealar misolida ochib beriladi. Uchinchi bobda suhbatlashish odobi borasida so‘z yuritiladi. Bizga yaxshi ma’lumki, suhbatlashish odobi va uning shartlariga amal qilish ijtimoiy munosabatlarning mo‘‘tadil kechishini ta’minlovchi asosiy va o‘ta muhim omillardan biri bo‘lib, aksariyat mualliflar tomonidan yaratilgan hamda axloq-odob muammolariga bag‘ishlangan asarlar mazmunidan alohida o‘rin olgan. «Odob as-solihin» asarida ham muallif suhbatlashish odobi va uning o‘ziga xos jihatlari borasida batafsil so‘z yuritadi. Muhammad Sodiq Qoshg‘ariy “Odob as-solihin” asarida, kasal holini so‘rash, ta’ziya va musibat odoblari haqida ham fikr yuritadi. Ushbu holatlarda amal qilinadigan qoidalar mohiyatidan xabardor bo‘lish ham har bir kishi uchun foydadan holi bo‘lmaydi. Biron mo‘minning vafoti haqidagi xabarni eshitilganda boshiga musibat tushgan kishilarga ta’ziya izhor etiladi. Ushbu tadbir dafn marosimidan oldin yoki keyin amalga oshirilishi mumkin. Ta’ziya bildirish uch kungacha joiz, undan so‘ng makruh deyiladi.

Tadqiqot munozaralari. Yettinchi bobda safar qoidalari va ularning mohiyati yoritib beriladi. Allomaning fikriga ko‘ra, safarga chiqishdan

ko‘zlangan maqsad quyidagi uch ko‘rinishda ifodalanadi: farz, fazilat, muboh (ruxsat etiladigan). Ayni o‘rinda safar farzining o‘zi quyidagi besh ko‘rinishni namoyon etadi: jihod, haj, ota va onaning chaqirig‘iga muvofiq, raddi mazolim (zulmni qaytarish) hamda ilm olish maqsadida uyushtirilgan safar. Muboh safarining uyushtirilishidan ko‘zlangan maqsad ham ikki ko‘rinishda namoyon bo‘ladi: 1) o‘z manfaati yo‘lida, o‘zgalardan biror narsani ta’ma qilmagan holda uyushtirilgan tijorat safari. Muboh safarining mohiyatini yoritar ekan, Muhammad Sodiq Qoshg‘ariy tijorat safarini uyushtirishdan asosiy maqsad faqat mol-dunyo orttirish bo‘lsa, u holda bunday tijorat safari unga ziyon etkazishini alohida uqtirib o‘tadi; 2) navi-nav’i tafarruj (ko‘ngil ochish) maqsadida safar uyushtirish. Alloma vaqti-vaqti bilan bunday safarlarni ham uyushtirib turish maqsadga muvofiq ekanligini aytib o‘tadi. Muhammad Sodiq g‘oshg‘ariyning ta’kidlashiga ko‘ra, har qanday maqsad yoki ko‘rinishdagi safarlarni uyushtirish chog‘ida ayollarga albatta ularning turmush o‘rtoqlari (mahrami) hamrohlik qilishlari zarur. Yuqoridagilardan ko‘rinib turibdiki, Muhammad Sodiq Qoshg‘ariy tomonidan yaratilgan “Odob as-solihin” asari jamiyat a’zolari, shu jumladan, yoshlarning ma’naviy-axloqiy jihatdan barkamol bo‘lishlarida katta ahamiyatga ega. Mazkur asar har bir inson tomonidan o‘rganilishi va kundalik turmushda qat’iy amal qilinishi zarur bo‘lgan hulq-odob qoidalarining majmui sanaladi.

Foydalanilgan adabiyotlar:

1. Muhammad Sodiq Qoshg`ariy pedagogik qarashlari referat // O‘zbek tili va adabiyoti. Toshkent, 1972. 4-5 sonlar.
2. Ahmad Yassaviy. Hikmatlar. Toshkent, 1990. 256 bet.
3. Xoja Ahmad Yassaviy. Devoni hikmat. Toshkent, 1991. 268 bet.
4. Ibrohim Haqqul. Tasavvuf saboqdari. Buxoro, 2000. 78 bet.

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MUHAMMAD SODIQ QOSHG 'ARIYNING MA 'RIFIY-AXLOQIY QARASHLARI. EDUCATIONAL AND MORAL VIEWS OF MUHAMMAD SADIQ KASHGHARI

Annonatsiya. Ushbu maqolada Muhammad Sodiq Qoshg'ariy (1740-1843) ning "Odob as-solihin" ("Yaxshi kishilar odobi") kitobidir. Mazkur asar kundalik turmushimizda har kuni har daqiqada bilish zarur bo'lgan turmush odobiga oid xulq-odob qoidalarining majmuidir. Bu asar XIX asr boshlarida xalqimizning odob-ahloq me'yorlari va milliy qadriyatlarini o'zida mujassamlashtirgan.

Kalit so'z: odob-ahloq, asar, mustabid tuzum, adabiyot, tarix, jo'g'rofiya, toshbosma nusxalari.

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EDUCATIONAL AND ETHICAL VIEWS OF MUHAMMAD SADIQ KOSGH ARI. EDUCATIONAL AND MORAL VIEWS OF MUHAMMAD SADIQ KASHGHARI

Annotation. This article presents the book by Muhammad Sadiq Kashgari (1740-1843) "Odob al-Salihin" ("Manners of Good People"). This work is a set of lifestyle rules that we need to know every minute of our daily lives. This work embodies the moral norms and national values of our people at the beginning of the 19th century.

Key words: morals, labor, authoritarian regime, literature, history, geography, lithographs.

O'zbek xalqining turli an 'analariga boy, milliy qadriyatlari keng ma 'no va chuqur tarixga ega. Mustabid tuzum davrida toptalgan adriyatlarni qayta tiklash uchun barcha imkoniyatlar yaratilgan bugungi kunda odob-axloq va yoshlarni

tarbiyalashda qadriyatlarimizga oid manbalarni o ‘rganish va hayotga tatbiq etish dolzarb ahamiyat kasb etmoqda. Shunday asarlardan biri Muhammad Sodiq Qoshg ‘ariy (1740-1843)ning “Odob as-solihin” (“Yaxshi kishilar odobi”) kitobidir. Mazkur asar kundalik turmushimizda har kuni har daqiqada bilish zarur bo ‘lgan turmush odobiga oid xulq-odob qoidalarining majmuidir. Bu asar XIX asr boshlarida xalqimizning odob-ahloq me‘yorlari va milliy qadriyatlarini o‘zida mujassamlashtirgan. Olim 1740-yilda Qashg‘arda tavallud topgan. U tarixchi, adabiyotshunos, mutafakkir olim, mutasavvuf shoir va tarjimon sifatida tanilgan. Qoshg'ariy boshlang‘ich ta ‘limni otasi Mulla Shoh A‘lam Ohundan olgach Qashg‘ardagi mashhur madrasada Xomidiydna ta ‘lim olishni davom ettiradi. U erda arab, fors tillarini, matematika, adabiyot, tarix, jo‘g‘rofiya, va diniy bilimlarni mukammal egallab, zamonasining ko‘zga ko‘ringan olimi darajasiga erishadi. Muhammad Sodiq Qoshg‘ariy hayoti davomida katta ilmiy meros qoldirgan.Manbalarda uning “Tazkira i Azizon” (Tazkirai Xo ‘jagon), “Zubdat al-masoyil”,“Tazkira-i ashob al-kahf”, “Tarixi Iskandar va Tojinoma-i shohi”, “Odob as-solihim”, “Qiyofat al-bashar”, “Risola – i kasbdor”, “Durr al-muzohir” kabi asarlari arab tilidan, “Tarixi Rashidiy” asarini esa fors tilidan turkiyga (uyg ‘urchaga) tarjima qilgan. Muhammad Sodiq Qoshg ‘ariy 1849 yilda vafot etgan. U Yusuf Xos Xojib maqbarasi yonidagi qabristonga (Qashg‘arda) dafn etilgan. Olimning odob-axloqqa oid muhim pedagogik asari “Odob as-solihin” (“Solihlarning doblari”) kitobidir. Asar turkiy tilda yozilgan bo‘lib, muqaddima, yetti bob va xotimadan iborat. Har bir bob esa to‘rt fasldan tashkil topgan.U “Zubdat almasoyil” nomli asar bilan bir jildda besh marta nashr etilgan: ikki marta Toshkentda (1889, 1901) va uch marta Istanbulda (1891, 1892, 1896). Hozirgi kunda Abu Rayhon Beruniy nomidagi Sharqshunoslik institutining fondida asarning ikkita qo ‘lyozma (1343,1320 y ko ‘chirilgan) va oltita toshbosma nusxalari saqlanmoqda.

O‘zbek xalqining turli an ‘analariga boy, milliy qadriyatlari keng ma ‘no va chuqur tarixga ega. Mustabid tuzum davrida toptalgan qadriyatlarni qayta tiklash uchun barcha imkoniyatlar yaratilgan bugungi kunda odob-axloq va yoshlarni tarbiyalashda qadriyatlarimizga oid manbalarni o‘rganish va hayotga tatbiq etish dolzarb ahamiyat kasb etmoqda. Shunday asarlardan biri Muhammad Sodiq Qoshg‘ariy (1740-1843)ning “Odob as-solihin” (“Yaxshi kishilar odobi”) kitobidir. Mazkur asar kundalik turmushimizda har kuni har daqiqada bilish zarur bo ‘lgan turmush odobiga oid xulq-odob qoidalarining majmuidir. Bu asar XIX asr boshlarida xalqimizning odob-ahloq me’yorlari va milliy qadriyatlarini o ‘zida mujassamlashtirgan. Olimning odob-axloqqa oid muhim pedagogik asari “Odob as-solihin” (“Solihlarning odoblari”) kitobidir. Asar turkiy tilda yozilgan bo ‘lib, muqaddima, etti bob va xotimadan iborat. Har bir bob esa to ‘rt fasldan tashkil topgan. U “ Zubdat almasoyil” nomli asar bilan bir jildda besh marta nashr etilgan: ikki marta Toshkentda (1889, 1901) va uch marta Istanbulda (1891, 1892, 1896). Hozirgi kunda Abu Rayhon Beruniy nomidagi Sharqshunoslik institutining fondida asarning ikkita qo‘lyozma (1343, 1320 y ko ‘chirilgan) va oltita

toshbosma nusxalari saqlanmoqda. “Odob as-solihin” asarining mundarijasi uning e ‘tiborga loyiq axloqiy – tarbiyaviy asar ekanligini ko ‘rsatadi. Asar muqaddima va 7 bobdan, har bir bobi 4 fasldan iborat bo‘lib, alloma mazkur asarni yozishdan maqsadini quyidagicha bayon qilgan: “Tolibi soliqlar odobi zohiriy va odobi botiniyning bilib, unga amal qilmoqlari lozim keldi, toki bular ham talabu suluklaridin foyda topib, urug ‘lar martabalariga yetkaylar….”.Demak, muqaddimada asarning maqsadi ifoda etiladi, ya ‘ni insonga yaxshi xulq egallashi zarurligi ta ‘kidlanadi va u odob qoidalarini egallab olmasa va yaxshi xulq bilan muaddab (odobli) va mukazzab (toza) bo ‘lmasa, nafaqat o ‘ziga, balki butun dunyoga yomonlik tarqadi, deydi va quyidagi masnaviyni keltiradi:

Beadab tanho na xudro dosht bad,
Balki otash dar hama ofoq zar.

References:

1. Ermatov, F., & Haydarov, S. (2021). TARIX FANINI O’QITISHDA 1870-1914 YILLARDA ANGLIYANING O’RGANILISHI. *Scientific progress*, *1*(6).
2. Do’stmurodov, S., & Haydarov, S. (2021). TARIX FANINI O’QITISHDA XVI-XVIII ASRLARDA HINDISTONNI O’RGANISH. *Scientific progress*, *1*(6).
3. Mengboyev, S. N., & Haydarov, S. (2021). TARIX FANINI O’QITISHDA URARTU PODISHOLIGINING O’RNI. *Scientific progress*, *1*(6).
4. Asqarov, N. S. O., & Haydarov, S. (2021). ARAB XALIFALIGINING POYTAXTI BAG‘DODNING TANAZZULGA YUZ TUTISHI. *Scientific progress*, *1*(6).
5. Ro’zmetov, J., & Haydarov, S. (2021). TARIXNI O’RGANISHDA SOSONIYLAR DAVLATINING O’RNI VA AHAMIYATI. *Scientific progress*, *1*(6).
6. Tulaboyev, D., & Haydarov, S. (2021). TARIXNI O’RGANISHDA MESOPATAMIYANING TARIXI VA DINI: O’RNI HAMDA AHAMIYATI. *Scientific progress*, *1*(6).
7. Ҳайдаров, С.А., (2022). Заҳириддин Муҳаммад Бобур: бир қўлда мўйқалам-у, бир қўлда тож. *Scientific progress*, 3(3).

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DOLAZRB MUAMMOLARDAN BO'LGAN YER OSTI SUV QUVURLARINING KORROZIYASI

Annotatsiya. Suv quvurlari zamonaviy muhandislik kommunikatsiyalarining asosiy elementlari bo'lib, bizning uylarimiz, korxonalarimiz va jamoalarimizga hayotiy resurslarning eng asosiylaridan bo'lgan suvni yetkazib berish uchun xizmat qiladi. Biroq, yer ostiga ko'milgan bu hayot manbasini yetkazib beruvchi tarmoqlari doimo tilsiz dushman tomonidan tahdid ostida: korroziya. Yer osti suv quvurlarining korroziya tufayli asta-sekin eskirishi infratuzilmaning yaxlitligi, suv sifati va iqtisodiy barqarorligiga ta'sir qiluvchi jiddiy muammodir.

Kalit so'zlari: tuproq, korroziya, quvur, yer osti suv, ta'sir, metal, himoya, sifat.

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CORROSION OF UNDERGROUND WATER PIPELINES AS DOLAZRB PROBLEMS

Abstract. Water pipes are the main elements of modern utilities and serve to deliver water, one of life's most basic resources, to our homes, businesses and communities. However, the buried supply networks of this source of life are constantly under threat from a silent enemy: corrosion. The gradual deterioration of underground water pipes due to corrosion is a serious problem affecting infrastructure integrity, water quality and economic sustainability.

Korroziyanining asosiy sharhlari: Yer osti quvurlarining yer ostida joylashishida korroziya tabiiy elektrokimyoviy jarayon bo'lib, unda metall a'trof-muhit ta'sirida parchalanadi va ye'miriladi. Tuproq tarkibi, yer osti quvurlaridagi suv, tuproq tarkibidagi namlik, adashgan elektr toki va quvurlarda ishlatiladigan metall turi kabi omillar korroziyaning kelib chiqishiga yordam beradi.Bu esa hozirgi kundagi muhandislik kommunikatsiyalari sohasidagi dolzarb muammodir.

Korroziya sabablari: Yer osti suv quvurlarining korroziyasiga bir qator omillar ta'sir ko'rsatadi:

Tuproqning xususiyatlari: Tuproq tarkibi hal qiluvchi rol o'ynaydi. Kuchli kislotali yoki gidroksidi tuproqlar korroziya jarayonini tezlashtirishi mumkin, bu esa metallning buzilishiga olib keladi.

Suvning kimyoviy tarkibi. Quvurlar orqali oqayotgan suvning sifati korroziyaga ta'sir qilishi mumkin. Yuqori darajada erigan kislorod, xloridlar, sulfatlar va boshqa ifloslantiruvchi moddalar korroziya tezligini tezlashtirishi mumkin.

Elektrokimyoviy reaksiyalar. Quvur va uning atrofidagi elektr potentsialidagi farqlar korroziyaga olib kelishi mumkin. Bu noto'g'ri o'rnatish, noto'g'ri qoplama yoki adashgan elektr toklari tufayli yuzaga kelishi mumkin.

Quvur materiallari turi: Turli metallar korroziyaga turlicha ta'sir ko'rsatadi. Temir, po'lat va mis kabi umumiy materiallar vaqt o'tishi bilan turli xil korroziyaga uchraydi.

1-rasm. Muhandislik kommunikatsiyalari tarmoqlarida ishlatiladigan quvurlar.

Korroziyaning yer osti suv quvurlariga ta'siri

Yer osti suv quvurlarining korroziyasining oqibatlari juda ko'p:

Strukturaning buzilishi: korroziya quvurlarning strukturaviy yaxlitligini zaiflashtiradi, bu esa buzilish, yoriqlar va og'ir holatlarda quvurlarning ishdan chiqishiga olib keladi. Sirt birikmalarining hosil bo‘lishi, ularning metal quvurlarga adgeziyasi va xossalari korroziya jarayoniga ta’sir qiladi. O‘z navbatida bu ko‘rsatkichlar metallning strukturasi va tarkibiga bog‘liq. Metall quvurlar asosan kristall tuzilishga ega. Kristall panjara tugunlarida musbat zaryadlangan ionlarjoylashgan bo‘lib, elektronlar metallda erkin harakatlanadi. Kristall panjara atomlari qat’iyan davriy joylashgan ideal kristallardan farqli holda, real kristallarda doimo defektlar deb ataluvchi struktura muntazamligining buzilishi kuzatiladi. Real metall quvurlar konstruksion materiallarda ideal kristall holatning buzilishiga metal quvurlarning kristallanishidagi nomuvozanat sharoitlar, uning tarkibida legirlovchi va qo‘shimcha elementlarning bo‘lishi, kristall panjara deformatsiyasi, buyumlarni tayyorlash jarayonidagi mexanik, termik, radiatsion va boshqa faktorlarning ta’siri asosiy sabab bo‘ladi.

Suv sifati bilan bog'liq muammolar: Korroziyaga uchragan quvurlar suv ta'minotini ifloslantirishi, uning sifatini pasaytirishi va iste'molchilarning sog'lig'iga xavf tug'dirishi mumkin.

Qayerdan oqib kelayotganligi noma’lum bo‘lgan suvlarni iste’mol qilishdan ehtiyot bo‘lish zarur. Ba’zi o‘lkalarda suvdan zaharlanish oqibatida kasalxonaga murojaat qilayotganlar soni ortib bormoqda. Agar boshqa ichimlik suvi topilmagan taqdirda suvni qaynatib, tinitilgandan keyingina ichish lozim.

Suv resurslarini sifatli tartibda tayyorlash, qo'llab-quvvatlash, va isrofni kamaytirishga e'tibor berishimizni talab qiladi. Suvning yaroqsiz foydalanilishi qadimgi vaqtlarda qoldi, lekin hozirgi zamonaviy texnologiyalar bu masalani amaliy yechishga yordam berishi mumkin.

Iqtisodiy ta'sir: korroziyaga uchragan quvurlarni ta'mirlash, almashtirish va texnik xizmat ko'rsatish shaharlar, kommunal xizmatlar va iste'molchilar uchun katta moliyaviy zararni keltirib chiqaradi.

3-rasm. Eskirgan suv ta’minoti tarmog’idagi quvurni almashtirish jarayoni

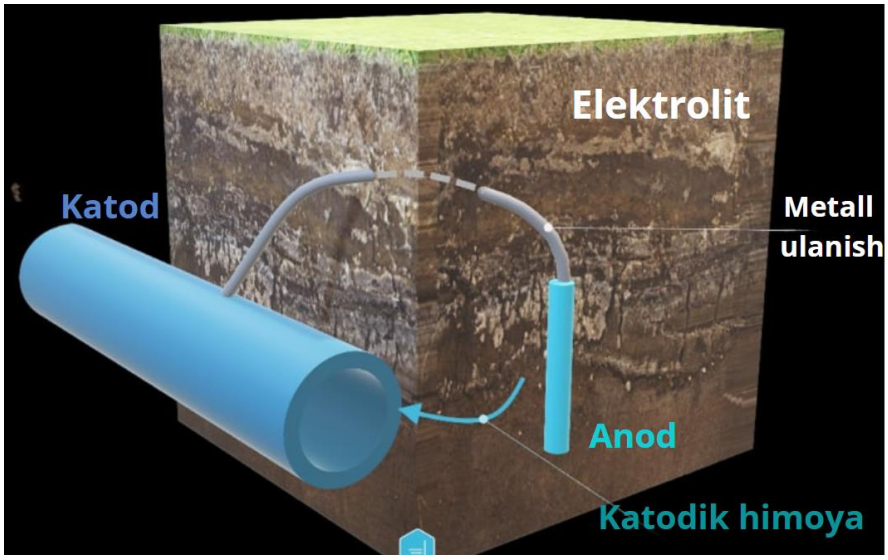
Yer osti suv quvurlarini buzilishi va korroziyasini oldini olish va kamaytirish strategiyalari

Yer osti suv quvurlarida korroziya ta'sirini oldini olish va yumshatish kompleks yondashuvni talab qiladi:

Himoya qoplamalari.Quvurlar yuzasiga himoya qoplamalarini qo'llash tuproq va suvdagi korroziy elementlarning ta'sirini kamaytiradigan to'siq bo'lib xizmat qiladi.

4-rasm. Himoya qoplamali quvurlar.

Katodik himoya. Katodik himoya tizimlaridan foydalanish korroziyaga olib keladigan elektrokimyoviy reaktsiyalarni boshqarishga yordam beradi, quvurlarning ishlash muddatini uzaytiradi.



5-rasm. Yer osti quvurlarini katodli himoya usuli.

Materialni tanlash. Quvurni qurish uchun zanglamaydigan po'lat yoki kompozit plastmassa kabi korroziyaga chidamli materiallarni tanlash korroziyaga moyillikni sezilarli darajada kamaytirishi mumkin.

Muntazam texnik xizmat ko'rsatish va monitoring. Muntazam tekshirish, texnik xizmat ko'rsatish va monitoring dasturlarini amalga oshirish korroziyani erta bosqichda aniqlashga yordam beradi, bu esa o'z vaqtida ta'mirlash yoki almashtirish imkonini beradi.

Xulosa:Yer osti suv quvurlarining korroziyasi keng tarqalgan muammo bo'lib, e'tibor va profilaktika choralarini talab qiladi. Sabablari, oqibatlari va oldini olish strategiyalarini tushunish bizning suv infratuzilmamizni himoya qilish va kelajak avlodlar uchun uzluksiz va xavfsiz suv ta'minotini ta'minlash uchun juda muhimdir. Ushbu yashirin tahdidga qarshi kurashish va hayotiy muhim suv

tarmoqlarimiz yaxlitligini saqlab qolish uchun sanoat manfaatdor tomonlari, tadqiqotchilar va siyosatchilar o‘rtasidagi hamkorlik zarur.

Adabiyotlar ro’yxati:

1. Mansurova Sh. P. (2023). ISSUES OF PRESSURE REGULATION IN HEATING NETWORKS. B INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY (Volume 3, Issue 10, October. 510–516).
2. Tashmatov, N.U., & Mansurova, S.P. (2022). Some Features of Heat and Moisture Exchange in Direct Contact of Air with a Surface of a Heated Liquid. International Journal of Innovative Analyses and Emerging Technology, 2(1), 26–31
3. Karimovich, T. M., & Obidovich, S. A. (2021). To increase the effectiveness of the use of Information Systems in the use of water. Development issues of innovative economy in the agricultural sector, 222-225.
4. Sultonov, A. (2019). Water use planning: a functional diagram of a decision-making system and its mathematical model. International Finance and Accounting, 2019(5), 19.
5. Sultonov, A., & Turdiqulov, B. (2022). SUV QABUL QILISH INSHOOTLARINING ISHLASH SAMARADORLIGINI OSHIRISHDA FILTRLARNING O‘RNI. Евразийский журнал академических исследований, 2(11), 12-19.
6. Turdiqulov, B., Nazirov, S., & Karimov, Y. (2022). ATOM VA MOLEKULALARNING YORUG’LIKNI YUTISHI VA NURLANISHI. Евразийский журнал академических исследований, 2(13), 1252-1258.
7. Sh. P. Mansurova. (2021). Application of renewable energy sources in buildings. Galaxy International Interdisciplinary Research Journal, 9(12), 1218–1224.
8. Sattorov, A., & Karimov, E. (2023). HAVO ALMASHINUV TIZIMIDA UYNI ISITISHGA SARFLANADIGAN ISSIQLIK QIYMATINI XISOBLASH. Educational Research in Universal Sciences, 2(13), 318–321.
9. Toshmatov N. U., & Mansurova Sh. P. (2022). Efficiency of use of heat pumps. International Journal of Innovations in Engineering Research and Technology, 9(10), 1–5.
10. Nazirov, S. O. o‘g‘li. (2023). GLOBAL SUV TANQISLIGI DAVRIDA SUV TA’MINOTI TIZIMLARINI TAKOMILLASHTIRISH MASALALARI. Educational Research in Universal Sciences, 2(13), 109–115.
11. Turdiqulov, B. (2023). Improvement of the Operation Process of Gas Burners. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(3), 1-5.
12. Mansurova, S. (2023). SOLAR HEATING SYSTEMS FOR BUILDINGS. International Bulletin of Applied Science and Technology, 3(11), 311–315.
13. Каримов, Э. Т. ў. (2023). МАМАЛАКАТИМИЗДА ЕНГИЛ АВТОМОБИЛ ЮВИШ ШАХОБЧАЛАРИНИНГ ОҚОВА СУВЛАРИНИ

ОҚИЗИШДА ЯНГИ ТИЗИМЛАРНИ ИШЛАБ ЧИҚИШ. Educational Research in Universal Sciences, 2(13), 263–267.
14. Nazirov Sanjar, & Karimov Yusuf. (2023). YER OSTI MUHANDISLIK TARMOQLARINI JOYLASHTIRISH VA ULARNING MUSTAHKAMLIK PARAMETRLARINI ANIQLASH. Innovations in Technology and Science Education, 2(9), 402–408.

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PROFESSIONAL TA’LIM TIZIMIDA GERMANIYA TAJRIBASI ASOSIDAGI DUAL TA’LIMNING TA’LIM-TARBIYA JARAYONLARINI TASHKIL ETISH VA BOSHQARISHDAGI AHAMIYATI

Annotatsiya. Professional ta’lim tizimning huquqiy asoslari, ta’lim-tarbiya jarayonlarini tashkil etishda dual ta’lim, Germaniya tajribasi asosidagi dual ta’limning ahamiyati yoritilgan.

Kalit so‘zlar: Professional ta’lim, dual ta’lim, dual ta’limning afzalliklari, dual ta’limning kamchiliklari, ta’lim-tarbiya jarayonlarini tashkil etish va boshqarishda dual ta’limning ahamiyati.

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THE SIGNIFICANCE OF DUAL EDUCATION IN THE SYSTEM OF PROFESSIONAL EDUCATION IN THE ORGANIZATION AND MANAGEMENT OF EDUCATIONAL PROCESSES BASED ON THE GERMAN EXPERIENCE

Abstract. The legal basis of the professional education system, dual education in the organization of educational processes, the importance of dual education based on the German experience are highlighted.

Key words: Professional education, dual education, advantages of dual education, disadvantages of dual education, importance of dual education in organization and management of educational processes.

Barchamizga ma’lumki, ta’lim jarayoniga katta e’tibor qaratgan mamlakatlar bugun rivojlangan davlatlar qatorida turibdi. Binobarin, tarixga nazar tashlaydigan bo‘lsak, kadrlar masalasi mamlakatning iqtisodiy va ijtimoiy rivojlanishining asosiy figurasi hisoblanadi. Shu bois O‘zbekistonda ham bu borada bir qator islohotlar o‘tkazib kelinmoqda.

Bugungi kunda uzluksiz ta’lim tizimining bir bo‘g‘ini sifatida professional ta’lim tizimida o‘quvchi-yoshlarda professional ta’lim, kasbiy

kompetentliliklarini shakllantirish, professonal ta’lim muassasalarida ta’lim-tarbiya jarayonini tashkil etish va boshqarish masalasi eng dolzarb masalalardan biriga aylandi.

Turli rivojlangan davlatlar tajribalarini o‘rganish, ularning ijobiy tomonlarini o‘zlashtirish, milliy qadriyat va an’analarimizni hisobga olgan holda ta’lim-tarbiya jarayoniga moslashtirish, joriy etish bo‘yicha bir qator tadqiqotlar olib borilmoqda.

Proyezidentimiz Sh.M.Mirziyoyevning 2019 yil 6 sentyabrdagi PF-5812-sonli “Professional ta’lim tizimini yanada takomillashtirishga doir qo‘shimcha chora-tadbirlar to‘g‘risida”gi Farmonlari, 2020 yil 7 avgustdagi 466-sonli O‘zbekiston Respublikasi Vazirlar Mahkamasining “O‘zbekiston Respublikasida uzluksiz boshlang‘ich, o‘rta va o‘rta maxsus, professonal ta’lim tizimini tartibga soluvchi normativ-huquqiy hujjatlarni tasdiqlash to‘g‘risida”gi qarorlari va O‘zbekiston Respublikasi Vazirlar Mahkamasining 2019 yil 13 maydagi 394-son “Mehnat bozorida talab yuqori bo‘lgan malakali kadrlarni kasbga tayyorlash tizimini takomillashtirish chora-tadbirlari to‘g‘risida”gi qarorlari, 2020 yil 23 sentyabrda tasdiqlangan 637-son O‘zbekiston Respublikasining “Ta’lim to‘g‘risida”gi Qonuni hamda mazkur faoliyatga tegishli boshqa me’yoriy-huquqiy hujjatlar ta’lim-tarbiya jarayonlarini tashkil etish va boshqarish faoliyatini takomillashtirishning huquqiy asoslari hisoblanadi [1;2;3].

Bugungi kunda ushbu tizim Germaniya, Avstriya, Shveysariya va Koreya Respublikasi kabi mamlakatlarda iqtisodiyotni rivojlantirishda juda katta o‘ringa ega.

Hozirgi kunda Germaniya xalqaro hamkorlik jamiyati (GIZ) hamda O‘zbekiston Respublikasi Oliy va o‘rta maxsus ta’lim vazirligi hamkorligida ta’lim-tarbiya jarayonini tashkil etish va boshqarish borasida amalga oshirilayotgan “O‘zbekistonda professional ta’lim tizimini isloh qilish va modernizatsiyalash jarayonlarini qo‘llab-quvvatlash” loyihasi doirasida professional ta’limda dual ta’limni tashkil etish bo‘yicha xorij tajribasini o‘rganish uchun mamlakatimiz hukumati, Oliy va o‘rta maxsus ta’lim vazirligi, Pedagogik innovatsiyalar instituti, kasbiy ta’limni rivojlantirish va muvofiqlashtirish hududiy boshqarmalari hamda professional ta’lim muassasalari vakillarining akademik almashinuvlari amalga oshirilmoqda.

Almashinuvlar davomida O‘zbekistonning Berlindagi elchixonasi va Germaniya xalqaro hamkorlik jamiyati (GIZ) ko‘magida Federal professional ta’limi instituti (BIBB), Germaniyaning professional ta’limi sohasida xalqaro hamkorlik byurosi (GOVET), Savdo-sanoat palatasi, yirik ish beruvchilar hamda yoshlarni kasbga o‘qitish markazlari vakillari bilan uchrashuvlar o‘tkazilgani holda kelgusidagi o‘zaro hamkorlik istiqbollari belgilandi.

Uchrashuvlar davomida Germaniyada dual ta’limni joriy etilishning huquqiy asoslari, tamoyillari, dual ta’lim tizimi ishtirokchilarining majburiyatlari, o‘quv me’yoriy hujjatlarni ishlab chiqish, xususiy sektorni jalb qilish hamda

yoshlarini dual ta’limga qiziqtirish masalalari yuzasidan o‘zaro fikr va tajribalar almashib, professional ta’lim tizimiga joriy etilmoqda.

An’anaviy ta’lim shaklida o‘quvchi/talaba oliy yoki professional ta’lim muassasasida nazariy bilimlarni ko‘proq egallab, amaliyot qismini juda oz soatlarda korxona va tashkilotlarda o‘taydi.

Shuning uchun, rivojlangan mamlakatlarning ta’lim tizimi o‘rganilib, zamonaviy texnologiyalar va dastgohlarda o‘qish bilan bir vaqtda korxona, tashkilotlarda ish faoliyatini olib borish imkoniyatini beruvchi dual ta’lim shakli O‘zbekiston ta’lim tizimiga kiritildi.

“Dual” so‘zi lotin tilidan olingan bo‘lib, biror narsaning ikki qismga taalluqliligi, ikkita narsani ifodalovchi, ikki qismdan iborat, degan ma’nolarni bildiradi.

Dual ta’lim – o‘quvchi/talabaga ta’limni o‘z yo‘nalishiga mos tashkilotda mehnat qilish bilan birga olib borish imkoniyatini beruvchi tizimdir.

Bunda yoshlar 2-3 kun ta’lim muassasasida nazariy bilimlarni va 3-4 kun korxona va tashkilotlarda haqiqiy ish jarayonlarida amaliy ko‘nikmalarni egallaydi.

Dual ta’lim shaklida tahsil olayotgan o‘quvchi/talaba korxona va tashkilotlarda ishga qabul qilinganda ularga korxona tomonidan ustoz biriktiriladi va oylik maoshi to‘lanadi.

Maqsad iqtisodiyotning barcha sohalarida malakali va zamonaviy kasbiy ko‘nikmalarga ega o‘rta bo‘g‘in kadrlarini tayyorlash hamda yoshlarning kasblar va mutaxassisliklarni egallashga bo‘lgan qiziqishlarini qo‘llab-quvvatlash uchun keng imkoniyatlar yaratishdan iborat [7].

Aytib o‘tganimdek, yoshlar ta’lim olish bilan birga haqiqiy ish joyida o‘z kasbiy ko‘nikmalarini rivojlantiradilar.

Dual ta’lim shakli professional ta’lim tizimida yo‘lga qo‘yildi. 2021-2022 o‘quv yilidan boshlab, maktabgacha ta’lim, temir yo‘l va qurilish kabi sohalarda o‘rta bo‘g‘in kadrlarini tayyorlash maqsadida professional ta’lim muassasalariga dual ta’lim shakli bo‘yicha 3 mingdan ortiq yoshlar o‘qishga qabul qilindi.

2022-2023 o‘quv yilida professional ta’lim muassasalariga 4,5 mingdan ortiq yoshlar dual ta’lim shaklida o‘qishga qabul qilindi hamda yuqorida aytib o‘tilgan sohalarga qo‘shimcha ravishda axborot texnologiyalari, yengil sanoat, qishloq xo‘jaligi va xizmat ko‘rsatish kabi sohalarda ham dual ta’lim shaklida kadrlar tayyorlash yo‘lga qo‘yildi [4;6].

Bugungi kunda hududlarning ijtimoiy-iqtisodiy rivojlanishidan kelib chiqib, 7,5 mingdan ortiq yoshlar respublikamizdagi professional ta’lim muassasalarida dual ta’lim shaklida ta’lim olib, 1,5 mingga yaqin korxona va tashkilotlarda ish faoliyatini olib bormoqda.

Oliy ta’lim tizimida esa faqat Toshkent to‘qimachilik va yengil sanoat institutida dual ta’lim asosida o‘qitish yo‘lga qo‘yilgan (3- va 4-bosqich talabalari uchun). Kelgusi o‘quv yilidan boshlab, bosqichma-bosqich boshqa oliy ta’lim

muassasalarida ham dual ta’lim shakli asosida kadrlar tayyorlashni yo‘lga qo‘yish rejalashtirilmoqda.

Biz bilamizki, Germaniya o‘zining ta’lim tizimiga dual ta’limni bir necha yillar oldin joriy qilgan. Germaniyada dual ta’lim rivojlanishining asosiy omili qonunchilikda dual ta’lim ishtirokchilarining (korxona, o‘quvchi, ta’lim muassasasi) vazifalari va majburiyatlari aniq belgilab qo‘yilgan.

Bugungi kunda Germaniyada 1,4 million yoshlar dual ta’lim shaklida ta’lim olishadi. Germaniyada har yili 500 ming o‘quvchi dual ta’limda ishtirok etish uchun korxonalar bilan shartnoma imzolashga erishadi va 74 foiz yoshlar o‘qishni yakunlagandan so‘ng ish beruvchi bilan mehnat shartnomasi imzolashga erishadi. Korxona tomonidan o‘quvchi(lar)ga malakali va maxsus sinovdan o‘tgan hamda sertifikatga ega bo‘lgan ustoz biriktiriladi.

Dual ta’limni tashkil etish va ish beruvchilarni jalb qilish Savdo sanoat palatasi va tarmoq savdo palatalari faoliyatining asosiy vazifalaridan hisoblanadi.

Professional ta’lim muassasalarida dual ta’lim tizimi tashkilotlar va korxonalar bilan birgalikda ta’lim olishni tashkil etish kelajakda tashkilot yoki korxonani malakali kadrlar bilan ta’minlash, o‘z iqtisodini rivojlantirish uchun vaqt va xarajatlarni tejaydigan, ishlab chiqarish muhitiga moslashib olgan xodimlarni tanlab olish imkonini beradi.

Dual ta’lim nafakat ma’lum bir professional vazifalarni bajarishga o‘rgatadi, balki mehnat jamoasida muvaffaqiyatli moslashishni ta’minlaydi, kerakli vakolat va mas’uliyatni shakllantiradi [8].

Professional ta’lim tizimida dual ta’lim tizimining afzalliklari:

- ta’lim dasturlarining mazmuni va tarkibi ta’lim muassasasi va korxona o‘rtasida kelishilgan bo‘lib, barcha tomonlarning talablarini qondirishni nazarda tutadi;

- mutaxassislarni amaliy tayyorlash nafaqat korxonalarda, balki ta’lim tashkilotlarining ustaxonalari, laboratoriyalari va o‘quv maydonchalarida ham tashkil etiladi;

- ta’lim muassasasi va korxona o‘rtasida o‘zaro hamkorlik rivojlanadi;

- korxonada amaliy ishlarni bajarish uchun o‘quv muassasasidagi nazariy faoliyatning doimiy o‘zgarishini o‘rganish uchun eng yaxshi omil hisoblanadi;

- ishga joylashganda, adaptatsiya jarayonini tezlashtiradi;

- kasbni aniq tushunish va kasbiy kompetensiyani shakllantiradi.

Professional ta’lim tizimida dual ta’lim tizimining ijobiy tomonlari bilan birga, uning kamchiliklarini ham ko‘rib chikaylik:

- ta’lim tashkilotlarining ukuv dasturlari bilan korxonada bajariladigan ishlarning mavsumiy ketma-ketligi har doim ham bir-biri bilan uyg‘un bo‘lmaydi;

- ta’lim tashkiloti ba’zan korxona tomonidan talab qilinadigan o‘quv materialini taqdim etishga ulgurmasligi mumkin;

- korxonalarning yangi (yosh) mutaxassislarni qabul qilishni istamasligi;

- moliyaviy imkoniyatlarning yetishmasligi sababli korxonalar yosh mutaxassislarga oylik belgilashni xohlamasligi.

Xulosa qilib aytadigan bo‘lsak, dual ta’lim-korxona (muassasa), talaba hamda davlatning manfaatlari va talablariga javob berishi juda ham muhim.

Professional ta’lim muassasalarining bo‘lajak bitiruvchilarini o‘z mutaxassisliklari bo‘yicha muvaffaqiyatli ish bilan ta’minlash masalasi qiziqtiradi. Shuning uchun davlat butun iqtisodiyot uchun malakali kadrlar tayyorlash masalasini samarali hal qilib kelmoqda.

Yuqori va zamonaviy darajaga ega bo‘lgan mutaxassislarni tayyorlashda dual ta’lim tizimining elementlaridan foydalanish maqsadga muvofiqdir, chunki aynan shunday mashg‘ulotlar talabaga motivatsiya beradi, o‘z 6ilimlarini ko‘rsatish, ijodiy rivojlanish imkoniyatlarini beradi, shu bilan birga mustaqil fikrlash, o‘z faoliyatini rejalashtirish, korxonadagi amaliyot davrida o‘z ish o‘rniga ega bo‘lish, kasbiy ko‘nikma va malakalarni shakllantirish va kutilgan natijalarga erishishni o‘rgatadi.

Binobarin, professional ta’lim tizimida ta’lim-tarbiya jarayonlarini tashkil etish va boshqarishda Germaniya tajribasi asosidagi dual ta’lim muhim ahamiyat kasb etadi.

Foydalanilgan adabiyotlar:

1. O‘zbekiston Respublikasining “Ta’lim to‘g‘risida”gi 637-son Qonuni. 2020 yil 23 sentyabr.
2. O‘zbekiston Respublikasi Prezidentining “Professional ta’lim tizimini yanada takomillashtirishga doir qo‘shimcha chora-tadbirlar to‘g‘risida”gi PF-5812-sonli Farmoni 2019 yil 6 sentyabr.
3. O‘zbekiston Respublikasi Vazirlar Mahkamasining “O‘zbekiston Respublikasida uzluksiz boshlang‘ich, o‘rta va o‘rta maxsus, professonal ta’lim tizimini tartibga soluvchi normativ-huquqiy hujjatlarni tasdiqlash to‘g‘risida”gi 466-sonli Qarori 2020 yil 7 avgust.
4. N.Ismoilov, Q. Shodmanov. Professional ta’lim muassasalarida tashkil etiladigan pedagogik jarayonlar tahlili. Science and innovation.2022 y.
5. Shodmanov, K. O., Nodirov, J. M., & Narzullayeva, G. N. (2020). Professional ta’lim muassasalari ukuvchilarida kasbiy kompetensiyalarni shakllantirish. NamDU. Ilmiy axborotnoma.
6. Nodirov, J. M., & Shodmanov, Q. O. (2023). PROFESSIONAL TA’LIM MUASSASLARIDA TA’LIM-TARBIYA JARAYONINI TASHKIL ETISH VA BOSHQARISHGA OID XORIJIY MAMLAKATLAR TAJRIBALARINING QIYOSIY TAHLILI (YAPONIYA MISOLIDA). Ekonomika i sosium, (6-1 (109)), 313-321.
7. Nodirov, J. M., Xamrakulov, M. A., & Abdulakimov, A. A. (2023). PROFESSIONAL TA’LIM MUASSASALARIDA TA’LIM-TARBIYA JARAYONLARI SAMARADORLIGINI OSHIRISH. Journal of new century innovations, 38(2), 113-117.
8. Nodirov, J. M. (2023). PROFESSIONAL TA’LIM MUASSASALARIDA TA’LIM-TARBIYA JARAYONLARINI TASHKIL ETISH VA

BOSHQARISHDA REFLEKSIV YONDASHUV. Novosti obrazovaniya: issledovaniye v XXI veke, 1(11), 894-900.
9. Юлдашев, Ж., Каюмов, Д., & Жураев, У. (2021). Олий таълим муассасаси профессор ўқитувчисининг маъруза ўтиш услуби ва ўзини тутиши. Экономика и социум, (1-2 (80)), 813-817.
10. Юлдашев, Ж., Каюмов, Д., & Жураев, У. (2021). Ўқув жараёнини илмий асосда ташкил этишда талабаларнинг мустақил таълимини ривожлантиришнинг услубий асослари. Экономика и социум, (1-2 (80)), 802-806.
11. Nurmuxamad Najmitdinovich Majidov, Dilshod Abdug'Ofur O'G'Li Qayumov, & Ulug'Bek Inomiddin O'G'Li Jo'Rayev (2023). TA'LIM SAMARADORLIGINI OSHIRISHDA ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARNING AHAMIYATI. Oriental Art and Culture, 4 (2), 441-446.
12. Alisher Xaydaraliyevich Alinazarov, Dilshod Abdug'Ofur O'G'Li Qayumov, & Ulug'Bek Inomiddin O'G'Li Jo'Rayev (2023). O'ZBEKISTON OLIY TA'LIM TIZIMIDA FAN, TA'LIM VA ISHLAB CHIQARISH INTEGRATSIYASINI TAKOMILLASHTIRISHNING ASOSIY YO'NALISHLARI. Oriental Art and Culture, 4 (2), 234-240.

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DIGITAL TRANSFORMATION OF ECONOMIC ACTIVITY IN AGRICULTURE: PROBLEMS AND DEVELOPMENT PROSPECTS

Abstract. The scientific article was prepared as a part of the dissertation and is devoted to the study of the features of digital transformation of economic activity in agriculture. The research was carried out on the basis of the analysis of scientific works of scientists, statistical data, regulatory legal framework, as well as the data obtained from the results of the author's survey conducted among representatives of peasant (farm) households and rural individual entrepreneurs in the article. information is provided. Particular attention is paid to the systematization of the factors that determine the specific characteristics of starting the process of digital transformation of agriculture, including the provision of information to the network, infrastructural aspects of the activity, the level of digital maturity of agricultural producers, as well as the development of the innovative system of the industry. The analysis of modern research has shown that the use of information technology solutions in the production process has a number of important advantages in addition to the traditional farming method, as it helps to increase labor productivity, reduce production costs and increase competitiveness. The insufficient level of knowledge of experts in the field of application of information technology solutions, the lack of financial opportunities for the introduction of digital technological solutions into the production process, and the lack of personnel are the main obstacles to the digital development of the agricultural industry. The article reveals the dependence of the rate of introduction of information technology solutions on the production volume of agricultural entities, as well as the relationship between the introduction of digital technologies and the effective development of agricultural business in four ways. defined at the level of digitization: digital governance, digital economy, data-driven economy and digital communication.

Keywords: digital transformation, digital technologies, information technology solutions, infrastructural features, agriculture.

Introduction

Currently, the process of digital transformation is large-scale and affects most sectors of economic activity, including the agricultural sector, which plays an important role in ensuring the country's food security. With the increase in population and its density, society's need for food products is increasing year by year, but the available resources remain finite and limited. This problem reveals the need to develop a new approach to the process of modernization of the

agricultural industry, to establish an effective work mechanism taking into account the use of digital technological solutions.

The urgency of the process of digital transformation of economic activity in agriculture is related to increasing the efficiency of the production process. Due to the introduction of specialized "smart" equipment for production, the use of artificial intelligence technologies, digital detailing of statistical data, as well as the use of digital platform solutions and network databases, production losses are reduced, labor productivity is increased. increased, product quality improved.

The object of research is the process of digital transformation of agriculture.

The subject of research is information technology solutions used in the production process of certain categories of agriculture.

to analyze the results expected from the digital transformation of some categories of agriculture during the introduction and use of information technology solutions.

Research Methodology

The research is based on the analysis of available statistical data, literature sources, as well as the latest articles in the field of IT.

To achieve the goal of the research, the following tasks were set:

• To study the characteristics of the process of digital transformation of economic activity and to determine the characteristic consequences of the introduction of digital technologies into the production process.

• to identify the main obstacles preventing the use of information technology solutions in the agricultural sector.

• To determine the rate of introduction of information technology solutions to different categories of agricultural producers depending on their production volume.

• description of the importance of infrastructural features in the framework of digital transformation of economic activity on the example of peasant farms and rural individual entrepreneurs.

Literature review

Research on the digital transformation process can be divided into several areas, based on customer experience, operational processes and business models. As a rule, the study of the digital transformation process is based on these components and Kravchenko N.A. [1], Gribanova Yu.I. [2], Tolstykh T.O. [3], Tsenjarik M.K. [4], Ermolenko O.D. [5] reflected in the research. It should be noted that the topic of digital transformation of agriculture and the formation of a mechanism for the introduction of information and technological solutions into the field occupies a wide place among modern researches. However, there are very few studies devoted to the infrastructural aspects of the activities of small-scale agriculture and the prospects of digital transformation of small-scale agriculture, so this research can be considered relevant and has scientific novelty.

The research is based on theoretical and methodological principles developed by local scientists.

Analysis and results

In writing the scientific publication, the author used the following methods: analysis and synthesis of scientific studies and articles, regulatory documents and documents, analysis of statistical data, as well as tabular and graphic methods of visualizing statistical data.

The process of digital transformation represents the transition to conducting business based on a comprehensive change of the company's operations, business processes and business models, maximizing the capabilities of digital technologies. Digital transformation often leads to the emergence of new businesses, customers and markets. In order to remain competitive, enterprises must take a strategic approach to assessing digital opportunities and understand internal and external environmental factors. It is also worth noting that the main factors of the digital transformation process include mobility (access to the Internet), the constant increase in the volume of data, computerization, the spread of network technologies, and the speed of economic processes. development of digital technologies, including artificial intelligence, formation of an ecosystem for integrated implementation of innovative processes and use of digital solutions [6].

It should be noted that various studies on the introduction of digital technological solutions in agriculture are directly related to the processes of automation of production, forecasting of current yields, estimation of the cost of existing products and profit calculations [7]. At present, there are various categories for the dissemination of technologies for the digital transformation of economic activity in agriculture. Digital transformation technologies can be based on the management system of agricultural enterprises: precision agriculture and animal husbandry, digital service of agrometeorological data, monitoring of agricultural equipment, drones, Big Data, robotics, markets, biotechnology and genetic engineering, alternative forms [8]. Other authors suggest dividing digital technologies into the main groups of "smart" agricultural technologies, including "precision agriculture", "agricultural robots", "AIoT platforms / AIoT applications", "Big data" [9]. Digital transformation of economic activity will help increase the competitiveness of the agricultural industry, attract investments, reduce the cost of agricultural products, as well as provide reliable and timely information about the current state of this industry and related industries. allows to obtain [10].

In the author's research, digital technologies are divided into four categories of information technology solutions: agricultural accounting and planning technologies (for example, 1C program: Accounting for an agricultural enterprise, 1C: Document circulation, etc.), automation technologies units (e.g. digital sensors, measurement transducers, position sensors, pressure velocity, force, etc.), forecasting technologies (e.g., remote sensing technologies, crop yield forecasting technologies, analytical software, etc.), information collection and transmission.

technologies (mobile terminals, communication system with a mobile video surveillance station, unmanned aerial vehicles, etc.) (Fig. 1).

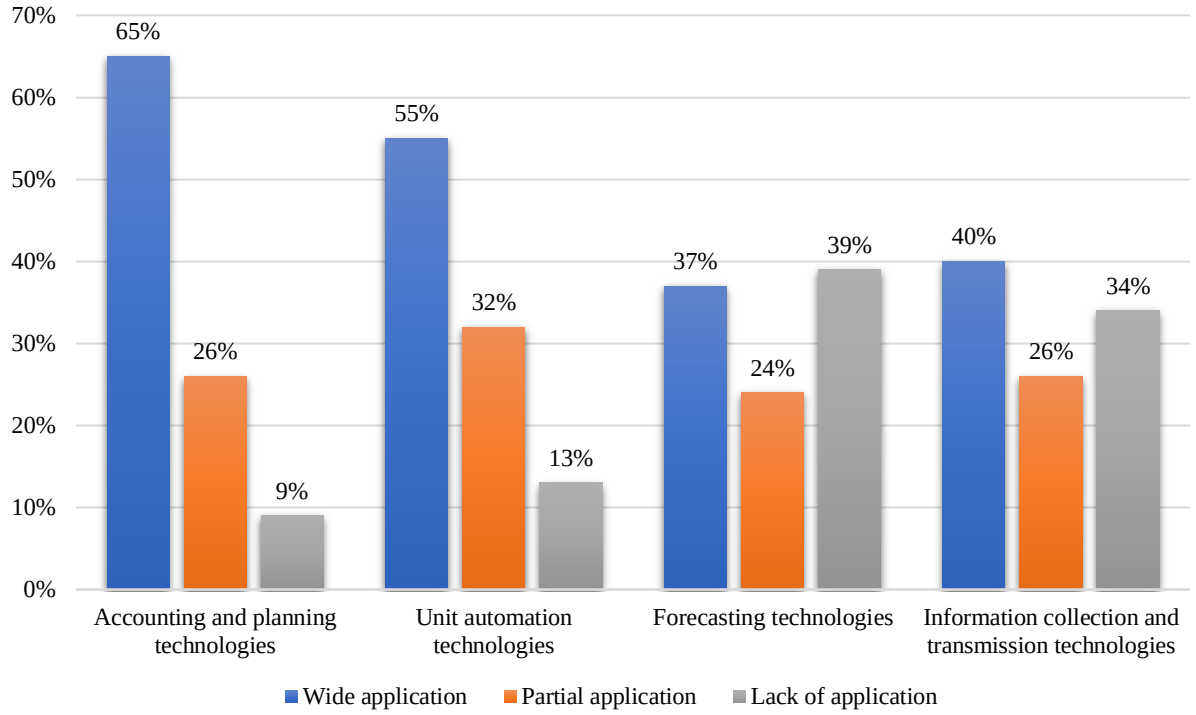

Figure 1. Application of different types of information technology solutions by peasant (farm) farms and rural individual entrepreneurs (compiled by the author)

According to the received data, agricultural activity accounting and planning technologies are currently used most (65%) by peasant (farmer) enterprises and rural individual entrepreneurs, in second place are division automation technologies (55%), followed by information collection and transmission technologies (40%), forecasting technologies (37%). Taking into account the use of information technology solutions in their activities, it should be noted that the representatives of peasant farms and rural individual entrepreneurs are highly interested and open to the process of introducing digital mechanisms into their production activities.

At the same time, there are a number of factors that prevent the introduction of information technology solutions in agriculture (Table 1). The main factor is the insufficient knowledge of the representatives of peasant (farm) households and rural individual entrepreneurs on the practical application of digital transformation and information technology solutions. It should also be noted that small and medium-sized businesses, due to the fragmentation of the information infrastructure, often turn to the help of specialized consulting centers using the principle of outsourcing. This problem shows the need to improve the means of digital transformation of economic activity in agriculture, which can be expressed in the formation of network databases and expert communities.

The second obstacle is the lack of financial opportunities to introduce digital technological solutions into the production process. The third reason that prevents the implementation of information technology solutions in agriculture is the lack of personnel and the insufficient level of skills of specialists in the field of digital technologies. This problem is the lack of knowledge, skills and qualifications for the use of digital technological solutions in the production, not having the necessary, correct and timely information, one of the main problems in the process of managing the enterprise. once again confirms that.

To a lesser extent, factors related to the reluctance of industry representatives to change the traditional way of business management to new management methods, issues of government support for agribusiness, the labor-intensive process of implementing digital solutions and the lack of readiness of agribusiness are implications for digital innovation. Despite the fact that the digital transformation of small and medium-sized agricultural enterprises is scattered compared to large-scale agricultural enterprises, the majority of respondents from farmers and rural entrepreneurs see the need to introduce digital methods. In agricultural business management, the factor "lack of visible need to introduce digital methods in agricultural business management " has taken an extreme place among other factors that prevent the introduction of information technology solutions in the agricultural sector.

Table 1.

Factors preventing the implementation of information technology solutions in agriculture

Factors preventing the introduction of information technology solutions in agriculture	Interest distribution
Lack of readiness of agricultural business for digital innovations	24.7 %
Lack of sufficient knowledge in the field of digitization	55.8 %
Lack of financial opportunities in the implementation of digital technologies in production	51.9 %
There is not enough support from the state in the digitalization of agricultural business	35.1 %
Reluctance to change the traditional way of business management to new ways of management	36.4 %
Lack of specialized personnel, insufficient qualification of experts in the field of digital technologies	46.8 %
There is no clear need to introduce digital methods in agricultural business management	19.5 %
The complexity of the process of introducing digital solutions, the lack of guarantees of their high efficiency	29.8 %

To determine the rate of implementation of information technology solutions for different categories of agricultural producers (households, peasant farms, medium-sized agricultural enterprises, large agricultural farms) It is recommended to apply to the National Research Institute. According to the results of this study, the level of demand among agricultural producers for the use of

digital technological solutions in their activities directly affects the need to form an agricultural production information system. is showing a secret. The level of demand for new technological solutions among different categories of agriculture (households, peasant farms, medium-sized agricultural enterprises) can be observed as follows (Table 2):

• Implementation potential for farms: high (organic agriculture, waste-free (circular) agriculture), medium (drip irrigation, integrated pest management), low (precision agriculture, large conveyor livestock, urbanized agriculture, automation and computerization, biofuels).

• Potential for adoption by households: high (zero-waste (circular) agriculture), medium (organic agriculture, integrated pest management), low (precision agriculture, large-scale conveyor livestock, drip irrigation, urbanized agriculture, automation and computerization, biofuels).

• Adoption potential of agricultural products: high (integrated pest management, biofuels), medium (organic agriculture, precision agriculture, drip irrigation, automation and computerization, rotational agriculture 'jaligi'), low (large-scale conveyor farming, urbanized agriculture).

• Large agricultural holdings have a high potential for introducing new technologies according to almost all indicators of technological solutions, except for waste-free (circular) agriculture (average implementation potential) and organic agriculture economy (low implementation potential) is excluded.

Data analysis shows the uneven distribution of the digital development of certain categories of agriculture, which is explained by the level of profitability, the scale of production, the specialization of production, as well as the dispersion of organizational units of business entities. The study of the potential of the introduction of technology describes the ability of agricultural enterprises to use a digital business model based on the automation of the entire cycle of the production chain for comprehensive digitization of production, automation of the maximum number of economic activity processes. In turn, the potential for introducing new technological solutions to small and medium-sized agricultural enterprises is scattered, which indicates the possibility of introducing information technology solutions only through the automation of individual management functions. Such functions include accounting, food market monitoring and business planning [11].

Table 2.

Demand for new technologies by economic entities of the agro-industrial complex

Technology	Personal auxiliary farms (subsidiary farming)	Farms/individual entrepreneurs (semi-commodity farm)	Medium-sized agricultural enterprises, social entrepreneurship corporation (commodity)	Large agricultural holdings (commodity, export-oriented farming)
Organic farming	M	H	M	L
Precision agriculture	L	L	M	H
Large conveyor belt farming	L	L	L	H
Drip irrigation	L	M	M	H
Integrated pest management	M	M	H	H
Urbanized agriculture	L	L	L	H
Automation and computerization	L	L	M	H
Zero-waste (circular) agriculture	H	H	M	M
Biofuel	L	L	H	H

Technology implementation potential: H - high, M - medium, L - low.

In general, the low potential of introducing digital technologies in smallest and medium forms of agriculture is a serious obstacle to the digital transformation of the sector's economic activity. In this regard, the agricultural industry faces the task of forming a comprehensive approach to the process of introducing digital technologies, as well as supporting agro-startups, which are the vector of development of this sector [12].

Conclusion/Recommendations

Thus, the mechanism of agricultural management is experiencing a number of important changes due to the large-scale digital transformation of economic activity, the state, realizing the need to introduce digital technologies into the agricultural industry, is rapidly modernizing the management business model. using digital components. Digital management of agriculture involves monitoring the quality and quantity of the produced products, analyzing the efficiency and effectiveness of enterprise activities, collecting and processing large amounts of data in order to create a single statistical database. The study of new trends in agricultural management serves the development of the agricultural sector, the effective use of the resource potential of our country with the correct distribution of costs, and the preparation of a pool of personnel with digital skills. The basis

of strategic planning for the development of the agricultural industry is scientific and technical forecasting, taking into account global, social, ecological and technological problems.

The study of the possibilities of introducing digital technologies into the economic activities of agricultural producers showed that the speed of introducing digital technological solutions is directly related to the production volume of economic entities. The rate of adoption of digital technologies in large agricultural enterprises is significantly higher than that of medium and small enterprises, which is due to the differentiated level of financial capabilities, production scale, related to the release concentration level. However, due to the increasing trend of widespread distribution and use of digital technology solutions, the availability of digital technologies is increasing, the user mechanism is being simplified, the cost of digital technologies is decreasing, which will lead to an increase in the number of digital technologies over time.

The article lists the main obstacles that prevent the introduction of digital technologies in the agricultural sector: lack of sufficient knowledge in the field of digitization, lack of financial opportunities to introduce digital technological solutions into the production process, lack of qualified specialists. employees. As a solution to these problems, it is appropriate to consider the possibilities of improving the means of digital transformation of economic activity, expressed in the formation of network databases and expert communities, which provide a quick solution to problems in the field of agriculture.

The data of the author's research showed that digital technological solutions are already finding their piecemeal application in the economic activities of small forms of agriculture, the introduction of digital technologies and the effective development of agricultural business at four levels of digitization the relationship between Agricultural accounting and planning technologies are the most common, unit automation technologies are also used, information collection and transmission technologies and forecasting technologies are used less often. In order to accelerate the process of introduction and application of digital technological solutions in agriculture, it is necessary to ensure effective cooperation between the subjects of separate agricultural sectors, to modernize the infrastructural features of activities that allow to ensure the continuity of reproduction processes.

References:

1. Digital transformation and problems of high-tech business / NA Kravchenko, VD Markova, NP Baldin and others / ed. Dan. OVER. Kravchenko, Doctor of Economics VD Markova. – Novosibirsk: IEOPP SB RAS, 2019. - 352 p.
2. Gribanov Yu.I. Digital transformation of business: textbook / Yu.I. Gribanov, MN Rudenko. - 2nd edition. - Moscow: Dashkov and K, 2021. - 213 p.
3. Tolstix TO A set of tools for managing business projects of innovative enterprises in the digital economy / TO Tolstix, VA Khvostikova; International Academy of Science and Practice of Production Organization, Voronezh State

Technical University. - Voronezh: Voronezh State. Technical University, 2016. - 237 p.
4. Tsenjarik MK, Krylova Yu.V., Steshenko VI Digital transformation of companies: strategic analysis, influencing factors and models. Newsletter of St. Petersburg University. Economy. – 2020 – T. 36. number. 3. – B. 390 – 420.
5. Ermolenko OD Problems and prospects of the development of Russian agriculture in the conditions of digital transformation and the role of human capital // Reclamation as a driver of modernization of the agro-industrial complex in the conditions of climate change. – 2020. – pp. 206–211.
6. Kochetkov EP Digital transformation of the economy and technological revolutions: problems for the current paradigm of management and crisis management // Strategic decisions and risk management. - 2019 - T. 10. No. 4. - pp. 330–341.
7. Buklagin DS Digital technologies for agricultural management // International journal of scientific research. 2021. No. 2–1(104). Page 136. 144.
8. Normuradov, N. (2023). QISHLOQ XO‘JALIGI MAHSULOTLARINI QAYTA ISHLASHDA RAQAMLI TEXNOLOGIYALARDAN FOYDALANISHNING ASOSIY YO‘NALISHLARI. Raqamli iqtisodiyot va axborot texnologiyalari, 1(1), 4-10.
9. Normuradov, N. S. (2023). SPECIFIC DIRECTIONS OF THE DIGITAL DEVELOPMENT OF INDUSTRIAL PRODUCTION. *Oriental renaissance: Innovative, educational, natural and social sciences*, *3*(3), 907-912.
10. Sunatillayevich, N. N. (2022). INNOVATIVE APPROACHES TO THE USE OF DIGITAL TECHNOLOGIES IN THE ACTIVITIES OF ECONOMIC ENTITIES. *Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany)*, 450-456.
11. Muxammadievich, J. A. (2019). Historical basis of peacemaking ideas. *South Asian Journal of Marketing & Management Research*, *9*(2), 44-48.
12. Muhammadievich, J. A. (2023). THE MORAL SIGNIFICANCE AND SOCIAL NECESSITY OF PEACEMANSHIP. *Web of Discoveries: Journal of Analysis and Inventions*, *1*(8), 27-35.
13. Жўраев, А. (2020). ТИНЧЛИКПАРВАРЛИК – МАЪНАВИЙ ЮКСАЛИШ ЖАРАЁНИНИНГ ЮКСАК ҚАДРИЯТИ. ILM SARCHASHMALARI, 1(1), 32-35.
14. Жураев, А. (2019). ФИЗИЧЕСКАЯ КУЛЬТУРА И СПОРТ КАК ИНСТРУМЕНТ ПАТРИОТИЧЕСКОГО, МИРОТВОРЧЕСКОГО И ДУХОВНО-НРАВСТВЕННОГО ВОСПИТАНИЯ МОЛОДЕЖИ. КОНФЕРЕНЦИИ, 1(1), 246-247.
15. Жураев, А. (2019). Ўзбекистонда барқарор тараққиётнинг тинчликпарварлик тамойили билан узвийлиги. НамДУ илмий ахборотномаси, 7-son, 143-148.
16. Samiyeva, M. (2023). RAQAMLI IQTISODIYOT SHAROITIDA SOLIQLAR VA BOSHQA MAJBURIY TO ‘LOVLARNI AMALGA

OSHIRISHDA RAQAMLI TEXNOLOGIYALARDAN FOYDALANISH. *YASHIL IQTISODIYOT VA TARAQQIYOT*, *1*(10), 284-287.
17. Самиева, М. Парпиева, Р. (2023). Зарубежный опыт развития системы системы цифрового образования. Ta'lim tizimida zamonaviy axborot texnologiyalari resurslaridan foydalanish istiqbollar, 356-358.
18. Самиева, М. (2023). BARQAROR XIZMAT KO 'RSATISHGA ASOSLANGAN SANOAT KORXONALARIDA RAQAMLI TEXNOLOGIYALARNI SAMARALI QO 'LLASH. *International Journal of Economics and Innovative Technologies*, *11*(2), 353-359.
19. qizi Samiyeva, M. F., & qizi Madyarova, M. A. (2023). Text mining and it is development stages. *Science and Education*, *4*(4), 1346-1352.
20. Sadinov, A., Rajabov, S., & Samieva, M. (2023). Improving waste recycling in Uzbekistan in digital technologies. In *E3S Web of Conferences* (Vol. 452, p. 05023). EDP Sciences.
21. Samiyeva, M. F. Q. (2023). Barqaror xizmat ko'rsatishga asoslangan biznes modellari sanoat kompaniyalarida raqamli texnologiyalar salohiyatini o'rganish. *Science and Education*, *4*(3), 823-828.
22. Samieva, M., & Madyarova, M. (2022). The Growth of ICT indicators in the Digital Economy of Uzbekistan. *Eurasian Research Bulletin*, *15*, 178-184.
23. Narzullaeva, M., Nabieva, F., & Samieva, M. (2022, December). A DATA ANALYTICS APPROACH FOR ASSESSING THE ROLE OF CHAIN SUPERMARKETS IN THE ECONOMY. In *Proceedings of the 6th International Conference on Future Networks & Distributed Systems* (pp. 387-394).

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IMPROVEMENT OF DIRECTIONS FOR INCREASING THE QUALITY AND EFFECTIVENESS OF INCLUSIVE EDUCATION IN HIGHER EDUCATION INSTITUTIONS

Abstract. This article talks about the teaching of inclusive education in higher education institutions and the quality and effectiveness of inclusive education.

Key words. Human rights, disability, higher education, children with disabilities, improvement of education.

There is a higher concept of human rights in the world. This means that everyone has the same and equal access to all the opportunities available in society. This includes people with limited opportunities and disabilities. As long as the society does not learn to accept such people and treat them equally, it cannot be said that the guarantee of human rights is fully ensured in the country. Especially if we take into account that there are about 1 billion people with disabilities in the world today, it is obvious that this is a very urgent issue.

Therefore, comprehensive support of persons with disabilities in our country, protection of their rights and interests, creation of an unobstructed environment for them to occupy a worthy place in society has been raised to the level of state policy. In this regard, legal foundations are being strengthened, and a number of decrees and decisions are being adopted. The goal is to relieve people with disabilities from hopelessness and insecurity by increasing their life activity, to increase their enthusiasm for living and to help them take their place in society, among others. That is why serious attention is paid to each direction in this regard. One of them is, of course, the development of inclusive education. Now the integration of children with disabilities into general education schools has become a natural stage in the development of the inclusive education system. This is related to the obligation of the society and the state to reconsider the attitude towards children with disabilities, not only to recognize their equal rights, but also to provide such children with wide opportunities in various fields, including education.

On October 13, 2020, the President of the Republic of Uzbekistan, aimed at improving inclusive education, forming a system of education for children with special educational needs, and improving the quality of educational services provided to them "On measures to further improve the system of education for children with educational needs" was adopted. With this decision, the concept of development of inclusive education in the public education system in 2020-2025 was adopted. The "Roadmap" for the implementation of the concept for 2020-2021 was approved. It is noteworthy that in 2023-2025, the inclusive education

system will be introduced in 51 percent of general education schools. 40 percent of children with disabilities are involved in this form of education. Two types of integration should be distinguished: educational and social. Educational integration is inclusion, i.e. "inclusive education", which ensures inclusion of a disabled child in one school. Educational environment with typically developing peers. Social integration includes the child's integration into society, that is, his socialization. Social integration applies to all children with developmental disabilities without exception, regardless of the nature and structure of the disorder, special educational needs, age, as well as the type of institution in which they study.

We believe that further development of inclusive education, strengthening the material and technical base of educational institutions should be recognized as one of the priority tasks of the government of the Republic of Uzbekistan, and it is necessary to create all the conditions for the full implementation of the specified tasks. It should be said that a number of positive trends are observed in this direction, the main of which is manifested in the practical actions of the government to deepen reforms aimed at the development of inclusive education in our country. In particular: the project of development of inclusive education is being implemented in our country at the expense of funds attracted by the Asian Development Bank, projects on strengthening the material and technical base of "Mehribanlik" specialized boarding schools and Mehribanlik houses are being developed and implemented. ". The development of inclusive education in the Republic of Uzbekistan, the problem of supporting the rights and freedoms of persons with disabilities is also reflected in the development strategy of the Republic of Uzbekistan in 2022-2026. In particular, "Fair social policy development of human capital", the 4th priority goal "Formation of an effective system of support for persons with disabilities, improvement of their quality of life" and the 66th goal directly envisages the protection and implementation of the living rights of disabled people in our country On the occasion of the International Day of Persons with Disabilities on December 3, 2021, the President of the Republic of Uzbekistan Sh.M. Mirziyoyev: "Critically evaluating our work with the disabled, the most vulnerable category of the population, we must ensure that they never feel alone., we will continue to mobilize all the forces and opportunities so that they can actively participate in the life of the state and economy," he said. This indicates that the leadership of Uzbekistan pays great attention to the legal protection of persons with disabilities, their freedoms, as well as the further development and improvement of the inclusive education system in our country. Based on the above, we want people with disabilities in our country to lead a fulfilling lifestyle and live an active life. participation in the economic and political life of society, as well as the development of inclusiveness in our country, which helps us to fulfill our civic obligations, we consider it relevant and important, given the modern reality.

An important aspect of inclusive education is that children and teachers learn from each other and solve problems together. This education should not be one-sided. Therefore, pedagogic skills are important in inclusive education. That is, the teacher will have to have a special approach to children with disabilities going to a general education school. Junior high school students have no idea about children with disabilities. They do not understand that they should not be laughed at, that they are ordinary people like everyone else, only a little weaker.

Adaptive programs have been developed in the field of subjects that answer the questions of teachers about teaching subjects in the conditions of inclusive education. A number of doctoral dissertations are being prepared on this topic. In the 2022-2023 academic year, a number of priority research directions of the department have been determined, and new scientific works are being undertaken. They can be cited as examples of such research directions as the pedagogical and psychological foundations of the cluster of continuous inclusive education, the implementation of the principles of mixed education, the rapid diagnosis of gaps in students' mastery of modules, and the orientation of students to individual work.

In general, we have a lot of work in this regard. In our country, it is aimed not only to provide quality education to children with disabilities, but also to ensure that the society accepts them as equals, and that they, as equal citizens of this country, use all opportunities equally. We aim to contribute to the formation of quality personnel in this educational system. After all, it is a fact that today, attention is being paid to the development of any form of education, and it is considered as the main tool in the development of a mature generation.

References:

1.O‘ZBEKISTON RESPUBLIKASI PREZIDENTINING FARMONI “NOGIRONLIGI BO‘LGAN SHAXSLARNI DAVLAT TOMONIDAN QO‘LLAB-QUVVATLASH TIZIMINI TUBDAN TAKOMILLASHTIRISH CHORA-TADBIRLARI TO‘G‘RISIDA” 2017-yil 1-dekabr, PF-5270-son. https://lex.uz/docs/3436196

2. Мамедов К. Д., Пулатова П. М. “Олигофренопедагогика асослари”. Педагогика Институтлари дефектология факультети талабалари учун ўқув қўлланма. -Тошкент.: “Ўқитувчи”, 1994.

3. "Fundamentals of inclusive education" - educational methodical guide. Urganch 2020.

4. Muzaffarova, H. (2020). Pedagogical technologies and their application to special educational institutions. Archive Nauchnyx Publication JSPI.

5. 3. Salamanca declaration of inclusive schools as the most effective means of combating discriminatory attitudes and creating a supportive environment in communities, building an inclusive society and providing education for all. (Spain), June 7-10, 1994.

6. Khujaeva, Shoirakhon. "RHYTHMIC VARIATION IN ALISHER NAVOI’S WORK" NAZM UL-JAVAHIR"." Pedagogy 2.2 (2023): 1247-1247.

7. Tashboltaeva T. I SAID KUNGIL DOGIN… //Journal of Modern Educational Achievements. – 2023. – Т. 7. – №. 7. – С. 50-54.

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SINERGETIKA TUSHUNCHALARI VA USULLARINI QO‘LLASHNING METODOLOGIK MUAMMOLARI

Annotatsiya. Mazkur maqolada sinergetika va sinergetik dunyoqarash tushunchalarini tarixiy tadqiqotlarda qo'llashning metodologik muammolari muhokama qilinadi.

Kalit so’zlar: Sinergetika, sinergetik dunyoqarash, betartiblikdan tartib, O'z-o'zini tashkil etish, bifurkatsiyalar, attractor, nochiziqli dinamika, dissipativ tuzilmalar nazariyasi.

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METHODOLOGICAL PROBLEMS OF APPLICATION OF THE CONCEPTS AND METHODS OF SYNERGETICS

Abstract. This article discusses the methodological problems of applying the concepts of synergetics and synergetic outlook in historical research.

Key words: Synergetics, synergetic outlook, order from chaos, Self-organization, bifurcations, attractor, nonlinear dynamics, theory of dissipative structures.

So'nggi o'n yillikda tarixiy tadqiqotlarning metodologik jihatlariga bag'ishlangan munozaralarda sinergetika tushunchalari va u bilan chambarchas bog'liq bo'lgan xaos nazariyasi tobora ko'proq e'tiborni tortmoqda. Sinergetikaning asosiy tushunchalarining paydo bo'lishi ko'p jihatdan kimyoviy fizika bo'yicha Nobel mukofoti sovrindori, rus kelib chiqishi taniqli Belgiya olimi Ilya Prigojinning ilmiy faoliyati bilan bog'liq. Nomuvozanatli sistemalar fizikasini o‘rganar ekan, I.Prigojin yangi effektlarni kashf etdi, ular mashhur “Betartiblikdan tartib” kitobining sarlavhasida lo‘nda aks ettirilgan.[1]

Sinergetika ko'pincha beqarorlik davrida holatlar keskin o'zgarib turadigan murakkab dinamik tizimlar evolyutsiyasining universal qonuniyatlari, o'z-o'zini tashkil etish to'g'risidagi ta'limot haqidagi fan deb ataladi. Sinergetikaning asoschilaridan biri, nemis fizigi G. Xaken uni nafaqat o‘z-o‘zini tashkil etish haqidagi fan sifatida, balki “ko‘plab quyi tizimlarning birgalikdagi ta’siri, natijada [yangi] tuzilish nazariyasi sifatida ta’riflagan. va tegishli faoliyat makroskopik

darajada yuzaga keladi"[3]. *"Taxminan 25 yil oldin, - deb yozadi Xaken, - men savol berdim: "O'z-o'zini tashkil etishning umumiy qonunlari bormi?" va bu masalani men sinergetika* deb atagan yangi fan doirasida o'rganishni taklif qildim.[4]. Unda umumiy qonunlar yoki tamoyillar bormi degan savol biroz hayratlanarli va, ehtimol, hayratlanarli tuyuldi.[5]. 1980-yillarda o‘z-o‘zini tashkil etish haqidagi yagona fan Germaniyada sinergetika (G. Xaken), fransuz tilida so‘zlashuvchi mamlakatlarda dissipativ tuzilmalar nazariyasi (I.Prigojin), AQSHda dinamik xaos nazariyasi (M.Feygenbaum) deb atalgan. Mahalliy adabiyotda birinchi atama asosan qabul qilingan, eng ixcham va sig'imli[6]. Ko'pincha o'z-o'zini tashkil etish fanining o'sib borayotgan daraxtining barcha "novdalari" *"murakkablik fani"* ("kompleks haqidagi fan") deb ataladi. Uning vaqtinchalik tomonlarini ta'kidlab, evolyutsion-sinergetik paradigma zamonaviy fanning oldingi safiga o'tayotgani tez-tez ta'kidlanadi.[7]. Ushbu paradigmaga muvofiq, rivojlanish deganda tizimning barqaror holatiga mos keladigan uzoq davrlar ketma-ketligi tushuniladi, ular xaotik xatti-harakatlarning qisqa davrlari ("bifurkatsiyalar") bilan to'xtatiladi, shundan so'ng keyingi barqaror holatga o'tish sodir bo'ladi. "attraktor"), uning tanlovi, qoida tariqasida, bifurkatsiya nuqtasida tebranishlar bilan belgilanadi.[8].

Akad. V.S. Stepinning ta’kidlashicha, o‘z-o‘zini rivojlantiruvchi tizimlar sinergetik effektlar, jarayonlarning tubdan qaytmasligi bilan ajralib turadi. Insonning ular bilan o'zaro ta'siri "inson harakatining o'zi tashqi narsa emas, balki har safar uning mumkin bo'lgan holatlar maydonini o'zgartirib, tizimga kiritilgan" tarzda davom etadi.[9].

XX-asr oxirida umumiy ilmiy paradigma sifatida sinergetika tushunchalarining keng qo'llanilishi nafaqat ijtimoiy va gumanitar fanlarning toifaviy apparatini kengaytirish, balki ushbu fanlar doirasida ishlab chiqilgan etarlicha universal matematik modellardan foydalanish masalasini ham ko'tardi. nochiziqli dinamik tizimlar nazariyasi va sinergetika tushunchalari bilan chambarchas bog'liq bo'lgan xaosning matematik nazariyasi. Sinergetika jarayonlar va muvozanat holatlari rivojlanishining chiziqli tabiati haqiqatda hech qanday hukmronlik qilmasligidan kelib chiqadi; O'rganilayotgan tizimlarning beqaror rivojlanish davrida, bifurkatsiya nuqtalarida xatti-harakatlarining oldindan aytib bo'lmaydiganligiga ko'proq e'tibor qaratish lozim, bunda kichik tasodifiy tebranishlar jarayon traektoriyasiga kuchli ta'sir ko'rsatishi mumkin. odatda an'anaviy fan tomonidan ko'rib chiqiladi, katta tebranishlar jarayonning borishiga kam ta'sir qiladi). Bifurkatsiya nuqtasi yaqinida yuzaga keladigan "tartibsizlik" tartib yo'qoladi degani emas; jarayonning dinamikasi bo'lishini bildiradi*ichki* (va tashqi sabablarga ko'ra emas) oldindan aytib bo'lmaydi. Bu borada tarixchilar tomonidan muhokama qilinadigan markaziy masala - bu o'rganilayotgan jarayonning rivojlanishining umumiy xususiyatiga oldindan aytish va bashorat qilish mutlaqo mumkin bo'lmagan baxtsiz hodisalarning ta'siri. Bu masala bilan bog'liq bo'lib, bifurkatsiya nuqtalarida

paydo bo'ladigan ijtimoiy rivojlanishga alternativalarni o'rganishga yangi yondashuvlar mavjud.

Tarixchilar uchun manbashunoslik va tarixiy tadqiqotlarda sinergetikadan foydalanishning metodologik jihati kam emas. Gap shundaki, agar manbalar o'rganilayotgan jarayonning muhim xususiyatlarini tavsiflovchi etarlicha uzoq vaqtli qatorlarni rekonstruksiya qilish imkonini bersa, maxsus kompyuterlashtirilgan texnikalar yordamida xaotik rejimlarning mavjudligi haqidagi gipotezani sinab ko'rish mumkin.[10]. Ushbu gipotezaning tasdiqlanishi jarayon dinamikasidagi keskin o'zgarishlarni (ham miqdoriy, ham sifat) tushunish uchun kalit bo'lib, uning chiziqli bo'lmaganligi sababli sezilarli tashqi sabablarsiz sodir bo'lishi mumkin.

Tarixchilarning metodologik va uslubiy vositalarini yangilash yo'nalishlaridan biri, bir tomondan, tarix fanining kontseptual va kategoriyaviy apparatiga umumiy ilmiy kategoriyalarni faolroq kiritish bilan bog'liq.o'n to'rt, va boshqa tomondan, tarixiy manbalar va tarixiy jarayonlarning matematik modellari ma'lumotlarini tahlil qilishning matematik usullarini takomillashtirish bilan. 60-80-yillarda tarix fani tomonidan to'plangan miqdorni aniqlash tajribasi. XX asr matematik statistikaning tobora murakkab usullarini bosqichma-bosqich joriy etish tendentsiyasini aniq ko'rsatdi. Ushbu tendentsiya so'nggi o'n yil ichida o'zini namoyon qilmoqda, ammo miqdorni aniqlash jarayonining yangi, sifat jihatidan boshqacha bosqichida. Avvalo, murakkab jarayonlarning modellarini yaratish va empirik vaqt qatorlarida xaosni aniqlash uchun ishlatiladigan nochiziqli dinamikaning usullari (xususan, xaos nazariyasi) haqida gapiramiz. Mamlakatimizda bu yangi bosqichni rivojlantirish akad. I.D.Kovalchenko. Ushbu yo'nalishni tavsiflab, O.M. Medushovskaya shunday yozadi: " Kovalchenko maktabining asarlarida, printsipial jihatdan, mantiqiy xulosa chiqarish mumkin bo'lgan usulga, bunday bilimga nisbatan ishonch bilan munosabat mavjud.

Sinergetika tushunchalari va usullarini tarixda qo‘llashning metodologik muammolari muhokamasiga o‘tishdan oldin, ijtimoiy tizimlarning o‘ziga xos xususiyatlariga e’tibor qaratgan holda murakkab dinamik tizimlarni o‘rganishga alohida to’xtaniladi

Adabiyotlar:

1. Пригожин И., Стенгерс И. Порядок из хаоса. М., 1986. См. также Пригожин И. Конец определенности. Время, хаос и новые законы приоды. Ижевск, 1999.
2. Хакен Г. Синергетика. М., 1980. С.7.
3. Хакен Г. Можем ли мы применять синергетику в науках о человеке?//Синергетика и психология. Вып. 2. "Соцальные процессы". М., 2000. С.12.
4. Kulmatov, P. M., & Tajibaev, M. A. (2022). SYNERGETIC AAS A FACTOR FOR THE DEVELOPMENT OF MODERN SCIENCE. *Scientific progress*, *3*(3), 925-929.

5. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. *Scientific progress*, *3*(3), 934-937.
6. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. *INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL*, *3*(3), 203-207.
7. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. *FAN, TA'LIM, MADANIYAT VA INNOVATSIYA*, *1*(2), 69-73.
8. Melikuziyevich, K. P., & Abdurashidovich, T. M. (2021). State and community management-as a priority task in the appeal. *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, *2*(2), 133-136.
9. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.
10. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
11. Рўзиев, А. (2020). АМИР ТЕМУР ҚАРАШЛАРИДА СИЁСИЙ-ҲУҚУҚИЙ ҒОЯЛАРНИНГ АКС ЭТИШИ. Научно-просветительский журнал" Наставник".
12. Ibodullaevich, K. K., & Mahmatkobil, O. (2022). “Electronic System”-Estonia Is Among the Leaders in The Fight Against Corruption. Eurasian Journal of Humanities and Social Sciences, 5, 152-155.
13. Ibodullaevich, K. K. (2022, April). In the fight against justice and corruption as an effective road. In E Conference Zone (pp. 370-372).

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LASSIFICATION OF THE SEMANTIC SERIES OF WORDS ADOPTED FROM FRENCH INTO ENGLISH AND ITS RESEARCH

Annotation. This article is devoted to the modern development of the English language and the different theoretical views of scholars, as well as the importance of assimilation words.

Key words: the role of the modern English language, the importance of words, theoretical views of scholars.

The vocabulary of modern English is very diverse. Throughout the entire history of the development of the language, enrichment of the vocabulary was carried out not only through word formation, certain language resources, but also through acquisition from other languages. Both words and phraseological turns are taken. The acquisition of these borrowed words can occur for various reasons and manifest itself in different ways in the development of the vocabulary of individual languages. In linguistics, words borrowed from other languages, commonly referred to as the general term “acquired words”, usually enter the language in two ways: as a result of contact between languages and cultural, historical, socio-economic and other people’s o connections between For example, in the course of its historical development, the English language was in contact with the Scandinavian languages and the Norman dialect of the French language. In addition, almost throughout its history, English has had linguistic contact to one degree or another with Latin, Spanish, Russian, German, as well as other languages of the world. Words borrowed from other languages, commonly referred to in linguistics as the general term "acquired words", usually enter the language in two ways: as a result of contact between languages, and through cultural, historical, socio-economic, and other peoples' interactions. there were connections between

As a result of the communication of languages and cultural and economic relations between peoples, the interaction of languages is not equivalent to the results of the influence of one language on another language. depends on the nature of specific historical conditions. For example, the number of words borrowed from the Scandinavian languages in English, as a result of the crossing of these languages, as a result of cultural, political and economic relations between these two peoples, is much lower than the words borrowed from the French language. The words that entered the English language as a result of the crossing of the English language with the French language during the Norman conquests constitute the most important layer of acquisitions in the modern English language [1].

He adopted the most borrowed words in the English language in connection with the need to express new concepts that arise as a result of the contact of the English people with other peoples and in the process of the development of society. However, among the appropriations there are many words that appeared in English as synonyms of pre-existing English words, some of which have firmly entered the English language, while others are still perceived as foreign elements The vocabulary of the language is in a state of almost continuous change, and its change occurs mainly by adding new words [2]. It is difficult to determine the full size of the vocabulary of English (as well as any other language), because in addition to existing words that have been consolidated in dictionaries, new words can be rearranged at any time according to existing patterns of word formation. possible However, in terms of quantity, the vocabulary of modern English is very large. According to I.R. Galperin and E.B.Cherkasskaya, according to modern English dictionaries, it contains about 500 thousand words (according to recent studies, their content exceeds 700 thousand words) authors, total of only 30,000 words [3].

The expansion of the vocabulary of the English language to its current size was the result of complex social and cultural-historical processes that began with the Norman conquest and continued in the following centuries. To try to trace those profound lexical changes that have taken place in the course of the historical development of English, it is precisely during this period that the greatest influx of French appropriations has been observed, contributing to the richness of the vocabulary of the language., as well as the English language is constantly filled with various foreign dictionaries. First, if we consider the classification of borrowings according to their semantic range, V.P. We refer to Sekirina's information. [4].

Many French appropriations of the 20th - 21st centuries reflect various spheres of human activity and cover almost all aspects of the material, socio-political and cultural life of England. Along with nouns, adjectives, verbs and adverbs were used in various fields, but the latter were less quantitatively, the words of the 20th century were mainly from the fields of social and worldly life, literature and art, religion, clothing. It should be noted that a relatively large layer of words representing legal and military terms can also be noted. In the following centuries, the scope and boundaries of borrowed words were significantly expanded, and in addition to the existing fields, military affairs, clothing, etc., as well as geographical concepts, trade (commercial and industrial terms), building names, medicine, etc. with related words). Here we present an approximate thematic classification, taking into account the semantic range of appropriations:

1) words meaning things and events in everyday life.

From a semantic point of view, this is the most capacious group of words, since most of them consist of the most diverse household vocabulary words.

Among the analyzed words, 607 acquired words belong to this group. (visage,chef,chance,detail,queue,alley,recherché,farouche,blase,gauche,blonde,ideal,baggage,appear,arrive,prepare,finish,pass,save,advance etc.), for example:

“Although you say I would not like him myself, I do assure you, if Mr. Solmes were such a man as Mr. Hickman, in person, mind, and behavior, my friends and I had never disagreed about him, if they would not have permitted met olive single; Mr. Lovelace (having such a character as he has) would have stood no chance with me.”(Richardson, Clarissa,vol.I,p.279).

References:

1.Гальперин И.Р., Черкасская Е.В. Лексикология английского языка - М.:ГЦКЗОИЯ,1956.-299с

2.Гинзбург Р.З.О пополнении словарного состава/ /Иностранные языки в школе. - М.:УПИМП РСФСР, 1954.-№1.-С.19-32.

3. Секирин В.П. Заимствования в английском языке - Киев.:Изд-во Киевского ун-та,1964.—152с.

4.Mirtojiyev M.O‘zbek tili semassiilogiyasi.Tashkent.2010.

5.Irisqulov M.Tilshunoslikka kirish.O‘qituvchi nashiryoti.Toshkent.1992.

УДК 621.372

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IKKITA DETERMINANT SIGNALNI FARQLASH

Annotatsiya: Qabul qiluvchi qurilma kirishidagi tebranish $s_1(t), s_2(t), \dots s_m(t)$ signallardan biri hamda xalaqit yig'indisidan iborat bo'lsin. Qabul qilingan $u(t)$ realizatsiyalar bo'yicha uzatish tomonidan qaysi signal uzatilganligini aniqlash masalasini yechish talab etilgan bo'lsin. Bunday masala asosan aloqa tizimlari uchun xosdir.Ma'lumki, aloqa tizimlarida turli signallarni qabul qilishdagi xatoliklar keraksiz (ortiqcha) bo'lib, ushbu tizimlarda nisbatan keng tarqalgan signallarni optimal qabul qilish mezonlaridan biri maksimum aposterior ehtimollik mezoni hisoblanadi.

Kalit so'zlar: Tebranish, realizatsiyalar, aposterior ehtimollik mezoni, determinant signa, korrelyatsiya.

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DIFFERENTIATION OF TWO DETERMINANT SIGNALS

Abstract. Let the fluctuation at the input of the receiver consist of one of the signals s_1 (t), s_2 (t),...s_m (t) and the sum of interference. Let it be required to solve the problem of determining which signal was transmitted by the transmission according to the received u(t) realizations. Such a problem is mainly typical for communication systems. It is known that errors in the reception of various signals in communication systems are unnecessary (redundant), and one of the criteria for optimal reception of signals that is relatively common in these systems is the maximum posterior probability criterion.

Key words: Oscillation, realizations, posterior probability criterion, determinant sign, correlation.

Ikkita determinant signalni farqlash.

Qabul qiluvchi qurilma kirishidagi signal quyidagi ko'rinishga ega bo'lsin

$$u(t) = \theta s_1(t) + (1-\theta)s_0(t) + n(t),$$

bunda, θ – tasodifiy miqdor bo'lib, mos ravishda p_0 va p_1 ehtimolliklarga ega 0 yoki 1 qiymatini qabul qiladi; $s_0(t)$ va $s_1(t)$ – aniq parametrli foydali

signal; $n(t)$ – matematik kutilmasi nolga va korrelyatsiya funksiyasi $R_n(\tau) = \frac{N_0}{2}\delta(\tau)$ ga teng bo‘lgan stasionar gauss oq shovqini [1].

U holda o‘xshashlik nisbati quyidagi ko‘rinishga ega bo‘ladi

$$\boldsymbol{l(u) = \exp\left(-\frac{E_1}{N_0} + \frac{2}{N_0}\int_0^T u(t)s_1(t)dt\right) / \exp\left(-\frac{E_0}{N_0} + \frac{2}{N_0}\int_0^T u(t)s_0(t)dt\right)},$$

bunda, E_0 va E_1 – $s_0(t)$ va $s_1(t)$ signallarning energiyasi. Ushbu nisbatni logarifmlasak, quyidagi ifodaga ega bo‘lamiz [2]

$$\ln l(u) = -\frac{E_1 - E_0}{N_0} + \frac{2}{N_0}\int_0^T u(t)\big(s_1(t) - s_0(t)\big)dt.$$

Bundan $s_1(t)$ signal uzatilgan deb qaror qabul qilinadi, agar quyidagi shart bajarilsa

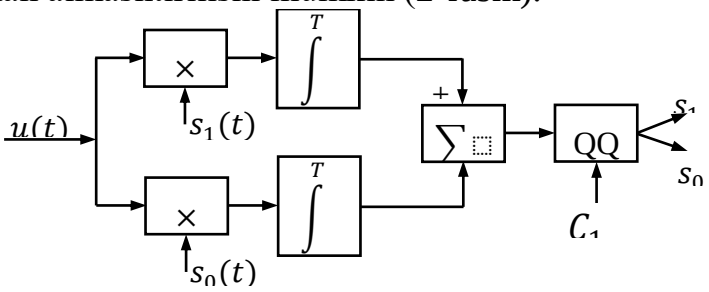
$$z = \frac{2}{N_0}\int_0^T u(t)\big(s_1(t) - s_0(t)\big)dt \geq \ln\frac{p_0}{p_1} + \frac{E_1 - E_0}{N_0} = C_1. \quad (1.1)$$

Simmetrik kanal uchun, ya’ni $p_0 = p_1 = 0{,}5$ va $E_0 = E_1 = E$ holat uchun, C_1 sath (chegara) nolga teng bo‘ladi va farqlash tenglamasi quyidagi ko‘rinishni oladi [3]

$$z \underset{s_0}{\overset{s_1}{\gtrless}} 0. \quad (1.2)$$

Ushbu (3.59) algoritm asosida ishlovchi optimal kogerent qabul qiluvchi qurilmaning strukturaviy sxemasi 1-rasmda keltirilgan, rasmda QQ – qaror qabullagich [4]. Sxemaning yuqori va past qismlaridagi korrelyatorlar impuls xarakteristikasi mos ravishda $h_1(t) = s_1(T - t)$ va $h_0(t) = s_0(T - t)$ ga teng bo‘lgan moslashgan filtrlar bilan almashtirilishi mumkin (2-rasm).

1-rasm. *Ikkita determinant signalni korrelyatsion farqlovchi qurilmaning strukturaviy sxemasi*

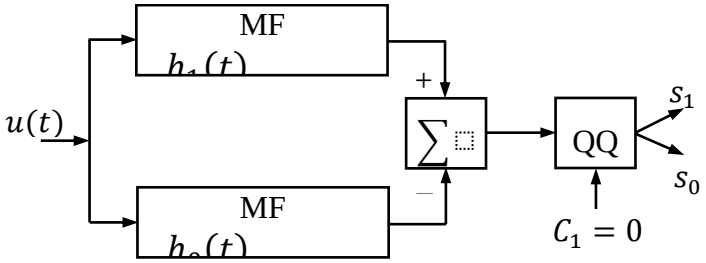


$P_x(s_0)$ va $P_x(s_1)$ shartli ehtimolliklar mos holda $s_0(t)$ va $s_1(t)$ signallar uchun z taqsimot orqali quyidagicha aniqlanadi [5]

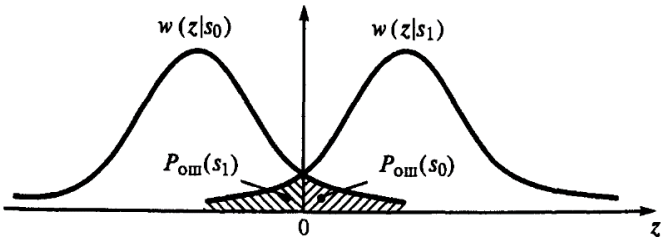
$$P_x(s_0) = \int_{z>C_1} w(z|s_0)dz,$$

$$P_x(s_1) = \int_{z<C_1} w(z|s_1)dz\,. \quad (1.3)$$

2-rasm. *Moslashgan filtrlar yordamida ikkita determinant signallarni farqlovchi qurilmaning strukturaviy sxemasi*



2-rasmda $w(z_1) = w(z|s_1)$ va $w(z_0) = w(z|s_0)$ taqsimotlarning grafiklari keltirilgan.



3.-rasm. *Determinant signallarni farqlashda ehtimollik zichliklari*

(1.1)–(1.3) ifodalar hamda $w(z_1)$ va $w(z_0)$ taqsimotlarni e'tiborga olib, quyidagiga ega bo'lamiz

$$P_x = 0{,}5\left(\int_0^{\infty} w(z|s_0)dz + \int_{-\infty}^{0} w(z|s_1)dz\right) =$$

$$= 1 - \Phi\left(\sqrt{\frac{E}{N_0}(1 - r_s)}\right) = 1 - \Phi\left(\sqrt{(1 - r_s)}h\right), (1.4)$$

bunda, $\Phi(z) = \frac{1}{2\pi}\int_{-\infty}^{z} e^{-t^2/2}dt$ – ehtimollik integrali, $h^2 = \frac{E}{N_0}$.

(1.4) formuladan ko'rinadiki, xatolik o'rtacha ehtimolligi nafaqat signalning energiyasi va shovqinning spektral quvvat zichligiga bog'liq, balki signallar o'rtasidagi o'zaro korrelyatsiya koeffitsiyentiga, ya'ni qo'llaniladigan signallar tizimiga ham bog'liq ekan [6,7]. Ehtimollik integrali $\Phi(z)$ monoton o'suvchi funksiya hisoblanadi. Demak, bir xil $\frac{E}{N_0}$ nisbatda o'zaro korrelyatsiya koeffitsiyenti r_s qancha kichik bo'lsa, tizim xalaqitbardoshligi shuncha yuqori bo'ladi [8,9].

O'zaro korrelyatsiya koeffitsiyenti $-1 \le r_s \le 1$ oralig'ida bo'lishini e'tiborga olsak, u holda korrelyatsiya koeffitsiyenti $r_s = -1$ ga teng bo'lgan signallar eng katta xalaqitbardoshlikka ega signallar hisoblanadi. Ushbu signallar bir xil shaklga ega bo'lib, ishoralari qarama-qarshi bo'ladi va shuning uchun ham qarama-qarshi signallar deb yuritiladi [10]. Ular uchun

$$P_x = 1 - \Phi\left(\sqrt{\frac{2E}{N_0}}\right) = 1 - \Phi\left(\sqrt{2}h\right). (1.5)$$

Qarama-qarshi signallarga misol sifatida fazasi π ga surilgan fazasi manipulyasiyalangan quyidagi signallarni keltirish mumkin

$$s_1(t) = U_0 \cos \omega_0 t\,, s_0(t) = U_0 \cos(\omega_0 t + \pi)\,, 0 \le t \le T.$$

Ortogonal signallar ($r_s = 0$) nisbatan kichik xalaqitbardoshlikka ega, ular uchun

$$P_x = 1 - \Phi\left(\sqrt{\frac{E}{N_0}}\right) = 1 - \Phi(h). \quad (1.6)$$

Agar $r_s = 1$ bo‘lsa, bunday signallar aynan teng signallar bo‘ladi, ya’ni $s_1(t) = s_0(t)$, va ularni tabiiyki farqlash mumkin emas. Ular uchun $P_x = 0{,}5$.

Ortogonal signallarga misol sifatida fazasi $\pi/2$ ga surilgan fazasi manipulyasiyalangan quyidagi signallarni keltirish mumkin [11].

$$s_1(t) = U_0 \cos \omega_0 t\,, s_0(t) = U_0 \cos(\omega_0 t + \pi/2)\,, 0 \le t \le T.$$

Ortogonal signallarni chastota manipulyasisini qo’llagan holda ham hosil qilish mumkin. Ushbu holda

$$s_1(t) = U_0 \cos(\omega_1 t - \varphi_1)\,, s_0(t) = U_0 \cos(\omega_0 t - \varphi_0).$$

Bunda $\varphi_1 = \varphi_0 = \varphi$ bo’lganda ushbu signallar orasidagi o‘zaro korrelyatsiya koeffitsiyenti quyidagi ko‘rinishni oladi

$$r_s = \frac{\sin\big((\omega_1 - \omega_0)T\big)}{(\omega_1 - \omega_0)T} + \frac{\sin\big((\omega_1 + \omega_0)T - 2\varphi\big) + \sin 2\varphi}{(\omega_1 + \omega_0)T}.$$

Agar $(\omega_1 - \omega_0)T = 2\pi k, k = 1{,}2, \ldots,$ sharti bajarilsa, korrelyatsiya koeffitsiyenti r_s nolga teng bo‘ladi va ushbu signallar ortogonal hisoblanadi. Amaliyotda ω_1, ω_0 va T parametrlar $(\omega_1 - \omega_0)T \gg 1$ shartni qanoatlantiradigan qilib tanlanadi, bunda $r_s \approx 0$ bo‘ladi [12].

Shuni payqash qiyin emaski, chastotasi manipulyasiyalangan signallar o‘rtasidagi o‘zaro korrelyatsiya koeffitsiyenti r_s minimal bo‘lishi uchun chastotalar orasidagi farq $1{,}5\pi$ ga teng bo‘lishi kerak, ya’ni $(\omega_1 - \omega_0)T = 1{,}5\pi$. Bunda xatolik ehtimolligi quyidagicha aniqlanadi [13].

$$P_x = 1 - \Phi\left(\sqrt{\frac{1{,}21E}{N_0}}\right) = 1 - \Phi\big(\sqrt{1{,}21}h\big).$$

Endi amplitudasi manipulyasiyalangan signallarning xalaqitbardoshligini ko‘rib chiqamiz, bunda

$$s_1(t) = U_0 \cos(\omega_0 t + \varphi)\,, s_0(t) = 0, 0 \le t \le T.$$

Ushbu holatda signallarni farqlash algoritmi quyidagi ko‘rinishga ega bo‘ladi [14]

$$z = \frac{2}{N_0}\int_0^T u(t)s_1(t)dt \underset{s_0}{\overset{s_1}{\gtrless}} \frac{E}{N_0} + \ln\frac{p_0}{p_1} = C_1.$$

Ehtimollik zichliklari $w(z/s_1)$ va $w(z/s_0)$ gauss taqsimot qonuniga bo‘ysunadi va matematik kutilmasi va dispersiyasi mos ravishda quyidagi qiymatlarga ega bo‘ladi $M\{z\} = \frac{2E}{N_0}, \sigma_z^2 = \frac{2E}{N_0}$ va $M\{z\} = 0, \sigma_z^2 = 2E/N_0$.

Agar $p_1 = p_0 = 0{,}5$ bo‘lsa, o‘rtacha xatolik ehtimolligi

$$P_x = 0{,}5\left(\int_{-\infty}^{C_1} w(z|s_1)dz + \int_{C_1}^{\infty} w(z|s_0)dz\right).$$

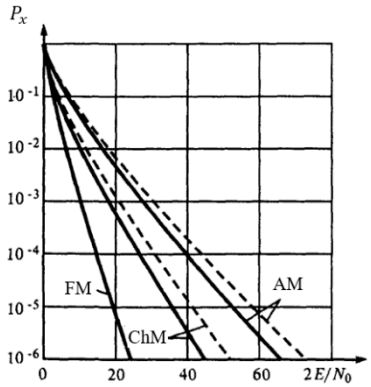
$C_1 = E/N_0$ ekanligini e’tiborga olib, va birinchi integral ahamiyatga ega emas deb hisoblasak [15]

$$P_x = 1 - \Phi\left(0{,}5\sqrt{\frac{2E}{N_0}}\right) = 1 - \Phi\left(\frac{h}{\sqrt{2}}\right). \quad (1.7)$$

4-rasmda fazasi (FM), chastotasi (ChM) va amplitudasi (AM) manipulyasiyalangan signallar uchun (uzluksiz chiziq) formulalar bo‘yicha hisoblangan xatolik ehtimolligining $2E/N_0$ nisbatiga bog‘liqligi grafigi keltirilgan.

Shunday qilib, eng katta xalaqitbardoshlikka fazasi manipulyasiyalangan signallar ega bo‘lar ekan. Ushbu FM signallar ChM signallarga qaraganda 2 marotaba, AM signallarga nisbatan esa 4 marotaba energetik yutuq (samaradorlik) qa ega. ChM signallar AM signallarga nisbatan 2 marotaba energetik yutuqqa ega [16].

Ma’lumki, $\sqrt{2E(1-r_s)}$ kattalik signallar orasidagi masofani ifodalaydi, ya’ni $d = \left(\int_0^T [s_1(t) - s_0(t)]^2 dt\right)^{1/2}$.



4-rasm. *AM, ChM va FM determinant signallarni farqlash xatolik ehtimolligi (uzluksiz chiziq) va tasodifiy boshlang‘ich fazali AM va ChM signallarni farqlash xatolik ehtimolligi (shtrix chiziq)*

Bundan foydlanib, (1.4) ifodani quyidagicha yozish mumkin

$$P_x = 1 - \Phi\left(\frac{d}{\sqrt{2N_0}}\right). \quad (1.8)$$

Ushbu ifodadan quyidagi xulosaga kelish mumkin: gauss oq shovqini ta’siridagi kanalda xatolik ehtimolligi faqat signallar orasidagi masofaga va shovqinning quvvat spektral zichligiga bog‘liq bo‘ladi. Ushbu xulosa m $(m > 2)$ ta signallarni farqlashda o‘rinlidir [17].

Foydalanilgan adabiyotlar:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).

14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

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XALQARO MOLIYADA YECHIMINI KUTAYOTGAN MASALALAR

Annotatsiya. Ushbu maqola xalqaro moliya sohasida hal etilishini kutayotgan dolzarb masalalarga bag‘ishlangan. Jahon iqtisodiyoti tobora o‘zaro bog‘liq bo‘lib borar ekan, innovatsion yechimlarni talab qiladigan yangi muammolar paydo bo‘ladi. Ushbu maqola asosiy tashvishlarni ta’kidlaydi, mavjud adabiyotlarni tahlil qiladi, potentsial metodologiyalarni taklif qiladi, kutilgan natijalarni taqdim etadi va ushbu muammolarni hal qilish bo‘yicha takliflar bilan yakunlanadi.

Kalit so‘zlar: Xalqaro moliya, Global iqtisodiyot, muammolar, yechimlar, adabiyotlarni tahlil qilish, metodologiyalar, natijalar, munozaralar, xulosalar, takliflar.

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ISSUES WAITING TO BE SOLVED IN INTERNATIONAL FINANCE

Annotation. This article is devoted to current issues that are waiting to be solved in the field of international finance. As the global economy becomes increasingly interconnected, new challenges emerge that require innovative solutions. This article highlights key concerns, analyzes the existing literature, suggests potential methodologies, presents expected results, and concludes with suggestions for addressing these issues.

Key words: International finance, Global economy, problems, solutions, literature analysis, methodologies, results, discussions, conclusions, proposals.

Mavjud adabiyotlarni sinchkovlik bilan o‘rganish xalqaro moliya sohasida takrorlanadigan muammolarni ochib beradi. Xalqaro moliya muammolarini hal qilish multidisipliner yondashuvni talab qiladi. Miqdoriy tahlil, amaliy tadqiqotlar va stsenariylarni modellashtirish qimmatli tushunchalarni berishi mumkin. Moliya institutlari va nazorat qiluvchi organlar o‘rtasidagi hamkorlik ushbu muammolarni hal qilish uchun samarali metodologiyalarni ishlab chiqish uchun juda muhimdir.

Ba'zi doimiy qiyinchiliklar:

Geosiyosiy ziddiyatlar: siyosiy beqarorlik va davlatlar o‘rtasidagi ziddiyatlar iqtisodiy noaniqlikka olib kelishi mumkin. Ushbu to‘qnashuvlar savdo

aloqalarini buzishi, sanktsiyalarga olib kelishi va korxonalar sarmoya kiritish yoki kengaytirishga ikkilanadigan muhit yaratishi mumkin.

Iqtisodiy pasayishlar: Yirik iqtisodiyotlardagi iqtisodiy pasayishlar, tanazzullar yoki moliyaviy inqirozlardan qo‘rqish global iqtisodiy noaniqlikka sezilarli hissa qo‘shishi mumkin. Qarzning yuqori darajasi, fiskal noto‘g‘ri boshqaruv yoki tashqi zarbalar kabi omillar iqtisodiy tanazzulni keltirib chiqarishi va global iqtisodiy barqarorlikka ta'sir qilishi mumkin.

Pandemiya va Sog‘liqni saqlash inqirozlari: Pandemiya kabi hodisalar, COVID-19 pandemiyasi ta'kidlaganidek, muhim iqtisodiy noaniqlikni keltirib chiqarishi mumkin. Ular ta'minot zanjirlarini buzishi, iste'mol xarajatlarining pasayishiga olib kelishi va turli sohalar uchun kengroq ta'sir ko‘rsatishi mumkin.

Pul-kredit siyosatidagi o‘zgarishlar: Yirik Markaziy banklar tomonidan pul-kredit siyosatidagi o‘zgarishlar jahon moliya bozorlariga ta'sir ko‘rsatishi va noaniqlikni keltirib chiqarishi mumkin. Foiz stavkalarining o‘zgarishi, miqdoriy yumshatish dasturlari yoki valyuta qiymatlarining o‘zgarishi iqtisodiy sharoitlarga keng ta'sir ko‘rsatishi mumkin.

Ekologik muammolar: Iqlim o‘zgarishi, tabiiy ofatlar va ekologik barqarorlik bilan bog‘liq muammolar iqtisodiy noaniqliklarni keltirib chiqarishi mumkin. Korxonalar atrof-muhit omillari tufayli tartibga solish nazorati, iste'molchilarning afzalliklari o‘zgarishi va ta'minot zanjiri uzilishlariga duch kelishi mumkin.

Siyos o‘zgarishlar: Davlat siyosati va qonunlardagi o‘zgarishlar biznes va investorlarning ishonchiga ta'sir qilishi mumkin. Soliq siyosati, savdo shartnomalari yoki sohaga oid qoidalardagi o‘zgarishlar noaniqlikni keltirib chiqarishi va iqtisodiy sharoitlarga ta'sir qilishi mumkin.

Global iqtisodiy noaniqlikni hal qilish hukumatlar, korxonalar va xalqaro tashkilotlarning muvofiqlashtirilgan harakatlarini talab qiladi. Shaffof va barqaror iqtisodiy siyosat, geosiyosiy masalalarga diplomatik yechimlar va korxonalar tomonidan xavflarni boshqarishning mustahkam strategiyalari kabi proaktiv choralar noaniqlikning global iqtisodiyotga ta'sirini kamaytirishga yordam beradi.

- Qarz darajasi va fiskal siyosat: turli mamlakatlarda davlat va korporativ qarzlarning yuqori darajasi moliyaviy barqarorlikka xavf tug‘diradi. Fiskal siyosatni boshqarish va qarz barqarorligini hal qilish doimiy muammolardir.
- Kriptovalyutalar va raqamli valyutalarning ko‘tarilishi an'anaviy moliyaviy tizimlar uchun qiyinchiliklar tug‘diradi. Regulyatorlar potentsial xavflarni bartaraf etishda ushbu texnologiyalarni mavjud ramkalarga qanday tartibga solish va integratsiya qilish bilan kurashmoqda.
- Iqlim o‘zgarishi va ESG masalalari: moliya sohasida ekologik, ijtimoiy va boshqaruv masalalari tobora muhim ahamiyat kasb etmoqda. Investorlar va moliya institutlari barqarorlik va iqlim o‘zgarishining investitsiyalarga ta'siriga e'tibor qaratmoqdalar.
- Valyuta kursining o‘zgaruvchanligi: valyuta kurslarining o‘zgarishi xalqaro savdo va investitsiyalarga ta'sir qilishi mumkin. Valyutalar atrofidagi

noaniqlik bir nechta yurisdiktsiyalarda ishlaydigan korxonalar va investorlar uchun qiyinchiliklar tug‘dirishi mumkin.

- Global Salomatlik inqirozi: COVID-19 pandemiyasi kabi hodisalar muhim iqtisodiy oqibatlarga olib kelishi mumkin. Global sog‘liqni saqlash inqirozlariga javoblar savdo, ta'minot zanjiri va iqtisodiy o‘sishga ta'sir qiladi.
- Daromadlar tengsizligi: mamlakatlar ichida ham, mamlakatlar o‘rtasida ham daromad va boylik taqsimotidagi tafovutlar ijtimoiy va iqtisodiy ta'sir ko‘rsatishi mumkin. Ushbu muammolarni hal qilish xalqaro hamkorlikni talab qiladigan murakkab vazifadir.
- Moliyaviy tartibga solish va muvofiqlik: rivojlanayotgan tartibga solish muhiti va transchegaraviy tartibga solishni muvofiqlashtirish zarurati xalqaro moliya sohasida doimiy tashvishlardir. Moliyaviy barqarorlikni ta'minlash va iqtisodiy o‘sishni ta'minlash o‘rtasida to‘g‘ri muvozanatni saqlash qiyin.
- Texnologiya va kiberxavfsizlik xavfi: moliyaviy tizimlar texnologiyaga ko‘proq bog‘liq bo‘lib, kiberhujumlar va texnologik nosozliklar xavfi ortadi. Moliyaviy infratuzilmaning xavfsizligi va barqarorligini ta'minlash ustuvor vazifadir.

Ushbu muammolar qanday rivojlanayotganini tushunish va xalqaro moliya sohasidagi rivojlanayotgan muammolarni aniqlash uchun dolzarb voqealar va xalqaro moliyaviy yangiliklardan xabardor bo‘lish juda muhimdir.

U aniqlangan yechimlarning oqibatlarini va ularning global moliyaviy bozorlarga ta'sirini o‘rganadi. Bundan tashqari, u tadqiqot jarayonida duch keladigan har qanday cheklovlar yoki muammolarni hal qiladi.

Xulosalar:

Xulosa qilib aytganda, xalqaro moliya sohasidagi hal qilinmagan muammolar zudlik bilan e'tibor va innovatsion yechimlarni talab qiladi. Ushbu maqolada ushbu muammolarni har tomonlama hal qilish uchun hamkorlikda va multidisipliner yondashuv zarurligi bayon etilgan. Potentsial natijalar yanada barqaror va barqaror xalqaro moliya tizimiga yo‘l ochishi mumkin.

Oldinga siljish uchun xalqaro moliya sohasidagi manfaatdor tomonlar akademiya, moliya institutlari va nazorat qiluvchi organlar o‘rtasida hamkorlikni kuchaytirishi kerak. Doimiy muloqot va axborot almashish uchun asos yaratish samarali yechimlarni ishlab chiqish va amalga oshirishga yordam beradi. Bundan tashqari, siyosatchilar global moliyaviy landshaftning dinamik xususiyatini hisobga olgan holda moslashuvchan va moslashuvchan bo‘lib qolishlari kerak.

Foydalanilgan adabiyotlar ro‘yxati:

1. Golovnin M.Yu. International Financial System: Global Trends and Qualitative Changes // Scientific Works of the Free Economic Society of Russia. 2022. Vol. 235. No. 3.
2. Global Debt Monitor. 2022. Washington DC: International Monetary Fund, 2022.

3. Alimkhanova Nigora,Haydarov Akobir(2023).Improving Accounting And Auditing Of Goods And Material Resources.International Journal of Economy and Innovation. Gospodarka I Innowacje.
4. Alimkhanova Nigora.The Importace of Economy in Tourism Field.American journal of economics and business management.ISSN: 2576-5973 Vol. 6, №. 2, 2023
5. Oromov Jakhongir.Financial policy.Web of scientist international scientific research journal.ISSN: 2776-0979, Volume 3,Issue 10, Oct., 2022.
6. Oromov Jakhongir.Digital Economy of the Age.Field.American journal of economics and business management.ISSN: 2576-5973 Vol. 6, №. 2, 2023.
7. Oramov J.International corporations as subjects of international financial relations.”Экономика и социум” №4(107)-2 2023.

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YOSH VOLEYBOLCHILARNING TAYYORGARLIK BOSQICHIDA MASHG'ULOT VA MUSOBAQA SAMARADORLIGINI ANIQLASH USLUBLARI

Annotatsiya. Yosh voleybolchilarga tayyorgarlik bosqichida o'z mahoratini oshirish va musobaqalarda yaxshi ishtirok etishi uchun samarali mashg'ulot usullari talab etiladi. Ushbu maqola ushbu o'yinchilarning mashg'ulotlari va raqobat samaradorligini aniqlash uchun ishlatilishi mumkin bo'lgan turli usullarni o'rganadi. Murabbiylar o'zlarining yutuqlari va samaradorligini baholab, rivojlanishni maksimal darajada oshirish uchun o'z yondashuvlarini moslashtirishlari mumkin.

Kalit so'zlar: yosh o'yinchilar, trening kurslari, o'yin samaradorligi, tayyorgarlik bosqichlari.

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METHODS OF DETERMINING TRAINING AND COMPETITION EFFICIENCY OF YOUNG VOLLEYBALL PLAYERS AT THE PREPARATORY STAGE

Abstract. Young volleyball players at the preparatory stage require efficient training methods to improve their skills and perform well in competitions. This article explores various methods that can be utilized to determine the training and competition effectiveness of these players. By evaluating their progress and performance, coaches and trainers can tailor their approach to maximize development.

Keywords: young players, training courses, game performance, preparation stages.

Kirish: So'nggi paytlarda yosh voleybolchilarning sport va o'quv faoliyatini musobaqalarga yuqori darajadagi tayyorgarlikni ta'minlash omili sifatida, yosh avlodning sog'lig'ini saqlash uchun zarur shart-sharoit sifatida takomillashtirish muammosi mutaxassislarning alohida e'tiborini tortmoqda.

Yosh voleybolchilarning sport va o'quv faoliyati-bu musobaqalarda yuqori natijalarga erishish uchun zarur bo'lgan yosh voleybolchilarning fazilatlari to'plamini takomillashtirishga qaratilgan tayyorgarlik jarayoni.

Yosh voleybolchilarning sport va o'quv faoliyatini baholash masalasiga bir nechta yondashuvlar mavjud. Kompleks yondashuv vakillari asosiy e'tiborni sport mashg'ulotlarining tarkibiy qismlarini ham o'yin, ham raqobatbardosh faoliyat sharoitida o'rganishga qaratadilar, bu esa sportchilarning sport faoliyatiga kompleks holatini aniqlashga imkon beradi [1].

Tizimli yondashuv doirasida olimlar sport mashg'ulotlarini baholashda nafaqat sportchilarning tayyorgarligini baholashga, balki ushbu tayyorgarlikning samaradorligini ta'minlaydigan omillarni tahlil qilishga ham e'tibor qaratdilar [5].

Konstruktiv yondashuv vakillari sport va o'quv faoliyatini baholashda asosiy e'tiborni sportchining samarali yutuqlarga optimal tayyorligi tarkibiy qismlariga samarali ta'sir ko'rsatishga imkon beradigan o'quv tsikllarini tashkil etishni tahlil qilishga qaratdilar.

Yosh voleybolchilarning sport va o'quv faoliyatini baholashda individual yondashuv doirasida mutaxassislar har bir sportchining tayyorgarligining turli tomonlarini o'rganish asosida individual ravishda kumulativ ko'rsatkichni o'rganishga ishora qiladilar [4].

O'rganilgan yondashuvlar asosida yosh voleybolchilarning sport va o'quv faoliyatini baholash tuzilmasi ishlab chiqilgan bo'lib, u bir vaqtning o'zida ishlaydigan o'zaro bog'liq tarkibiy qismlardan iborat: a) psixososyal (motivatsiyani rivojlantirish, irodaviy fazilatlarni rivojlantirish, hissiy barqarorlik, fikrlashni rivojlantirish, diqqatni jamlash xususiyatlari); b) jismoniy (kuch fazilatlarini rivojlantirish, moslashuvchanlikni rivojlantirish, chidamlilik darajasi, rivojlanish chaqqonlik, sakrash qobiliyatini rivojlantirish, tezlikni rivojlantirish); D) texnik-taktik (texnik harakatlar hajmi, texnik harakatlarni o'zlashtirish sifati, texnik harakatlar samaradorligi, taktik harakatlar hajmi, guruhda, jamoada o'zaro ta'sir o'tkazish qobiliyati, samarali taktikani tanlash); e) kognitiv (voleybol o'yinining o'ziga xos xususiyatlari, voleybolda texnika haqida bilim, voleybolda taktika haqida bilim, voleybolchilarning jismoniy fazilatlari haqida bilim, voleybolda mashq qilish xususiyatlari haqida bilim, voleybolda uskunalar haqida bilim).

Tadqiqotda Xanti-Mansi avtonom okrugi - Yugra hududida faoliyat yuritayotgan uchta sport muassasasining 13-14 yoshli 76 nafar yosh voleybolchisi ishtirok etdi.

Yosh voleybolchilarning sport va o'quv faoliyati samaradorligini aniqlash uchun haqiqiy va ishonchli diagnostika usullari qo'llanildi, ularning natijalari sifatli va miqdoriy materiallarni to'plashga imkon berdi.

Yosh voleybolchilarning sport va o'quv faoliyati samaradorligi darajasini o'rganish uchun quyidagi tadqiqot usullaridan foydalanilgan: psixososyal komponent (M. L. Kubishkinaning" hayajon motivatsiyasi "metodologiyasi, shaxsning irodaviy tashkilotini o'rganish metodologiyasi, "Lusher testi asosida

o'spirinlarning hissiy sohasini o'rganishning tezkor diagnostikasi", fikrlash tezligini o'rganish metodologiyasi); jismoniy komponent ("voleybolchilarning kuch fazilatlari" testi, "moslashuvchanlik" testi, "chidamlilik" testi, "epchillik" testi, "sakrash" testi, "tezlik" testi) [6]; fiziologik komponent ("qon bosimi" metodologiyasi, "yurak urishi va 20 cho'ktirish" funktsional testi, "vazn va balandlik indeksi" metodologiyasi, "qon tomir" testi, "qo'l dinamometriyasi" metodologiyasi, "gemoglobin darajasi" testi) [3]; texnik-taktik komponent (texnik harakatlarni ishlab chiqish hajmi, samaradorligi, sifati, kuzatuv protokoli asosida samarali taktikani tanlash); kognitiv komponent (yosh sportchilarning nazariy tayyorgarligini aniqlash uchun so'rovnoma).

Sinov usullari natijalari SPSS statistik dasturlarining kompyuter to'plamidan foydalangan holda matematik va statistik ma'lumotlarni qayta ishlash usullari yordamida mavjud sifatli talqin va mazmunli umumlashtirish bilan statistik tahlil qilindi. Statistik jihatdan ahamiyatli farqlarni va sub'ektlarning turli guruhlari o'rtasidagi bog'liqlikni aniqlash uchun korrelyatsiya va dispersiya tahlillaridan foydalanilgan.

Diagnostika va tahlil natijalariga ko'ra tadqiqot natijalari quyidagicha qayd etildi: yuqori, o'rta, past.

Yuqori daraja: sport va o'quv faoliyati, natijada yosh voleybolchilar: voleybolchilarning sport faoliyatining xususiyatlari to'g'risida bilimlar majmuasini yaxshi bilishadi; rivojlangan jismoniy fazilatlar va xususiyatlar majmuasiga ega, ularning ko'rsatkichlari ushbu yosh toifasi standartlariga muvofiq yuqori darajaga mos keladi; texnik va taktik harakatlarning mukammal to'plamiga ega; tananing normal fiziologik xususiyatlariga ega, patologiyalar va surunkali kasalliklar aniqlanmagan;yuqori darajadagi hissiy barqarorlikka ega.

O'rta daraja: sport va o'quv faoliyati, buning natijasida yosh voleybolchilar: qisman voleybolchilarning sport faoliyatining xususiyatlari to'g'risida bilimlar majmuasiga ega; rivojlangan jismoniy fazilatlar va xususiyatlar majmuasiga ega, ularning ko'rsatkichlari ushbu yosh toifasi standartlariga muvofiq o'rtacha darajaga mos keladi; qisman normal holatda tananing fiziologik xususiyatlari, patologiyalari va surunkali kasalliklari aniqlanmagan; qisman ular rivojlangan aqliy jarayonlarga, hissiy barqarorlikning o'rtacha darajasiga ega.

Past daraja: yosh voleybolchilarga olib keladigan sport va o'quv faoliyati: voleybolchilarning sport faoliyatining xususiyatlari to'g'risida bilimlar majmuasiga ega emas, sport mashg'ulotlarining o'ziga xos xususiyatlariga e'tibor qaratmaydi, voleybolda texnika va taktika masalalarini yaxshi bilmaydi; texnik va taktik harakatlar to'plamiga ega emas, ularning xususiyatlari standartlarga muvofiq past darajaga mos keladi; tananing ba'zi fiziologik xususiyatlari salbiy holatda.

Empirik tadqiqotlar bosqichida turli xil adabiyotlarni o'rganish asosida yosh voleybolchilarning sport va o'quv faoliyati samaradorligi darajasini aniqlash uchun yosh voleybolchilarning sport va o'quv faoliyatini baholash tuzilmasining

har bir ko'rsatkichining rivojlanish darajasini o'lchash uchun diagnostika usullari to'plami ishlab chiqilgan.

Xulosa: Tayyorgarlik bosqichida yosh voleybolchilar o'rtasidagi mashg'ulotlar va musobaqalarning samaradorligini aniqlash ularning har tomonlama rivojlanishida hal qiluvchi ahamiyatga ega. Samaradorlikni baholash, statistik tahlil, psixologik baholash va ko'p o'lchovli baholash kabi turli usullardan foydalangan holda, murabbiylar o'z yondashuvlarini moslashtirish va o'yinchilarning imkoniyatlarini maksimal darajada oshirish uchun qimmatli tushunchalarga ega bo'lishlari mumkin.

Foydalanilgan adabiyotlar:

1. Abalakov, V. M. sport texnikasini o'rganish uchun yangi uskunalar / V. M. Abalakov. - M.: jismoniy tarbiya va sport, 1960. 98 s.
2. Abramov B. C. aerobika va biz / B. C. Abramov. - Toshkent: Tibbiyot, 1999. 174 s.
3. Anderson, N. aerobika bo'yicha instruktorlarni tayyorlash xalqaro markazining seminari materiallari: usul, qo'llanma / N. Anderson. - AQSh: Minneapolis, 1990 yil. 39 s.
4. Anoxina, I. A. ritmik gimnastika, talabalarda jismoniy faoliyat etishmovchiligini qoplash vositasi sifatida: muallif. dis. - qaniydi?... kand. - qaniydi? ped. - qaniydi? fanlar / I. A. Anokina; MGAFK. Malaxovka, 1992 yil. - 24 s.
5. Artamonova, A. A. voleybolchilarni ma'lum jismoniy fazilatlarni rivojlantirishga genetik moyillik asosida tezlik va kuch tayyorlashni individuallashtirish: muallif. dis. - qaniydi?... kand. - qaniydi? ped. - qaniydi? fanlar / A. A. Artamonova; BGNIU. Shuya, 2011 yil. 37 s.
6. Ashmarin, B. A. jismoniy tarbiya bo'yicha pedagogik tadqiqotlar nazariyasi va metodikasi: FK institutlari talabalari, aspirantlari va o'qituvchilari uchun qo'llanma. - M.: jismoniy tarbiya va sport, 1978. 223 s.

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TURKISTONDA JADIDCHILIK HARAKATI VA ULARNING FAOLIYATI

Annotatsiya: ushbu maqolada Turkistonda jadidchilik harakatining vujudga kelish hamda ularning faoliyatini o’rganishga oid ma’lumotlar keltirilgan.
Kalit so’zlar: Turkiston, jadidchilik harakati, Osiyo, ilm-fan, texnika taraqqiyoti, ziyoli qatlam.

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THE EXTREME MOVEMENT AND THEIR ACTIVITIES IN TURKEY

Annotation: this article presents information on the emergence of the jadidism movement in Turkestan and the study of their activities.
Keywords: Turkestan, jadidism movement, Asia, Science, Technical Development, intellectual layer.

19-asrning ikkinchi yarmida Osiyo, shu jumladan, Turkiston ilm-fan va texnika taraqqiyoti bo‘yicha yevropadan ancha orqada qolib ketgan davri edi. Qoloqlik va jaholat, o‘lka aholisining ayanchli ahvoli Turkistonning Yevropa va jahon sivilizatsiyasidan orqada qolib ketishi va bunday fojiali hayotdan qutulish, erk va ozodlikka erishish haqida o‘z zamonasining ilg‘or ziyoli qatlamlarida fikr-mulohazalar paydo bo‘la boshlagan davri bo’lgan.

XX asr boshlarida Rossiyadagi musulmon maktablarining buyuk islohotchisi va “Tarjimon” jurnali tashkilotchisi Ismoil G‘aspiralining nomi butun Sharqqa mashhur bo‘lib ketgan. U Bog‘chasaroyda eski maktablarning murakkab o‘qish usuliga nisbatan yengil qiroat usuliga asoslangan yangi maktab ochib, unda o‘zi dars bergan, darsliklar yozgan, chorizmning Sharqdagi siyosatini fosh qiluvchi asarlari bilan Turkistondagi ilg‘or ziyolilarning dunyoqarashiga katta ta’sir ko‘rsatib borgan edi. Qisqacha qilib aytganda u yangi usul maktablarning vujudga kelishida namuna bo‘lgan.

Jadidlar chorizmning mustamlaka siyosati strategiyasiga jiddiy zaiflantiruvchi o‘zgarishlar qilishga majbur etuvchi vatanparvar siyosiy kuch sifatida 19-asr oxiri – 20-asr boshlaridan tarix sahnasiga chiqa boshlaganlar.

Jadidlar Turkistonda 19-asr oxirida paydo bo‘lgan ilg‘or usullarni yoqlagan ma’rifatparvarlargina bo‘lib qolmay, ayni damda turkiy-islomiy huquqiy merosning millat ichida keng yoyilishi, xurfikrlilik, taraqqiyot va milliy istiqlol uchun ham kurashni maqsad qilib qo‘ygan edi.

Chor mustamlakachilari O‘rta Osiyoda ochilgan yangi usul maktablariga qarshi kurash boshlaydi, bu maktablarni «islomiyatga qarshi», «g‘ayridin maktablari» deb tashviqot yurgizadilar, josuslik idoralarini ishga soladilar, hatto Buxoro amiriga va Xiva xoniga ham kuchli tazyiq o‘tkazganlar. Ahvol shu darajaga borib yetganki, bu masala bilan bog‘liq ko‘plab qurbonlar yuz beradi. Chor ma’murlari islom diniga ham qarshi kurashni kuchaytirib yuboradilar. Hattoki, 1903-yili podsho Turkiston aholisi uchun muborak Haj qilishni ham farmon bilan man etib qo’yadi. Bu mahalliy musulmon aholisida kuchli norozilik uyg‘otgan. 1905-yilgi to‘ntarish harakatidan keyin Rossiya hududidagi turkiy xalqlar va ularning Turkiya bilan qardoshlik aloqasi kuchaydi. O‘z davrida Turk dunyosi markazlaridan biri bo‘lgan Qrim, Qozon, Istanbulda chop etilgan jadidchilik ruhidagi adabiyotlar Turkistonga ham keng yoyila boshlandi.

Jadidchilik harakati muhitida jadidchilik adabiyoti ham yuzaga keldi va mukammal bir shaklga kirdi. Ham nasrda, ham nazmda yangilanish, qoloqlik va jaholatdan qutilish, rus istilosiga qarshi kurash, ma’rifat va hurriyatga erishish, istiqlolni qo‘lga kiritish g‘oyalari bilan to‘lib-toshgan yangi bir adabiyot shakllanib bordi. Abay bunday adabiyotning ilk namoyandalaridan biri bo’lgan. Shundan so‘ng Shayx Ahmad Mahdum maydonga chiqqan edi. O‘rta asrlarda shunday ulug‘ zotlarni yetishtirgan Turkiston kabi buyuk bir tabarruk zaminning so‘nggi asrlarda jaholat va hurofot azobida inqirozga yuz tutishi, bu yerda kuchli bo‘lgan o‘rta asrchilik va mustamlakachilik zulmlari, o‘lkadagi yangi uyg‘onish, yangi ma’rifat va adabiyot uchun borayotgan kurash musulmon xotin-qizlar huquqini himoya qilish haqida Ismoil Gaspirali o‘tkir publitsistik maqolalari bilan faol qatnasha boshlagan. «Buxoro va Bog‘chasaroy», «Bog‘chasaroydan Toshkentga» (1893), «Turkistonning yangi tarixi» (1905), «Buxoroda nimalarni ko‘rdim?» (1908), «Turkistondan xat» va boshqalar shu jumlasiga kiradi. Uning ta’siri bilan Turkistonda ham yangi usul maktablari uchun o‘quv qo‘llanmalari, matbuot va adabiyot namunalari maydonga kela boshladi. Turkistonda jadidchilik harakatining yirik vakillaridan Mahmudxo‘ja Behbudiy (1871-1919) dir. U “Turkiston jadidlarining otasi” sifatida tarixda nom qoldirgan. Fayzulla Xo‘jayev Behbudiy haqida: “Siyosiy, ijtimoiy faoliyati, bilimining kengligi jihatidan o‘sha zamon Turkistonidagi jadidlar orasida unga teng kela oladigani bo‘lmasa kerak” degan fikrni bildirgan.

Behbudiy Gapirinskiy yo‘lga qo‘ygan “usuli jadid” maktablarini Turkistonda qaror toptirishda, ularni darslik va qo‘llanmalar bilan ta’minlashda jonbozlik ko‘rsatdi. Yangi tipdagi maktablarning milliy-madaniy taraqqiyotimizda muhim omil bo‘la olishi mumkinligi haqida o‘nlab maqolalar yozgan. “Qisqa umumiy geografiya”, “Bolalar maktubi”, “Islomning qisqacha tarixi”, “Amaliyoti islom”, “Aholi geografiyasiga kirish”, “Rusiyaning qisqacha

geografiyasi” kabi darsliklar yaratdi. Nashriyot tashkil qilib, darsliklar va qo‘llanmalar, xaritalar bosib chiqargani bizgacha ma’lum bo’ldi.

Bular ilk o‘zbek maktablari uchun tuzilgan darslik va qo‘llanmalar sifatida emas, balki til-yozuv madaniyatimiz taraqqiyoti nuqtai nazaridan ham muhim ahamiyatga egadir. Behbudiy 1913-yilda «Samarqand» gazetasi va «Oyina» jurnalini chiqardi. Gazeta dastlab 2, so‘ng 4 betlik bo‘lib haftada 2 marta chiqqani va moddiy tanglik tufayli 45 sonidan keyin to‘xtagani ma’lum qilingan. «Oyina» o‘lkadagi o‘zbek tilida chiqqan birinchi jurnal edi. U xalq orasida ancha mashhur bo‘lgan. Boshida haftada bir, 1914-yildan esa har o‘n besh kunda chiqqandir. Munavvar Qori Abdurashidxonov milliy matbuotning asoschilaridan biridir. Abdulla Avloniy o‘zi ochgan maktab uchun to‘rt qismdan iborat “Birinchi muallim”, “Ikkinchi muallim”, “Maktab gulistoni”, “Turkiy guliston yohud ahloq” kabi darsliklar va o‘qish kitobini yaratdi. Maktab-maorif ishlariga ko‘mak ko‘rsatuvchi “Jamiyati hayriya” tashkil etdi. “Nashriyot” shirkati tuzib, Xadrada “Maktab kutubxonasi” kitob do‘konini ochgan. U 1913-yilda tashkil etilgan professional “Turon” nomli teatr to‘garagining tashkilotchilaridandir. Abdurauf Fitrat (1886-1938) jadidchilik harakatining yirik namoyondalaridan biridir. U Buxoro jadidchilarining tashkilotchilaridan biri sifatida xalqni ma’rifat va madaniyatdan bahramand qilish uchun astoydil kirishadi. Fitrat adabiyotga shoir va adabiyotshunos sifatida kirib keldi. U “Munozara” nomli drama yaratgan. Shuningdek, “Sayxa”, “Sayyohi hindi”, “Rahbari najot”, “Tarixi islom” kabi asarlarini 1908-1913 yillarda yaratgan. Fitrat o‘z ona diyorini ozod va hur ko‘rishni orzu qilgan edi.

Turkistonning milliy shoiri, Andijonda jadidchilikka asos solgan Cho‘lpon (1898-1938) shaharda «Turon kutubxonasi» va uning yonida katta bir qiroatxonani tashkil qilgan. Xulosa qilib aytganda, rus mustamlakachilari Turkiston zamini uzra o‘z hukmronliklarini o‘tkazgan kezlarda yurtning jonkuyar, millatsevar, erksevar farzandalari jadidlar harakati ta’sirida milliy istiqlol uchun, mustaqil Turkiston uchun, ekspluatatsiya, zo‘rlik va zo‘ravonlikka qarshi xalqni otlantirdilar. Faqat o‘lkada so‘nggi asrlar davomida ishlab chiqarish kuchlari va taraqqiyotning orqada qolganligi oqibatida, xalq ommasining ijtimoiy-siyosiy, g‘oyaviy-nazariy saviyasi ham yetarli darajada davr talabiga monand bo‘lmaganligidan bu kurash birlashgan katta kuch sifatida muvaffaqiyat qozonilgan. Siyosiy-ijtimoiy tarqoqlik, «o‘zingni bil, o‘zgani qo‘y» kayfiyati milliy kayfiyatga, milliy birlikka putur yetkazdi. Jadidchilik harakatini o‘lka xalqlari ommaviy sur’atda qo‘llab quvvatlamadilar. Bu harakat faqat xalq orasiga ma’rifat va madaniyat g‘oyalarini tarqatishdan nariga o‘tmadi, o‘zining tor doirasida o‘ralib qoldi, siyosiy kurash partiyasi darajasiga ko‘tarila olmadi hamda ommani zulm va istibdodga qarshi dasturiy kurashga torta olmadi. Jadidlar harakatining nazariy va siyosiy barkamollik darajasiga o‘sib yetmaganlikdan rus bolsheviklari ustalik bilan foydalandilar va ularni ikkiga bo‘lib yubordilar. Jadidlarning bir guruhi bolsheviklarning yolg‘on va quruq va’dalariga ishonib, ular tomoniga o‘tdilar, «Yosh buxoroliklar» va

«Yosh xivaliklar» guruhiga uyushdilar. Natijada milliy-ozodlik va istiqlol uchun kurash olib borayotgan kuchlar kuchsizlandi va parokandalikka uchragan.

Uzoq tarixga ega bo'lgan o'zbek xalqi ijtimoiy- siyosiy to'siqlarga qaramay Markaziy Osiyodagi boshqa xalqlar kabi, ilg'or fikr egalarini, buyuk olimlarni yetkazdi, insoniyatga ilm-fan ma'naviyat sohasida o'lmas durdona asarlar, fikrlar qoldirdi.

1924-yil amalga oshirilgan milliy davlat chegaralanishi natijasida mintaqa xaritasi qaytadan tuziladi. Sovet hokimiyati yillarida kommunistik partiya rahbarligida respublikada adolatsiz milliy siyosat amalga oshirildi. Bu paytda maktablarda o'quv tarbiya ishlari mazmuni tuzumning maqsadi asosida o'zgardi. Adabiyot darslariga esa ko'proq rus yozuvchilarining asarlari bilan tanishtirishga katta ahamiyat berildi va rus pedagoglari darsliklaridan foydalanilib kelingan. Natijada o'zbek pedagogikasi markscha-lenincha nazariya doirasida shakllangan soxta fanga aylanib ketdi.

Foydalanilgan adabiyotlar ro'yxati:

1. Karimov I. Milliy mafkura - mamlakat kelajagi poydevori. "Xalq so`zi" gazetasi, 7 aprel, 2000 yil.
2. Karimov I. "Tarixiy xotirasiz kelajak yo`q", T."Sharq", 1998.
3. Karimov I. "Ozod va obod Vatan, erkin va farovon hayot - pirovard maqsadimiz" "Ishonch" gazetasi, 25 yanvar 2000 yil.
4. O`zbekiston tarixi (qisqacha ma`lumotnoma) T. "Sharq", 2000.
5. O`zbekiston tarixi (1-qism), T."Universitet", 1997.
6. O`zbekiston tarixi (talabalar uchun qisqacha Ma`ruzalar matni), T., "Universitet", 1999.

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A STUDY OF PAREMIOLOGICAL UNITS IN WORLD LINGUISTICS

Abstract. In this article, we tried to shed light on the study of paremiological units in world linguistics. Each nation describes the image of a woman differently in its language based on its national views. In the Uzbek paremiological units, the female figure is depicted as a mother, wife, housewife, and in the English paremiological foundation, in addition to these, a woman performs tasks such as a business entrepreneur, a worker.

Key word: paremiological units, moral-cultural standard, spiritual, political and religious literate, didactic language unit, female symbol mother, wife, home, principles of ethnocultural ethics.

In the current process of globalization, raising the spiritual, political and religious literacy of our people is the most important demand of our time, and in this regard, the issue of women is of particular importance. Features of the image of women in English and Uzbek languages are considered. Each nation describes the image of a woman differently in its language based on its national views. In the Uzbek paremiological units, the female figure is depicted as a mother, wife, housewife, and in the English paremiological foundation, in addition to these, a woman performs tasks such as a business entrepreneur, a worker. The image of a woman in English literature has gradually changed over time. In English prose of the 19th century, the image of a woman was completely idealized by male writers. Also, the relationship between women and society is studied in various ways. Analyzing the literature, we can evaluate the portrayal of a woman in prose by analyzing the relationship between a woman and society in the creation of a woman's image, how a woman is recognized in the layers of society, and her place in society and in the family. As for the image of a woman in each national literature, it is reflected and perceived in accordance with the nature of that nation and the spirit of the times.

In world linguistics, the study of the level of reflection of the world landscape in the language, the analysis of such nodes as the living area and conditions of the people, lifestyle, mental characteristics, national character, the realization of the level of cultural development of the people, the principles of ethno-cultural ethics, the separation of symbols representing culture in oral sources, social requires a thorough analysis of relations, forms of communication between peoples, and ethical and cultural standards of behavior.

In world linguistics, special attention is paid to the issue of revealing the linguistic position, sources of formation, etymology of paremiological units, showing their connection with the life, worldview, traditions, and customs of a particular people, and summarizing the scientific and theoretical views on this

matter. As a result, a number of scientific studies on the performance of various tasks, structural-discursive aspects, and mental characteristics of the proverb as a paremiological unit were created not only for the science of folklore, but also from the point of view of linguistics. At the moment, the research of these linguistic units in cognitive, psychological, linguistic and cultural aspects, and their structural-semantic, artistic-aesthetic aspects is still relevant.

The study of English proverbs is aimed at studying the place of proverbs in communication and social life. Experimental field studies to determine the paremiological minimum in this area were conducted by Mieder, Gossen, a scientist who conducted research on the functioning of proverbs in closed social groups, for example, in territorially separated settlements of Mexico, and the use of illocutionary and perlocutive proverbs in speech was researched by Norrick. made, the function of proverbs in speech was studied by scientist Cram.

The issues of the origin of proverbs and matals have been sufficiently studied by English and Uzbek linguists. British and American scientists who made the greatest contribution to the study of English proverbs and the theory of the origin and classification of proverbs are Reidot R., Whitting K., Meider U., Taylor A. and others. The founder of the study of Turkish (Uzbek) language proverbs is Mahmud Koshgari. The first examples of proverbs of the Turkic peoples are given in Koshgari's work "Devonu Lugotit Turk". Some of these proverbs are still used in different variants among the Uzbek people. For example, in Koshgari's work "Kishi olasi ichtin, yilqi olasi tashtin"; the proverb is used today among the Uzbek people as "Adam olasi izidi, mol olasi tashida"

Paremiological scientists of both directions have the task of defining the proverb, distinguishing the proverb and the units close to it. Attempts to define a proverb have been studied since the time of Aristotle and Plato, and as Mieder points out, there are more definitions than the proverb itself - the impossibility of defining a proverb has become a proverb Mieder.

As Dundis points out, any study of proverbs begins with the idea that defining a proverb is too difficult a task and not worth it. In another work, admitting that the proverb has never had an adequate definition, he cites the words of another famous paremiologist, B. White, and argues that there is no need to define a proverb, because everyone knows what it is. Determining the linguistic nature of a proverb is acceptable for many languages, because a proverb is an international phenomenon and is transferred from one language to another. The form of the proverb accepted as an international term is paremia. Paremias exist in all languages of the world, in particular, Indo-European, Turkish, Ugric-Finnish, Tungus-Manchurian, Eskimo-Aleut, Nakh-Daghestan, Chinese-Tibetan, Austro-Asiatic, Malay-Polynesian, Dravidian, Papuan, Afro-Asiatic, Semitic-Hamitic, Arabic, Persian and other languages are characterized by their richness and uniqueness. Paremies are found in all languages of the world, because they are characteristic of language universals. In our opinion, the opinion presented by

scientists is correct, any didactic language unit in the spirit of instruction can be called a proverb.

A proverb is used in speech to confirm the truth or falsity of a statement. It can be observed that the proverbs reflect many centuries of collective experience.

Russian scientists Kopylenko and Z.D. In her book, Popova noted that proverbs and literary texts are widespread in written and oral genres. shows that it is a heritage of cultural, historical and aesthetic value. Mieder gives the following definition of a proverb: "a proverb is a short, generally known sentence of the folk which contains wisdom, truth, morals, and traditional views in a metaphorical, fixed and memorizable form and which is handed down from generation to generation "that is, a proverb is a short, common saying of the people, in which wisdom, truth, morals and traditional views are figurative, fixed and remembered and passed from generation to generation.

In our opinion, proverbs are the object of research of both folklorists and philologists, approving the opinion of scientists.

Proverbs are regarded as universally accepted expressions of folk wisdom, and are intensively used in print and oral speech. Strengthening the social experience, the reflection of morality, the experience of passing from generation to generation, is increasing intensively today. Not all proverbs and sayings pass the test of time, some of them become obsolete, and some are revived (only those that correspond to the spirit of people and the new conditions of their life). Proverbs and sayings reflect a certain state of being, because they are spoken by people who lived in a certain time and place. They apply to all aspects of life, such as language, speech, work, laziness, patience, intelligence, stupidity, lies, honor, shame, love, it can be observed that concepts such as friendship, enmity, beauty, wealth reflect the whole multifaceted life of the people, as well as all spheres of activity, in proverbs and sayings. N.N. Amosova distinguishes between idioms and phrasemes in the classification of English phraseological units. If the phraseological unit is easily divided into parts and its general meaning comes from the meaning of its parts, such combinations are called phrasemes. The meaning of a word that can be semantically separated is constant, that is, a possible indicative minimum related meaning, the meaning of a word that is semantically realized is phraseologically related to a constant context unit can be called a phrase. The meaning of the components of a phrasal verb is different from that of idioms, which are less independent. A whole phrase as a whole has a certain general, inseparable meaning. The paremiology of any nation is inextricably linked with the history, culture, traditions and literature of the nation that speaks this language, and is accordingly reflected in artistic works.

Thus, you can easily find publications of proverbs. As a result of the efforts of philologists to study the proverb content of world languages in the last decades, dictionaries of proverbs and collections of paremiological units have been created.

References:

1. Mieder W. Paremiological minimum and cultural literacy // Wise words. Essays on the proverb / Ed. by W. Mieder. N.Y., 1994a, P. 297-316.
2. Gossen G.H. Chamula Trotzil proverbs. Neither fish nor Fowl // Wise words. Essays on the proverb / Ed. by W. Mieder. N.Y., 1994, P. 351-392.
3. Norrick N.R. Proverbial perlocutions. How to do things with proverbs // Wise words. Essays on the proverb / Ed. by W. Mieder. N.Y., 1994, P. 143-157.
4. Cram D. The linguistic status of the proverb // Wise words. Essays on the proverb / Ed.by W. Mieder. N.Y., 1994, P. 73-97.
5. Mieder W. Proverbs are never out of fashion. Popular wisdom in the modern age. N.Y.-Oxford, 1993.
6. Uaytning, K. Толковыйсловарьанглийскихпословиц [elektronniyresurs] / http://www.library.ru
7. Копыленко, Попова, «Очерки по общей фразеологии» 1989, с. 132

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AREA OF AMARANTH APPLICATION BY CHEMICAL COMPOSITION

Abstract. The following scientific report reviewed the materials on the history of the development of using Amaranthus, chemical composition, using of representatives of the genus Amaranthus [Amaranthaceous] in the medicine and food industry. The presence of valuable biological active substances in the amaranthus determines the prospects of its use in the production of special and general food products, as well as raw materials for the production of biological active additives.

Key words: amaranthus, biological active substances, amaranth oil, pectin, amino acids, squalene, antioxidant activity.

In connection with the problem of providing humanity with food, all over the world there is a search for ways to increase plant productivity and identify new crops that can be both a source of high-quality food and raw materials for the creation of new medicines. The most promising among other plants is amaranth.

Genus Amaranthus L. - amaranth [fam. Amaranth] has about 75 species growing in warm and temperate zones of the globe [1]. Amaranth is a valuable multi-purpose crop: grain, vegetable, fodder, ornamental and industrial. The center of origin of amaranth is South America, where a large number of its species, varieties and forms grow. Many representatives of the genus live in North America, India and China, but these are secondary centers of distribution of amaranth [2]. In pre-Columbian times, the grain amaranth was one of the main food crops of the New World, almost as important as corn and beans. Amaranth is an ancient crop with a thousand-year history, known since the times of the ancient Incas, Aztecs and Mayans. It was called "Aztec wheat" or "Inca bread". In addition to its consumption as food, the Aztecs and Incas used amaranth as a source of purple dye in pagan rites. With the arrival of the Spanish conquistadors and the introduction of Christianity, pagan rituals began to be supplanted, including by their related amaranth. Corn and beans remained the main food crops, and amaranth was practically forgotten. Thus, the Spanish conquerors put an end to the use of amaranth as a staple food crop of the New Age, which significantly slowed its spread into world agriculture as a highly nutritious product.

A significant contribution to the revival of amaranth was made by Robert Rodale, who created the Amaranth Institute in the USA and contributed to the introduction of this culture in many countries of the world [3].

According to a number of researchers [4-6], amaranth is a unique crop with multifaceted applications. Suitable for cultivation as a fodder, grain, vegetable, medicinal and ornamental plant. It has high productivity, drought and salt resistance, high protein content and other biologically active substances.

In Europe, amaranth began to be grown as an ornamental plant only at the beginning of the 18th century. They began to grow it for grain. In Asia, amaranth became popular as a grain crop among the hill tribes of India, Pakistan, Nepal and China. Broad-leaved forms are used by the population of these countries as vegetable plants for preparing salads rich in carotene, vitamin C, calcium, iron and other microelements [2]. In the 30s of the last century N.I. Vavilov [7] strongly recommended the introduction of amaranth into the Russian national economy. As a result of the tests, high yield, drought resistance, rapid growth, high nutritional value of grain and green mass and other advantages of amaranth were noted.

The possibility and feasibility of using amaranth in the production of confectionery dietary products, as well as in baby food, has also been established [8].

It has been established that 63 g of amaranth green mass is equivalent in protein to 10 g of soybean grain. Under production conditions, it has been shown that in Russia, even at 60° northern latitude, it is possible to obtain up to 300 centners of amaranth green mass per hectare, and in the middle zone - up to 1000 centners, while soybeans, like those mentioned above, are not cultivated at all under these conditions. The green mass of amaranth is an excellent feed for pigs and birds, as well as for cattle [8-9].

In many countries of Latin America, Asia and Africa, amaranth is used as a vegetable crop. Considering the nutritional value and high content of vitamins in amaranth leaves, you can prepare salads, soups, and side dishes from them. They are also dried and pickled for consumption in winter. Protein concentrates, pectin, and amaranthine dye are obtained from the leaves [9–10].

At the same time, it is known that amaranth leaves emit oxalic acid in significant quantities, the accumulation of which in the human body is undesirable. Therefore, in addition to scientific interest, elucidating the regulation of oxalic acid metabolism attracts the attention of specialists involved in nutrition and toxicology.

A characteristic feature of amaranth lipids is the high content of squalene [5–7], phospholipids and other substances with high biological activity. A technology has been developed for obtaining oil from amaranth seeds by cold pressing, which ensures the yield of high-quality oil with a maximum content of physiologically active compounds [11-13].

The presence of valuable biologically active substances in the seeds and vegetative organs of plants of various types of amaranth, high content of protein, pectin, squalene, dietary fiber, vitamins [A, group B, C, E], macro- and microelements. determines the prospects for its widespread use in the production

of bakery, confectionery and dairy products, as well as raw materials for the production of dietary supplements.

Thus, amaranth is a grain, fodder, vegetable, industrial, green manure and ornamental crop and all its organs (grain, leaves, stems, roots) can be used by humans.

References:

1. Gusev V.D. Botanicheskii zhurnal, 1972, vol. 57, no. 5, pp. 457–464. [in Russ.].
2. Zheleznov A.V., Zheleznova N.B., Burmakina N.V., Iudina R.S. Amarant: nauchnye osnovy introduktsii. [Amaranth: the scientific basis of introduction]. Novosibirsk, 2009, 236 p. [in Russ.].
3. Amaranth: Perspectives on Production, Processing and Marketing. – 1990. – P. 199.
4. Магомедов И.М. Перыве результаты испытания амаранта в различных зонах страны// Амарант. Л.,1989. С4-9.
5. Магомедов И.М. Амарант– новая перспективная культура// Земледелие. – 1990. –№4. – С.54-61.
6. Чернов И.А., Земляной Б.Я. Амарант – фабрика белка. – Казань: Изд-во Казанского ун-та, 1991. – 91с.
7. Vavilov N.I. Problema novykh kul'tur. Izbrannye trudy. [The problem of new crops. Selected Works.]. Moscow, 1965, vol. 5, pp. 537–563. [in Russ.].
8. Магомедов И.М., Чиркова Т.В.Амарант прошлое, настоящее и будущее. Санкт-Петербург. Успехи современного естествознания №1, 2015, стр. 1108-1113
9. Гинс М.С. Биологически активные вещества амаранта Амарантин: свойства, механизмы действия и практическое использование. – Москва: РУДН, 2002. – 183 с.
10. Кононков П.Ф., Гинс В.К., Гинс М.С. Амарант – перспективная культура XXI века. – Москва: РУДН, 1999. – 298 с.
11. Магомедов И.М. Амарант: Биология. Сельское хозяйство. Медицина. Материалы XI Межд. научно-метод. конференции. 9–13 июня 2014. – Махачкала. – Т. 1. – С. 85–87.
12. Caselato-Sousa V.M,Amaya-Farfan J. State of Knowledge on Amaranrh Grain: A Comperehensive Review // J of Food Science. – 2012. – V. 27. – № 4. – P. 93–104.
13. Amaranto: Ciencia y Tecnologia.- Ed. Espita R.E. – 2012. – P. 354.

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THE ANALYSIS OF THE CROSS-CULTURAL VARIATIONS OF SPEECH ACTS IN MODERN LINGUISTICS

Annotation. This article is devoted to the study of the theory of speech actions and its role in modern linguistics, which is of theoretical and practical relevance. We have every reason to believe that numerous linguists have made significant contributions to the study of diverse aspects of speech actions in modern linguistics.

Introduction

In our everyday life we as a rule perform or play quite a lot of different roles – a student, a friend, a daughter, a son, a client, etc. When playing different roles our language means are not the same – we choose different words and expressions suitable and appropriate for the situation. We use the language as an instrument for our purposes. To speak a language is to express thoughts in the form of linguistic utterances that employ words and follow combinatorial rules. A speech act, though, is not merely the expression of a thought. It is the vocalization of a certain representation of the world (external or internal) aimed at making official the display of an intention to change a state of things and at changing things by the public display of that intention. A speech act is a public utterance; it cannot be a silent thought, and its effects are obtained in virtue of its being a public thought.

Many speech acts are culture-specific. This is particularly so in the case of institutionalized speech acts, which typically use standardized and stereotyped formulae and are performed in public ceremonies. A good example is provided by the speech act of divorcing. In some Muslim cultures, under the appropriate circumstances, the uttering of a sentence with the import of (1) three times consecutively by a husband to his wife will ipso facto constitute a divorce. By contrast, in Western cultures, no one (no matter what his or her religion is) can felicitously use.

(1) to obtain a divorce. (1) 'I hereby divorce you.'

But how about non-institutionalized speech acts? First of all, as said above, any given speech act may be culture-specific. Rosaldo, for example, observed that the speech act of promising has no place among the Ilongots – a tribal group of hunters and horticulturalists in the Philippines. She attributes the absence of this speech act in the conceptual repertoire of the Ilongot to a lack of interest in sincerity and truth in that community. The Ilongot, argues Rosaldo, are more concerned with social relationships than with personal intentions. On the basis of

anthropological evidence such as this, Rosaldo claims that the universality of Searle's typology of speech acts cannot be maintained. Another example of this kind has been reported for the Australian aboriginal language Yolngu. According to Harris (1984: 134–135), there does not seem to be any speech act of thanking in the Yolngu speaker's repertoire. Conversely, a given speech act may be present only in certain cultures. For example, in the Australian aboriginal language Walmajari, one finds a speech act of requesting that is based on kinship rights and obligations. The verb in question is japirlyung, and the speech act may be called 'kinship-based requesting,' because it conveys a message meaning roughly '*I ask/request you to do X for me, and I expect you to do it simply because of how you are related to me*'. Thus, for the speakers of Walmajari, it is very difficult to refuse a kinship based speech act of requesting. 'Exotic' speech acts such as the kinship-based requesting do not seem to be present in other East Asian or Western cultures. Secondly, given a particular situation, pertinent speech acts are carried out differently in different cultures. For instance, in some East Asian and Western cultures, if one steps on another person's toes, one normally performs the speech act of apologizing. But apparently this is not the case among the Akans, a West African culture. As reported by Mey, in that culture, such a situation does not call for apologies but calls for the expression of sympathy: ''The focus is on the person to whom the bad thing has happened rather than the person who has caused the bad thing'' (Mey, 2001:287). Another example: while in English, thanks and compliments are usually offered to the hosts when leaving a dinner party, in Japanese society, apologies such as o-jama itashimashita 'I have intruded on you' are more likely to be offered by the guests.

A similar speech act of apologizing is performed in Japanese upon receiving a present, when a Japanese speaker is likely to say something like sumimasen –the most common Japanese 'apology' formula or one of its variants. Conversely (as pointed out by many authors), apologies can be used in a much broader range of speech situations in Japanese than in English. Thirdly, in different cultures/languages, the same speech act may meet with different typical responses.

Fourthly, the same speech act may differ in its directness/indirectness in different cultures. Since the late 1970s, a great deal of research has been conducted on how particular kinds of speech acts, especially such face-threatening acts as requests, apologies, and complaints are realized across different languages. Of these investigations, the most influential is the large-scale Cross-Cultural Speech Act Realization Patterns Project (CCSARP). In this project, the realization patterns of requesting and apologizing in German; Hebrew; Danish; Canadian French; Argentinean Spanish; and British, American, and Australian English were compared and contrasted. In the case of requests, the findings were that among the languages examined, the Argentinean Spanish speakers are the most direct, followed by the speakers of Hebrew. The least direct are the Australian English speakers, while the speakers of Canadian French and German are positioned at

the midpoint of the directness/indirectness continuum. Building on the CCSARP, strategies for the performance of certain types of face-threatening acts in a much wider range of languages have since been examined. These languages include Catalan, Chinese, Danish, Dutch, French, German, Greek, Hebrew, Japanese, Javanese, Polish, Russian, Thai, Turkish, four varieties of English (British, American, Australian, and New Zealand), two varieties of French (Canadian and French), and eight varieties of Spanish (Argentinean, Ecuadorian, Mexican, Peninsular, Peruvian, Puerto Rican, Uruguayan, and Venezuelan).

As a result of these studies, it has now been established that there is indeed extensive cross-cultural variation in directness/indirectness in speech acting, especially in the realization of face-threatening acts (FTAs), and that these differences are generally associated with the different means that different languages utilize to realize speech acts. These findings have undoubtedly contributed to our better understanding of cross-cultural/ linguistic similarities and differences in faceredressive strategies for FTAs.

A number of studies have recently appeared that explore speech acts in interlanguage pragmatics. Simply put, an interlanguage is a stage on a continuum within a rule-governed language system that is developed by L2 learners on the way to acquiring the target language. This language system is intermediate between the learner's native language and his or her target language.

Some of these studies investigate how a particular type of speech act is performed by non-native speakers in a given interlanguage; others compare and contrast the similarities and differences in the realization patterns of given speech acts between native and nonnative speakers of a particular language. The best studied interlanguage is that developed by speakers of English as a second language. Other interlanguages that have been investigated include Chinese, German, Hebrew, Japanese, and Spanish.

Conclusion

A few recent formal and computational approaches to speech acts and speech act theory are worthy of note. One important theoretical development is the integration of speech acts with intentional logic, resulting in what is called 'illocutionary logic'. Similarly, Merin (1994) has endeavored to produce algebra of what he calls 'social acts.' Finally, recent formalizations of various aspects of speech act theory in artificial intelligence and computational linguistics can be found in Perrault (1990), Bunt and Black (2000), and Jurafsky (2004).

References:

1. Austin J. L. How to do things with words (1st/2nd edn.). Cambridge: Harvard University Press. 1962/1975
2. Bach K. and Harnish R. M. 'How performatives really work: a reply to Searle.' Linguistics and Philosophy 15, 1992, 93–110.
3. Geis M L. Speech acts and conversational interaction. Cambridge: Cambridge University Press. 1995, 300p

4. Mey J. L. ‘Focus-on issue: ‘‘New light on speech acts.’’ Journal of Pragmatics 36(5), 2004, 831–832.
5. Morgan J. L. ‘Two types of convention in indirect speech acts.’ In Cole P (ed.) Syntax and semantics 9: Pragmatics. New York: Academic Press. 1978, 261–280.
6. Rosaldo M.Z. ‘The things we do with words: Ilongot speech acts and speech act theory in philosophy.’ Language in Society 11, 1982, 203–237.
7. www.lingvist.ru/english/linguistics/theory/speeach_acts.html
8. www.learningenglishgfree.com/teaching/linguistics/speeach_acts.html

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QADIMGI SHARQDA QADRIYATLARNING SHAKLLANISHI VA RIVOJLANISHI

Annotatsiya: Mazkur maqola qadriyatning nisbiyligini tushunish uning insoniy tabiatini tushunishga, uning insonga daxldorligini, inson uchun qimmatli ekanligini anglashga imkon beradi.

Kalit so’zlar: Sharq falsafasi, qadriyat, insonparvarlik, insonga muhabbat, odamiylik, mehribonlik, fozillik, hamdardlik, go‘zallik, Aristotel, Platon, Diogen, Ellinizm, Antik falsafa.

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FORMATION AND DEVELOPMENT OF VALUES IN THE ANCIENT EAST

Abstract. This article understands the relativity of value allows to understand its human nature, to understand that it is relevant to a person, that it is valuable for a person.

Key words: Eastern philosophy, value, humanity, love for man, humanity, kindness, virtue, sympathy, beauty, Aristotle, Plato, Diogenes, Hellenism, Ancient philosophy.

Qadimgi Xitoy falsafiy tafakkurida ham qadriyat to‘g‘risidagi tasavvurlar va tushunchalarning qanday paydo bo‘lganligi va rivojlanganligini kuzatishimiz mumkin. Bu erda ham falsafiy tafakkur dastavval olamni mifologik tasavvur etishga asoslandi. Biroq bu uning rivojlanmaganligi va “tarixan cheklanganligidan” emas, balki unda olamga bo‘lgan munosabat avval boshdanoq qadriyatli xarakterda bo‘lganligidan guvohlik beradi. Qadimgi Xitoy falsafasida olamni qadriyatli idrok etishga bo‘lgan intilish ancha kuchli bo‘lgan. Bu turlicha falsafiy ta’limotlarda olamning birlamchi elementlari (osmon, er, suv, olov va h.k.)ning qadriyatli talqin etilishida yaqqol ko‘zga tashlanadi. Konfutsiy (eramizdan avvalgi 551-479 yillar) tomonidan tuzilgan va qayta ishlangan “Щu szin” (“Tarix kitobi” yoki “Hujjatlar kitobi”)da insonning besh qobiliyati: tashqi qiyofa – bu fazilat, u xulq-atvorni qat’iylashtiradi, nutq – haqiqatga amal qilishga va so‘zining ustidan chiqishga imkon beradi, ko‘rish xossasi – nazokatli va

ehtiyotkor bo‘lishga, tafakkur xossasi – donishmand bo‘lishga imkon beradi. SHu asosda besh xil baxt (uzoq umr ko‘rish, boylik, tana sog‘ligi, ruh xotirjamligi, “donishmandlikka muhabbat”, “osoyishta vafot etish” va olti baxtsizlik (falokat tufayli umrning qisqarishi, kasallik, musibat, qashshoqlik, tananing majruhligi, aql ojizligi) alohida ta’kidlanadi. Konfutsiy qarashlarini o‘zida aks ettirgan “Lun yuy” kitobida nimaning foyda va nimaning zarar keltirishi haqida shunday deyiladi: quvonchning uch turi foyda keltiradi: 1) urf-odatga muvofiq ravishda qilgan xatti-harakatingdan va musiqadan quvonsang; 2) odamlarga ezgu ishlar haqida gapirsang; 3) donishmand odamlar bilan do‘st bo‘lsang. Biroq xursandchilik zarar keltirishi ham mumkin: isrofgarchilikka berilishdan, bekorchilikdan va maishatbozlikdan quvonsang, u zarar keltiradi. Konfutsiy olijanob erkakning beshta sifatini alohida ta’kidlaydi: “Olijanob erkak ezgu ishlarni qilishda isrofgarchilikka yo‘l qo‘ymaydi; u zo‘r berib mehnat qilar ekan, achchig‘lanmaydi; istaklarida hasis, ulug‘likka mag‘rur emas; u hurmat qozonadi, biroq qattiqqo‘l emas”. Konfutsiy ta’limotida “Jen” – insonparvarlik, insonga muhabbat, odamiylik, mehribonlik, fozillik, hamdardlik singari ma’nolarini anglatadi. Ravshanki, bu tushuncha zaminida ikki yarim ming yildan keyin ham o‘z ahamiyatini yo‘qotmagan qadriyatli sifat nazarda tutiladi. SHogirdning jen to‘g‘risidagi savoliga Konfutsiy javob berib, shunday degan edi: “O‘zing istamaganni boshqalarga xam qilma, shanda davlat ham, oilada ham hech kim senga dushmanlikni his etmaydi”

Qadriyatning nisbiyligini tushunish uning insoniy tabiatini tushunishga, uning insonga daxldorligini, inson uchun qimmatli ekanligini anglashga imkon beradi. Biroq faylasuflar insoniyat olamidagi go‘zallik va xunuklik, adolat va adolatsizlik, baxt va baxtsizlik turli davrlar va turli xalqlar tasavvurida nozik chegaraga ega ekanligini ko‘rdilar. Qadimgi dunyo va hozirgi davr tadqiqotchilari Protagorning qarashlarida sub’ektivizm va relyativizm mavjudligini ta’kidlaydilar. Aristotel “Metafizika” asarida yozishicha: “Protagor inson hamma narsaning o‘lchovidir deyishi bilan faqat quyidagilarni nazarda tutgan: har bir odam nima qanday tuyulsa ham mavjud, ham mavjud emasdir, u yaxshi va yomondir; boshqa qarama-qarshi fikrlar ham to‘g‘ridir, chunki bir narsa chiroyli bo‘lsa, boshqalari aksinchadir: har bir odamga nimaiki qanday tuyulsa, u o‘lchovdir”. Protagor qarashlarini butunlay rad etish qiyindir; buning ustiga uning tanqidchilarini beg‘araz edilar, deb ham bo‘lmaydi. Umuman olganda, “inson barcha narsaning o‘lchovidir” degan formulaning ilgari surilishi antik gumanizmning qaror topishi uchun, olamni gumanistik – qadriyatli tushunish uchun g‘oyat muhim ahamiyatga ega edi. Ikkinchidan, bu formula falsafiy tafakkur olamiga kirib keldi va turlicha talqin etila boshladi. Platon olamga qadriyatli munosabatning eng muhim momentlarini, uning xilma-xilligini va birligini ochib berdi. U eng ko‘p qadrlanadigan boylik g‘oyasiga ta’rif berdi: “O‘rganilishi kerak bo‘lgan narsalar faqat qadriyat tufayligina o‘rganiladi; qadriyat ularga ham borliq, ham mavjudlik beradi, qadriyatning o‘zi garchand mavjudlik bo‘lmasa-da, u mavjudlikdan tashqaridadir, o‘z afzalliklari va kuchi

bilan undan yuksaklikda turadi". Aristotel qadriyatning mohiyati va mavjudligini tushunishda Platon fikriga qo‘shila olmadi:. Men e'zozlanadigan qadriyat deganda yaxshi, ilohiy qadriyatni, masalan, jon va aqlni – nimaki birlamchi bo‘lsa, o‘shalarni nazarda tutaman. Yana buning ustiga, e'zozlanadigan qadriyat hamma tomonidan hurmat qilinadigan va sharaflanadigan narsalardir. Fozillik ham qadriyatdir, u tufayli inson hurmatga munosib bo‘ladi, u shundagina fozil kishilarga xos go‘zallikka ega bo‘ladi: "Maqtaladigan qadriyat" – bu, xatti-harakati maqtovga loyiq bo‘lgan fozil kishilarning o‘zidir; "Qadriyat – imkoniyat, bu – hokimiyat, boylik, kuch-qudrat, go‘zallik". Qadriyatning to‘rtinchi turi ham bor. Bu - "qandaydir saqlovchi yoki boshqa qadriyatlarni yaratuvchi" qadriyatdir. Masalan, gimnastika ana shunday qadriyat bo‘lib, u sog‘liqni saqlaydi. Aristotel qadriyatning boshqa mantiqiy prinsiplar asosida ham qismlarga ajratdi. U qadriyatlarni final va instrumental, moddiy va ma'naviy qadriyatlarga ajratdi. "Qadriyat jonda bo‘lishi (fozillarda shunday) yoki tanada bo‘lishi (masalan, sog‘lik, go‘zalliklar) yoxud tashqarida bo‘lishi (boylik, hokimiyat va shunga o‘xshashlar) mumkin". Jondagi qadriyat "eng yuksak" qadriyatdir. U namoyon bo‘lishiga ko‘ra uch xil: "oqillik, fozillik va lazzatlanish" bo‘lib, ularni o‘zida mujassamlashtiradi. Aristotel aksiologiya uchun g‘oyat muhim bo‘lgan masalalardan biri bo‘lgan turli sub'ektiv baholar va qadriyatlarning nisbati masalasini kun tartibiga qo‘ydi. U qadriyatli munosabatlar kishilarning yoshi va axloqiy sifatlariga bog‘liq ravishda bir-biridan farqlanishini alohida ta'kidladi. U: "xilma-xil narsalar bolalar va erkaklarga, tentak va fozil kishilarga qadrli bo‘lib tuyulsa, bu mutlaqo oqilonadir", – deb yozdi. Uning fikricha, fozil inson haqiqiy qadriyat o‘lchovidir. Qadrlanishning mezoni muammosi antik dunyo mutafakkirlarining doimiy e'tiborida bo‘ldi. Ular "qadriyat" tushunchasini to‘g‘ridan-to‘g‘ri qadimgi yunoncha aksia (axia) so‘zi bilan ifoda etdilar. Diogen Laertskiy ularning qadriyat to‘g‘risidagi ta'limotlarini shunday bayon etdi: "Predmetlar orasida hurmatga loyiq va e'tibor berishga arzimaydigani bo‘ladi. Hurmatga loyiqlari qadriyatga ega bo‘ladilar. Qadriyat, birinchidan, hayotga ko‘mak beruvchi ayrim vositachilik yoki foydadir, u tabiatiga muvofiq ravishda boylik ham, sog‘lik ham keltiradi; uchinchidan, tovarning tajribali baholovchi tomonidan belgilanadigan ayirboshlash narxidir. Hurmatga loyiq narsalar qadriyatga egadir. Masalan, qalbning xususiyatlari – iste'dod, san'at, kamolot va shunga o‘xshashlar yoki hayot: sog‘lik va quvvat, farovonlik, ziyon-zahmat chekmaslik, go‘zallik singari tana xossalari yoxud boylik, sha'n-shavkat, mashhurlik singari tashqi holatlardir. Qadriyat e'tibor berishga arzimaydigan narsalarga qarshi turadi. Ular qalb xossalari (noshukrlik, layoqatsizlik kabilar) ni va tananing o‘lim, kasallik, jarohat, majruhlik singari xossalarini hamda muayyan tashqi holatlar (qashshoqlik, omadsizlik...)ni o‘z ichiga oladi". Demak, stoiklarda qadriyatning ancha keng ta'rifi yaratilgan bo‘lib, ularning bir qismi XIX-XX asr aksiologiyasida qaytadan tiklandi va qayta kashf etildi. Ular qadriyatlarni "qalb xossasi", "tana xossasi" va "tashqi holat" singari turlarga ajratdilar. Antik falsafa

ellinizmning so‘nggi davrida sub’ekt va ob’ektning eng umumiy tarzda ayniyligini anglash orqali olamni global – qadriyatli tushunishga muvaffaq bo‘ldi.

Adabiyotlar:

1. Shodmonova SH. S. Oilada kichik maktab yoshdagi bolalarni milliy qadriyatlar asosida axloqiy tarbiyalashning pedagogik asoslari: ped.fan. nom …yozilgan diss. Avtoref. – T.: FTDK, DITAF bosm. 2001. – 19 b.
2. Shoumarov SH., SHoumarov G‘. Muhabbat va oilaviy hayot. – T.: Abu ali ibn Sino, 1999. – 93 b.
3. Рашидова, Б. (2022). ЮКСАК МАЪНАВИЯТ АВВАЛО ИНСОН ОДОБИДА НАМОЁН БЎЛАДИ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(12), 351-355.
4. Рашидова, Б. Я. (2024). ТАЪЛИМ-ТАРБИЯ ҚАНЧА МУКАММАЛ БЎЛСА, ХАЛҚ ШУНЧА БАХТЛИ ЯШАЙДИ. Educational Research in Universal Sciences, 3(1), 464-469.
5. Yaxyayevna, R. B. (2023). The Role of the Neighborhood in Preparing Young People for Family Life. AMERICAN JOURNAL OF SCIENCE AND LEARNING FOR DEVELOPMENT, 2(3), 37-40.
6. Yaxyayevna, R. B. (2023). We Will Not Allow Ignorance to Replace Enlightenment. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(3), 23-26.
7. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. Scientific progress, 3(3), 934-937.
8. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(3), 203-207.
9. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. FAN, TA'LIM, MADANIYAT VA INNOVATSIYA, 1(2), 69-73.
10. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.

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Amaliy psixologiya ta'lim yo'nalishi talabasi

PATOPSIXOLOGIYADA PSIXIKANING SHAKLLANIB BORISH QONUNYATLARI

Annotatsiya. Patopsixologiya psixik faoliyat va shaxs xususiyatlarining parchalanish qonuniyatlarini me'yordagi psixik jarayonlarning shakllanishi va borishi qonuniyatlari bilan taqqoslab o'rganish uchun xizmat qiladi.

Kalit so'zlar: patopsixologiya, terapevtik jarohat, sindrom, shizofreniya, psixopatik, oligofrenik sindrom, o'smirlar, differensial psixologiya, psixokorreksiya, ijtimoiy tiklanish.

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THE LAWS OF THE FORMATION OF PSYCHIC ACTIVITY IN PSYCHOPATHOLOGY

Abstract. Psychopathology serves to study the laws of the formation and development of psychic processes, taking into account the principles of the fragmentation of psychic activity and individual characteristics.

Keywords: psychopathology, therapeutic treatment, syndrome, schizophrenia, psychopathic, oligophrenic syndrome, complexes, differential psychology, psychocorrection, social adaptation.

Asosiy qism: Patopsixologiya psixologiyaning jadal va samarali rivojlanayotgan sohalaridan biridir. Klinik psixopatologiya buzilgan psixik funktsiyalarning namoyon bo'lishini tekshiradi, aniqlaydi, tavsiflaydi va tizimlashtiradi, patopsixologiya esa klinikada kuzatilgan buzilishlarga olib keladigan psixik jarayonlarning borishi va strukturaviy xususiyatlarini ochib berish uchun psixologik usullardan foydalanadi. Patopsixologiya psixiatriya klinikalarida kengroq qo'llanila boshlagan bo'lsa-da, uning metodik usullari hozirgi vaqtda nafaqat psixiatriyada qo'llaniladi balki, Terapevtik, jarrohlik klinikalarida va tibbiyotning boshqa sohalarida bemorning ruhiy holatidagi o'zgarishlarni, uning ish faoliyatini va shaxsiy xususiyatlarini o'zgartirishni hisobga olgan holda foydalanish zarur bo'ladi. Patopsixologiyani bilish har qanday ixtisoslik va ixtisoslikdagi psixologlar uchun muhimdir, chunki

psixologning odamlar bilan professional muloqoti ruhiy kasal odam bilan uchrashishni istisno qilmaydi.

Shu munosabat bilan shuni ta'kidlash kerakki, psixologiya va patopsixologiya o'rtasidagi chegarada ijtimoiy amaliyot va ayniqsa uning bir qator sohalari uchun norma, ya'ni normal aqliy rivojlanish masalasi juda dolzarb bo'lgan muammo yotadi. Patopsixologiyada normallik va ruhiy salomatlikni belgilashda ular odatda Jahon sog'liqni saqlash tashkiloti qoidalariga rioya qilishadi; normallik "... nafaqat kasallikning yo'qligi, balki jismoniy, ijtimoiy va ruhiy farovonlik holati" deb tushuniladi".

Korsakovaning so'zlariga ko'ra, "klinik-psixologik sindrom" - bu psixikaning tizimli-strukturaviy tuzilishida ularni birlashtiradigan bog'lanishning yetarli emasligiga asoslangan kognitiv jarayonlar yoki shaxsning buzilishi belgilarining tabiiy kombinatsiyasi. kasallik jarayoni hisoblanadi. Muallif klinik va psixologik sindromni ikkita yondashuv doirasida ko'rib chiqadi - patopsikologik va neyropsikologik. Patopsixologiyada markaziy o'rinni yuqori aqliy funktsiyalarning buzilishida umumiy bo'g'inni izlash egallaydi, bu esa bunday funktsiyalarni amalga oshirish jarayonida individual belgilarning rivojlanishiga asoslanadi. Masalan, shizofreniyada sindrom hosil qiluvchi radikal motivatsiyaning buzilishi bo'lishi mumkin, buning oqibati ushbu kasallikka xos bo'lgan fikrlash, idrok etish, xotira va boshqalardagi o'zgarishlar (yoki xususiyatlar) bo'lishi mumkin. Polyakov yozganidek, klinik-psixologik sindrom. klinik-psixopatologikdan farq qilmaydi, lekin boshqa mazmunga ega. "Agar klinik (psixopatologik) tadqiqotlar buzilgan ruhiy jarayonlarning namoyon bo'lish shakllarini aniqlasa, eksperimental psixologik tadqiqotlar aqliy jarayonlarning o'zi (ya'ni tuzilishi) qanday buzilganligi haqidagi savolga javob berishi kerak."

Bir qator psixopatologik sindromlardan quyidagilar eng katta klinik ahamiyatga ega;

- shizofreniya yoki dissotsiativ simptomlar majmuasi - motivlar ierarxiyasining tuzilishini o'zgartirish, fikrlashning maqsadliligini buzish (mulohaza yuritish, xilma-xillik va boshqalar) kabi shaxsiy-motivatsion buzilishlardan iborat; hissiy-irodaviy buzilishlar (his-tuyg'ularning tekislanishi va dissotsiatsiyasi, parabuliya va boshqalar), o'z-o'zini hurmat qilish va o'z-o'zini anglashdagi o'zgarishlar (autizm, begonalashuv va boshqalar);

- psixopatik (shaxsning g'ayritabiiy) simptomlar kompleksi - hissiy-irodaviy buzilishlar, motivlar ierarxiyasi tarkibidagi o'zgarishlar, intilishlar va o'zini o'zi qadrlash darajasining yetarli emasligi, katatimik tipdagi fikrlashning buzilishi, buzilishlardan iborat. prognozlash va o'tmish tajribasiga tayanishda (klinikada - asosan anomal tuproq tufayli yuzaga kelgan psixogen reaktsiyalar va psixopatik shaxslar va psixogen reaktsiyalar)

- organik (ekzo- va endogen) simptom komplekslari - intellektning pasayishi, oldingi bilim va tajriba tizimining parchalanishi, xotira, diqqat va fikrlashning operativ tomonining buzilishi belgilaridan iborat; hissiyotlarning beqarorligi; tanqidiy qobiliyatlarning pasayishi (klinikada bu ekzogen-organik

miya lezyonlariga to'g'ri keladi - miya yarim aterosklerozi,travmatik miya shikastlanishining oqibatlari; giyohvand moddalarni suiiste'mol qilish va boshqa kasalliklar, shuningdek, "endogen" -haqiqiy epilepsiya turining organik" buzilishlari,miyadagi birlamchi atrofik jarayonlar;

- oligofrenik simptomlar kompleksi - o'rganish, tushunchalarni shakllantirish, mavhumlik, umumiy ma'lumot va bilimlarning yetishmasligi, fikrlashning ibtidoiyligi va konkretligi, ortib borayotgan taklif va hissiy buzilishlardan iborat.

Patopsixologik eksperiment - bu inson psixik faoliyatining patologik xususiyatlarini ochib beruvchi shart-sharoitlarni sun'iy ravishda yaratishni o'z ichiga olgan psixologik eksperimentning bir turi. Bu qat'iy belgilangan sharoitlarda aqliy jarayonlarni hisobga olish va oldindan rejalashtirilgan o'zgarishlar ehtimoli bilan tavsiflanadi.

Zeigarnik patopsixologik eksperimentni somatik tibbiyotda keng qo'llaniladigan funktsional testlar bilan tenglashtiradi, ular yordamida shifokorlar odatda alohida organlar va tizimlar funktsiyalarining holatini aniqlaydilar. Muayyan "yuk" ning roli eksperimental vazifalarga tegishli bo'lib, ularni amalga oshirish aqliy operatsiyalarni yangilashni talab qiladi. Shunday qilib, bemorning aqliy faoliyati eksperimental vaziyat bilan bog'liq holda tekshiriladi.

Ruhiy sog'lom shaxslarning eksperimental psixologik tadqiqotidan asosiy farqi eksperimentni o'tkazish texnikasi, uning davomiyligi va sub'ektning eksperimental vaziyatga munosabatini hisobga olish zaruratidadir. Ba'zi hollarda, bemorning xulq-atvorining xususiyatlarini hisobga olgan holda, eksperimentator o'z taktikasini sezilarli darajada o'zgartirishi, qo'shimcha usullarni joriy qilishi lozim.

Har qanday psixologik eksperimentning asosiy printsipi mustaqil o'zgaruvchi (eksperimenter tomonidan o'zgartirilgan omil) va qaram o'zgaruvchi o'rtasidagi bog'liqlik mavjudligini tekshirish zarurati. Bunday holda, quyidagilar mumkin: eksperimentator mustaqil o'zgaruvchiga ta'sir qiladigan va olingan natijalarni qayd etadigan qo'zg'atilgan klassik eksperiment va eksperimentatorning faoliyati bilan bog'liq bo'lmagan o'zgarishlar sodir bo'ladigan eksperiment (masalan, ruhiy kasalliklarni kuzatish). miya shikastlanishi yoki ruhiy kasallik tufayli). Tajribaning bu turi mustaqil o'zgaruvchidagi katta va ba'zan qaytarilmas o'zgarishlarni kuzatish imkonini beradi.

Aksariyat hollarda bu qo'zg'atilgan tajriba va havola qilingan tajribadir. Ikkala elementning mavjudligi patopsixolog tadqiqot materiallarini umumlashtirishda hisobga olishi kerak bo'lgan ko'plab omillarning murakkab o'zaro bog'liqligini tushuntiradi. S. Ya. Rubinshteyn sub'ektning ruhiy holatiga ta'sir qiluvchi shart-sharoitlarni o'zgartirish va bemorga xos bo'lgan psixologik o'zgarishlarni kamaytirish yoki oshirishning uchta usulini ko'radi: 1) eksperimentning davomiyligi uchun bemor joylashtirilgan vaziyatni o'zgartirish; 2) eng ko'p ishlatiladigan bemorning faolligini o'zgartirish; 3) ma'lum

farmakologik preparatlarni kiritish orqali bemorda ruhiy jarayonlar holatining o'zgarishi. Patopsixologik eksperimentda bemorning aqliy faoliyatiga ta'sir qilish usullarining bunday bo'linishini yodda tutish kerak. Patopsixolog eksperimentning aniq maqsadini, eksperimental topshiriqlarni hisobga olgan holda uni rejalashtirish va o'tkazishda sub'ektning tadqiqot holatiga munosabatini hisobga olishi va ular bilan ishlash jarayonida olingan natijalarni doimiy ravishda taqqoslashi kerak. Tadqiqot maqsadiga qarab, psixolog va bemorni boshqaradigan motivlar har doim ham, ayniqsa, psixologik tekshiruv vaqtida bir-biriga mos kelmaydi.

Patopsixolog ishining asosiy bo'limlari uning ishtiroki bilan belgilanadi:

- differentsial diagnostika muammolarini hal qilish;
- neyropsik kasalliklarning tuzilishi va darajasini baholash;

Psixologiya kitobi

- aqliy rivojlanish diagnostikasi va umumiy ta'lim va mehnatga tayyorlash va qayta tayyorlash yo'llarini tanlash;
- funktsional tashxis qo'yish uchun ma'lumotlarni olish uchun bemorning shaxsiyati, ijtimoiy muhiti va ijtimoiy pozitsiyasini o'rganish;
- nevropsik kasalliklar dinamikasini baholash va terapiya samaradorligini hisobga olish;
- ekspert ishi;
- psixokorreksiya ishlari.

Differensial diagnostika muammolarini hal qilishda patopsixologning ishtiroki. Nozologik tashxisni aniqlashtirish uchun qo'shimcha ma'lumotlar manbai sifatida patopsixologik tekshiruv diagnostik jihatdan qiyin holatlarda, ayniqsa kasallikning atipik va klinik jihatdan zaif variantlarida, dastlabki bosqichlarda va remissiya davrida zarur bo'lishi mumkin. Ekstramural psixiatriyaning rivojlanishi va ruhiy kasalliklarning sezilarli patomorfozi bilan bog'liq holda, o'chirilgan, past simptomatik shakllarning chastotasi sezilarli darajada oshdi va psixologning patopsixologik tadqiqot ma'lumotlarini tahlil qilish asosida malakaviy xulosasi tobora muhim ahamiyat kasb etmoqda. Ma'lum xarakterli ruhiy kasalliklar jarayonlarining mavjudligi yoki yo'qligi va shaxsiy xususiyatlarning o'zgarishi haqida qo'shimcha ma'lumot manbai sifatida, ko'pincha bunday diagnostika vazifalari shizofreniyaning dastlabki ko'rinishlari va sust shakllarini nevrozlardan, psixopatiyadan va miyaning organik kasalliklaridan ajratish zarur bo'lganda paydo bo'ladi.

Neyropsixik kasalliklarning tuzilishi va darajasini baholash. Neyropsixitrik kasalliklarning tuzilishi va darajasini baholash nafaqat differensial diagnostika maqsadlari uchun muhimdir. Bemorning ahvolini aniqlashda (har xil turdagi tekshiruvlar bilan va ayniqsa, mehnatga layoqatlilik darajasini aniqlashda), funksional tashxis qo'yishda, bemorning mehnatga moslashish va ijtimoiy tiklanish usullarini aniqlashda, kasbiy yo'nalishda mustaqil rol o'ynaydi. Psixokorrektsiya va davolash va tiklash tadbirlarini o'tkazishda Neyropsixiyatrik kasalliklarning tuzilishi va darajasini hisobga olish, shuningdek, neyropsixiyatrik

kasalliklarning rivojlanish dinamikasini va kursini baholashda va reabilitatsiya davolash samaradorligini kuzatishda shifokorga yordam beradi. Ushbu muammolarni hal qilish uchun patopsixolog psixologik usullardan foydalangan holda, muayyan faoliyatning psixologik xususiyatlarini hisobga olgan holda individual psixik jarayonlarning buzilishining og'irligi va tabiatini va ushbu buzilishlarni qoplash imkoniyatini aniqlab berishi mumkin.

Tadqiqot maqsadlariga qarab, eksperimentni o'tkazishga yondashuv o'zgarishi mumkin va shunga mos ravishda hal qilinadigan masalalar doirasi torayadi yoki kengayadi. Shuni ta'kidlash kerakki, buzilishlarning tuzilishi va darajasini o'rganish har tomonlama bo'lishi va aniq o'zgarishlarga uchragan aqliy faoliyatning tomonlarini ham, muayyan hayotiy vaziyatda ko'rib chiqiladigan integral shaxs tuzilishidagi saqlanib qolgan tomonlarni ham qamrab olishi kerak.

Aqliy rivojlanish diagnostikasi va umumiy ta'lim va mehnatga tayyorlash va qayta tayyorlash yo'llarini tanlash. Bolalar va o'smirlar muassasalarida patopsixolog, shuningdek, differentsial diagnostika muammolarini hal qilishda ishtirok etadi. Bu erda, ayniqsa, muhim o'rinni uning aqliy rivojlanish va uning anomaliyalarini - disontogenezning turli shakllarining darajasi va tuzilishini aniqlash bo'yicha ishi egallaydi. Ushbu masalalarni hal qilish anomal bola yoki o'smir uchun umumiy ta'lim va mehnat ta'limi yo'llarini tanlash, uning o'rganish qobiliyatini prognozlash, haqiqiy pedagogik va terapevtik-moslashuvchan choralar o'rtasida oqilona munosabatni o'rnatish bilan bevosita bog'liq va aniqlangan anomaliyani qoplash. Shunday qilib, patopsixologik tadqiqotlar nafaqat rivojlanish anomaliyasining mohiyatini yaxshiroq tushunishga yordam beradi, balki o'qituvchilar va ota-onalarga bola bilan ishlashda foydalanish tavsiya etiladigan tuzatish tavsiyalarini ishlab chiqish uchun asos bo'lib xizmat qiladi.

Foydalanilgan adabiyotlar ro‘yhati:

1. А.В. Фролова, А.Ф. Минуллина «КЛИНИЧЕСКАЯ ПСИХОЛОГИЯ»
2. Тополянский В. Д., Струковская М. В. Психосоматические расстройства. – М., 1986.
3. Ташлыков В.А. Психология лечебного процесса. —Л., 1984
4. Спиваковская А. С. Профилактика детских неврозов. – М., 1980.
5. Хьелл Л., ЗшлерД. Теории личности. — СПб., 1997.

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BIZNES MUHITINI YAXSHILASH VA TADBIRKORLIKNI RIVOJLANTIRISHNING YAPON TAJRIBASI

Annotatsiya. Maqolada Yaponiyada biznes muhitini yaxshilash va tadbirkorlikni rivojlantirish borasida davlat tomonidan olib borilgan islohotlar va erishilgan natijalar yoritib berilgan. Shu bilan birga tadbirkorlikni rivojlantirishdagi to'siqlar va ularni bartaraf etishdagi echimlar to'g'risidagi yapon tajribasi bayon etilgan.

Kalit so'zlar: tadbirkorlik, xususiy mulk, biznes, biznes muhit, imtiyoz, yapon tajribasi, startap.

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JAPANESE EXPERIENCE IN IMPROVING THE BUSINESS ENVIRONMENT AND DEVELOPING ENTREPRENEURSHIP

Abstract. The article highlights the reforms carried out by the government and the results achieved in order to improve the business environment and develop entrepreneurship in Japan. At the same time, the Japanese experience of entrepreneurship development, obstacles and ways to solve them are described.

Keywords: entrepreneurship, private property, business, business environment, privileges, Japanese experience, startup.

Yaponiyada biznes muhitini yaxshilash va tadbirkorlikni rivojlantirishda davlatning roli va bu yo'nalishda olib borgan islohotlari muhim ahamiyatga ega bo'lgan. Xususan kichik biznes va xususiy tadbirkorlikni tartibga soluvchi huquqiy asoslarning yangilanishi o'z navbatida yangi tadbirkorlar soni oshishiga jiddiy turtki bo'ldi. Yaponiyada kichik va o'rta biznesni tartibga soluvchi asosiy qonun dastlab 1963 yilda qabul qilingan **"Kichik va o'rta tadbirkorlik bo'yicha asosiy qonun"** hisoblanib, aynan shu qonun asosida qo'llab-quvvatlanar edi36.

Tahlillarga ko'ra 1990 yillarga kelib Yaponiyada tadbirkorlik subyektlarining yangi shakllari, biznes uchun startap loyihalarining rivojlanish holati AQSh va Buyuk Britaniya kabi rivojlangan mamlakatlarga nisbatan sust shakllanganligini ko'rishimiz mumkin. Yapon mutaxassislari mazkur holatni

36 https://www.chusho.meti.go.jp/sme_english/outline/08/01_01.html

o’rgangan holda 1999 yildan hukumat tomonidan **“Kichik va o’rta tadbirkorlik bo’yicha asosiy qonun”**ga jiddiy o’zgarishlar kiritilishini taklif etdilar. Berilgan takliflar asosida kiritilgan o’zgarishlar tadbirkorlar uchun quyidagi imkoniyatlarni yaratilishiga olib keldi:

- tadbirkorlarga ko’proq erkinlik berish;
- moliyaviy qo’llab-quvvatlash;
- startap loyihalar uchun yangi imtiyozlar taqdim etish;
- byurokratik jarayonlarni soddalashtirish.

Qisqa muddatda natijalarni yaxshilashga qaratilgan **“Startaplarni ikki xissaga oshirish rejasi”** (“Startup-Doubling Plan”) kabi davlat dasturi va loyihalari ishlab chiqildi. Natijada 2001 yildan 2006 bo’lgan davrda startaplar soni **180 mingdan 360 minggacha** ko’paydi37.

Olib borilgan islohotlar natijasida 2022 yilda Yaponiyadagi jami biznes subyektlari soni **3,6 mln.taga** yetdi, shundan **3,6 mln.tasini kichik va o’rta biznes** subyektlari tashkil qildi. Shuningdek, **“Milliy startap va venchur forumi”** tashkil qilindi38. 2022 yilgacha **10 mingdan** ortiq startap loyihalar muvaffaqiyat qozondi, ular orasida unicorn deb ataluvchi qiymati **1 mlrd.** AQSh dollaridan oshgan loyihalar paydo bo’ldi.

Yaponiyada kichik biznesni qo’llab-quvvatlash va yangi tadbirkorlik subyektlari sonini oshirishga qaratilgan islohotlar quyidagi asosiy yo’nalishlarda amalga oshirildi:

1. **Kichik biznesni yo’lga qo’yish uchun eng kam talab qilinadigan kapital talablarini bekor qilish.** Biznes boshlash, xususan xorijiy investitsiya uchun minimal kapital kiritish talablari olib tashlandi. Bu o’zgarishdan avval qo’shma-korxona uchun kapital kiiritishga bo’lgan eng kam miqdordagi talab 10 **million** iyenani tashkil qilardi. Islohotdan so’nga **“Bir iyenalik kompaniyalar”** soni orta boshladi.

2. **Tadbirkorlar uchun maxsus ta’lim berish va ma’lumot olishga ko’maklashish**. 1997 yilda Yaponiya hukumati tomonidan o’tkazilgan so’rovnomada 1,25 million yollanib ishlovchilar ehtimoliy tadbirkorlar ekanligi aniqlandi. Bu yollanib ishlovchilarning har 50 nafardan bittasiga to’gri keladi. Ushbu respondentlarning yarimi yaqin kelajakda o’zini-o’zi band qilish rejasi borligini bildirishgan. Mazkur salohiyatdan unumli foydalanish maqsadida **“Ijtimoiy-iqtisodiy rivojlanish uchun Yaponiya samaradorlik markazi”** (JPC-SED) tomonidan yangi tadbirkorlar uchun hamda tadbirkorlikka jalb qilish uchun ta’lim berish va ma’lumotlar bilan ko’maklashish xizmatlarini keng yo’lga qo’yildi.

3. **Yangi biznes g‘oyalari va tashabbuslarni moliyalashtirish.** Startaplarni moliyalashtiruvchi yangi **“Milliy moliyalashtirish korporatsiyasi”** (National Life Finance Corporation) dasturi tuzildi va 2008 yilgacha xususiy

37 https://nap.nationalacademies.org/read/12194/chapter/8
38 https://www.eastasiaforum.org/2022/08/09/restoring-japan-as-a-start-up-nation/

moliyaviy tashkilotlardan qarz olishga qiynalgan yangi tadbirkorlarga moliyaviy xizmatlar ko’rsatdi.

Quyidagi jadvallarda (1va 2-jadvallar) Yaponiyada biznes muhitini tahlil qilishga maqsadida o’tkazilgan tadqiqot natijalari keltirilgan. Buning uchun tadbirkorlar örtasida ötkazilgan sörovnoma natijasiga muvofiq biznes muhiti bilan bog’liq **10** ta **eng asosiy omillar** tanlab olingan hamda respondentlar tomonidan berilgan javoblar foiz qiymatida keltirilgan. Jami **2468** ta kompaniya sörovnomada ishtirok etgan, har bir kompaniyaga beshtagacha javoblarni tanlash imkoni berilgan.

1-jadval.

Yaponiyada biznes muhitining jozibador taraflari

Reyting	So‘rovnoma javoblari	Jami (n=2468)	Ishlab chiqarishda	Ishlab chiqarishdan boshqa
1	Daromad darajasi yuqori, Istemolchilar soni köpligi	61,0	8,7	52,3
2	Rivojlangan infrastruktura	47,6	8,1	39,6
3	Yangi mahsulot va xizmat turiga nisbatan sezuvchanlik, yangi mahsulotlarning raqobatbardoshligini ölchash imkoning mavjudligi	47,3	8,4	38,9
4	Global kompaniyalar va ishlab chiqaruvchilarning ko’pligi	36,8	6,1	30,7
5	Sifatli yashash sharoitlari	34,8	5,7	29,1
6	Malakali mutaxasisslarning borligi	23,9	5,9	18,0
7	Osiyo mintaqaviy bozorlariga kirish eshigi, hududiy markaz uchun optimal joylashuv	19,8	3,8	16,0
8	Hududlarga kirib borishdagi geografik joylashuvning ahamiyati	18,2	3,1	15,1
9	Moliyaviy resurslar mavjudligi va moliyaviy tizimning samaradorligi	10,4	2,7	10,5
10	Yuqori sifatli ilmiy salohiyat va ilmiy yutuqlar	10,4	3,8	6,6

Manba: “54th Survey of Trends in Business Activities of Foreign Affiliates” (METI)39

2-jadval.

Yaponiyada biznes yuritish uchun to’siqlar

Reyting	So‘rovnoma javoblari	Jami (n=2468)	Ishlab chiqarishda	Ishlab chiqarishdan boshqa
1	Biznes qilishning yuqori xarajatlari	75,1	80,1	74,1
2	Hodimlar uchun xavfsizlikni ta’minlashdagi qiyinchiliklar	53,6	57,4	52,8

39 https://www.meti.go.jp/english/statistics/tyo/gaisikei/index.html

3	Eksklyuzivlik va Yaponiya bozorining ajralib turishi	45,2	40,9	46,1
4	Iste'molchilarning mahsulot va xizmatdan yuqori satndartlarni talab qilishi	44,3	49,5	43,2
5	Murakkab administrativ jarayonlar	40,5	36,4	41,3
6	Qat'iy tartib-qoidalar, ruxsatnoma va litsenziya olish tizimi	39,3	37,6	39,7
7	Rag'batlantirish va imtiyozlarning yetarli emasligi	18,7	21,5	18,1
8	Xorijliklar uchun yashash sharoitlari va muhiti	12,2	13,6	11,9
9	Viza olishdagi qiyinchiliklar	7,0	6,0	7,2
10	Mablag' olishdagi qiyinchiliklar	6,7	6,9	6,7

Manba: "54th Survey of Trends in Business Activities of Foreign Affiliates" (METI)

Amalga oshirilgan eng so'nggi samarali islohotlar sifatida quyidagilarni keltirish mumkin:

1. **Abenomiks** – **2012** yilda sobiq bosh vazir Shinzo Abe tomonidan rivojlanishning yangi loyihasi sifatida taklif qilindi. Mazkur rivojlanish dasturining iqtisodiy islohotlar yo'nalishiga *bizneslar uchun samarali monetary siyosat, kuchli fiskal stimul, biznes raqobatbardoshligini oshirish, xususiy investitsiyani rag'batlantirish va bizneslar uchun innovatsiyani qo'llab-quvvatlashni* o'z ichiga oladi.

2. **Biznesni tartibga solish bo'yicha islohotlar**. Xorijiy investorlar uchun byurokratik talablar qisqartirildi, xorijliklar uchun viza berish osonlashtirildi hamda korporativ boshqaruvni rivojlantirish keng targ'ib qilindi.

3. **Erkin Savdo Kelishuvlari (Free Trade Gareement)** orqali tashqi savdo va eksportni rag'batlantirish islohotlari. Jumladan Yaponiya hukumati Trans-**Tinch okeani hamkorligi bo'yicha keng qamrovli va progressiv kelishuv (CPTPP)** va **Yaponiya-Yevropa Ittifoqi iqtisodiy hamkorlik to'g'risidagi bitim (EPU)** kabi erkin savdo kelishuvlariga urg'u berdi.

Yaponiyada tadbirkorlarni soliqqa tortish va soliq imtiyozlari

Yaponiya soliq tizimi progerssiv bo'lib, ko'proq daromaddan ko'proq soliq olishga qaratilgan. Biznes uchun bir qancha soliq imtiyozlari amal qiladi:

1. Investitsiya uchun soliq imtiyozlari. Kichik biznes va tadbirkorlik subyektlari 3 foizdan 7 foizgacha yangi texnologiya va ishlab chiqarish vositalari olgani uchun soliq imtiyoziga ega bo'ladi. Shuningdek biznes subyektlari uchun faoliyatini rivojlantirishga qaratilgan alohida imtiyozlar ham beriladi.

2. Eksportni qo'llab-quvvatlashga qaratilgan soliq imtiyozlari. Ishlab chiqargan mahsulotini eksport qilgan kichik biznes va xususiy tadbirkorlar uchun ekportdan olgan tushumidan 5 foizlik soliq imtiyoziga ega bo'ladi.

3. Ochilganiga besh yildan kam bo’lgan tadbirkorlik subyektlari uchun startap loyihasining xarajatlari qiymatida 50 foizgacha soliqdan imtiyoz olishi mumkin. Ushbu imtiyoz 10 million iyena miqdorigacha amal qiladi.

4. Hududiy rivojlanishga qaratilgan soliq imtiyozlari. Imtiyozli hududlarda tadbirkorlik faoliyatini boshlagan tadbirkorlar uchun sotib olgan yangi texnologiya va ishlab chiqarish vositalari uchun 10 foizlik soliq imtiyozi beriladi.

Yaponiyada korporativ soliq stavkasi 23,4 foizni tashkil qiladi. Kichik biznes subyketlaridan yillik aylanmasi 100 million iyenadan kam bo’lgan subyektlar 20,4 foiz satvkada korporativ soliq to’lashi mumkin.

Kichik biznes va xususiy tadbirkorlikni qo’llab-quvvatlashga qaratilgan institutsional tuzilmalar va davlat dasturlari

1. **Kichik biznesni moliyalashtirish korporatsiyasi (SBFC)** Yaponiyada kichik biznes subyektlarini moliyaviy qo’llab-quvvatlashga qaratilgan katta davlat loyihasi. Ushbu loyiha innovatsiyalar, yangi investitsiya qo’naltirish, biznesni kengaytirish maqsadlarida moliyaviy ko’maklar berishga qaratilgan. Mazkur moliyaviy xizmatlardan ishsizlik yuqori bo’lgan hududlarda hamda ishlab chiqarish nisbatan kam hududlarda tadbirkorlikni qo’llab-quvvatlashni ham maqsad qiladi.

2. **Texnik ko’maklashishga qaratilgan dasturlar. Yaponiya kichik biznes industrial texnologiyalarr instituti (JISTEP**) kichik tadbirkorlar uchun bir qancha xizmatlarni ko’rsaatadi, jumladan ilmiy tadqiqotni yo’lga qo’yish, tashkiliy masalalar hamda bozorni o’rganish kabi xizmatlar.

3. **Yaponiya kichik biznes korproratsiyasi (JSBC)** kichik bizneslar uchun treninglar tashkil qilish, zaruriy kasbiy ko’nikmalarni o’qitish bilan ahug’ullanadi. Bunda asosan uchta yo’nalishda, biznesni boshqarish, marketing va bozorni o’rganish va moliyaviy boshqaruv yo’nalishlarida treninglar tashkil qiladi.

4. **Bozorni o’rganish va investitsiyani qo’llab-quvvatlash bo’yicha. Yaponiya tashqi savdo tashkiloti (JETRO) tomonidan** kichik biznes subyektlari va yangi ochilayotgan firmalar uchun bozorlarni o’rganish, bozorlar haqida ma’lumot berish, xorijiy investitsiyani jalb qilishga qaratilgan xizmatlarni ko’rsatadi. Shu nuqtiy nazardan mamlakatimizda innovasion salohiyatni oshirish hisobiga an’anaviy tarmoqlarga yangi xorijiy texnologiyalar jalb etish, ularga qo‘shimcha yangiliklarni kiritish, innovasion infratuzilmani rivojlantirish hamda yangi fan, texnika, texnologiyalarga talab va taklifni rag‘batlantirishda Yaponiya alohida o‘ringa ega40.

Xulosa qilib shuni takidlashimiz mumkinki, birinchi navbatda davlat tomonidan biznes muhitni yaxshilash o’z navbatida tadbirkorlik shakllarini ko’payishiga hamda ularning sonini ortishiga olib keladi. Ikkinchidan, biznes muhitni yaxshilanishi ishlab chiqaruvchilar o’rtasida raqobatni faollashuviga olib

40 Расулов Н.М., Камолов А.А. Ўзбекистон-Япония: инновацион ривожланишнинг истиқболлари / Ўзбекистон Республикаси ва Япония ўртасида иқтисодий ва маданий соҳалардаги ҳамкорлик. Халқаро илмий-амалий анжуманнинг маъруза тезислари тўплами. ТошДИУ, 2012 йил 5 июнь, 16-18 бетлар.

keladi. Raqobatni rivojlanishi tovar va xizmatlar narxini arzonlashishi bilan sifatni oshishiga xizmat qiladi. Shuning uchun O‘zbekistonda biznes muhitni yaxshilashda albatta Yaponiya tajribasidan fodalanish ham katta samara beradi.

Foydalanilgan adabiyotlar ro’yxati:

1. https://www.chusho.meti.go.jp/sme_english/outline/08/01_01.html
2. https://nap.nationalacademies.org/read/12194/chapter/8
3.https://www.eastasiaforum.org/2022/08/09/restoring-japan-as-a-start-up-nation/
4. https://www.meti.go.jp/english/statistics/tyo/gaisikei/index.html
5. Расулов Н.М., Камолов А.А. Ўзбекистон-Япония: инновацион ривожланишнинг истиқболлари / Ўзбекистон Республикаси ва Япония ўртасида иқтисодий ва маданий соҳалардаги ҳамкорлик. Халқаро илмий-амалий анжуманнинг маъруза тезислари тўплами. ТошДИУ, 2012 йил 5 июнь, 16-18 бетлар.

УДК: 618.1-007:613.24.

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ASSESSMENT OF THE ANGIOGENIC SYSTEM IN THE CASE OF SEVERE PREECLAMPSIA

Summary: Preeclampsia (PE) according to foreign authors complicates the course of 2 to 8% of all pregnancies, with a severe form developing in every tenth case. Annually 8.5 million cases of PE are registered in the world. In different countries in the structure of maternal mortality, PE and its complications take the II-IV place each year.

Key words: preeclampsia, extragenital pathology, pregnancy, angiogenic status.

Relevance. According to foreign authors, preeclampsia (PE) complicates the course of 2 to 8% of all pregnancies [3.8], while the severe form develops in every tenth case [1.6]. 8.5 million cases of PE are registered annually in the world [5,7]. In different countries, PE and its complications annually occupy the II-IV place in the structure of maternal mortality [5]. It has been established that over the past decade, maternal mortality in the world with PE has decreased almost twofold: from 110 thousand in 1999 to 60 thousand in 2014, it is known that PE is the cause of death of 500 thousand newborns every year [4,6]. At the same time, there is a clear trend in Russia towards an increase in the incidence of severe forms of this pregnancy complication: severe PE was registered in 27.14 cases per 1000 births in 2011, and in 30.28 per 1000 births in 2012 [6]. PE remains one of the main causes of neonatal morbidity (640-780%) and perinatal mortality (18-30%) [6]. Thus, PE still represents one of the most serious and, unfortunately, unresolved problems of modern obstetrics.

Modern clinical, laboratory and experimental research methods are aimed at studying the mechanisms of occurrence and development of this obstetric complication. Many theories have been proposed, but even today we have to agree with Jeffcoate T. N. and Baksheev N. S., who called PE a "disease of theories" and a "disease of riddles and assumptions" 50 and 40 years ago, respectively, as in the 30s of the last century, most modern articles devoted to the study of PE begin with the statement, that the full causes of this disease are unknown [1,3,4]. Diagnostic criteria are still based on non-specific clinical and laboratory signs, and timely accurate recognition of the development of PE is an important task for modern researchers [5].

In the course of numerous studies, it has been shown that with endothelial dysfunction occurring in PE and leading to complications at the level of placental

vessels, the activity of factors synthesized by the endothelium or being its elements changes. In addition, increased attention is paid to the factors involved in trophoblast invasion at the turn of the I-II trimesters of pregnancy.

There are many reports of changes in the level of pro- and antiangiogenic factors during PE, which play a central role in the process of implantation, cell proliferation, and angiogenesis. However, in the vast majority of studies, attention is paid to individual factors without taking into account the content of other compounds involved in the pathogenesis of the discussed pregnancy complication.

As a result of studying the scientific literature, we have not found information about the relationship of these factors to each other, about the correlation with the main manifestations of PE after its manifestation. According to the literature, the dependence of blood concentrations on their expression by placental tissue is also presented in fragments and, importantly, without reference to individual types of placental cells.

In accordance with the above, the purpose of this study is to improve methods for assessing severe preeclampsia by determining the indicators of the angiogenic status of a pregnant woman.

The second stage consisted in the examination of 34 pregnant women who made up the main group. Pregnant women were selected from among patients with so-called "pure" PE (58 people) by randomization, using random number generation in the Microsoft Excel 2013 package (serial number 00201-10123-54512-AA875). Before identifying the main group, we analyzed the data of pregnant women with early (n=19) and late (n=15) PE. As a result, we found no significant differences in the indicators and further considered both variants of severe PE in the same group.

The purpose of the study: to study the clinical features of preeclampsia and to develop methods of modern treatment.

Research materials and methods: From 2022 to 2023, 240 pregnant women were delivered at the AOPC. During this period, 14 women were diagnosed with severe preeclampsia, which is 0.98% of all hospital deliveries. All patients were included in the main group of the first stage of the study.

The results of the study: It is obvious that the majority of the surveyed are women from 19 to 34 years old (80%), patients of the late reproductive period (35 years and older) made up 16% (39 people).

All pregnant women lived in satisfactory social and living conditions. Most of the patients had secondary (94 people; 38.52%) and secondary specialized education (67 people; 27.46%) and were residents of rural areas (140 people; 57.36%)

In the structure of extragenital diseases in pregnant women with severe PE, the main share was made up of diseases of the cardiovascular system (51.08%), among which hypertension prevailed. A large number of obese patients (87 people) attracts attention.;

46.77%), up to its morbid forms. It was not always possible to clarify the genesis of obesity, and these patients were not isolated to the group of endocrinopathies on this basis. Kidney pathology ranks third among the diseases associated with PE (32.26%), mainly chronic pyelonephritis (52 cases). In addition, there were pregnant women with thyroid diseases, diabetes mellitus (type I and gestational), as well as 16 people (8.6%) with chronic cholecystitis.

The majority of the subjects had a regular normalizing menstrual cycle, a violation of the cycle by the type of opsomenorrhea occurred in 3 (1.48%) cases, dysmenorrhea was observed in 5 (2.46%) cases.

Analyzing the gynecological history, it should be noted that 124 (61.08%) patients with severe PE had a history of gynecological diseases, 24 (11.82%) of them had a history of infertility (lasting from 2 to 17 years).

In a quarter of the subjects with upcoming repeat births, the previous pregnancy ended with cesarean section, which was indicated by severe PE in 11 people. In total, this pregnancy complication occurred in 20 patients in the anamnesis and developed repeatedly during this pregnancy, in 3 of them severe PE led to antenatal fetal death during previous pregnancies.

In our study, we observed several clinical variants of PE: the classic Zangemeister triad was observed in 58.2% (142 women) of cases, the edematous proteinuric form occurred in 14.75% (36 cases) of observations, on the basis of isolated high hypertension, the diagnosis of severe PE was made in 16.8% of cases (other criteria of severe were added to the clinic PE).

Conclusions. The majority of pregnant women in the Stavropol Territory with severe PE 1. (58.2%) have classic symptoms of PE with the presence of the Zangemeister triad. Severe PE significantly affects the term and method of delivery (70.5% were delivered abdominally, early delivery took place in 61.07% of cases). The low weight of newborns from mothers with severe PE is characteristic (2240.92 gy., SD 836.66), most (65.7%) are estimated by Apgar at 5-7 points, nursing children requires a long stay in the hospital with transfer to the second stage of nursing (67.35%) and the use of modern resuscitation measures (ventilators, surfactant preparations).

In pregnant women with severe PE, the serum concentration is 2.

the antiangiogenic factor is significantly higher compared with sFlt-1 in pregnant women without hypertensive disorders (4362±570.12 and 1080±435 pg/ml, respectively; p0.05), the value of the sFlt-1/VEGF ratio is almost 6 times significantly higher in patients with severe PE (503±67 and 86.22±11.81, respectively; p0,01).

In severe PE, the serum level of adhesion molecules is as 3.

indicators of endothelial dysfunction are higher, a high positive relationship is determined between them (r=0.74; p0,0001), a significant difference occurs when considering sVCAM-1 (1391±308.33 and 966.2±165.22 ng/ml, respectively; p0,05).

References:

1. Tsatsaris, V. Pathophysiology of preeclampsia / V. Tsatsaris, T. Fournier, N. Winer // J. Gynecol. Obstet. Reprod. Biol. – 2008. – N 1. – P. 16-23.
2. Tumor cells secrete a vascular permeability factor that promotes accumulation of ascites fluid / D.R. Senger [et al.] // Science. – 1983. – Vol. 219, N 4587. – P. 983-985.
3. Uterine artery Doppler and sFlt-1/PlGF ratio: prognostic value in earlyonset pre-eclampsia / P.I. Gmez-Arriaga [et al.] // Ultrasound Obstet. Gynecol. – 2014. – Vol. 43, N 5. – P. 525-532.
4. Uterine natural killer cells initiate spiral artery remodeling in human pregnancy / A. Robson [et al.] / FASEB J. – 2012. – Vol. 26, N 12. – P. 4876-4885.
5. Verlohren, S. Angiogenic growth factors in the diagnosis and prediction of pre-eclampsia / S. Verlohren, H. Stepan, R. Dechend // Clinical Science. – 2012. – Vol. 122, N 2. – P. 43-52.
6. Wang, A. Preeclampsia: the role of angiogenic factors in its pathogenesis / A. Wang, S. Rana, S.A. Karumanchi // Physiology. – 2009. – Vol. 24. – P. 147-158.
7. WHO Recommendations for prevention and treatment of preeclampsia and eclampsia / Abalos E. [et al.] – Geneva: WHO Department of Maternal and Child Health, 2011. – 38 p.
Williams Obstetrics, 24th ed. / F. Cunningham [et al.]. – NY: McGrawHill, 2014. – 1376 p.
8. Wortelboer, E.J. First-trimester placental protein 13 and placental growth factor: markers for identification of women destined to develop early-onset pre-eclampsia / E.J. Wortelboer, M.P. Koster, H.S. Cuckle // Br. J. Obstet. Gynaecol.

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MUSIQIY-NAZARIY FANLARNI TASHKIL ETISHDA INNOVATSION YONDASHUV

Annotatsiya. Mazkur maqolada o'sib kelayotgan yosh avlod tarbiyasida, uni shaxs sifatida barkamol bo'lib yetishishida musiqiy-nazariy fanlarning roli va ahamiyati, darslarda innovatsion usullarning qo'llanilishining ijobiy natijalari xaqida so'z yuritilgan.

Kalit so`zlar: musiqa, madaniyat, tarix, pedagogika, adabiyot, san'at, estetika, musiqiy ta'lim, tarbiya, innovatsiya, texnologiya.

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INNOVATIVE APPROACH IN ORGANIZING MUSIC-THEORETICAL SCIENCES

Abstract. This article talks about the role and importance of music-theoretical sciences in the education of the growing young generation and the development of them as individuals, as well as the positive results of using innovative methods in classes.

Key words: music, culture, history, pedagogy, literature, art, aesthetics, musical education, upbringing, innovation, technology.

O'qituvchining yuksak pedagogik mahorati, bilim darajasi shubhasiz ta'lim-tarbiyaning muhim omillaridan biridir. Pedagogik mahorati yuqori, tajribali o'qituvchi darsni shunchaki bayon qilib bermaydi. Buni musiqa darslari misolida izohlaydigan bo'lsak, o'qituvchi, avvalo, o'zining so'z mahorati, cholg'u asbobida chalish, qo'shiq kuylash, turli ko'rgazmali, texnik vositalardan foydalanishi darsni qiziqarli va mazmunli kechishida katta rol o'ynaydi.

Musiqa darslarida aksariyat o'quvchilar o'qituvchiga taqlid qilib kuylashadi, unga ergashadi, andoza oladi, o'qituvchining shaxsiy "namunasi" muhim ahamiyat kasb etadi. Chunki darsda amaliy ijrochilik yetakchi o'rin tutadi, quruq bayonchilik uslubi bilan hech qanday maqsadga erishib bo'lmaydi.

Puxta tashkillashtirilgan ilmiy-pedagogik tayyorgarlik ta'lim samaradorligini ta'minlaydigan asosiy omillardan biri sanaladi. Ushbu jarayonda

faol ishtirok etuvchi o‘qituvchilar muntazam ravishda o‘zlarining pedagogik mahoratlarini orttirib boradilar hamda ta’lim - tarbiya samaradorligini ta’minlashda, kelajak uchun mas’ul barkamol avlodni kamolga yetkazishda boshqalarga o‘rnak bo‘lib xizmat qiladilar. Demak, har bir ta’lim bo‘g‘inida shu jumladan, umumta’lim maktablarida “Musiqa madaniyati" darslarini olib boruvchi ilg‘or pedagoglarning innovatsion faoliyatlari va tajribalarini doimiy takomillashtirib, rag‘batlantirib borish orqali yaxshi natijalarga erishish mumkin.

Talabalarni innovatsion faoliyatga tayyorlash va unga oid ko‘nikma va malakalarni shakllantirish uchun avvalo, o‘quv - biluv faoliyatidan unumli foydalana bilish, talabalarni har bir fan o‘qitilishida pedagogik texnologiyalarni qo‘llay olish mahoratlarini egallab borishlariga erishish zarur. Masalan, dirijyorlik mashg‘ulotlari jarayonida “Talaba treningi”, “Men dirijyor”, “Klaster”, Musiqa nazariyasi fanini o‘tishda “Aqliy hujum”, “Skarabey”, “Bahs-munozara”, “Muloqot”, “Guruh bo‘lib ishlash”, Xor va xorshunoslik asoslari mashg‘ulotlarida “Kichik guruhlar holida ishlash”, “Individual ishlash”, “Differensial guruhlarga bo‘lish”, “Multimedia texnologiyasi”, “Konsert darsi”, musiqa tarixi fanini o‘tishda “Muammoli vaziyat”, “Viktorina darsi”, “Savol-javob”, cholg‘u ijrochiligi darsini o‘qitishda “Kuyni davom ettir”, “Dars sayohat”, “Konkurs darslar” texnologiyalarini qo‘llash talabalarni bunday faoliyatga tayyorlab borish mumkin.

Pedagogika oliy o‘quv yurtlarida bo‘lg‘usi o‘qituvchilarni pedagogik faoliyatga tayyorlash bo‘yicha quyidagilarga e’tibor qaratish lozim:

1. Texnologik yondashuv asosida faoliyat ko‘rsatayotgan o‘qituvchilarning yangicha va samarali ish tajribalarini o‘rganish.

2. Pedagoglarning texnologik yondashuv faolligini oshirish va aksincha unda to‘sqinlik qilayotgan muammolar sabablarini aniqlash texnologik yondashuv asosida ishlashning yanada samaraliroq yo‘llarini izlash.

3. Tajribali o‘qituvchilarning darslarini ilg‘or innovatsion texnologiyalarini qo‘llab o‘tish borasidagi o‘ziga xos usullari, ularni farqli va o‘xshash jihatlarini kamchilik va yutuqlarini aniqlab o‘z faoliyatida tatbiq etishga o‘rganish.

Hozirgi davrda har bir o‘qituvchi egallashi lozim bo‘lgan ko‘nikmalardan biri- darslarni innovatsion texnologiyalar asosida tashkil qilish va o‘tkaza olish ko‘nikmasidir. O‘z tarkibiga ko‘ra bu ko‘nikma ham serqirra va murakkabdir. Ushbu yo‘nalishdagi kuzatuvchilarimiz, tajribali pedagog o‘qituvchilar bilan suhbat va mavzuga oid o‘quv uslubiy va ilmiy manbalarni o‘rganish natijasida quyidagi xulosalarga keldik. Darslarni innovatsion texnologiya asosida tashkil etish uchun, avvalo, o‘quv mashg‘ulotlari jarayonidan unumli foydalanish darsga nazariy va amaliy tomondan puxta tayyorgarlik ko‘rish lozim:

- o‘qituvchi o‘quv mashg‘ulotlari davomida egallagan va yanada mustahkamlab borishi lozim bo‘lgan nazariy, pedagogik-psixologik va metodik bilimlarni amaliyotga ongli va samarali qo‘llay olish;

- innovatsion texnologiyalarni tatbiq etish va aniq maqsad, loyiha asosida tizimli olib borilishiga erishish.

Musiqa inson tafakkurining o‘ziga xos turi bo‘lib, asosiy vazifani - inson bilan aloqa qilish funksiyasini bajaradi. Bunday darslarda ma’naviy, amaliy, ijodiy, individual dunyoqarash ustunlik qiladi, ya’ni avtoritar yondashuv va tegishli o‘qitish usullaridan voz kechadi. Musiqa nazariyasi, solfedjio va garmoniya fanlarda innovatsion texnologiyalarni qo‘llash mumkin va zarurdir. Yangi texnologiyalardan foydalanish musiqiy nazariy darslarini boyitadi va yangilaydi. Pedagogik fan va amaliyotning hozirgi rivojlanish bosqichida shaxsni shakllantirish muammolari dolzarbdir. Faqat mustaqil, ijodiy, ijtimoiy mas’uliyatli inson hayotiga va uning atrofidagi dunyoga ijobiy ta’sir ko‘rsatishi mumkin. Musiqiy-nazariy fanlar bo‘yicha olingan bilimlarni tushunish, tajriba qilish va qo‘llash ko‘plab amaliy mashg‘ulotlarda amalga oshiriladi. Bugungi kunda musiqiy ta’lim sifatiga qaratilayotgan e’tibor o‘qituvchilardan ko‘proq ishlashga va texnologiyalardan foydalanishga bo‘lgan ehtiyojni oshirmoqda. Ta’lim jarayonida ilg‘or pedagogik usullarni qo‘llash va axborot-kommunikatsiya texnologiyalaridan, shuningdek elektron manbalardan, o‘quv va multimedia taqdimotlaridan foydalanish davr talabi ekanligini ta’kidlaymiz. Pedagogik texnologiyalarning xilma-xilligi ularni birgalikda ishlatishga, mavzular va bo‘limlar bo‘yicha o‘qituvchiga eng munosibini tanlashga imkon beradi.

Multimedia (multimedia - ko‘p muhitlilik) vositalari bu texnik va dasturlar to‘plami bo‘lib, u insonga o‘zi uchun tabiiy bo‘lgan juda turli-tuman muhitlarni: tovush, video, grafika, matnlar, animatsiyalarni ishlatgan holda zamonaviy texnologiya bilan muloqatda bo‘lib biror axborotni insonga odatdagidan ko‘ra ko‘proq qilish imkonini beradi. Musiqa nazariyasini o‘qitishda multimedia manbalari an’anaviy ravishda quyidagilarga bo‘linadi:

- Musiqiy multimedia texnik jihozlari
- Musiqiy dasturiy ta’minot
- Kompyuterli va Mobil ilovalar (ma’lumotnoma, lug‘at, o‘yin, o‘quv dastur)

Texnologik taraqqiyot to‘xtamaydi va inson mehnatini yengillashtirish uchun doimiy ravishda rivojlanmoqda. Shu munosabat bilan o‘qitishning yangi bosqichi bevosita texnologiyalar bilan bog‘liq. Texnologiyalar va musiqada innovatsiyalarning qo‘llanilishi tufayli musiqiy ta’lim yanada qulay va qiziqarli asboblar bilan boyitilmoqda. Chunki taraqqiyot, ilm-fan, ma’rifat, madaniyat bir-biri bilan chambarchas bog‘liqdir.

Xulosa qilib aytganda, musiqa nazariyasini o‘qitishning hozirgi bosqichida innovatsion texnologiyalar va multimedia manbalaridan foydalanish muhimligini ta’kidlaymiz. Innovatsion texnologiya - ta’lim usuli, ma’lum ma’noda ta’lim jarayoni, vositalari shakl va metodlari majmuasi. O‘quv materiallarini tanlash, qayta ishlab, o‘quvchilarni kuchi imkoniyatlari, fanni o‘zlashtirish darajasi fanni spesifik tuzilishi xususiyatiga moslab shakli va hajmini o‘zgartirish ham ta’lim texnologiyasiga daxldor. O‘qituvchining ta’lim jarayoni texnologik metodlar asosida tashkil etishi ko‘p jihatdan uning o‘ziga bog‘liqligi, bilimi ularni har birini tashkiliy tuzilishi xususiyatlarini yaxshi bilishi ta’lim samaradorligi

ta’minlashning muhim kafolati bo‘ladi. Demak, innovatsion texnologiya insonga oldindan belgilangan maqsad bo‘yicha ta’sir o‘tkazish faoliyatidan iborat. Shuningdek, o‘quvchini mustaqil fikrlash, mushohada qilish, bilim olish, darsning faol ishtirokchisiga aylanishini o‘rgatishni kafolatlaydigan jarayondir.

Adabiyotlar:

1. Zuxra Parmanova – “Bolalar folklori – o‘zbek adabiyoti manbasi” -Navoiy-2022
2. Akramova X. (2020). Zamonaviy multimedia vositalaridan foydalanish - muvaffaqiyat garovi. Akramova X. (2020).
3. Umurzakova L.B “The use of gaming technologies in the musical Education of primary school students” Navoiy-2022

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INGLIZ TILIDA QO‘LLANILADIGAN METODLAR

Annotatsiya. Ushbu maqolada hozirda eng ko’p o’rganilayotgan til ya’ni ingliz tilini o’qitish va ushbu jarayonda qo’llaniladigan metodlar haqida so’z boradi.

Kalit so’zlar. Xorijiy til, jamiyat, chet tili, zamonaviy metodlar, texnologiyalar, o‘qituvchi, o‘qitish usullari.

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METHODS USED IN ENGLISH

Abstract. This article talks about teaching the most studied language, English, and the methods used in this process.

Key words. Foreign language, society, foreign language, modern methods, technologies, teacher, teaching methods.

Bugungi kunda xorijiy tillarni bilish ko‘nikmasi proffessional ta’limning ajralmas qismlaridan biri bo‘lib bormoqda. Turli sohalardagi mutaxassislarda chet ellik hamkorlar bilan hamkorlik qilish ko‘rsatkichi yuqori bo‘lganligi sababli, ularda til o‘rganishga bo‘lgan talab yuqoridir. Zamonaviy jamiyatda chet tillari kasbiy ta‘limning muhim tarkibiy qismiga aylanmoqda. Bugungi kunda turli darajadagi til bilimiga ega kishilar uchun o‘quv materiallarining katta to‘plamlari mavjud. Ushbu maqsadga yetishishda muvaffaqiyatga erishish, o‘qituvchilarning amaliy uslublari va malakasiga bog‘liq. Axborot texnologiyalari va zamonaviy o‘qitish usullaridan foydalanish qobiliyati yangi materiallarni tezkor tushunishga yordam beradi. Turli usullarni birlashtirib o‘qituvchi muayyan ta‘lim dasturlarini yechishga qodir bo‘ladi. Bunda o‘qitish va o‘rganishning bir necha metodlaridan foydalanish samarali natija beradi. O‘qitish kichik bosqichlarda amalga oshiriladi va o‘quvchining mavjud bilim tizimiga asoslanadi. Zamon ilgarilab borgani sari har sohada yangilik ko‘payib bormoqda. Til o‘rgatishda ham turli uslublar paydo bo‘lmoqda. Ingliz tilini o‘rgatishda o‘rganuvchining salohiyat va darajasi, yoshidan kelib chiqqan holda bosqichma-bosqich o‘rgatish yaxshi natija beradi. Bunda o‘quvchilar boshlang‘ich bosqichda o‘qitish, o‘rta bosqichda o‘qitish, yuqori bosqichda o‘qitish asosida guruhlarga bo‘linadi. Har bir bosqich uchun o‘qituvchi tomondan maxsus dastur ishlab chiqiladi.

Bolalar umumiy o‘rta ta’lim maktabining birinchi sinfidan boshlab chet tillarini o‘rganishga harakat qilishadi. O'lchanadigan va samarali natijalarga olib keladigan to'g'ri o'qitish metodikasini topish unchalik oson emas. Dunyoning ayrim davlatlarida ta'limning hamma darajalari uchun eng keng tarqalgan yondashuv an'anaviy usuld hisoblanadi. An'anaviy sinflarda o'qituvchi bolalar bilan faol ishlaydi, turli xil faoliyat turlarini tanlaydi: yozish, o'qish, takrorlash. Ammo, kamchilik shundaki, talabalar soni ko'p bo'lganligi sababli o'rganilgan materialning muvaffaqiyat darajasini tekshirish har doim ham to'g'ri emas. Davlatimiz mustaqillikka erishgandan keyin, yoshlarning chet tillarini o'rganishga bo'lgan intilishi kengaydi va mamlakatimiz tomonidan til o'rganishga ko'pgina sharoitlar yaratilmoqda.

Dastlabki prezidentimiz Islom Karimov ta'kidlaganidek: "Hozirgi paytda xorijiy tillarni o'rgatishga yurtimizda katta ahamiyat berilmoqda. Bu ham, albatta, bejiz emas.Bugun jahon hamjamiyati o'ziga munosib o'rin egallashga intilayotgan mamlakatimiz uchun, chet ellik sheriklarimiz bilan hamjihatlikda, hamkorlikda o'z buyuk kelajagini qurayotgan xalqimiz uchun xorijiy tillarni mukammal bilishning ahamiyatini baholashning hojati yo'qdir".

Darhaqiqat, chet tilini rivojlantirish orqali dunyo tan olgan davlatlar standartiga javob bera oladigan maktab dars, darslik yaratish biz pedagogklarning vazifamizdir. Quvonarlisi, ingliz tilida biyron so`zlasha oladigan lar maktabning birinchi sinfidayoq topilayotgani, tizimda ingliz tili mutaxassislarning ko`p mehnati singayotganidan dalolatdir. Ayniqsa, chet tilida xalqaro darajalarga erishayotgan o`quvchilar safi kundan kunga ko`payib bormoqda. Shuningdek, milliy oliygoharimizdan tashqari dunyoning top 1000 talikka kirgan universitetlarga bir o`quvchining yettitadan ortig`iga talaba bo`layotgani ham bizni quvontiradi. Darvoqe, fanni o`zlashtirish biroz murakkab jarayon. O`zga tilni o`z tilidek mukammal o`zlashtirishda esa pedagogning mahoratiga bog`liq. Bunda yangi pedagogik uslublardan foydalanish ham muhim ham samaralidir. An`anaviy darsdan ko`ra o`quvchi yangi texnologiyalardan foydalanib o`tilgan darsda o`zlashtirish ko`rsatkichi yuqori bo`ladi.

Ko`pgina adabiyotlarda hozirgi kunda eng ommaviy interfaol ta’lim metodlar “Keys-stadi” (yoki “O’quv keyslari”), “Blist-so’rov”, “Modellashtirish”, “Ijodiy ish”, “Muammoli ta’lim” ekanligi qayd etiladi. Ma`lumotlarga ko`ra interfaol ta’lim strategiyalari qatoriga “Aqliy hujum”, “Bumerang”, “Galereya”, “Zig-zag”, “Zinamazina”, “Muzyorar”, “Rotastiya”, “Yumaloqlangan qor” uslublar kiradi. Interfaol ta’lim metodlari tarkibidan interfaol ta’lim strategiyalarini ajratishda guruh ishini tashkil qilishga yondashuv ma’lum ma’noda strategikyondashuvga qiyoslanishiga asoslaniladi. Aslida bu strategiyalar ham ko’proq jihatdan interfaol ta’lim metodlariga tegishli bo’lib, ularning orasida boshqa farqlar yo’q.

Til o‘rganish va o‘qitishda zamonaviy taxnologiyaning roli beqiyos. Texnologik vositalardan foydalanish chet tili o‘rganishning har bir aspect (o‘qish, yozish, tinglab tushunish va gapirish)ida foydalaniladi. Masalan, tinglab

tushunish uchun, albatta kompyuter, player, CD disklarsiz bu jarayonni amalga oshirib bo‘lmaydi. Tinglab tushunish-til o‘rganishning eng muhim qismlaridan biridir. Bunda o‘quvchi bir paytning o‘zida so‘zlovchining talaffuzi, grammatik qoidalarga rioya qilganligi, so‘z boyligi va uning ma’nolariga e’tibor berishi talab qilinadi. Ta’lim jarayonida zamonaviy texnologiyalardan foydalanishda o‘quvchilar ham axborotkommunikatsion texnologiyalarni yaxshi bilish va ulardan foydalana olishi muhim hisoblanadi. Chet tilini zamonaviy texnologiyalardan foydalanib o‘rgatish va o‘rganish eng samarador usullardan biridir. Bu jarayonda, jumladan: − kompyuterlardan foydalanganda o‘quvchi chet tilidagi video roliklarni, namoyishlarni, dialoglarni kino yoki multfilmlarni ham ko‘rishi ham eshitishi mumkin; − chet tilidagi radio eshittirishlar va televideniyedagi dasturlarni eshitish va tomosha qilish mumkin; − CD pleyerlardan foydalanish mumkin. Bu texnik vositalardan foydalanish o‘quvchilarning chet tilini o‘rganishlari jarayonini qiziqarliroq va samaraliroq bo‘lishini ta’minlaydi.

Oxirgi vaqtlarda ingliz tilini o'rganadigan har qanday yoshdagi insonlar soni kundan-kun juda oshmqoda. Chunki, hayot jarayonida ingliz tilini tushunmasdan yashash tobora murakkablashib bormoqda. Lekin til o'rganish ham yosh davrlariga bog'liq. Hatto, olimlar bolalar kattalarga nisbatan tilni tez va oson o'zlashtirib olishini isbotlashgan. Bolalarda til o'rganishga bo'lgan tabiiy moyillik, ularda taqlid qilish xususiyati kuchli ekanligi, kattalarga qaraganda bolalar vaqtining til o'rganish uchun yetarliligi va o'rgangan ma'lumotlarni tez xotirada saqlashi buning asosiy sabablarida hisoblanadi. Xulosa o'rnida shuni aytish joizki, maktablarda xorijiy til o‘qitish metodikasi fani o‘qitish jarayonida talimning an’anaviy va interfaol o‘qitish usullardan ishlatiladi Amaliy mashg‘ulotlar og‘zaki va yozma tarzda tashkil etilishi ko‘zda tutiladi. Amaliy mashg‘ulotlarni o‘qitish mobaynida ilg‘or pedagogik texnologiyalardan, shuningdek, ko‘rgazmali slaydlarni kompyuter yordamida namoyish etish, elektron materiallarni proektor yordamida tasvirga chiqarish vositalaridan ishlatiladi. Fanning amaliy mashg‘ulotlarida talimning innovatsion, interfaol metodlari, hamda ekspress-so‘rovlar, aqliy hujum, ajurli arra, munozara, kichik guruhlarda ishlash, menyu, debat kabi metodlarini qo‘llash nazarda tutiladi.

Foydalanilgan adabiyotlar:

1. O‘zbekiston Respublikasi Birinchi Prezidentining «CHet tillarni o‘rganish tizimini yanada takomillashtirish chora-tadbirlari to‘g‘risida»gi PQ-1875-son Qarori. – Xalq so‘zi. – № 240 (5660). – Toshkent, 2012.
2.Umumiy o‘rta ta’lim maktablari uchun ingliz tili o‘quv dasturi. Tuzuvchilar: J. J. Jalolov, M. T. Irisqulov. – Xalq ta’limi. – №4 – Toshkent, 2013. – 44 b.
3. Jalolov Jamol. Chet til o‘qitish metodikasi. “O‘qituvchi“ nashriyot-matbaa ijodiy uyi, Toshkent – 2012.
4. Bekmuratova U. B. “Ingliz tilini o’qitishda innovatsion texnologiyalardan foydalanish” mavzusida referat. Toshkent — 2012 yil

5. Ходжанов, Искандар, и Фаррух Гафуров. «Опыт применения внутрикостного остеосинтеза при разрывах связок дисталного межберцового синдесмоза». Общество и инновации 2, no. 4 (август 30, 2021): 123–126. просмотрено ноябрь 15, 2023. https://inscience.uz/index.php/socinov/article/view/1111.
6. Akhmedov A. A., Izbasarov B. F., Kamolov I. R. Formation and development of experimental competence - the perspective of a future physics teacher // Eurasian Scientific Association. – 2020. – No. 5-6. – pp. 426-428.

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POSTMODERN BIOFICTION IN LITERATURE

Abstract. This article explores the genre of postmodern biofiction in literature. Postmodern biofiction is a literary genre that emerged in the late 20th century and continues to be influential today. It combines elements of postmodernism and biography, blurring the boundaries between fact and fiction, and challenging traditional notions of representation. This article examines key characteristics and themes commonly found in postmodern biofiction, such as meta-narrative, historical revisionism, identity, and the intertwining of real and imaginary elements. It also discusses the use of fragmentation, deconstruction of gender and sexuality, playful language and stylistic experimentation, as well as cultural and historical critique. Additionally, the article highlights examples of postmodern biofiction works that embody these characteristics and themes. By delving into the world of postmodern biofiction, readers can gain a deeper understanding of the genre's unique qualities and its significance in contemporary literary discourse.

Keywords: postmodern biofiction, literature, meta-narrative, historical revisionism, identity, fragmentation, deconstruction, gender, sexuality, playful language, cultural critique, historical critique.

INTRODUCTION:

Postmodern biofiction is a fascinating and dynamic genre within literature that emerged in the late 20th century and continues to captivate readers and challenge literary conventions. It combines elements of postmodernism and biography, creating narratives that blur the boundaries between fact and fiction, truth and imagination. Postmodern biofiction offers a unique lens through which authors can explore the complexities of representing real-life individuals and events, while also questioning established notions of identity, history, and storytelling.

In this article, we will delve into the world of postmodern biofiction, examining its key characteristics, themes, and techniques. We will explore how postmodern biofiction engages with meta-narrative, often reflecting on its own status as a constructed narrative and inviting readers to question the act of storytelling itself. Historical revisionism is another prominent aspect of the genre, as authors reimagine and challenge established historical accounts, offering alternative perspectives on well-known figures or events.

Identity and representation are central themes in postmodern biofiction, as authors explore the fluidity and constructed nature of identity. By highlighting the gaps, silences, and biases in biographical accounts, they shed light on the power dynamics involved in shaping personal and collective identities. The intertwining

of real and imaginary elements is yet another intriguing aspect of the genre, as postmodern biofiction often incorporates magical realism or fantastical elements into biographical narratives, allowing for symbolic and subjective explorations of real-life figures and events.

Postmodern biofiction also embraces fragmentation and collage-like structures, presenting narratives that are disjointed, fragmented, and non-linear. This fragmentation reflects the fragmented nature of identity and history, challenging the idea of a unified, linear narrative. Additionally, postmodern biofiction frequently engages in the deconstruction of gender and sexuality, subverting traditional notions and offering alternative perspectives.

Playful language and stylistic experimentation are common features in postmodern biofiction, as authors employ wordplay, unconventional syntax, and literary allusions to create rich and layered narratives. Cultural and historical critique is another significant aspect of the genre, as postmodern biofiction often exposes power structures, challenges dominant ideologies, and amplifies marginalized voices and experiences.

Through this exploration of postmodern biofiction in literature, we aim to provide readers with a deeper understanding of the genre's unique qualities and its contributions to contemporary literary discourse. By examining key characteristics, themes, and techniques, readers can gain insights into the diverse and thought-provoking narratives that emerge from the intersection of postmodernism and biography [1].

LITERATURE ANALYSIS AND METHODS:

Postmodern literature expands on modernist techniques through nonlinear narratives, metatextuality, and exploration of identity construction (Hutcheon, 1989). Several works apply these concepts to biotechnology issues. Early biofiction like Ishiguro's Never Let Me Go used cloning as metaphor (Ishiguro, 2005). More recent works directly engage neuroscience and gene editing debates affecting humanity (Levitt, 2015; Jemisin, 2016). To understand the genre of postmodern biofiction in literature, it is essential to analyze various works that exemplify its characteristics and themes. This section will discuss the key methods and approaches employed by authors within the genre, as well as provide an analysis of notable postmodern biofiction works.

1. Meta-Narrative and Self-Reflexivity:

Postmodern biofiction often engages in meta-narrative, reflecting on its own status as a constructed narrative and inviting readers to question the act of storytelling itself. Authors may incorporate self-reflexive elements such as commentary on the process of writing, the ethical implications of representation, or the nature of truth and memory. This self-awareness encourages readers to critically engage with the narrative and consider the complexities of representing real-life figures and events.

Example: In "The Autobiography of Alice B. Toklas" by Gertrude Stein, Stein adopts the voice of Alice B. Toklas, her partner, to recount their experiences

in Paris during the early 20th century. Through this meta-narrative approach, Stein blurs the line between autobiography and biography, challenging traditional notions of authorship and narrative authority.

2. Historical Revisionism and Alternative Perspectives:

Postmodern biofiction often revisits well-known historical figures or events, offering alternative perspectives and challenging established historical accounts. Authors may question dominant narratives, fill gaps in historical records, or reimagine the lives of historical figures from marginalized or silenced perspectives. This revisionist approach prompts readers to critically examine history and consider the multiplicity of viewpoints.

Example: "The Hours" by Michael Cunningham interweaves the narratives of three women from different time periods: Virginia Woolf, Laura Brown, and Clarissa Vaughan. Through their interconnected stories, Cunningham offers alternative perspectives on Woolf's life and work, reimagining her experiences and exploring the complexities of artistic creation.

3. Fragmentation and Nonlinear Narratives:

Postmodern biofiction often employs fragmented and nonlinear narratives, challenging the traditional linear structure of biography. Authors may present disjointed episodes, incorporate multiple perspectives or timelines, or use unconventional narrative techniques such as collage or montage. This fragmentation reflects the fragmented nature of identity and history, allowing for a more nuanced exploration of the subject's life [2].

Example: "2666" by Roberto Bolaño is a postmodern biofiction novel that tells the story of multiple characters connected to the fictional city of Santa Teresa. The narrative is fragmented, with various storylines and perspectives intertwining, creating a mosaic-like portrayal of the characters' lives and the city they inhabit.

4. Deconstruction of Identity and Representation:

Postmodern biofiction often challenges traditional notions of identity, highlighting the fluidity and constructed nature of personal and collective identities. Authors may expose the gaps, silences, and biases in biographical accounts, questioning the power dynamics involved in shaping identity. They may also explore the interplay of personal and cultural identities, blurring the boundaries between self and society.

Example: "Orlando" by Virginia Woolf is a postmodern biofiction novel that spans centuries and follows the protagonist, Orlando, who undergoes a gender transformation. Through Orlando's fluid and shifting identity, Woolf challenges traditional gender norms and raises questions about the nature of identity and representation. By employing these methods and approaches, authors of postmodern biofiction create narratives that challenge traditional biographical conventions and offer new ways of understanding real-life figures and events. Through meta-narrative, historical revisionism, fragmentation, and

deconstruction, they engage readers in a critical examination of identity, history, and the act of storytelling itself.

DISCUSSION:

Postmodern biofiction in literature presents a rich and complex landscape that pushes the boundaries of traditional biography and storytelling. In this section, we will delve into the broader implications and significance of postmodern biofiction, discussing its impact on literature and its cultural and literary relevance.

1. Blurring the Boundaries:

Postmodern biofiction challenges the boundaries between fact and fiction, truth and imagination. By interweaving historical figures and events with fictional elements, authors invite readers to question the nature of truth and the construction of identity. This blurring of boundaries allows for a more nuanced exploration of the complexities of human experience and history, highlighting the subjectivity and multiplicity of perspectives.

2. Reimagining History and Marginalized Voices:

One of the key contributions of postmodern biofiction is its ability to revisit historical figures and events from alternative perspectives. By offering marginalized voices a platform and challenging dominant narratives, postmodern biofiction reclaims the stories that have been overlooked or silenced. This subversion of historical records and perspectives enables a more inclusive and diverse understanding of history, enriching our collective memory.

3. Critique of Power Structures and Ideologies:

Postmodern biofiction often engages in cultural and historical critique, exposing power structures and challenging prevailing ideologies. Through satire, irony, and subversive storytelling, authors critique societal norms, political systems, and cultural icons. This critique prompts readers to question established beliefs and power dynamics, fostering a more critical engagement with the world around them.

4. The Fluidity of Identity and Representation:

Postmodern biofiction interrogates the constructed nature of identity and representation. By deconstructing gender, exploring multiple perspectives, and utilizing fragmented narratives, authors challenge fixed notions of identity. They highlight the fluidity of personal and cultural identities, inviting readers to question societal norms and consider the complex interplay between the self and society.

5. Engaging the Reader as an Active Participant:

Postmodern biofiction often requires active reader participation. By employing meta-narrative, self-reflexivity, and unconventional narrative techniques, authors invite readers to become aware of the act of storytelling and the role of interpretation. This active engagement encourages readers to critically analyze the text, question assumptions, and actively participate in the construction of meaning.

Postmodern biofiction's ability to challenge traditional literary conventions, offer alternative perspectives, and critique power structures makes it a significant genre within contemporary literature. By embracing experimentation, blurring boundaries, and amplifying marginalized voices, postmodern biofiction fosters a more inclusive and multifaceted understanding of history, identity, and storytelling. It invites readers to critically engage with the complexities of representation and actively participate in the construction of meaning, ultimately enriching our literary and cultural landscape [3].

RESULTS:

The genre of postmodern biofiction in literature has yielded a range of captivating and thought-provoking works that challenge traditional biographical conventions and push the boundaries of storytelling. In this section, we will discuss the notable results and outcomes of postmodern biofiction in terms of literary achievements, critical reception, and cultural impact.

1. Literary Innovation and Experimentation:

Postmodern biofiction has been instrumental in fostering literary innovation and experimentation. Authors within the genre have embraced unconventional narrative structures, fragmented storytelling, and linguistic playfulness. This experimentation has expanded the possibilities of storytelling, pushing the boundaries of form and style. The genre has given rise to works that are engaging, intellectually stimulating, and aesthetically daring, appealing to readers who seek new and unique literary experiences.

2. Critical Recognition and Scholarly Engagement:

Postmodern biofiction has garnered significant critical attention and scholarly engagement. Scholars have recognized the genre's ability to challenge established notions of biography, history, and identity, and have explored its theoretical implications. The genre's engagement with meta-narrative, historical revisionism, and the deconstruction of identity and representation has sparked academic discussions and enriched literary analysis. Postmodern biofiction has become a subject of academic research, conferences, and publications, contributing to the broader field of literary studies.

3. Cultural and Social Relevance:

Postmodern biofiction holds cultural and social relevance by amplifying marginalized voices and offering alternative perspectives on history and identity. By reclaiming the stories of historically marginalized individuals or communities, the genre challenges dominant narratives and expands our understanding of the human experience. Postmodern biofiction's critique of power structures and ideologies also resonates with contemporary socio-political discussions, prompting readers to critically examine societal norms and power dynamics.

4. Reader Engagement and Interpretive Complexity:

Postmodern biofiction demands active reader engagement and offers interpretive complexity. The genre's incorporation of meta-narrative, self-reflexivity, and fragmented narratives invites readers to become active

participants in the construction of meaning. This engagement encourages readers to question assumptions, reflect on the nature of storytelling, and critically analyze the text. Postmodern biofiction's ability to prompt readers to engage with complex themes and perspectives fosters a deeper appreciation for literature and encourages a more nuanced understanding of the world.

5. Expansion of Literary Boundaries:

Postmodern biofiction has expanded the boundaries of literature by challenging traditional genre classifications and blending elements from various genres and styles. The genre's fusion of postmodernism and biography has opened up new avenues for literary exploration, enabling authors to create hybrid narratives that defy categorization. This expansion of boundaries has invigorated the literary landscape, encouraging experimentation and innovation across different genres and forms. In summary, the results of postmodern biofiction in literature encompass literary innovation, critical recognition, cultural relevance, reader engagement, and the expansion of literary boundaries. Through its unique blend of postmodern elements and biography, the genre has made a significant impact on the literary world, inspiring authors, scholars, and readers alike. The genre's ability to challenge established conventions, amplify marginalized voices, and foster critical engagement underscores its enduring significance within contemporary literature.

Postmodern biofiction in literature has emerged as a vibrant and influential genre that challenges traditional biographical forms and pushes the boundaries of storytelling. Through its innovative methods and approaches, postmodern biofiction has yielded captivating works that blur the lines between fact and fiction, offer alternative perspectives on history, and invite readers to critically engage with the act of storytelling itself.

The genre's emphasis on meta-narrative and self-reflexivity encourages readers to question the constructed nature of narratives and explore the complexities of representation. By revisiting historical figures and events from marginalized perspectives, postmodern biofiction amplifies voices that have been overlooked or silenced, enriching our understanding of history and identity.

Postmodern biofiction's fragmentation and nonlinear narratives disrupt traditional linear storytelling, offering a more nuanced exploration of the subject's life and challenging notions of fixed identity. The genre's deconstruction of identity and representation prompts readers to critically examine societal norms and power structures, fostering a deeper awareness of the fluidity and multiplicity of identities.

Postmodern biofiction's impact extends beyond the literary realm. It has garnered critical recognition and scholarly engagement, contributing to academic discussions on biography, history, and identity. Moreover, the genre's cultural and social relevance lies in its ability to reclaim stories, challenge dominant narratives, and critique power structures, resonating with contemporary socio-political conversations.

By demanding active reader engagement and offering interpretive complexity, postmodern biofiction encourages readers to become active participants in the construction of meaning. This engagement fosters a deeper appreciation for literature and encourages a more nuanced understanding of the world [4].

CONCLUSION:

In conclusion, postmodern biofiction in literature has resulted in literary innovation, critical recognition, cultural relevance, reader engagement, and the expansion of literary boundaries. The genre's ability to challenge conventions, amplify marginalized voices, and foster critical engagement underscores its enduring significance within contemporary literature. As readers continue to explore the complex narratives and alternative perspectives offered by postmodern biofiction, the genre will undoubtedly shape and inspire future literary endeavors, enriching our literary and cultural landscape.

References:

1. Bolaño, Roberto. 2666. Farrar, Straus and Giroux, 2008.
2. Cunningham, Michael. The Hours. Picador, 1998.
3. Stein, Gertrude. The Autobiography of Alice B. Toklas. Dover Publications, 1990.
4. Woolf, Virginia. Orlando. Penguin Classics, 2000.

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HUQUQIY MUNOSABATLAR ASOSI SIFATIDA - YURIDIK FAKTLAR

Annotatsiya. Ushbu maqolada huquqiy munosabatlar va ularning hususiyatlari, mazmun mohiyati, ushbu munosabatlarda yuridik faktlar qanday o’rin egallaydi shularhaqida fikr yuritiladi.

Kalit so’zlar: huquqiy munosabat, huquqiy norma, yuridik fakt, yuridik hodisalar, yuridik harakatlar.

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AS THE BASES OF LEGAL RELATIONS – LEGAL FACTS

Abstract. This article discusses legal relations and their features, content and the role of legal facts in these relations.

Key words: legal relationship, legal norm, legal fact, legal events, legal actions.

Jamiyat hayotida kishilar va ularning turli – tuman tashkilotlari o’rtasida ko’plab moddiy, ma’naviy, siyosiy, madaniy va boshqa munosabatlar mavjud bo’ladi. Ushbu munosabatlar ma’rifiy jamiyatda axloqiy, diniy, korporativ va boshqa ijtimoiy normalar bilan tartibga solinadi, shakllantiriladi va yo’naltiriladi. Ijtimoiy munosabatlar asosan huquq normalari bilan tartibga solinadi. Har qanday ijtimoiy munosabatlar huquq normalari bilan tartibga solinadi.

Huquq normalari nima? Huquq normasi – davlat tomonidan o’rnatiladigan yoki ma’qullanadigan, muayyan shaklda ifodalanadigan, ijtimoiy munosabatni tartibga solishga qaratilgan umummajburiy xulq – atvor qoidasi. Huquq normalari o’z vazifa va funksiyalarini huquqiy munosabatlar orqali amalga oshiradi. Ozbekiston Respublikasida O’zbekiston Respublikasi Konstitutsiyasi va qonunlarining ustunligi so’zsiz tan olinadi. [1]

Huquqiy munosabatlar – sub’yektiv huquq va yuridik majburiyatlar bilan o’zaro bog’liq bo’lgan shaxslar o’rtasidagi huquq normalari va muayyan yuridik faktlar asosidagi aloqalardir. Demak, yuridik faktlar huquqiy munosabatlarni yuzaga keltiruvchi yuridik asos hisoblanadi.

Huquqiy munosabatlar yuridik normalar asosida kelib chiqadi. Lekin, huquqiy normalar o’z - o’zidan, bevosita huquqiy munosbatlarni paydo qilmaydi. Normalar faqatgina huquqiy munosabatlar vujudga kelishining muayyan shartlarini, muayyan vaziyatlarni va holatlarni belgilab beradi. Yuridik faktlar

muayyan hayotiy hodisalar bilan bog'liq hamda huquqiy munosabatlarni mavjud bo'lish asosi hisoblanadi.

Yuridik faktlar – huquqiy munosabatlarni yuzaga keltiruvchi, o'zgartiruvchi va bekor qiluvchi holatlardir. Ayrim holatlarda yuridik faktlar amaldagi mavjud munosabatlarni o'zgartirishi va yoki bekor qilishi ham mumkin. Yuridik ahamiyatga ega bo'lgan faktlarni belgilash haqidagi ishlar bo'yicha qonuniy, asosli va adolatli hal qiluv qarorlarini chiqarish fuqarolarning huquqlarini himoya qilishni ta'minlaydi. Sudlar fuqarolarni va davlatni qonun bilan qo'riqlanadigan manfaatlari himoyasini ta'minlab, bu ishlarni asosan to'g'ri hal qilmoqdalar. [2]

Yuridik faktlarni turli hil mezonlar bo'yicha tasniflash mumkin:

- Huquqni vujudga keltiruvchi,
- Huquqni bekor qiluvchi,
- Huquqni o'zgartiruvchi faktlar farqlanadi.

Yuridik faktlar xilma – xildir, ular mohiyatan bir necha turlarga bo'linadi. Yuridik faktlar ular keltirib chiqaradigan huquqiy oqibatlarga qarab: huquqni yaratuvchi, huquqni o'zgartiruvchi va huquqni bekor qiluvchi faktlarga bo'linadi. Ayni bir yuridik hodisa bir vaqtning o'zida ham huquq yaratuvchi, ham huquqni o'zgartiruvchi, ham huquqni bekor qiluvchi fakt bo'lishi mumkin. Masalan, insonning o'limi fakti meros huquqiy munosabatlarning kelib chiqishiga sabab bo'la oladi, mavjud bo'lgan huquqiy munosabat ishtirokchilari tarkibi o'zgarishiga olib keladi, ya'ni o'lgan shaxs bu munosabatdan chiqib ketadi, bir qator ya'ni oilaviy, mehnat, nafaqa singari huquqiy munosabatlarning tugashiga asos bo'ladi.

Yuridik faktlar ikki asosiy guruhga bo'linadi: yuridik hodisalar va yuridik harakatlarga bo'linadi.

Hodisalar - tabiat va jamiyatdagi shunday faktlarki, ularning sodir bo'lishi kishilarning xohish irodasi, ehtiyojiga bog'liq emas. Masalan, yer qimirlashi, shaxsning tug'ilishi, shaxsning vafot etishi, yong'in sodir bo'lishi, sel kelishi kabi tabiiy ofatlar va boshqalar. Bunday hodisalar huquq bilan tartibga solinuvchi ijtimoiy munosabatlarga ta'sir ko'rsatadi, shuning uchun ular yuridik faktlar deb tan olinadi. Odatda bunday hodisalar huquqiy munosabatlarning ob'yektiga ta'sir etadi. Masalan, yong'in sababli uy - joyiga zarar yetgan shaxs bilan tegishli davlat idoralari yoki sug'urta tashkilotlari o'rtasida huquqiy munosabat kelib chiqadi.

Harakatlar - huquqiy munosabat ishtirokchilari hohish – irodasi bilan bog'liq faktlardir. Ular bir necha turlarga ajraladi: huquqqa muvofiq va huquqqa xilof harakatlardir. Qonun normalari asosida vujudga keladigan hamda shu normalar bilan tartibga solinadigan harakatlar huquqiy harakatlar yoki huquqqa muvofiq harakatlar deb ataladi. Huquq normalari talablariga zid, ularni buzuvchi harakatlar huquqqa xilof yoki g'ayriqonuniy harakatlar hisoblanadi. Huquqqa zid harakatlar mazmun va xususiyatiga ko'ra: jinoiy, ma'muriy, fuqarolik va intizomiy – huquqiy bo'lmagan harakatlarga bo'linadi. Huquqiy bo'lmagan harakat qonunga binoan yuridik javobgarlikni keltirib chiqaradi.

Huquqqa mos harakatlar ikki turga bo’linadi:

- Yuridik aktlar,
- Yuridik xatti – harakat.

Yuridik aktlarda huquqqa muvofiq harakatlar muayyan huquqiy oqibatlarni vujudga keltirishi nazarda tutilib sodir etiladi, lekin bunday oqibatlar qonunda nazarda tutilganligi sababli kelib chiqadi. Masalan, ijodkor ilmiy yoki badiiy asar yaratdi, bunda ijodkorning huquqiy oqibatlarni vujudga keltirishni xohlagani yoki xohlamaganidan qat’iy nazar, qonun mualliflik huquqiy munosabatlarni vujudga kelishini shart qilib qo’ygan. Demak, ijod mahsulining yaratilishi – yuridik faktdir. [3]

Yuridik aktlarning eng muhim xususiyati shundan iboratki, ularda yuridik ahamiyatga molik asosiy sharti – yuridik oqibatlarni ko’zlab ish ko’rishdir.

Xulosa qilib aytganda, huquqiy munosabatlar fuqarolar, jamoat birlashmalar, davlat organlari va boshqa yuridik shaxslar o’rtasidagi turli – tuman aloqalarni tartibga solish orqali jamiyatda qonuniylikni mustahkamlash, qonun ustuvorligini qaror toptirish, shuningdek, inson, jamiyat va davlat manfaatlarini huquqiy jihatdan ta’minlashga samarali xizmat qiladi. Yuridik faktlar huquqiy munosabatlar o’rnatishning muhim vositasi bo’lib xizmat qiladi. Ular, odatda, huquqiy munosabat sub’yektlarining manfaatlariga mos keladi.

Foydalanilgan adabiyotlar ro‘yxati:

1. O’zbekiston Respublikasi Konstitutsiyasi. Adolat. 2023 yil.
2.”Yuridik ahamiyatga ega bo’lgan faktlarni belgilash haqidagi ishlar bo’yicha sud amaliyoti to’g’risida.” Oliy sud Plenumi qarori.
3. Davlat va huquq nazariyasi. Darslik. X.T. Odilqoriyev. “Adolat”. 2018 y.

DOI 10.5281/zenodo.10716015
УДК 336.13

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THE EFFECT OF FLUSHING ON THE MECHANICAL DRILLING SPEED

Annotation. A complete cleaning of the bottom of the well from fragments of destroyed rocks is carried out by a flushing liquid with a chisel. The amount and quality of the liquid supplied to the bottom of the well and the supply of drilling pumps depend on the cleaning of the bottom of the well. The article presents the calculated and actual data on the minimum supply of drilling pumps when drilling with various bits.

Keywords: flushing liquid, updraft, rock fragments, drilling, flow rate, flushing liquid, feed, well, lifting of drilling tools.

During the construction of oil and gas wells, high mechanical drilling speed and bit penetration are crucial. Drillers who know the subtleties of technology pay special attention to the mechanical speed of drilling and sinking into the bit. Of course, the high performance of drilling bits depends on many factors, among which one of the main ones is the complete cleaning of the bottom of the well from fragments of rocks destroyed by the bit. In case of incomplete cleaning of the bottom of the well from the fragments of the drilled rock, the chisel will work on the surface of the fragments, repeatedly grinding them, which as a result, part of the chisel's resource is spent on grinding.

The complete cleaning of the bottom of the well from the fragments of destroyed rocks with a chisel is performed by flushing liquid, its quality and quantity supplied to the bottom of the well.

In [1,2] it is shown that the minimum velocity of the upward flow of the washing liquid Min required for complete cleaning of the bottom of the well from rock fragments destroyed by the chisel should be V_{min} = 0.9-1.2 m/s for drilling by rotary methods.

In [3,4] it is stated that in order to ensure complete cleaning of the bottom of the well from rock fragments destroyed by the chisel, the flow rate of the washing liquid during drilling should be within the range of Q = 0.05-0.067 l/s per/cm^2 of the bottom area. At the same time, a lower value refers to rotary, and a higher value refers to drilling with downhole motors.

At a known upstream velocity, the required minimum supply of flushing fluid to clean the bottom of the well from rock fragments destroyed by the chisel can be determined by the following formula:

$$Q_{min} = 0{,}785\ (D_d^2 - d_{d.s.}^2)\ V$$

where, D_d is the diameter of the bit, mm;

$d_{d.s.}$ - is the outer diameter of the drill string, mm;

V - is the velocity of the upward flow in the annulus for the removal of sludge to the wellhead, m/s.

To compare with the actual supply of flushing liquid when drilling wells, the minimum supply was calculated when drilling with commonly used bits according to this formula:

1. When drilling with a 490 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}490^2 - 0{,}127^2)\ x\ 0{,}9 = 158{,}24$ 1/s;

2. When drilling with a 393.7 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}3937^2 - 0{,}127^2)\ x\ 0{,}9 = 98{,}1$ 1/s;

3. When drilling with a 295.3 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}2953^2 - 0{,}127^2)\ x\ 0{,}9 = 50{,}2$ 1/s;

4. When drilling with a 269.9 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}2699^2 - 0{,}127^2)$ x $0{,}9 = 40{,}1$ 1/s;

5. When drilling with a 215.9 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}2159^2 - 0{,}127^2)\ x\ 0{,}9 = 21{,}54$ 1/s;

6. When drilling with a 190.5 mm rotary bit:

$Q_{min} = 0{,}785\ (0{,}1905^2 - 0{,}114^2)\ x\ 0{,}9 = 16{,}5$ 1/s.

When calculating the minimum supply of drilling fluid into the well, the mechanical drilling speed and the cavernosity coefficient are not taken into account. Because the cavernosity coefficient and the mechanical drilling speed have their own value for each interval, the lowest upstream velocity of V=0.9 l/s was used in the calculation.

The calculated and actual field data of the minimum supply of drilling pumps during drilling with various bits are shown in Table 1.

Table 1 shows that when drilling in the upper intervals of the 393.7 mm chisel, the supply of drilling mud into the well is significantly less and the lack of actual supply compared to the calculated one is:

for the Zhanubiy Kemachi field from - 48.1 l/s to -66.1 l/s;

for the Samantepa field from -56.1 l/s to - 63.1 l/s;

for the Surgil deposit, from -58.1 l/s to - 80.1 l/s.

Table 1

Calculated and actual data on the minimum supply of drilling pumps during rotary drilling to ensure complete cleaning of the bottom of the well

Drilling interval, m	Bit diameter, mm (well number)	Supply of flushing liquid for rotary drilling of wells		
		Calculated, l/s	Actual, l/s	Excess of calculated (+) or disadvantage (-), l/s,
1	2	3	4	5
Oil field South Kemachi (Bukh PI)				
0-429	393,7 (скв. 77)	98,1	50,0	-48,1
0-428	393,7 (скв. 121)	98,1	32,0	-66,1
0-402	393,7 (скв. 89)	98,1	40,0	-58,1
423-2000	295,3 (скв. 106)	50,2	36-40	-10,2+14,2
429-2196	269,9 (скв. 77)	40,1	38-40	-2,1+0,1
428-2215	269,9 (скв. 121)	40,1	35-40	-5,1+(4,9)
2214-2313	215,9 (скв. 105)	21,54	10	-11,54
2220-2332	190,5 (скв. 89)	16,5	10	-6,5
2215-2301	190,5 (скв. 121)	16,5	10-12	-4,5+6,5
Oil field Samantepa (Karaulbazar oil and Gas exploration expedition)				
0-256	393,7 (скв. 92)	98,1	35	-63,1
0-254	393,7 (скв. 97)	98,1	38	-60,1
0-255	393,7 (скв. 94)	98,1	40	-58,1
0-252	393,7 (скв. 102)	98,1	35	-63,1
0-177	393,7 (скв. 104)	98,1	10	-78,1
177-255	393,7 (скв. 104)	98,1	42	-56,1
256-1900	269,9 (скв. 92)	40,1	28-38	-2,1+12,1
254-2348	269,9 (скв. 93)	40,1	32-42	-8,1+(+1,9)
255-1943	269,9(скв. 94)	40,1	30-40	+0,1+10,1
252-1903	269,9 (скв. 102)	40,1	28-35	-5,1+12,1
255-1960	269,9 (скв. 104)	40,1	28-38	-2,1+12,1
1900-2353	190,5 (скв. 92)	16,5	20,0	+3,5
2348-2480	190 (скв. 93)	16,5	18	-1,5
1943-2337	190,5 (скв. 94)	16,5	28-30	+11,5+13,5
1903-2367	190,5 (скв. 102)	16,5	18	+1,5
1960-2348	190,5 (скв. 104)	16,5	20-22	+3,5+5,5
Oil field Surgil (Ustyurt UBR)				
35-405	393,7	98,1	27	-71,1
35-403	393,7	98,1	30	-68,1

32-403	393,7	98,1	40	-58,1
0-406	393,7	98,1	18	-80,1
32-401	393,7	98,1	28-40	-58,1+70,1
405-1502	269,9	40,1	21-45	+4,9+(-19,1)
403-1503	269,9	40,1	20	-20,1
403-1502	269,9	40,1	35-40	-0,1+12,1
406-1502	269,9	40,1	18-19	-21,1+22,1
401-1502	269,9	40,1	22	-18,1
1502-2865	190,5	16,5	21	+4,5
1503-2850	190,5	16,5	18	+1,5
1502-1781	190,5	16,5	35-40	+18,5+23,5
1781-2952	190,5	16,5	23	+6,5
1502-2950	190,5	16,5	18-23	+1,5+6,5
1502-2950	190,5	16,5	22-28	+5,5+11,5

The reason for the insufficient supply of drilling fluid to completely clean the bottom of the well from the fragments of drilled rock is most likely due to the instability of rocks in the upper intervals and the danger of their collapse, shedding, erosion, etc. Therefore, when drilling in the upper intervals with a 393.7 mm chisel, in order to avoid scree, landslides, washouts, etc., a special drilling mode may be applied that limits the supply of drilling fluid, as well as the load on the chisel and mechanical speed. In the fields under consideration, according to the table, there is also insufficient supply of drilling mud to the bottom of the well to completely clean it from rock fragments when drilling with 295.3 mm and 269.9 mm chisels, although the borehole could be drilled under optimal conditions.

When drilling with bits of 215.9 mm and 190.5 mm through the productive formation at the South Kemachi field, there is also an insufficient supply of drilling mud for complete cleaning of the bottom of the well from rock fragments. This is due to the low pressure of the productive reservoir and the risk of catastrophic absorption. However, when drilling with a 190.5 mm bit at the Samantepa and Surgil fields, the supply of drilling mud exceeds the minimum required by +1,5-+13,5 1/ s and on + 1,5-1-23,5 1/ s accordingly.

The actual field data indicate that in order to completely clean the bottom of the well from the fragments of the drilled rock, it is necessary to drill wells at a certain rate of upward flow of the washing liquid in the range of 0.9-1.0 m/s in the annulus during rotary drilling. In the absence of the required upstream velocity of the flushing liquid, complete cleaning of the bottom of the well from the fragments of the drilled rock does not occur. As a result, the chisel works on the surface of crushed rocks, grinds them repeatedly and part of the chisel's resource is spent uselessly. When drilling in soft rocks in the upper intervals, and especially in clays, the removal of sludge is not completely ensured and the chisel, working in clays, winds the oil seal, the bit balls jam, the penetration reaches a minimum due to the oil seal, as well as due to the sludge located in the borehole.

When lifting the drilling tool, the chisel and the bolt go like a piston. The chisel pulls out all the sludge above the chisel. In drilling practice, the entire trough system was completely filled with sludge, after lifting the drilling tool during drilling in the upper intervals in soft clay rocks, with insufficient supply of washing liquid.

When drilling through a productive reservoir with a bit of 190.5 and 215.9 mm, the danger is associated with catastrophic absorption of drilling fluid and, subsequently, the manifestation of gas. Therefore, based on the experience of well construction, the following conclusions can be drawn:

1. The upper intervals of the section during well drilling are mainly represented by loose, crumbling, crumbling and clay rocks.

When drilling loose, crumbling, crumbling rocks, a drilling regime is required that limits the load on the bit, the number of rotations of the rotor, the supply of flushing liquid and the discharge of drilling mud. When drilling in clay rocks, the supply of flushing liquid is required to completely clean the bottom of the well in order to avoid winding clays on the chisel and weighted drill pipe.

2. In the middle intervals from under the conductor to the productive formation, an optimal drilling mode can be applied, which allows the maximum possible supply of drilling fluid into the well and ensures complete cleaning of the bottom of the well from fragments of drilled rock, the load on the bit and the number of rotations of the rotor to obtain a high mechanical drilling speed.

3. When drilling through a productive formation, a special regime is required that preserves the original reservoir properties of rocks as much as possible, representing a productive formation and preventing catastrophic absorption with subsequent gas occurrence.

4. In the middle intervals, the low supply of the drilling pump is due to a misunderstanding of the drillers about cleaning the bottom of the well from the fragments of drilled rocks.

References:

1. Временная методика составления технических проектов на бурение, крепление и испытание нефтяных и газовых скважин. М.: «Недра», 1976.
2. Правила безопасности в нефтяной и газовой промышленности. Ташкент, 2000.
3. Умедов Ш.Х. Совершенствование промывочных жидкостей для вскрытия продуктивных пластов // Монография. - Ташкент.: «Fan va texnologiya, 2015.
4. Ашуров Б.Н., Меликулов У.А., Мирсаатова Ш.Х. Предотвращение сальникообразования на долоте с применением смазывающей добавки. – «Экономика и социум», № 8 (99), 2022.

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YARIM O’TKAZGICHLI MATERIALLAR

Annotatsiya: ushbu maqolada yarim o’tkazgichli materiallar haqida ma’lumotlar hamda yarim o’tkazgichlarning elektr o’tkazuvchanlik xususiyatlari haqida ma’lumotlar keltirilgan.

Kalit so’zlar: Qattiq jismlar, elektr o’tkazuvchanlik, kimyoviy sof yarim o’tkazgich, elektron kovak jufti.

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SEMICONDUCTOR MATERIALS

Annotation: this article provides information on semiconductor materials as well as information on the electrical conductivity properties of semiconductors.

Keywords: solid bodies, electrical conductivity, chemical pure semiconductor, electronic bucket pair.

Qattiq jismlar elektr o’tkazuvchanlik xususiyatlarini inobatga olib o’tkazgichlar, dielektriklar va yarim o’tkazgichlarga ajratiladi.

-O’tkazgichlar guruhiga metallar va elektr o’tkazuvchanligi 10^5-10^6 $Om^{-1}\cdot sm^{-1}$ bo’lgan materiallar kiradi.

-Elektr o’tkazuvchanligi 10^{-10}-10^{-15} $Om^{-1}\cdot sm^{-1}$ tartibda bo’lgan jismlar dielektriklar yoki izolyatorlar guruhini tashkil etadi.

-Yarim o’tkazgichlar guruhiga elektr o’tkazuvchanligi 10^5-10^{-10} $Om^{-1}\cdot sm^{-1}$ tartibda bo’lgan barcha materiallar kiradi.

Yarim o’tkazgichlarning elektr o’tkazuvchanlik xususiyati metallarnikidan sifat jihatdan birmuncha farq qiladi. Ular quydagilardir:

- ✓ Oz miqdordagi aralashmaning o’tkazuvchanlikka kuchli ta‘sir etishi;
- ✓ o’tkazuvchanlik harakteri va darajasining temperaturaga bog’liqligi;
- ✓ o’tkazuvchanlikning tashqi kuchlanishga kuchli bog’liqligi.

Yarim o’tkazgich materiallari tarkibiga kimyoviy elementlar - germaniy va kremniy, kimyoviy birikmalar, metall oksidlari (oksidlar), oltingugurt birikmalari (sulfidlar), selen birikmalari (selenoidlar) kiradi.

Kimyoviy sof yarim o’tkazgich kristalida elektron kovak juftining hosil bo’lishi asosida ikki xil o’tkazuvchanlik ya’ni- elektron va kovak

o’tkazuvchanligi mavjud bo’lib, ularning miqdori bir-biriga tengdir. Yarim o’tkazgichning elektron o’tkazuvchanligi n-tur o’tkazuvchanlik (negative-manfiy so’zidan olingan) kovak o’tkazuvchanligi esa, p-tur o’tkazuvchanlik (positive - musbat so’zidan olingan) deb ataladi. Ular birgalikda yarim o’tkazgichning xususiy o’tkazuvchanligi deb yuritiladi.

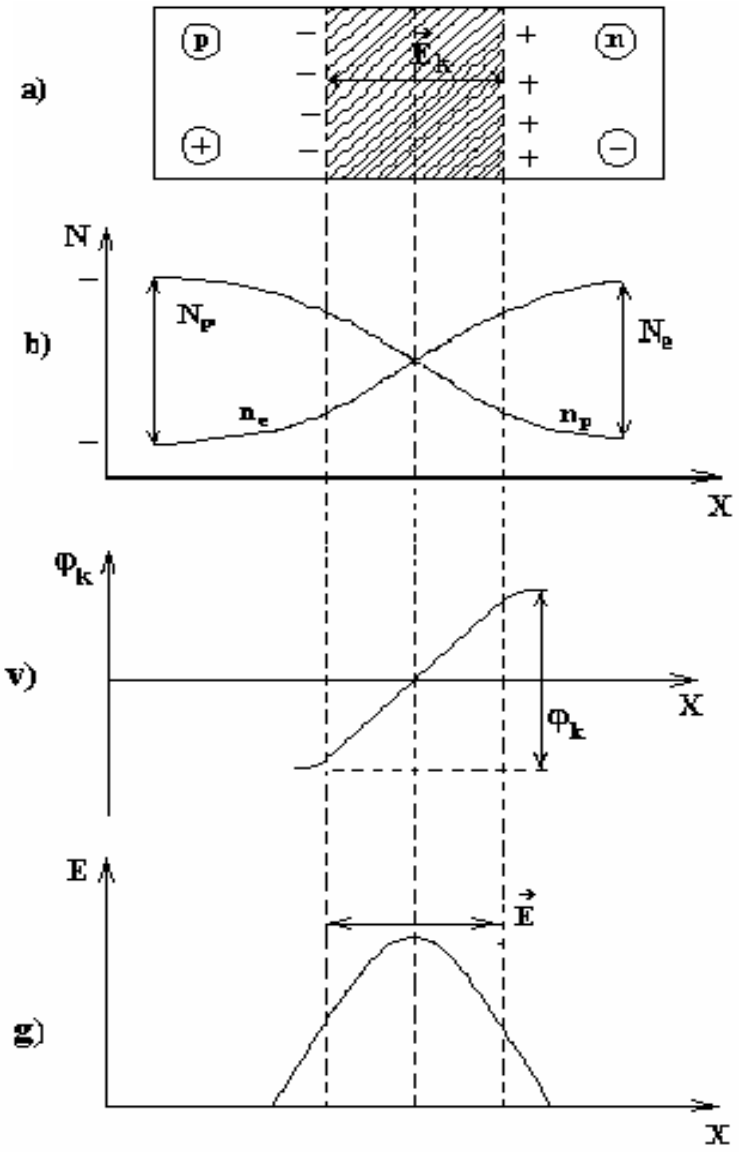
Asosiy o’tkazuvchanligi elektron o’tkazuvchanlikdan iborat bo’lgan kristal **n-** tur kristall yoki **yarim o’tkazgich** deyiladi.

Asosiy o’tkazuvchanligi kovak o’tkazuvchanlik bo’lgan yarim o’tkazgich **p-** tur yarim o’tkazgich deb yuritiladi. Uni hosil qiluvchi begona modda **aktseptordir**.

Yarim o’tkazgichli asboblarning ishlash prinsipi **p-n** o’tish degan hodisaga asoslangan bo’ladi. U o’tkazuvchanliklari turlicha bo’lgan yarim o’tkazgichni kontaktga keltirish orqali hosil bo’ladi. Lekin bunda yarim o’tkazgichlarning mexanik kontakti **p-n** o’tishni hosil qilmaydi, sababi ular orasida ideal kontakt hosil qilish mumkin emas.

Shuning uchun yagona yarim o’tkazgich kristali olinib shartli ikki bo’lak deb qaraladi va ularda turli ishorali o’tkazuvchanlik hosil qilinadi. Shartli bo’laklar orasidagi yupqa qatlam kontakt sohasi deb qaraladi.

p-n o’tish hodisasini sifat jihatini ko’rib chiqaylik. Faraz qilaylik, germaniy (yoki kremniy) monokristalida turli ishorali o’tkazuvchanlik hosil qilingan bo’lsin. Oson bo’lishi uchun donor va akseptor moddalarning miqdorini bir xil deb hisoblab chiqamiz. Unda turli ishorali tok tashuvchilarning miqdori ham teng bo’ladi (1-rasm).



1-rasm. p-n o’tishning hosil bo’lishi.

p-n o’tishning hosil bo’lishining: **a**-turli o’tkazuvchanlikli yarim o’tkazgichlar kontakti, **b**-tok tashuvchilar taqsimoti (N_p, N_e- asosiy va n_p, n_e- asosiy emas); **v**- kontakt potensiallar farqi; **g**-elektr maydon kuchlanganligining taqsimoti.

Kontaktga keltirishning boshlangich vaqtida **p**-sohadagidan, **n**-sohadagi elektronlar miqdori **p**-sohadagidan katta bo’ladi (1b-rasm). Shu sababli kontakt sohasida tok tashuvchilar diffuziyasi vujudga keladi. Bunda **n**-sohadagi elektronlar **p**-soha tomon, **p**-sohadagi kovaklar esa **n**-soha tomon ko’chadiki unga bir xil ishorali zaryadlarning o’zaro itarilishi yoki turli ishorali zaryadlarning o’zaro tortishishi sabab bo’la olmaydi. Diffuziya hosil bo’lishining asosiy sababi kontakt sohasidagi tok tashuvchilar konsentratsiyasiningturlicha bo’lishi hisoblanadi.

n-sohadan **p**-sohaga elektronlarning siljishi orqali kontakt chegarasida musbat zaryadli atomlar-ionlar qoladi.

Ular musbat qo'zg'almas zaryadlarining konsentratsiyasi ortiqcha bo'lishiga olib keladi. Natijada bu soha elektronlarga kambag'al bo'lib qoladi. Xuddi shunday jarayon natijasida **p**-sohada (-) zaryadlar konsentratsiyasi ortib, soha kovaklarga kambag'al bo'ladi. Kontakt sohasida bunday kambag'allashgan sohaning vujudga kelishi kondensator qoplamalariga o'xshash turlicha zaryadga ega bo'lgan ikki qatlamni hosil qiladi. Natijada u potensiallar ayirmasi $\varphi_к$ va maydon kuchlanganligi $\vec{E}_k$ bo o'lgan elektr maydonini hosil qiladi (1v-1g-rasm). Zaryadlarning kuchishi elektr maydon kuch chiziqlari bo'yicha bo'lgani uchun unga **dreyf toki** deyiladi. Diffuziya toki bilan dreyf toki tenglashganda muvozanat hosil bo'ladi. U dinamikmuvozanat deyiladi (tok tashuvchilarning soni o'zaro teng bo'ladi). Kontakt sohasidagi zaryadlarga kambag'al bo'lgan soha yarim o'tkazgichning kovak va elektron o'tkazuvchanlikka ega qatlamlarini bir-biridan ajratib turadi. Bu qatlam to'siq qatlam deb, hosil bo'lgan potensiallar ayirmasi esa **potensial to'siq** deb yuritiladi.

Potensial to'siqning tashqi manba ta'sirida o'zgarishini, ya'ni **p-n** o'tishning volt-amper xarakteristikasini aniqlab olamiz. **p-n** o'tishga tashqi manba ulansa, potensial to'siqning balandligi o'zgaradi va tok tashuvchilarning dinamik muvozanati buziladi. Buning natijasida diffuziya va dreyf toklarining muvozanati ham buzilib natijaviy tokning kattaligi tashqi manbaning kuchlanishiga bog'liq bo'lib qoladi.

Adabiyotlar:

1. Nigmatov K. Radioelektronika asoslari. T., 1994.
2. Qo'yliyev B.T. Tabiatning fizik xossalari bitmas-tuganmasdir. Qarshi, 2005.
3. Гершунский Б.С. Основи электроники и микроэлектроники. М., 1990.
4. Манаев Э.И. Основи радиоэлектроники. М., 1989.
5. Молчанов А.П., Занадворов П.Н. Курс электроники и радиотехники. М., Наука, 1976.
6. Степаненко И.П. Основи теории транзисторов и транзисторних схем. М., Энергия, 1977.
7. Gulmira, U. (2023). Theoretical basis of management of the financial stability of the banking system. International Journal of Advance Scientific Research, 3(05), 126-130.
8. Abdullaev, A., Abdullaeva, G., & Umirova, G. (2022). Содержание стресс-тестирования экономической безопасности банковской системы. InterConf.

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ABOUT THE FORMATION OF THE TOPONYMS ZARAFSHAN BASIN AND ZARAFSHAN RIVER

Abstract. The role of farming culture in people's lives, the importance of Zarafshan water in irrigating vast fields in the Zarafshan oasis, its tributaries and toponyms are explained.

Key words: Zarafshon, Nurota, Mionkol, Politimit, Kohak, Siyob, Mastchoh, Kharomkom, Rudi Mosaf, Rudi Sharg, Somjan, Sugd, Ositin, T. Tolstov, Afshin, K. Ruf, Sugdiyona, Strabon, Arrian, Jaykhuniy, Peshku, Karaqir, Karmana.

Introduction

Located in Central Asia, the Zarafshon river located in the territory of Tajikistan, originates as Mastchoh from the Zarafshon Glacier, located on Mount Koksuv, adjacent to Turkestan and the Zarafshon mountain Node. Near the village of Aini, the left tributary of the Fan joins the river and is named Zarafshan here. The Zarafshan River flows in a thin and thick stream in the mountainous part. As it reaches the plateau, it expands and the flow rate decreases. About 200 tributaries join the river in the mountainous part. The largest rivers joining the river from the left side are Fandarya, Kishtutdarya and Maghiyandarya. After passing through the city of Panjikent, no tributary joins the river. After flowing 8 km from the city of Samarkand, the Zarafshan River forms Miyonqala Island, which is 100 km long and 15 km wide.

Main part

The Zarafshan River is saturated by the melting of ice and snow. Therefore, 61% of the river water flows in summer and is mainly used for irrigation The time of the lowest river water falls in December. Studying place names (toponyms) is a very important issue in geography. Because through the toponym of the place, it is possible to easily get information about the history, nature, ethnography, and inhabitants of that place. In recent years, great importance has been attached to the study and regulation of place names in our country. This is in accordance with

the Law of the Republic of Uzbekistan "On the Names of Geographical Objects" adopted on October 12, 2011 and measures to regulate work in the field of geographical object names approved on October 16, 2012 in accordance with it. we can see in the example of the decision No. 295 of the Cabinet of Ministers of the Republic of Uzbekistan.

Zarafshan is a river in Tajikistan and Uzbekistan. In the Avesta monuments, it is written as "Daitya" - "Good water"; during the rule of the Greeks, the word "Daitya" was exactly translated into Greek and was called Polytheme - "Abundant good water"; the names of the river in the form of Sugd, Jirt, John, Somjan are also known; in the Pahlavi (old Persian) language "Nomiq" ("Famous", "Ezgu"), in Persian sources it is called Rudi Mosaf, Rudi Sharg'; in Arabic sources, names such as Haramkom - "Holy River", Wadi us Sughd, Nahr ul Bukhara are mentioned; In "Boburnoma" it is mentioned as Obi Kohak; Later, the river was called Kohak, Zarafshan from the 18th century. Its length is 877 km, the basin area is 41,860 km², of which the mountainous part is 17,710 km², the rest is foothills and plains. Mile in Zarafshan oasis. av. Settlers who lived in the beginning of 2000 - 1000 years used to make canals and ditches from Zarafshan. The Dargom canal, which received water from Zarafshan in the 1st-4th centuries, is also very large, and the Zarafshan valley is a very ancient valley. The meaning of the word Zarafshon is "Zar", that is, gold, "afshon" means a reader, a distributor.

According to the Russian scientist S.T. Tolstov, the origin of this name goes back to Indian and Iranian peoples. He said that it was related to the name of the Scythian people, who are the ancestors of the Ossetians, called "Alai". Because the word "afshin", "afshon", meaning "distributor", "sharer" has been preserved in the Ossetian language until now.

According to historical sources, Divoshtich, the king of the Afshin people, ruled the upper part of Zarafshan in the 8th century. The struggle of the Sughds against the Arabs under his leadership coincides with the territory of this oasis. In addition, as a result of archeological excavations in Panjikent, the capital of the ancient Sughd state, it is recorded in some sources that a four-armed woman, who is considered a "river goddess", was found among various paintings. This means that in ancient times, people worshiped the Zarafshan river and believed in it. They considered him holy.

The beauty of the river did not leave the Arabs, who invaded these areas in the 8th century, indifferent. They were impressed by the beauty of this valley and called these places "Garden of God", "heavenly place". They even compared the valley to the dark blue dress of our prophet. In some sources, there is information that the term Zarafshan has been mentioned since the 17th century. The first information about him was mentioned in the works of ancient historians Strabo, Arrian, Cursius Rufus under the name of Polytymitus. For example, the ancient Greek scientist Quintus Curstius Rufus wrote: "In the area of Sugdiyona, there is a large river called "Polytimitis" by the locals, which first flows in a narrow channel and then disappears into a narrow cave. But the rushing sound of the river is always heard." Another Greek scientist Strabo says about the river:

The incident mentioned by Quintus Rufus corresponds to the upper course of the river. The cave through which the river flows is an ice cave. And Arrian writes that the Polythymus is "a river that waters a large area and disappears into the sands." Writing about the length of Polythymes, he writes that it was large on the river Penia in Thessaly. In addition, according to some sources, Spitamen, when the river was so full and formed a huge forest around it, gave a heavy blow to the 10,000-strong army of Alexander Makidonsky and disappeared in that forest. The historian and scientist Narshakhi, who lived thousands of years ago, called the Zarafshan river Rudizar, Haromkom in his works and noted that this river flows to Boykand. Boykand is adjacent to Kattakol. He wrote that this lake is called Bargin, Farukh and Karakol. Jaykhuniy, who lived in the 10th century, called this lake Somchan. "The excess water of Bukhara collects there and aquatic animals live there. Even if you gather all the birds and fishes of Khorasan, you cannot compare with him. So Ulugbek did not choose Karakol for hunting in vain. Based on these data, we can say that 500 years ago, the Zarafshan river was very muddy.

CONCLUSION

In conclusion, it can be said that the name of the Zarafshan River goes back to the very distant past. We can learn that this river was overflowing in ancient

times. Even in those times, the river oasis was crowded with people. This shows that river water has been considered an important resource for irrigation of lands and people's lifestyle for centuries. The Zarafshan River is still very important for human consumption and agriculture. Unfortunately, in many cases, it is time to take a serious look at the inconvenience caused by improper use of river water. We need to use river water as economically and rationally as possible. Only in this way, future generations can enjoy this priceless blessing.

References:

1. Toshev X. Zarafshon o`zbeklarining xo‘jaligi va ish turmushi. -T. Fan, 1987.-B 4.
2. Muhammadjonov. A. Quyi Zarafshon vohasining sug‘orilish tarixi. -T.: -1972.-B 361.
3. Rasulova D. S. Tarixiy manbalarda Zarafshon toponimikasi // Oriental Art and Culture. 2020. №III. URL: https://cyberleninka.ru/article/n/tarixiy-manbalarda-zarafshon-toponimikasi.
4. Xolmurodov R. Xatirchi tumani tarixidan lavhalar.

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THE ORIGIN OF GEOECOLOGICAL CIRCULATION UNDER THE INFLUENCE OF ANTOPOGENIC FACTORS IN THE NAVOI REGION

Abstract. To comprehensively research the geo-ecological problems of Navoi region and to study the environmental and geo-ecological problems that have arisen in geocomplexes and prevent the acceleration of natural geographical processes occurring in the territory of the region. Identifying the sources of existing environmental problems, classifying them, mapping them, and developing their scientific solutions.

Key words: Navoi region, Kyzylkum desert, Zarafshan river, ecology, geoecological, geocomplex, mapping, atmosphere, air pollution, pollution source.

INTRODUCTION

Man can never live without nature, because he is an integral part of nature. The world in which we live and surrounds us is as kind and lively as our mother. In every particle of the sun, in every body of the soil, we feel the loving touch of nature as a mother to us. It embodies thousands of elements necessary for man in every aspect. What is the state of our beautiful nature today? Who is responsible for this? How can this be prevented? These questions are becoming a hot topic today. Unfortunately, humans have an unprecedented impact on nature. It cannot be compared to anything that can be influenced by human intelligence and work.

MAIN PART

According to the natural conditions, the territory of Navoi region is divided into 3 parts: the northwestern part of the region is occupied by the Kyzylkum desert - there are closed bogs (Karaqota, Molali, Mingbulok), aeolian sandy plains and residual mountains (Ovminzatog, Yetimtog, Bokantov, Tomditov, etc.).; the south-eastern part, the western part of the Nurota mountain ranges is occupied by low and medium-height mountains (Koratog, Oktog, etc.) and intermountain bogs (Nurota bog, etc.); The region's cotton-growing zone is located in the middle of

the Zarafshan River oasis. The mountains in the Navoi region are mainly composed of rocks of the Silurian, Devonian, Coal, Burian, Paleogene, and Neogene periods. Plains and sand dunes have changed under the influence of complex natural factors of the Quaternary geological period. Gold was found in Muruntov, and graphite was found in the north of Ovminzatog. The region has reserves of tungsten, phosphorites, quartz sand, cement, and limestone. Mineral healing, saline and deep underground water reserves have been identified in Navoi region.

For example, the waters found in Tomdibulok, Karaqota and their surroundings are widely used in agriculture. The province is seismically located in the 7-point earthquake zone. Due to the Kyzylkum desert, the climate is a harsh continental desert climate: summer is long and dry. It is hot, the average temperature in July is 27.2-29.6, in the sand the temperature rises to 60-70 in the sun. Average temperature in January is from 1.9 to -0.6. The climate in deserts and pastures, oases is average. Precipitation occurs mainly in spring and winter. Annual precipitation is 125-282 mm. The vegetation period is 177-212 days. The main water source of Navoi region is Zarafshan river. Konimex channel was released from Zarafshan. Kuyimozor, Todakol reservoirs, Konimekh canal are of great importance in supplying water to Navoi region. Most of the northern and western parts of the region consist of shifting sand dunes and occasional clay deserts.

Modern technological development has increased the negative impact of man on nature. In the Navoi region, it is important to protect nature, maintain the balance between man and nature, and create ecological culture among the population. Geo-ecological security has become the most important problem for people today and tomorrow. This problem exists in all parts of the country or the world, where the degree of change of the geo-ecological environment is different, especially nowadays, the rapidly developing process of urbanization is turning the main agglomerations of cities into the most polluted places. We can see this in the example of the city of Navoi. It is known that one of the most important components of nature is the environment, which is very necessary for the survival of living organisms. The environment is mainly two sources; anthropogenic sources pollute the product of natural factors and human activities. If the environmental conditions of the region are polluted by desertification, erosion of rocks and other natural factors; anthropogenic pollutant sources include industrial enterprises, automobile, air, and railway transport emissions, as well as harmful substances produced as a result of the use of various fuels. Currently, it is necessary to take measures to protect the atmospheric air in the city from various pollutions, reduce the amount of harmful substances in the air, and at least maintain it in the current state. Air pollution, in particular, leads to extreme deterioration of geo-ecological conditions. The negative impact of polluted atmospheric air on the environment, plants, human health and lifestyle is huge. Research results show that there are more diseases in areas with air pollution. The

city of Navoi is considered a city with a developed light and food industry in our republic. According to the end of 2010, there are about 50 joint enterprises in the city, almost the majority of them are light and food industries.

Sources of air pollution. Physical, chemical and biological changes in the atmosphere affect living organisms. In recent years, changes in gas balance have been observed as a result of increasing human influence. Changes in the constant amount of gases in the atmosphere have been found to have negative consequences for our planet.

As the great thinker Abu Ali Ibn Sina said, "If there were no dust and smoke in the air, a person would live up to a thousand years." Atmospheric pollution means changes in its physical and chemical properties as a result of the addition of toxic compounds to the air. In the past 4 years, the number of industrial enterprises, the volume of construction works has doubled, and the number of vehicles has quadrupled in the Navoi region. As a result, the amount of dust and gas increased by 4-5 times. Green areas are decreasing year by year.

The information about this was disclosed at the press conference on the theme "Completion of the work carried out by the administration in the first quarter of 2022 and future plans" in cooperation with the regional branch of the Creative Union of Journalists of Uzbekistan in the Department of Ecology and Environmental Protection of Navoi region.

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It is noted that in 2021, 91 thousand 258 tons of gas and dust were released into the atmosphere in the region. 51 thousand tons of them are contributed by industrial enterprises and more than 40 tons by motor vehicles. The highest "share" is occupied by the city of Navoi, Konimekh, Karmana and Tomdi districts.

Although the gas and dust trapping devices installed in the chimneys of the enterprise are installed, they trap 97.2% of the dust and harmful gases. The movement of polluted air over the city is due to wind burning. East and northeast winds blow 300-310 days a year in the city of Navoi, and winds blow in the west direction the rest of the days. Therefore, residents of Tinchlik Gorgoncha, Dormon, and other villages around the airport in the western part of the city breathe polluted air for 3/2 days. Navoiy GRES can be included among such enterprises. For example: in 1997, 111.9 tons of toxic substances were released into the atmosphere, in 1998, this figure was equal to 95.58 tons, now it is more than 50 tons. At the Navoi thermal power station, NO2 oxides produced by gas burning have been built. The Navoi cement plant is located far from the city in the south-west, and its product is cement of various colors. Each year, a single cement plant emits more than 10,000 tons of harmful substances into the atmosphere and pollutes the environment. In order to reduce harmful substances

released into the atmosphere, 546 dust gas cleaning devices are currently operating. With the help of this equipment, 423,000 tons of harmful substances are retained in 1 year. More than 55,000 vehicles are registered in the region, but not all of them meet the state control standards.

In particular, necessary measures will be taken to install dust-gas cleaning equipment in 67 economic entities, and 43 dust-gas trapping equipment in industrial enterprises will be modernized. Large leafy trees that trap dust and gases are planted in the territory of 26 industrial enterprises and adjacent areas.

So, the pollution of atmospheric air with harmful gases, soot, fogs, in turn, will not fail to have a complicated effect on the body of people living in this area.

CONCLUSION

In conclusion, in order to reduce the waste of industrial enterprises, we should first of all introduce the use of zero-waste technology using advanced technologies that meet the requirements of the present time. As, the issue of waste is one of the important problems in ecology, and if they are processed or processed according to hygienic requirements, we will not only benefit economically but also prevent pollution of the earth, air, water, food products, and people's health will be of great importance in the protection of nature and we will deliver our nature for the next generation while preserving its purity.

References:

1. «Ekologiya va tabiatni muhofaza qilish» D.YO. Yormatova, X.S.Xushvaqtova TOSHKENT-2018
2. “Amaliy geografiya‘‘ Sh.M.Sharipov, V.N.Federko, N.I.Safarova, V.A.Rafiqov Toshkent 2017 y.
3. O`zbekiston tabiiy geografiyasi‘‘ G_ulomov. P, Hasanov. I, Qayumov. A. 2-qism Toshkent 2009 y.
4. «Ekologiya» I.Hamdamov, Z.Bobomuradov, E.Hamdamova Toshkent-2009

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ROLE OF SERVICES IN THE DEVELOPMENT OF THE MODERN ECONOMY

Abstract. The article discusses the scope of services and its role in today's global economy. In recent years there has been a tendency to increase the role of services, and service sector growth is outstripping the growth of material production. This situation is typical not only for the developed countries but also developing countries. Development of services directly affects the standard of living of the population. The growing scale of the global trade in services will inevitably lead to the need of establishing an international regulatory mechanism. Today, the role of the service sector is growing as a result of the creation of certain socio-economic conditions.

Keywords: services, development, influence intangible production, service sector, human capital, business services, innovative economy.

Introduction. The article examines the sphere of services and its role in the modern world economy. In recent years it has been observed the tendency to increase the role of services, and the growth of the service sector is ahead of the growth of the material sector production Such a situation is typical not only for economically developed countries, but also for developing ones of states. The development of the service sector directly affects the standard of living of the population. Zooming in world trade in services inevitably led to the need to create an international regulatory mechanism. Analysis of literature on the topic. In the scientific literature, the theoretical and methodological foundations of the research of the service sector were laid down in the works of such famous people economist classics such as F. Bastiat, A. Smith, J.-B. Sei, K. Marks, A. Marshall and others.

Separate issues of formation and development of the service sector are considered in the works of such Russian and Ukrainian scientists as E. Agababyan, V. Bazilevich, T. Blinov, Z. Varnalii, L. Verkhovodova, Yu. Golovin, M. Dolishnii, E. Zhiltsova, H. Zhuravlyov, V. Kozak, T. Koryagina, V. Kutsenko, V. Yakovleva etc.. Analysis of published works and materials, dedicated to the study of this problem, showed that it still has many unexplored aspects theoretical questions and unsolved practical problems. Selection of previously unresolved parts general problem. In the innovation process one of the leading roles is assigned to the state.

The state is interested in the development of the service sector and in increasing its competitiveness, it has great opportunities for stimulation innovative activity from the point of view of financing innovation, forming a

favorable economic environment and organizing innovative infrastructure. Decision about that exactly how the state needs to act to create favorable conditions for the development of the services market not yet decided. The purpose of the article. There is the study of the regulation mechanism of the service sector and the search for ways to create an innovative structure - the integration of science, business and providing access to the entire complex resources (human, informational, financial, industrial and other).

Analysis and results.

The growth of the service sector in our country began in the 1990s. She became attractive to entrepreneurs, as some types of activities which it includes, practically do not require a large start-up capital (for example, consulting services), others due to their underdevelopment allow the founders to receive excess profit (financial, trust services). It should be noted that the demand for services is growing even with the stagnation of material production. Use of the product brings the consumer is more satisfied than the fact of owning the product. Material goods are perceived as a factor contributing to expansion services.

With the development of productive forces of society the industrial, economic aspect was strengthened services, and most importantly, the need for services grew and demand from the population. Services began to play a completely self-sufficient role in the economy. Service, as a type of activity, is located in continuous connection with the provision process or by performing this service, i.e. service. Objects of service can be natural and legal persons - population and enterprises. However, the sphere of services is traditionally limited to serving the population. In this aspects, it is quite legitimate to distinguish two groups services by the nature of their consumption: 1) production consumption of services, that is, services provided to legal entities - enterprises;2) final consumption of services, i.e. services, provided to individuals - the public. The service economy, compared to the industrial economy, is more harmonious because it includes into a single complex of material production, circulation and services. In force brightly pronounced individualization, where the focus is specific client, the service economy is socially oriented. Services are knowledge-intensive and capital-intensive. They can have industrial character and require highly qualified performers, but may be unqualified and meet the personal needs of members society. The sphere of services is to a greater extent under state protection from foreign competition than material production. The economy of social development and the optimization of the growth of the sphere are also traced services in comparison with material production and expansion of its economic positions.

The deepening of market transformations led to a significant increase in the number of entrepreneurs, firms, organizations engaged in providing services. The requirements for the quality of services have also changed.

The main conditions for the provision of which are:

- regulations;

– availability of the service for the consumer;
– control by the customer;
– safety, quality and service culture;
– protection of the client's legal interests when performing the service;
- state guarantees of availability of receipt services;
- professionalism.

The basis of high quality services is their regulatory support at the state level. In addition, there are universal types of services, that is, they are provided not only to individuals (the population), but also to legal entities (enterprises). In other words, in market conditions there is a convergence of production and final consumption of services, primarily due to the fact that part active population is engaged in entrepreneurship, including small business. The following services are required for wholesale market entities: a) from financial intermediation and insurance; b) related to the use of real estate (rental of non-residential property, cars and equipment, trucks, others types of transport equipment); c) computer equipment maintenance services; d) services in the field of accounting and auditing; consultations on taxation and production management; e) services in the field of advertising. In addition, types of services related to wholesale trade, marketing and logistics are distinguished: wholesale trade services, purchasing services, marketing services, other trade services. In the implementation of the state innovation policy, designed to ensure the transition of the national economy to the path of modernization with the goal ensuring global competitiveness and sustainable socio-economic development country, the service sector is of great importance.

Its role in this process is manifested in the following directions: first, innovative development of the service sector itself as the most important sector of the country's economy; secondly, formational national innovation system and development national innovation infrastructure. The development of the service sector is supported by the competitiveness of services, which directly depends on the level of innovative activity, provided by the organization in the field of services.

The result of innovative activity (service product, technology or its separate elements, new organization of service activities), capable of more to effectively meet public needs is called innovation in the service sector. Implementation of innovative technologies in the service sector involves the introduction of new types of technology and technical and technological techniques in the service process (technical innovations); increase service efficiency (organizational and technological innovations); improvement of internal and external relations, improvement of methods management (management innovations). Innovative service enterprises to increase competitiveness conduct policy aimed at creating conditions that stimulate the creation of innovations. In the innovation policy, four main elements are distinguished: the search for the idea of a new service; design and organization of

the production of new services; introducing a new service to the market and monitoring the progress of its implementation are received by the results In fact, the totality of the listed elements is an innovative process. Successful management of the innovation process in organizations of the service sector is based on such most important principle.

– orientation to the consumer (offer to consumers those innovations that he really needs, at the same time, the organization can not only satisfy existing needs).

– systematic (clear organization of the process, allocation of clearly defined functions, their executors and relationships between them);

- adaptability (timely response to changes in the external and internal environment);

- priorities (priority of innovative processes over traditional ones);

- consistency with all participants of the innovation process (participants are all subjects,

The state is interested in the development of the service sector and in increasing its competitiveness, it has great opportunities in stimulating innovative activities from the point of view of financing innovation, creating a favorable economic environment and organizing innovative infrastructure. The main goal creation of an innovative structure – integration science and business and ensuring access to a whole set of resources (human, informational, financial, production, etc.).

Conclusions.

Nowadays, the role of the service sector grows due to the creation of certain socioeconomic conditions. They arose as a result scientific and technical progress, a significant increase in labor productivity in the production of material goods, as well as changes in meaning and degree the urgency of meeting the various needs of modern society. At the same time, the services of large and small companies already provide more jobs than in all other sectors of the economy in aggregate. The demand for services is growing even with the stagnation of material production. Material goods are perceived as a factor, which contributes to the expansion of services. Strengthening the role services stimulates the purchase. The service economy, compared to the industrial economy, is more harmonious, because it includes the spheres of material production, circulation and services in a single complex.

References:

1. Alieva Z.K. Innovative management in the service sector /2010/02/alieva-zk.pdf.

2. Noskova N.A. Innovative activity in the service sector // Modern scientific research and innovations. 2012. – Access mode: 2012/06/1503

3. Baigulova A.A., Yakushenko A.A. Indicator system of strategic industry business analysis // Problems economics and management. – 2016. – No. 1(53). – pp. 23–26.

4. Burmenko T.D., Danylenko N.N., Turenko T.A. Economics of the service sector. – Irkutsk: BGUEP Publishing House, 2005. – 444 p.

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G‘AZNACHILIK IJROSINI TASHKIL ETISHNING XORIJIY TAJRIBALARI

Annotatsiya. Ushbu maqola g‘aznachilik ijrosini tashkil qilishda ahamiyatli jihatlarni inobatga olish masalalarini xorijiy mamlakatlardagi holatini tahlil qiladi. Shuningdek, jahon miqyosidagi rivojlangan mamlakatlarda ga‘znachilik tizimining qay darajada ta’minlanganligini ham nazariy va amaliy ma’lumotlar asosida e’tirof etadi.

Kalit so‘z va iboralar: G‘aznachilik, xorijiy tajriba, Avstraliya, davlat moliya boshqaruvi, Fransiya, Braziliya, federal mamlakat.

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FOREIGN EXPERIENCES OF TREASURY EXECUTION ORGANIZATION

Annotation. This article analyzes the situation in foreign countries on the issues of taking into account important aspects in the organization of treasury execution. It also recognizes the extent to which the treasury system is provided in the world's developed countries on the basis of theoretical and practical information.

Key words: Treasury, foreign experience, Australia, public financial management, France, Brazil, federal country.

KIRISH.

G‘aznachilik tizimini to‘g‘ri boshqarish bu avvalo, davlat moliyasini boshqarishning muhim bir qismi sifatida qaralishi joiz. Negaki, davlat moliyasini boshqarish tizimi va uning tarkibiy qismlarining samaradorligi hamma vaqt, ya’ni barcha davrlarda muhim ahamiyatga ega bo‘ladi. Davlat moliyasi ichida g‘aznachilik tizimini boshqarish ishlarini sifatli ta’minlash uchun shu mamlakatning barqaro rivojlanishi va kafolatlangan aholi oldidagi ijtimoiy majburiyatlarini bajarilishining sifat darajasi asos sanaladi. Byudjet tizimining barqarorligini ta’minlash va shuningdek, umumiy moliyaviy xavfsizlik va barqaror iqtisodiy o‘sish masalasi ham bunda dolzarbdir.

Yana muhim omillardan biri bu — g‘aznachilikning davlat byudjetini boshqarish mexanizmi sifatida shakllanishi bu davlat byudjeti siyosatini amalga oshirishda, mamlakatning byudjetini ijro etish jarayonida daromadlar va

xarajatlarni samarali boshqarish jarayoni xalqaro tajriba va albatta, shu mamlakatning davlat moliyasi tarixini hisobga olgan holda amalga oshirilishidir.

Ma’lumki, biror davlatda amalga oshirilayotgan iqtisodiy islohotlar sharoitida g‘aznachilik byudjeti ijrosi masalalarini hal etish butun g‘aznachilik tizimini rivojlantirishning ilmiy asoslangan dasturini nazarda tutadi. Buni sanoati rivojlangan mamlakatlar tajribasi ham tasdiqlaydi. Bunda byudjet daromadlari va xarajatlarini ijro etishning g‘azna mexanizmi yordamida samarali boshqaruvga erishiladi.

TADQIQOT METODOLOGIYASI.

Aynan davlat moliyasida g‘aznachilik ijrosini tashkil etishning xorijiy tajribalari haqida fikr-mulohaza bildirish uchun dastavval, bu mavzuning ahamiyatli jihatlarini tilga olish lozim. Birgina O‘zbekiston Respublikasi davlat moliyasida g‘aznachilik ijrosini tashkil qilishda xorijiy tajribalardan nusxa olish yoki aynan bu tajribalarni amaliyotda tadbiq qilish mamlakatning iqtisodiy rivoj topishida keng ko‘lamli yordamchi vosita deyish mumkin. Chunki dunyo bo‘ylab sinovdan o‘tgan, shu sinovni amalga oshirgan mamlakatda ilg‘or natijani ko‘rsatgan tajribani davlat moliyasida, uning g‘aznachilik ijrosida qo‘llab ko‘rishda eng birinci navbatda soha mutaxassislari tomonidan erishiladigan natijaning prognoz qilinishida bunda muhim rol o‘ynaydi. Shuningdek, bu prognoz bilan qilinadigan ishlarning bosqichlari ro‘yxati tuzilishi va tizimlilik asosida amalga oshirilishi mamlakat foydasiga xizmat qiladi.

Yuqoridagilarni nazariy dalillash uchun quyida g‘aznachilik ijrosini tashkil etishning jahon mamlakatlari tajribalariga ko‘z tashlanadi. Bunda mamlakatlarning boshqaruv turlari bo‘yicha, ya’ni federal va unitar mamlakatlar tasnifiga alohida e’tibor beriladi. Hamda shu mamlakatlarning xazina taqsimoti, hukumat tuzilmalari o‘rtasidagi funksiyalar, bu davlatlarning moliyaviy boshqaruv masalalariga ham diqqat qaratiladi.

Bilamizki, har bir davlatda milliy g‘aznaning asosiy maqsadi davlat resurslarini optimal moliyaviy boshqarishga ko‘maklashishdan iborat. G‘aznachilik byudjet muassasalarining faoliyati uchun ularni zarur mablag‘lar bilan va tezkorlik bilan ta’minlaydi. Shu bilan birga, turli mamlakatlarda xalqaro tajriba shuni ko‘rsatadiki, bir xil deb ataladigan organlar — g‘aznachilik davlat moliyasini boshqarish bilan bog‘liq turli funksiyalarni bajaradi. Agarda g‘aznachilik tomonidan byudjet muassasalariga faqat tasdiqlangan byudjetlar bo‘yicha mablag‘lar ajratilganda va g‘aznachilik oldindan belgilangan mezonlar asosida majburiyatlar, xarajatlarni to‘lash bo‘yicha limitlar belgilash huquqiga ega bo‘lganda uning faollik darajasi oshadi.

Biror davlat boshqaruvining g‘aznachilikning molaya va tashkiliy tuzilmasining yagona model mulki mavjud emas. Uning bo‘limlari va boshqaruv soni, shuning barobarida ularning o‘ziga xos bo‘lgan funksiyalari dunyodagi har bir mamlakatda turlicha belgilanadi.

MUHOKAMA VA NATIJA.

Muammo yuzasidan o‘rganilgan adabiyotlar va to‘plangan statistik ma’lumotlar natijasida, jumladan, dunyo mamlakatlarining iqtisodiy hayotidagi masalalarni o‘rganish asosida Avstraliyada vazirlik maqomiga ega bo‘lgan va hukumatga bo‘ysunuvchi G‘aznachilik departamenti mavjudligi aniqlandi. Mazkur departamentning asosiy vazifalariga makroiqtisodiy siyosat va daromadlarni yig‘ish ekanligiga ham aniqlik kiritildi. G‘aznachilik departamentining bir ismi sifatida Soliq idorasini aytish mumkin. U orqali G‘aznachilik Soliq to‘lovchilar bilan eng kamida aloqada bo‘ladi. Hamda barcha Soliq to‘lovlarini qo‘lga oladi. Albatta, bunda tashqi daromadlar hisobga kirmaydi. Chunki tashqi daromadlar Avstraliyada bojxona xizmati tomonidan olinadi. Byudjetning xarajatlar bo‘yicha ijrosi byudjetdan oluvchilarning so‘rovlariga muvofiq amalga oshiriladi. Mamlakatda byudjet oluvchining byudjet majburiyatlarini qabul qilishning aniq huquqiy normalari hamda byudjet mablag‘laridan maqsadli va oqilona foydalanishni tekshirish usullari belgilangan bo‘lib, ular soha vazirliklari tomonidan amalga oshiriladi. G‘aznachilik boshqarmasi bir vaqtning o‘zida passiv rol o‘ynaydi.

Shu o‘rinda Avstraliya federal davlat turi ekanini ta’kidlab ketish lozim. Bunday ta’kidlashning sababi yuqorida g‘aznachilik ijrosini tashkil etishning xorijiy tajribalarini o‘rganishda mamlakatlarning boshqaruv turlariga e’tibor berishga diqqat qaratilganligidir.

Avstraliyada g‘aznachilik funksiyalarini G‘aznachilik departamentidan tashqari Moliya departamnetin ham bajaradi. Uning mas’uliyatiga xarajatlarni nazorat qilish, moliyaviy aktivlarni boshqarish siyosatini belgilash, byudjetlarni ishlab chiqish, buxgalteriya hisobini tartibga solish va markaziy ro‘yxatga olish tizimini yuritish kiradi. Davlat mablag‘lari yagona g‘azna hisobvarag‘ida jamlanadi. Moliya boshqarmasi yagona bank hisobvarag‘i mexanizmining ishlash tartibi va shartlarini belgilaydi.

Endi Federal mamlakat sanaluvchi Braziliyada davlat moliyasini boshqarishni tashkil etish masalasiga to‘xtalamiz. Braziliyada davlat moliyasini boshqarishni tashkil etish Avstraliyadagidan biroz farq qiladi. Asosiy funksiyalar Moliya vazirligining ikkinchi darajali bo‘linmasi bo‘lgan G‘aznachilik kotibiyatiga yuklatilgan. Bundan tashqari, Federal Daromadlar Kotibiyati va Federal Nazorat Kotibiyati Moliya vazirligiga bo‘ysunadi, ular ham ba’zi g‘aznachilik funktsiyalarini bajaradilar.

Kanadada federal hukumatining moliyaviy tuzilmasi XIX asrning 1867-yilgi Konstitutsiya to‘g‘risidagi qonuniga asoslangan o‘z faoliyatini olib boradi. Hali hanz ushbu akt davlat moliyasi tamoyillari uchun konstitutsiyaviy asos bo‘lib xizmat qilmoqda va hukumat uchun asosiy qo‘llanma ham hisoblanadi. Bugungi Kanada federal hukumatining qonunchiligidagi moliyaviy tuzilma “Moliyaviy boshqaruv to‘g‘risida”gi qonun, Audit to‘g‘risidagi umumiy qonun va hukumatni qayta tashkil etish to‘g‘risidagi qonunga asoslanadi. Barcha soliq tushumlari markaziy jamg‘armaga yoki yig‘ilgan daromadlar fondiga joylashtirilishi kerak

va bu jamg‘armadan mablag‘lar agar ularni o‘zlashtirishga Parlament tomonidan ruxsat etilmasa, sarflanishi mumkin emas.

Vazirlar Mahkamasi byudjetni tayyorlash va parlamentga taqdim etish uchun javobgardir. Ushbu ishlarning aksariyati tizim tomonidan amalga oshiriladi. Ya’ni Vazirlar Mahkamasi qo‘mitalari, shu jumladan: ustuvorliklar va rejalashtirish qo‘mitasi, xarajatlarni ko‘rib chiqish qo'mitasi, g‘aznachilik va siyosiy qo‘mitalar. Endigi galda Fransiya timsolida G‘aznachilik funksiyalariga e’tibor qaratiladi.

Fransiyada moliyaviy boshqaruv funksiyalari G‘aznachilik va Davlat hisoblari bosh boshqarmasi o‘rtasida taqsimlanadi. Ikkala tashkilot ham ikkinchi darajali bo‘linmalar — G‘aznachilik Moliya vazirligi va Buxgalteriya Bosh boshqarmasi Byudjet vazirligi tarkibiga kiradi.

Fransiyaning barcha moliyaviy resurslari haqida gap ketganda, yagona G‘aznachilik hisobvarag‘ida jamlanganligini alohida ta’kidlash joiz. U Markaziy bankda joylashgan bo‘lib, ushbu hisobvaraq orqali tushum va to‘lovlarni nazorat qilinadi. Biroq u daromad bilan bog‘liq operatsion muammolarni hal qilishda ishtirok etmaydi. Bunda davlat buxgalteriya hisobi bosh boshqarmasi daromadlarni yig‘ish uchun javobgardir. Hozirda masker mamlakat hududida 2000 ta yirik qo‘shilgan qiymat solig‘i to‘lovchilari to‘g‘ridan-to‘g‘ri Markaziy bankdagi yagona hisob raqamiga to‘lovlarni amalga oshirmoqda. Qolgan soliqlar daromadlar boshqarmasi (50 foizga yaqin), G‘aznachilik va Davlat hisobi bosh boshqarmasi (35 foizga yaqin) va bojxona xizmati (15 foizga yaqin) tomonidan boshqariladi. Mamlakatda xarajatlar bo‘yicha byudjetning ijrosi Byudjet direksiyasi tomonidan nazorat qilinadi. Byudjet direksiyasi o‘zining moliyaviy nazoratchilar tizimi orqali mablag‘larning sarflanishini nazorat qilishi mumkin. Bunda xarajatlar juda qattiq nazorat qilinadi: majburiyatlarni olish bosqichida va to‘lov shartlarida — moliyaviy nazoratchilar tomonidan va G‘aznachilik va Buxgalteriya Bosh boshqarmasi tomonidan to‘lash bosqichida. Fransiyadagi g‘aznachilik Avstraliya va Braziliya g‘aznalari singari ichki va tashqi davlat qarzlarini boshqaradi. U qimmatbaho narsalar masalasini nazorat qiladi, hujjatlarni rasmiylashtiradi, ularni chiqarish hajmi, muddatlari va tuzilishi masalalariga ham aralashadi, aniqrog‘i bularning hal qilinishi ham uning zimmasidadir.

Bundan tashqari Fransiyada davlat moliyaviy axborot tizimi ishlab chiqilgan va bugungi kunda ham u muvaffaqiyatli faoliyat yuritmoqda. Bu tizim byudjetni tayyorlash, byudjet hujjatlarini nashr etish va byudjet ijrosini amalga oshiradi. Byudjet direksiyasi va soha vazirliklari o‘rtasida boshqa aloqa tizimlari mavjud. Yagona hisobvaraq bo‘yicha operatsiyalar bo‘yicha yig‘ma ma’lumotni olish bir kun davom etadi, batafsil ma’lumot har hafta olinadi.

XULOSA.

Har bir mamlakat uchun eng avvalo, davlat moliyasining holati to‘g‘risida hokimiyat va boshqaruv organlarini tezkor va ishonchli axborot bilan ta’minlaydigan, shu orqali ularning samarali boshqaruvini ta’minlaydigan davlat

moliyaviy axborot tizimi zarur. Bu bozor iqtisodiyoti sharoitida shu davlatda byudjet islohotining muhim elementidir. G‘aznachilik ijrosini tashkil etish yuzasidan dunyo miqyosidagi ilg‘or mamlakatlar misolida xalqaro tajribani baholashda shuni ta’kidlash kerakki, avtomatlashtirilgan moliyaviy boshqaruv tizimlarini modernizatsiya qilish va joriy etish har bir davlat hududida butun byudjet jarayoni samaradorligini oshirishni ta’minlaydigan ustuvor yo‘nalishdir.

Foydalanilgan adabiyotlar ro‘yxati:

1. Казначейская система исполнения бюджета / Под ред. Н.Г. Ивановой и ТД. Маковник: - СПб.: Питер, 2002. 203 с.
2. Прокофьев С., Шубина Л. Орасширении функций органов федерального казначейства / Бюджет, 2003. No 9. С. 20-21.
3. Прокофьев С. Казначейская система исполнения бюджета / Бюджет, 2003. No 9. С. 58-60.
4. Shahlo Shodmonkulova Olimjon qizi. FINANCIAL RESOURCES OF THE TREASURY SYSTEM AND ISSUES OF THEIR MANAGEMENT/ Web of Scientist: International Scientific Research journal. ISSN: 2776-0979, Volume 4, Issue 3, Mar., 2023. 493-495p.
5. Shahlo Shodmonkulova Olimjon qizi. Experience of foreign countryies in imporoving the methodology for monitoring cash flows in the treasury. / In volume 2, Issue 12 of Web Scientist: International Scientific research Journal (WOS) December, 2021.
6. Shaxlo Shodmonkulova Olimjon qizi. G‘aznachilik tizimining joriy qilinishining davlat moliyasi tizimidagi ahamiyati. International conference on developements in education Hosted from Amsterdam, Netherlands; April, 2022. 350-351b.
7. https://t.me/jalilova_dilshoda_2292
8. https://t.me/ilmiy_yordam_beraman

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MUSIQA VA SAN'AT MAKTABLARIDA FORTEPIANO O'QITISH METODIKASINING O'ZIGA XOS XUSUSIYATLARI

Annotatsiya. Ushbu maqolada musiqiy tarbiyaning ayniqsa fortepiano musiqa asbobini chalishni o'rgatish orqali bolalar rivojlanishidagi ahamiyati va o'rni ko'rsatilgan. Ushbu jarayonda murabbiy tomonidan qo'yiladigan asosiy vazifa – o'quvchilarda musiqaga muhabbat hissini uyg'otish hamda ularning musiqiy va ijrochilik qobiliyatlarini rivojlantirishdan iborat hisoblanadi. Ijrochilik mahoratini o'rganish jarayonida bola avvalambor shaxs sifatida shakllanadi, zarur hayotiy ko'nikmalarga ega bo'ladi. Shu nuqtai nazardan maqoladamaktabdan tashqari ta'lim ayniqsa musiqa va san'at maktablaridagi o'quv-tarbiya jarayonining muhimligi ta'kidlanib, qaysikim ushbu ta'lim muassasasida har bir bola individual yondashuv asosida erkin ijodiy jarayon ta'sirida tarbiyalanadi.

Kalit so'zlar: san'at, musiqa, tarbiya, jarayon, ijod, fortepiano, qobiliyat, yondashuv, ijro, mahorat, natija.

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SPECIFIC CHARACTERISTICS OF PIANO TEACHING METHODOLOGY IN MUSIC AND ART SCHOOLS

Abstract. This article shows the importance and place of musical education in the development of children, especially by teaching them to play the piano musical instrument. In this process, the main task of the coach is to instill in the students a feeling of love for music and to develop their musical and performing abilities. In the process of learning performance skills, the child is first of all formed as a person, acquires the necessary life skills. From this point of view, the article emphasizes the importance of extracurricular education, especially the educational process in music and art schools, in which every child is brought up under the influence of a free creative process based on an individual approach.

Keywords: art, music, education, process, creativity, piano, ability, approach, performance, skill, result.

Fortepianoning birinchi vatani Italiya hisoblanadi. Italiyalik usta Bartolomeo Kristofori 1709 yilda klavesin tanasi va klavikordning klaviatura mexanizmini asos qilib olgan holda ushbu asbobni yaratgan. Kristofori uni piano et forte deb atagan, bu "sokin va baland ovozli" degan ma'noni anglatadi. "Grand piano" atamasi birinchi marta 1777 yilda ishlatilgan.

Fortopiano haqli ravishda musiqa asboblari qiroli deb ataladi. Buning sabablari ko'p, lekin asosiysi - asbobning diapazoni. Pianino fagotning eng past notasidan tortib pikkolo nayining eng yuqori notasigacha bo'lgan orkestr asboblari tovushlarining butun spektrini qamrab oladi.

1732 yilda fortepiano uchun birinchi musiqa asari yozilgan. Bu Lodoviko Giustinining sonatasi edi. Shu bilan birga, ko'pchilik bastakorlar kompozitsiyalarni yozishda hali ham klavesinga e'tibor berishgan. V.A.Motsart va J.Gaydn birinchilardan bo'lib pianino uchun asarlar yaratdilar.

O'zbekistonda fartepiano musiqasi janrlarining vujudga kelishi va ularning XX asrda rivojlanishi o'zbek musiqasi tarixiga bag'ishlangan nashrlarda, shuningdek, V. Golovkina, N. Yanov-Yanovskaya, T. G'afurbekov kabi musiqashunoslar tadqiqotlarga o'rganilgan.

Shiddat bilan o'zgarib borayotgan ijtimoiy-madaniy hayot sharoitida faqat ta'limgina har tomonlama rivojlangan shaxsning shakllanishiga asos va poydevor bo'lib xizmat qiladi.

Bolaning yoshligidan boshlab individual qobiliyatlari va ijodiy xususiyatlarini kashf etish, ularning rivojlanishi uchun shart-sharoit yaratish va buning uchun zarur bo'lgan ta'lim-tarbiya asoslarini ta'minlash zamonaviy talim tizimining vazifalari hisoblanadi.

Yuqoridagi vazifalarni amalga oshirishda muvaffaqiyatlarga erishishda maktabdan tashqari ta'lim salmoqli ahamiyat kasb etadi. Bolalar rivojlanishining asosiy yo'nalishlaridan biri bo'lib uni san'atga, shu jumladan musiqaga oshno qilish hisoblanadi.

Fortepiano musiqa asbobini chalishni o'rganish bolaning musiqiy ta'limida alohida o'rin tutadi.

«Fortepianoda chalish – barmoqlar harakati, fortepianada ijro etish esa-qalb harakati", odatda biz birinchisini eshitamiz degan edi A.Rubinshteyn.

Musiqa sadolari orqali dunyoni, ayniqsa erta yoshda anglash, bolaning ijtimoiy chegaralar bilan hali cheklanmagan ijodiy qobiliyatlarini ochib berishga imkon beradi va uning estetik tasavvurlarini shakllantirishga yordam beradi.

Filigran fortepiano texnikasini o'zlashtirish endigina chalishni o'rganishni boshlagan yoshlardan katta kuch talab etmaydi, bu jarayon ko'p jihatdan ularga yangi, qiziqarli o'yin faoliyati sifatida ko'rinadi.

Musiqa asboblarini chalishni o'rgatish jarayonida bolada kattalar va o'zi ham sezmagan boshqa qobiliyatlar va xususiyatlar ham namoyon bo'lishi mumkin.

Qo‘shimcha ko‘nikma va malakalarga ega bo‘lgan bolalar tengdoshlari o‘rtasida farqlanib turadilar va atrofdagi insonlar tomonidan o‘zlariga bo‘lgan e’tiborni his etishadi. Bu esa o‘z navbatida ularda yangi muvafaqiyatlar sari intilish, shaxsiy rivojlanishlari, hayot yo‘lida uchraydigan qiyinchiliklarni bartaraf etish uchun qo‘shimcha motivayiya hosil qilish imkonini beradi.

Maktabdan tashqari ta’lim jarayoni tizimini tahlil qilish, bizga fortepiano chalishni o‘rgatishga yordam beradigan quyidagi vazifalarni hal qilish imkonini beradi.

I. Ijtimoiy:

1) bolaning ijodiy (jumladan irsiy o‘tadigan) qobiliyatlarini namoyon etish;

2) ota-onalar va pedagoglar bilan bolaning ijodiy potensialini namoyon qiladigan yo‘nalishlarni aniqlash;

3) bolaning ijtimoiy moslashuvi, shu jumladan unda atrofidagilarni qabul qilish va o'z manfaatlarini erkin amalga oshirish imkonini beradigan ma'naviy-axloqiy tamoyillarni shakllantirish;

4)o‘smirlar organizmida ro‘y beradigan psixofiziologik o‘zgarishlar davrida, ularning o‘z xohishlari asosida bandligini ta’minlash;

5) turli musiqa asamrlarini forepianoda ijro etishga o‘rgatish orqali bolaning madaniy o‘sishi va rivojlanishini ta’minlash, shu jumladan tarixiy davrlarda madaniyat rivoji hamda buyuk musiqashunos shaxslar haqidagi bilimlarni egallashi;

6) klassik va zamonaviy musiqiy asarlarni audio va video yordamida eshitish, tinglash orqali mustaqil ta’lim olish ko‘nikmalarini rivojlantirish.

2. Pedagogik:

1) bolaning ijodiy potensiali, individual qobiliyatlarini rivojlantirish;

2) fortepiano cholg‘u asbobida chalish ko‘nikmaklariga o‘rgatish, ijro mahorati texnikasini hosil qilish;

3) bolaning darsga tayyorgarlik hamda mustaqil ta’lim jarayonidagi mehnat intizomini shakllantirish;

5) bolada musiqiy asarlarni ijro etishda aniqlik, fidoyilik, filigranlik, professionallik, shuningdek, badiiylik, improvizatsiya, assotsiativlik va, albatta, o'z ishiga va boshqa odamlar tomonidan berilgan mehnatga mas'uliyat kabi fazilatlarni tarbiyalash.

Ushbu tadqiqot vazifalarini samarali amalga oshirish uchun zarur bo'lgan o'qitishning umumiy didaktik tamoyillari quyidagilar hisoblanadi:

1. Oddiydan murakkabga o'tishda bosqichma-bosqichlik va izchillik;

2. Qo'shimcha ta'lim muassasasiga o'qishga kirishda bolaning tabiiy qobiliyatlari, o'quv faoliyati, mehnat faoliyati, musiqiy tayyorgarligi darajasidan kelib chiqqan holda o'quvchilarga yondashuvda individuallik va farqlash;

3. O'qitishning variativligi va ko'p qirraliligi: repertuar tanlash, o'quvchining yoshi va psixo-emotsional xususiyatlarini hisobga olgan holda darsni tashkil etish tizimi;

4. Talaba va o‘qituvchi o‘rtasidagi o‘zaro hurmat va tushunish darajasida muloqotni ta’minlash, muloqotning demokratik uslubini o‘zlashtirish, talabalar tashabbuslarini qabul qilish;

5. Qo'shimcha ta'lim shakllarini jalb qilish: musiqiy asarlar ijro etish, spektakllarni tomosha qilish, madaniy tadbirlarda qatnashish (kontsertlar, ochiq darslar va boshqalar)4

6. Turli ijodiy jamoalar tajribasini o‘rganish orqali nafaqat musiqa sohasidagi, balki boshqa sohalarda ham dunyoqarashini kengaytirish bo‘yicha tizimli ishlarni olib borish;

7. Bola qaysi ijtimoiy muhitdan kelib chiqqan va u qanday tarbiyalanganligini tushunish;

8. O'qitishda noan'anaviy metod va usullardan foydalanish. Masalan, yosh bolalar bilan ishlashda, o'yin faoliyati uchun vaqt ajratish, musiqa asarlarining tasvirlarini ko‘rsatish va taqdim etish.

Respublikamizdagi maktabdan tashqari va sinfdan tashqari musiqiy ta’lim mashg‘ulotlarida bolalarning musiqiy idrokini shakllantirish, rivojlantirish hamda to‘g‘ri yo‘naltirish muammosi yoshlarni ma’naviy yetuk, fidoyi vatanparvar insonlar qilib tarbiyalashda muhim ahamiyat kasb etadi. Yosh avlod fortepiano mutaxassisligini mukammal egallashi uchun ta’lim-tarbiya sinfdan tashqari to‘garaklarda boshlang‘ich sinfdan boshlab olib borilsa, pedagoglar kutgandek yetuk mutaxassis yetishib chiqqanligiga guvoh bo‘lamiz.

Adabiyotlar:

1. Абдуллаев К. Ф., Умурова М. Ё. ПЕДАГОГИЧЕСКИЕ ОСОБЕННОСТИ УРОКА ПЕНИЯ В НАЧАЛЬНОЙ ШКОЛЕ //CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES. – 2023. – Т. 4. – №. 2. – С. 66-69.

2. Арзиматова Заррина Бахтияровна ФОРТЕПИАНО ТАЪЛИМИНИНГ МАЗМУНИ ВА МОҲИЯТИ // Oriental Art and Culture. 2022. №1.

3. Djalalova, N.X. FORTEPIANODA IJRO ETISH YOSHLARNI MUSIQIY TAFAKKURINI FAOLLASHTIRUVCHI OMIL SIFATIDA // ORIENSS. 2022. №10-2.

4. Karimov, A. (2023). FORTEPIANO CHOLG’U SINFIDA ISHLASHNING USLUBIY ASOSLARI. *Евразийский журнал технологий и инноватsiй*, *1*(5 Part 2), 184–187.

5. Собиров Т.Р., Зарипова Л.Р. Роль геометрических узоров в народном декоративном искусстве в Средней Азии IX-XV вв. Вестник казанского государственного университета культуры и исскусств. Научный журнал. № 4 2023. С 46-52.

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ABU NASR FAROBIYNING MUSIQIY TA'LIMI BORASIDAGI TADQIQOTLARI HAQIDA

Annotatsiya. Mazkur maqolada Sharq uyg'onish davri mutafakkiri, qomusiy olim Abu Nasr Forobiyning "Katta musiqa kitobi" asosida musiqiy ta'limotining mazmuni, mohiyati, musiqiy asboblar tasnifi, ijro san'ati haqida fikrlar yoritilgan.

Taynch iboralar. O'tror, Bag'dod, Katta musiqa kitobi, Isfahon, musiqa haqida risola, musiqa asbobi.

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ABOUT ABU NASR FAROBI'S RESEARCH ON MUSIC EDUCATION

Annotation. This article describes the content, essence, classification of musical instruments, performance art of the Eastern Renaissance thinker, encyclopedist Abu Nasr Farabi based on the "Big Book of Music".

Keywords: Otror, Baghdad, Big book of music, Isfahan, treatise on music, musical instrument.

Abu Nasr Forobiy (873–950) Jahon madaniyatiga katta hissa qo'shgan Markaziy Osiyolik mashhur faylasuf, qomusiy olim Forobiyning to'liq ismi Abu Nasr Muhammad ibn Muhammad ibn Uzlug' Tarxon. O'rta asrning bir qancha ilmiy yutuqlari, umuman Yaqin va O'rta Sharq mamlakatlarida taraqqiyparvar ijtimoiy-falsafiy tafakkur rivoji uning nomi bilan bog'liq. Forobiy o'z zamonasi ilmlarining barcha sohasini mukammal bilgan va bu ilmlar rivojiga katta hissa qo'shganligi, yunon falsafasini sharhlab, dunyoga keng tanitgani tufayli Sharq mamlakatlarida uning nomi ulug'lanib, "Almuallim as-soniy" "Ikkinchi muallim" (Aristoteldan keyin), "Sharq Arastusi" deb yuritilgan.

Forobiy 873 yilda turkiy qabilalardan bo'lgan harbiy xizmatchi oilasida, Sirdaryo qirg'og'idagi Forob – O'tror degan joyda tug'ilgan. U tug'ilgan hudud Somoniylar tomonidan boshqarilib, arab xalifaligining shimoliy chegarasi hisoblangan. Forobiy boshlang'ich ma'lumotni ona yurtida oldi. So'ng Toshkent

(Shosh), Buxoro, Samarqandda o‘qidi. Keyinroq o‘z ma’lumotini oshirish uchun arab xalifaligining madaniy markazi bo‘lgan Bag‘dodga keldi. Bag‘dodda bu davrda musulmon dunyosining turli o‘lkalaridan, xususan, Markaziy Osiyodan kelgan ko‘p ilm ahllari to‘planishgan edi. U yerga bora turib Forobiy Eron shaharlari Isfahon, Hamadon, Ray va boshqa joylarda bo‘ldi. Forobiy Bag‘dodda o‘rta asr fani va tilining turli sohalari, yunon falsafiy maktablari bilan chuqur tanishib, o‘zga diniy e’tiqod, falsafiy fikrdagi kishilar bilan ilmiy muloqotda bo‘ldi. Abu Bashar Matta ibn Yunusdan (870–940) yunon tili va falsafasini, Yuhanna ibn Xiylon (860– 920)dan tabobat va mantiq ilmini o‘rgandi. Ayrim ma’lumotlarga qaraganda, u 70 dan ortiq tilni bilgan.

XV asrning musiqa nazariyotchilaridan biri Sharqning yirik shoiri va mutafakkiri Abdurahmon Jomiy o‘zining “Musiqa haqida risola”sida Forobiyni buyuk musiqashunos olim sifatida tilga oladi. Q.Sarton Forobiy musiqashunoslik sohasida ham “o‘z davrining Yevropa nazariyalaridan ancha oldinda edi” deb ko‘rsatadi.

Fransuz arabshunos olimi Karra de Voo Forobiyni musiqa san’atidagi xizmatlarini ta’kidlab, bunday deb yozgan edi: - “Forobiy yana buyuk musiqachi ham edi. Biz uning sharq musiqasi nazariyasi bo‘yicha eng muhim asarlari uchun undan minnatdormiz” – deb yozgan edi.

Olimning tarjimai holi haqida arab olimi Ibn Abu Usaybia (1203—1270) bunday yozadi: ―Abu Nasr Forobiy bir qancha vaqt Bag‘dodda yashadi, keyin Shom (Suriya) ga ko‘chib kelib, umrining oxiriga qadar shu yerda turib qoldi. U yetuk faylasuflardan, fozil donishmandlardan biri edi. Falsafaga oid fanlarni mukammal bilardi. Abu Nasr Forobiy musiqa ilmidan ham durustgina xabardor edi. Bu ilmga oid nazariyani yaxshi bilardi.

Ulug‘ faylasuf va musiqa nazariyotchisi turli mamlakat olimlari e’tiborini o‘ziga tortdi. Uning ma’ruzalarida, suhbatlarida odam tirband bo‘lar edi. U mumtoz va faol musiqachi, ud sozida benazir ijrochi ham bo‘lgan. Ibn Abi Useybianing yozishicha, Forobiy “Mol-dunyo bilan hech ishi yo‘q edi, “o‘lmas ovqat” ga chidab yashaydigan serqanoat odam edi. Uning fe’l-atvori xuddi qadimgi faylasuf-hakimlar odobiga o‘xshardi”.

Forobiyning ajoyib ishlaridai biri musiqa sohasida yozgan asarlaridir. Ma’lum bo‘lishicha, Forobiy yoshligidan boshlab musiqaga berilgan, o‘sha paytlarda O‘rta Osiyoda mavjud bo‘lgan musiqa asboblarini yaxshi chala bilgan. Shu bilan birga u musiqa nazariyasini ham mukammal egallagan. Abu Nasr Forobiyning asarlari ro‘yxatida uning bu sohaga oid bir qancha asarlarini ko‘rishimiz mumkin.

1.“Katta musiqa kitobi” Farobiyning musiqaga bagishlangan birinchi kitobi. Bu kitobning to‘liq tanqidiy matni nashr etilgan. U to‘laligicha faqat fransuz tiliga erkin tarjima qilingan, ayrim bo‘laklari ko‘p tillarga, jumladan o‘zbek, qozoq, rus tillariga o‘girilgan va o‘rganilgan. Uning qo‘lyozma matnlari dunyoning turli kutubxonalarida mavjud, xususan, eng qadimiysi 1138 yil Ibn Bojja uchun ko‘chirilgan matni Madrid kutubxonasida 602 - raqam ostida

saqlanmoqda. Undan tashqari 1257 yilda ko‘chirilgan Konstantinopol (Istanbul) kutubxonasida 22 - raqam ostida saqlanayotgan matn, 1347 yil ko‘chirilgan Milan kutubxonasida 289- raqam ostida saqlanayotgan matn va 1089 yil ko‘chirilgan matndan 1537 yil ko‘chirilgan Leyden kutubxonasida 1427 - raqam ostida saqlanayotgan matnlarni ko‘rsatib o‘tish mumkin

2. “Iyqo sanog‘i kitobi” yoki “Iyqo sanog‘i haqidagi kitob”. Bu kitobning qo‘lyozma matni Istanbuldagi Manisa kutubxonasida 1705 - raqam ostida (59a-81v, davomi 88a-89v varaqlar) saqlanmoqda. Nemis tiliga tarjima qilingan.

3.“Iyqolar kitobi”. Bu kitobning qo‘lyozma matni Turkiyaning To‘pqopi saroyi Ahmad III kutubxonasida 1878 - raqami ostida (160v-167a bet) saqlanmoqda. Nemis tiliga tarjima qilingan. O‘zbek tilida Forobiyning iyqo nazariyasiga oid tadqiqoti bor.

4.“Ilmlar sanog‘i” kitobining musiqaga bag‘ishlangan bo‘limi. U ikki varaqni tashkil etadi. O‘rta asr G‘arb olimlari “De scintiis” deb ataganlar. Arab matni ko‘p bor nashr etilgan. Bir necha tillarga tarjima qilingan, jumladan rus, o‘zbek, qozoq tillariga1.

5. “Ilmlarning paydo bo‘lishi” asarining musiqaga bag‘ishlangan qismining lotincha tarjimasi “Dt ortu scientiari” nomida saqlangan, rus tilidagi tarjimasi ham bor, ruscha tarjima asosida o‘zbek tiliga ham o‘girildi, ammo asli - arabcha matni saqlanmagan.

Ibn Abu Usaybianing hikoya qilishicha, Forobiy ajoyib bir musiqa asbobi yasagan, undan juda ham go‘zal, yoqimli kuylar eshitish mumkin bo‘lgan, hatto bu kuy eshituvchini juda ham zavqlantirib yuborgan. Forobiyning musiqa sohasida bilimdon kishi ekanligini o‘sha davrda to‘qilgan bir hikoyadan ham bilish mumkin. Hikoyada Forobiy Shom amiri saroyiga kirib, musiqa chalib, u yerdagilarni uxlatib chiqib ketadi. Bu naql ham Forobiyning musiqa donishmandigina emas, balki uning usta ijrochisi ham bo‘lgani haqida o‘sha paytlarda paydo bo‘lgan hikoyatdir. Shuningdek musiqa ilmining matematik nazariyasini ishlab chiqishda Abu Nasr Forobiyning xizmatlari katta.

She’riy nutqning mutlaq yolg‘on deb atalishi kishiga dastlab erish tuyuladi. Lekin aslida Forobiy haq. Forobiy san’at asari oddiy mantiq ilmi qonun-qoidalariga bo‘ysunmaydigan o‘ziga xos mantiqqa, badiiy mantiqqa ega bo‘lishini ta’kidlaydi.

Boshqa bir o‘rinda, She’r san’ati risolasida u yuqoridagi fikrlarini davom ettirib, shunday deb yozadi: isbotda ilm, tortishuvda ikkilanish, xitobada ishontirish qancha ahamiyatli bo‘lsa, she’riyatda ham xayol va tasavvur shunchalik zarur bo‘ladi.

Arastu izidan borib, Muallimi as-soniy she’riyatni tasviriy san’at bilan qiyoslaydi va har ikkala san’at turi ham mohiyatan bir xil asosga taqlidga borib taqalishini aytadi:...she’r san’atini bezaydigan narsalar so‘z, mulohazalar bo‘lsa, rassomlar san’atini bezaydigan narsa bo‘yoqlar sanaladi. Bularning ikkovi o‘rtasida farq bor, ammo ikkalasi ham odamlar tasavvuri va sezgilarida bir maqsadga taqlid qilishga yo‘nalgan bo‘ladi.

6. Forobiy ko‘p jildlik «Musiqa haqidagi katta kitob» asarida musiqiy bilimni ikkiga ijro san’ati bilan bog‘liq bo‘lgan musiqiy amaliyotga va musiqaning sof o‘zini, ijrochilikka bog‘lanmagan holda o‘rganadigan nazariyaga ajratadi. Kitobda ohang tizimidagi uyg‘unlik, zarb singari hodisalar tahlil etiladi. Shu munosabat bilan utovushlarni emas, balki tovushlar tasavvurini beruvchi raqqoslarning musiqiy g‘oyaga bo‘ysungan ohangiy harakatini anglatuvchi ritmik mimika ohangiy harakat tushunchasini kiritadi. Shuningdek, kitobda Yaqin va O‘rta Sharqda ma’lum bo‘lgan musiqiy asboblar, ularni ijro etish yo‘llari, usullari haqida, umuman, musiqa tarixi to‘g‘risida atroflicha ma’lumot berilgan. Faylasuf musiqadan olinadigan lazzat musiqiy uyg‘unlikning makonda yoyilishidan, pardalarning navbatma-navbat kelishidan deb biladi. Musiqada gap tovushning o‘zida emasligini, balki uni qanday chiqarish muhim ekanini aytadi, ya’ni bizda yoqimli yoki yoqimsiz sezgini tovushning o‘zi emas, balki uni paydo qilish usuli uyg‘otadi. Musiqaning kelib chiqishini esa inson nutqining boyligi bilan bog‘laydi: xushomad qilayotganda ovoz pasayadi, mag‘rur so‘zlayotganda qat’iy jaranglaydi.

Forobiyning san’atga oid qarashlarida ezgulik bilan go‘zallik ma’lum ma’noda aynanlashtiriladi, biri ikkinchisida yashovchi hodisalar sifatida talqin etiladi. Shuning uchun uning asarlarida go‘zal xatti-harakatlar, go‘zal qilmishlar degan iboralarni ko‘p uchratish mumkin. San’atda go‘zallikka yetishishni u falsafa tufayli ro‘y beradi, deb hisoblaydi. Uning fikriga ko‘ra, har bir san’at hodisasining go‘zalligi uning o‘z borlig‘ini to‘la namoyon etishi va mukammallikka erishuvi bilan bog‘liq. Alloma faylasuf ichki go‘zallikni yuqori qo‘yadi va bu boyning boyligini bezab, kambag‘alning kambag‘alligini yashiradigan go‘zallikni adab deb ataydi. Bunday go‘zallik yuksak axloqiy xatti-harakatlar va insoniy komillikda o‘zini namoyon etadi. Tashqi go‘zallikka kelganda, faylasuf tabiiy go‘zallikni har qanday bezanish, yasanishlardan yuqori qo‘yadi. Ikkinchi muallim san’atning taqlidiylik xususiyatiga egaligini ta’kidlaydi. Ana shu taqlidiylik idrok etuvchida hissiyot va tasavvur uyg‘otadi. San’atkor o‘z xayolot kuchi, ijodiy qudrati bilan umumiy g‘oyalarni yakka qiyofalarda in’ikos ettiradi. U nutqning turlarini mantiqiy nuqtai nazardan tadqiq etar ekan, she’riy nutqni mutlaq yolg‘on, sofistik nutqni asosan yolg‘on, xitobiy nutqni bir xilda ham yolg‘on, ham rost, dialektik nutqni asosan rost, isbotiy (apodiktik) nutqni mutlaq rost deydi.

Адабиётлар рўйхати:

1. Абдуллаев К.Ф. Мыслители востока о педагогической профессии //Культура мира и ненасилия подрастающего поколения: ракурсы интерпретатsии и педагогические условия развития. – 2020. – С. 117-120.
2. Булатов М. С. Геометрическая гармонизатsія в архитектуре Средней Азии 1X-XV вв. - Москва, 1988 й.
3. Собиров Т. Р. и др. Об общественном положении зодчих и архитекторов среднего и ближнего востока в IX-XV веках //European science. – 2021. – №. 2 (58). – С. 59-62.

4. Собиров Т.Р., Омонов К-К- Шукурова Л. Педагогик махорат журнали 2012. 2 сон, Бухоро 2012.
5. Sobirov T.R., Q.Amonov. IX-XV asrlar Markaziy Osiyo allomalirining geometrik yasashlarning zamonaviy ta'limda qo'llash. Педагогик маҳорат журнали. 2021 й 2-сон, 225-227 б.
6. Sobirov T.R. Chizmachilik (geometrik va proekstion chizmachilik). –Buxoro, 2020.
7. Sobirov T. R., Omonov Q. K. //Graphical Basis Of Girikh Used In Traditional Applied Decorative Art Of Central Asia In The 9-15th Centuries//. Journal of Contemporary Issues in Business and Government Vol. 27, No. 1, 2021 P-ISSN: 2204-1990; E-ISSN: 1323-6903 https://cibg.org.au/article_7790.htm

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IKKI KARRALI INTEGRALLARNI CHEGARALARINI TANLASHDA GEOGEBRA DASTURIDAN FOYDALANISH

Annotatsiya. Ushbu maqolada ikki karrali integralni hisoblashda asosiy bajariladigan ishlardan eng avvalo integral chegarasini qo'yish va integrallash tartibini o'zgartirish masalalari ko'rib chiqiladi. Bundan tashqari ikki karrali integralni hisoblashda integral chegarasini qo'yishda soha chizish uchun Geogebra dasturi va uning foydali chihatlari ko'rib chiqiladi.

Kalit so'zlar: Ikki karrali integrallar, soha, integral chegarasi, integral chegarasini tanlash.

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USING THE GEOGEBRA PROGRAM TO SELECT THE BOUNDARIES OF DOUBLE INTEGRALS

Abstract. In this article, the issues of setting the limit of the integral and changing the order of integration are considered among the main tasks in the calculation of the double integral. In addition, the Geogebra program and its useful aspects are considered for drawing the area when calculating the integral limit when calculating the double integral.

Key words: Double integrals, field, integral limit, choice of integral limit.

Asosiy qism: Oliy ta'lim muassasalari talabalariga matematik analizning ba'zi bo'lim va mavzularini o'qitishda bir muncha qiyinlilikka uchrash holatlari mavjudligini ko'pchilik ta'kidlashi mumkin. Buning sababi sifatida hozirgi kunda talabalarning soha tushunchasi va ba'zi sohalarni tasavvur qilish qobiliyati kamligi sababli ikki karrali integralni hisoblashda integrallash chegarasini qo'yishda juda ko'p kamchliklarga yo'l qo'yishadi. Shuni oldini olish maqsadida quyida biz integrallash chegarasini o'rnatishda Geogebra dasturidan foydalanish va uning samaralari to'g'risida to'xtalib tahlil qilib o'tamiz. Quyida bir nechta misollarni tahlil qilamiz.

Misol 1: Ushbu $y^2+8x=16,\ y^2-24x=48.$ chiziqlar bilan chegaralangan D soha uchun $\iint\limits_D f(x,y)dxdy$ ikki karrali integral takroriy integralga keltirilsin [1].

Yechish: Birinchi navbatda

$y^2+8x=16,\ y^2-24x=48.$

chiziqlarning kesishish nuqtalarini topamiz. Buning uchun

$$\begin{cases} y^2+8x=16 \\ y^2-24x=48 \end{cases}$$

tenglamalar sistemasini yechib olamiz [3,4]. Buning uchun maqktab matematika kursidan ma'lum bo'lgan tenglamalar sistemasini yechishning arifmetik qo'shish usulidan foydalanib tenglamalar sistemasining birinchi tenglamasidan ikkinchi tenglamasini ayiramiz va

$$32x=-32$$

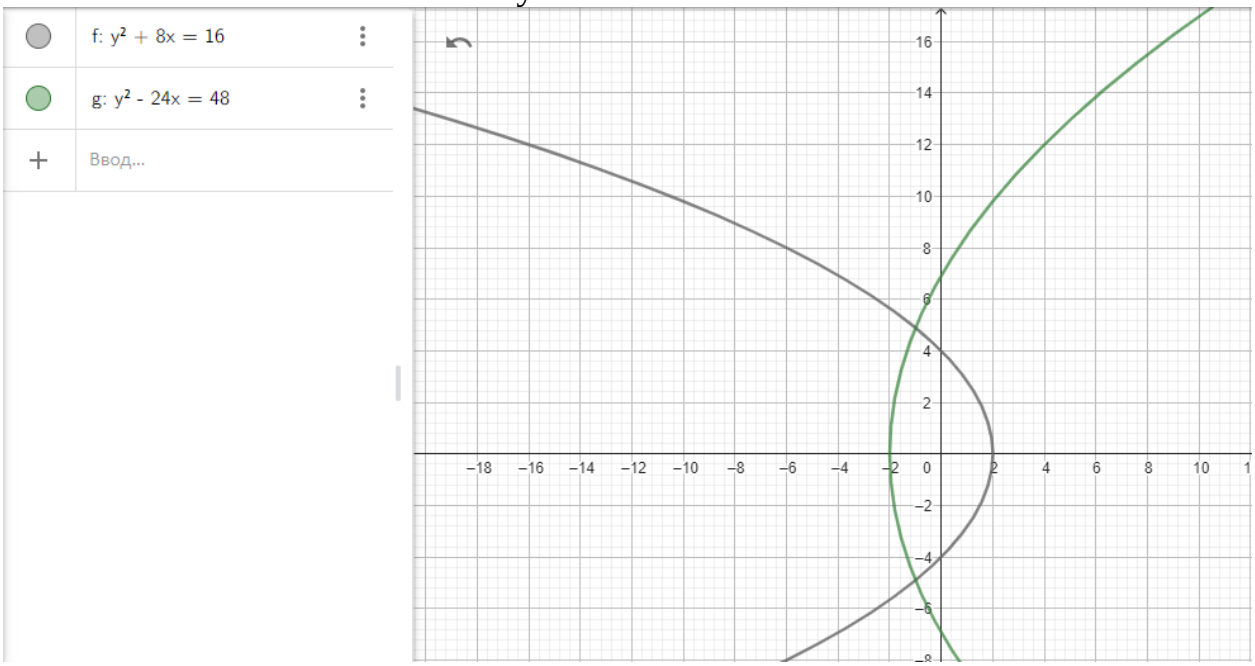
tenglik hosil bo'ladi. Bundan esa

$$x=-1, y=\pm 2\sqrt{6}$$

ekanligi kelib chiqadi. Ushbu funksiyalardan argumenti y o'zgaruvchiga bog'liq bo'lgan ikkita funksiyani keltirib olamiz

$$x=2-\frac{y^2}{8}, x=\frac{y^2}{24}-2.$$

Keyin takroriy integralning integrallanish sohasini aniqlash uchun keyingi navbatda sohani chizmada tasvirlaymiz.



Ushbu chizmadan sohani quyidagicha yozishimiz mumkin.

$D=\left\{-2\sqrt{6}\le y\le 2\sqrt{6}, \frac{y^2}{24}-2\le x\le 2-\frac{y^2}{8}\right\}$, [2]

bundan esa

$$\iint\limits_D f(x,y)dxdy=\int_{-2\sqrt{6}}^{2\sqrt{6}} dy \int_{\frac{y^2}{24}-2}^{2-\frac{y^2}{8}} f(x,y)dx$$

Misol 2: $\int_0^1 dy \int_0^{y^3} f dx + \int_1^2 dy \int_0^{2-y} f dx.$ integrallash tartibini o'zgartiring [1].

Yechish: Ushbu takroriy integralni integrallash tartibini o'zgartirish uchun eng avvalo berilgan integralning chegarasini grafigini chizib olamiz. Bundan tashqari

$$y^3 = x, 2 - y = x$$

funksiyadan y ni topamiz.

$$y = \sqrt[3]{x}, y = 2 - x$$

funksiyalarning o'zaro keisshish niqtalarini topamiz [4,5]. Buning uchun ikkita funksiyani tenglashtirib tenglama yechamiz.

$$\sqrt[3]{x} = 2 - x$$

bu yerda

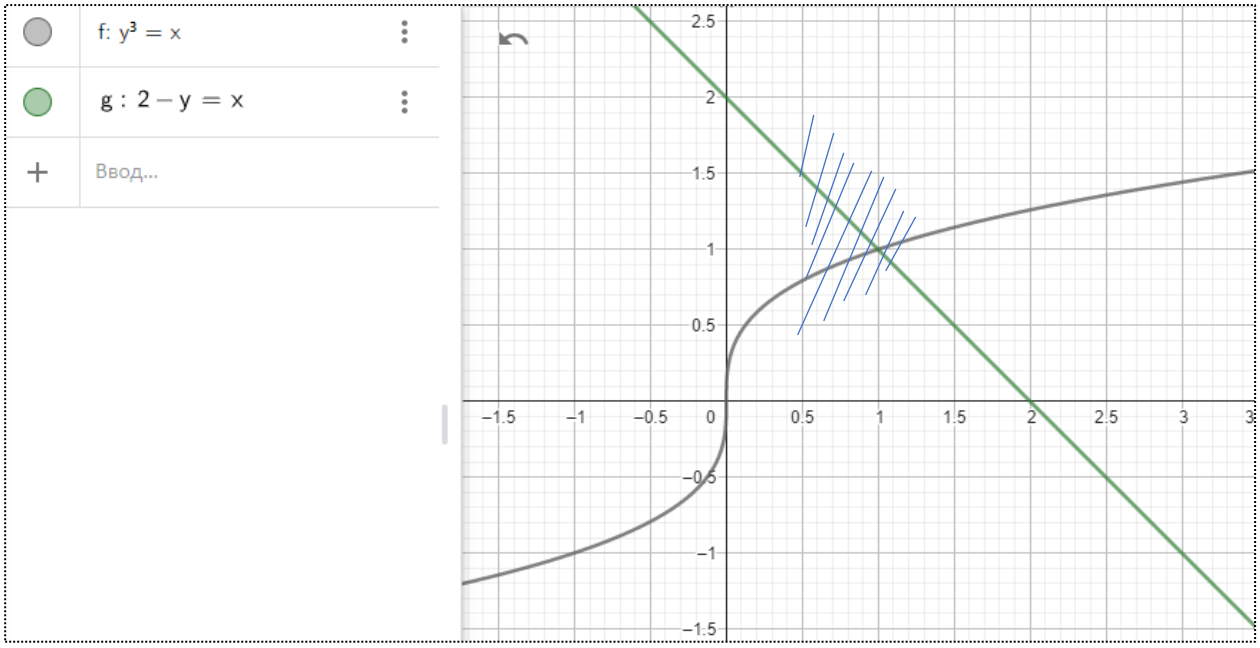
$$\sqrt[3]{x} = t$$

belgilash kiritib olsak tenglamamiz,

$$t^3 + t - 2 = 0$$

Ko'rinishga keladi. Endi ushbu tenglamani

$$t^3 - 1 + t - 1 = 0$$
$$(t-1)(t^2 + t + 2) = 0$$
$$t = 1 \to x = 1$$



Ushbu grafikdagi shtrixlangan qism bo'yicha olingan integral berilgan va bu integralni tartibini o'zgartirish zarur. Buning uchun berilgan sohani quyadagicha tengsizliklar orqali yozib olamiz.

$D = \{0 \le y \le 1, 0 \le x \le y^3\} \cup \{1 \le y \le 2, 0 \le x \le 2 - y\}$ va

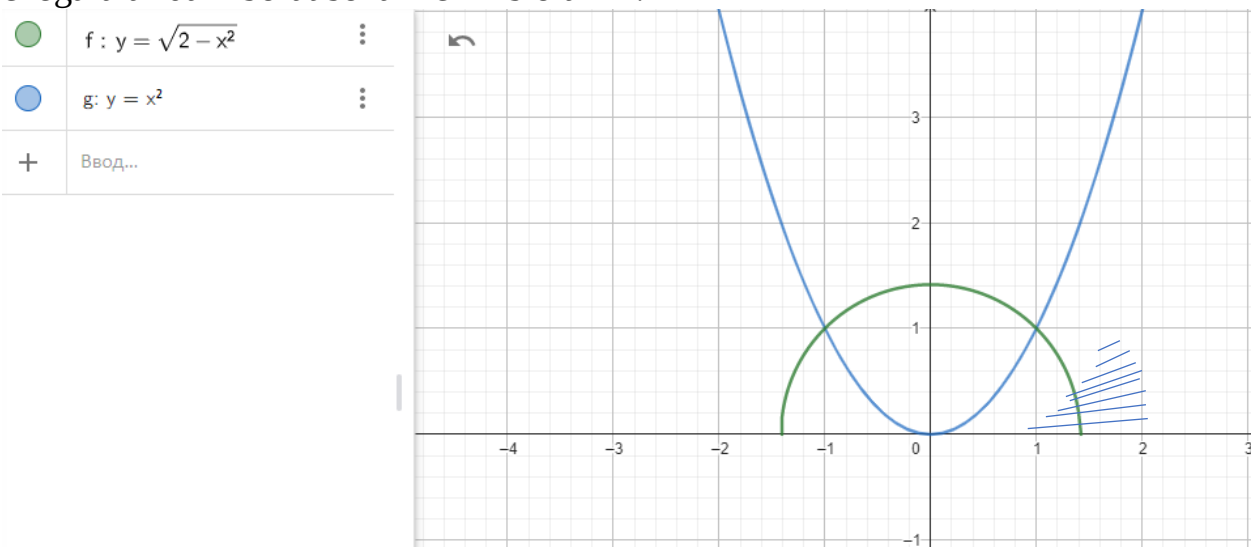
$$D = \{0 \le x \le 1, \sqrt[3]{x} \le y \le 2 - x\}$$

kabi yozib olamiz va yuqoridagi takroriy integralni quyidagicha yozishimiz mumkin.

$$\int_0^1 dy \int_0^{y^3} f dx + \int_1^2 dy \int_0^{2-y} f dx. = \int_0^1 dx \int_{\sqrt[3]{x}}^{2-x} f(x,y) dy$$

Misol 3: $\int_0^1 dx \int_0^{x^2} f dy + \int_1^{\sqrt{2}} dx \int_0^{\sqrt{2-x^2}} f dy$ integrallash tartibini o'zgartiring [1].

Yechish: Ushbu berilgan takroriy limitning ham integrallash tartibini o'zgartirish uchun huddi yuqoridagi misoldagi kabi berilgan integralning chegaralaridan iborat sohani chizib olamiz.



Ushbu shtrixlangan soha ikki karrali integralning integrallash sohasidir. Endi integrallsh tartibini o'zgartirish uchun, ikkita funksiyaning kesishish nuqtalarini va y ga bog'liq funksiyalarni topib olamiz. Buning uchun,

$$\sqrt{2-x^2} = x^2$$

tenglamani yechamiz.

$$2 - x^2 = x^4, x^4 + x^2 - 2 = 0 \to x^2 = t \text{ [2,3]}$$

belgilash kiritib olamiz.

$$t^2 + t - 2 = 0$$

tenglama hosil bo'ladi. Bu tenglamaning yechimlari,

$$t_1 = -2, t_2 = 1 \to x_{1,2} = \pm 1$$

bo'lib, endi yuqoridagi ikkita funksiyadan

$$y = \sqrt{2-x^2}, y = x^2$$

lardan, x ni topib olamiz,.

$$x = \sqrt{2-y^2}, x = \sqrt{y}$$

va sohani quyidagicha yozib olamiz,

$$D = \{0 \le x \le 1, 0 \le y \le x^2\} \cup \left\{1 \le x \le \sqrt{2}, 0 \le y \le \sqrt{2-x^2}\right\}, D$$
$$= \left\{0 \le y \le 1, \sqrt{y} \le x \le \sqrt{2-y^2}\right\}$$

shulardan kelib chiqib, ikki karrali integrallarning integrallash tartibini quyidagicha yozib olamiz.

$$\int_0^1 dx \int_0^{x^2} f dy + \int_1^{\sqrt{2}} dx \int_0^{\sqrt{2-x^2}} f dy = \int_0^1 dy \int_{\sqrt{y}}^{\sqrt{2-y^2}} f(x,y)dx.$$

Xulosa: Yuqoridagi misollardan ko'rinadiki, oliy ta'lim muassasalari talabalariga ikki karrali integrallarni o'rgatishda Geogebra va shunga o'xshgan dasturlardan foydalanib sohalarini shizish orqali o'rgatish nafaqat misol yechimini chiqarishda balki talabalarga tasavvur qobiliyatini rivojlantirishda ham juda o'rni katta bo'lib hizmat qiladi. Chunki shunday funksiyalar borki talaba bir ko'rishining o'zidayoq bu funksiya grafigi to'g'risida yetarli xulosaga kela olmasligi mumkin. Shu borada Geogebra va shunga o'xshagan dasturlar, bir muncha qiyin funksiyalar va ularning grafiklari hususida xulosa qilishga va karrali integrallarni, nafaqat karrali integrallar balki bir nechta funksiya bilan chegaralangan soha yuzasini topishda integraldan foydalanishda ham qo'l keladi.

Foydalanilgan adabiyotlar:

[1]. B.A. Shoimqulov, T.T.Tuychiyev, D.H.Djumaboyev. Matematik analizdan mustaqil shlar. "O'zbekiston faylasuflari milliy jamiyati" nashriyoti 2008.

[2]. T.Azralorov, H.Mansurov. Matematik analiz 1-qism. Toshkent "O'qituvchi" 1994 yil.

[3]. Solayeva Mehribon Norimonovna TEACHING THE CONCEPT OF LIMIT WITH THE HELP OF PEDAGOGICAL RESEARCH, INTERDEPENDENCE OF DISCIPLINES AND METHODS OF PEDAGOGICAL PRACTICE" European Journal of Research and Reflection in Educational SciencesVol. 8 No. 5, 2020, Part II ISSN 2056-5852

[4]. Solayeva M.N., Eshqorayev Q.A., Seytov A.J. Ba'zi bir misollarni ajoyib limitlar yordamida Noan'anaviy uslublardan foydalanib yechish usullari Muallim ham uzluksiz ta'lim 1-1 2020 yil 109-113 betlar.

[5]. Solayeva M. N., Seytov A. J. Maktab o'quvchilariga ketma- ketlik va funksiya limitini o'rgatishdagi ba'zi misollarni ishlashning innovatsion uslublari ILMIY AXBOROTNOMA 2020-yil, 4-son ISSN 2091-5446.

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O’ZBEKISTONDA FUQAROLIK MASALALARI – QON VA TUPROQ HUQUQI

Annotatsiya. Mazkur maqolada O’zbekistohda fuqarolik masalalari, yagona fuqarolik va uning huquqiy asoslari, fuqarolikka ega bo’lishda qon va tuproq huquqining qo’llanilishi, shaxsning huquqiy holatini aniqlashda fuqarolikning ahamiyati tahlil etilgan. Shuningdek O’zbekistonda fuqarolikka ega bo’lishning huquqiy asoslari haqida tahliliy fikrlar berilgan.

Kalit so’zlar: Konstitutsiya, fuqarolik, qon huquqi, tuproq huquqi, yagona fuqarolik, jamiyat, inson huquqlari.

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CIVIL ISSUES IN UZBEKISTAN - BLOOD AND LAND RIGHTS

Annotation. This article analyzes the issues of citizenship in Uzbekistan, single citizenship and its legal basis, the application of the right of blood and soil in obtaining citizenship, the importance of citizenship in determining the legal status of a person. Also, the legal basis of obtaining citizenship in Uzbekistan Analytical opinions are given.

Key words: Constitution, citizenship, right of blood, right to land, single citizenship, society, human rights.

Shaxsning huquqiy holatini aniqlashda fuqarolik muhim omil ekanligi e’tirof etilgan qoida.

Har qanday mamlakatda, jumladan, O‘zbekistonda yashovchi aholining asosiy qismi O‘zbekiston fuqarolaridan iborat bo‘lib, aholining ma’lum qismi O‘zbekiston fuqarosi bo‘lmasligi mumkin. Ular O‘zbekistonda turli sabablar

bilan yashayotgan, ishlayotgan, o‘qiyotgan, safarga kelgan, xorijiy mamlakatlar fuqarolari yoki fuqaroligi bo‘lmagan shaxslar bo‘lishi mumkin.

Shaxs ma’lum davlatga mansub bo‘lsagina u fuqaro hisoblanadi. Bu tegishli hujjatlar orqali rasmiylashtiriladi.

1948 yilda BMT tomonidan qabul qilingan Inson huquqlari to‘g‘risidagi Umumjahon Deklaratsiyasiga binoan, har bir kishi tabiiy, ajralmas, daxlsiz huquq va erkinliklarga egadir. Barcha davlat idoralari inson huquqlari va erkinliklarini oliy ijtimoiy qadriyatlari, deb bilib, ularni ta’minlashga va muhofaza qilishga majburdirlar.

Fuqarolik – Konstitutsiyaviy institut. Uning asoslari Konstitutsiyada belgilangan.

Konstitutsiyaning VI bobi “Fuqarolik” deb nomlangan. O‘zbekiston Respublikasining butun hududida yagona fuqarolik o‘rnatiladi.

O‘zbekiston Respublikasining fuqaroligi, unga qanday asoslarda ega bo‘lganlikdan qat’i nazar, hamma uchun tengdir.

Qoraqalpog‘iston Respublikasining fuqarosi, ayni vaqtda, O‘zbekiston Respublikasining fuqarosi hisoblanadi” [1].

Shu moddada fuqarolikka ega bo‘lish va uni yo‘qotish asoslari hamda tartibi qonun bilan belgilanadi, deb ko‘rsatilgan. SHunga asosan, O‘zbekistonda fuqarolik masalalari 2020 yil 13 martda yangi tahrirda qabul qilingan“O‘zbekiston Respublikasining fuqaroligi to‘g‘risida”gi qonun41bilan tartibga solinadi. Qonunning 4-moddasida fuqarolikning huquqiy tushunchasi berilgan bo‘lib, unga asosan, O‘zbekiston Respublikasida fuqarolik shaxsning davlat bilan o‘zaro huquqlari, majburiyatlari va javobgarligi yig‘indisida ifodalanadigan hamda inson qadr-qimmati, asosiy huquqlari va erkinliklarini e’tirof etish hamda hurmat qilishga asoslanadigan doimiy siyosiy-huquqiy aloqasini belgilaydi. [2]

O‘zbekistonda yakka fuqarolik o‘rnatilgan, yakka fuqarolikning siyosiy ahamiyati ham katta. Fuqarolik shaxs bilan davlat o‘rtasida siyosiy munosabatlarni vujudga keltiradi. Fuqarolik natijasida shaxs ma’lum huquq va erkinliklarga ega bo‘libgina qolmay, ma’lum burchlarga ham ega bo‘ladi. Natijada, shaxsning davlat oldidagi mas’uliyati oshadi.

Ma’lum mamlakatlarda yashovchi hamma kishilar, albatta, fuqaro deb qaralmasligi kerak, mamlakatda yashovchilar aholi bo‘lishi mumkin. Aholi tarkibiga fuqaroligi bo‘lmagan shaxslar hamda chet el fuqarolari ham kiradi. Ularning huquqiy holatida sezilarli tafovutlar mavjud. Shaxsning ma’lum davlatda yashashining o‘zigina uni fuqaro deb hisoblashga asos bo‘lmaydi, shaxs fuqaro bo‘lishi uchun shaxs bilan davlat o‘rtasida alohida munosabatlar mavjud bo‘lishi kerak. Fuqarolik davlat bilan shaxs munosabatlarining alohida tartibda amalga oshishini ta’minlaydi. Umumiy asosda davlat qonun yo‘li bilan kim shu davlatning fuqarosi hisoblanishini, fuqarolikka ega bo‘lish, uni yo‘qotish asoslari

41Qonun hujjatlari ma’lumotlari milliy bazasi, 14.03.2020 y., 03/20/610/0299-son

va tartibini belgilab qo‘yadi. Har bir shaxsning fuqaroligi alohida hujjatlar bilan rasmiylashtiriladi. O‘zbekistonda bunday hujjat shaxslarning pasporti,identifikatsiyalovchi kartasidir. Fuqarolik shaxs bilan davlatning barqaror munosabatlarini vujudga keltiradi.

Fuqaro va davlat munosabatlarini belgilashda xalqaro huquq normalari ham e’tirof etiladi. O‘zbekistonda fuqarolikni quyidagicha xarakterlash mumkin.

O‘zbekistonda yakka fuqarolik e’tirof etilgan. Konstitutsiya va qonunda bu mustahkamlangan. O‘zbekiston fuqarolari O‘zbekiston fuqaroligidan chiqmasdan turib, boshqa mamlakatlarning fuqaroligini qabul qilishi mumkin emas va aksincha.

O‘zbekistonda fuqarolik tenglikka asoslangan, ya’ni fuqarolikka ega bo‘lish qanday asoslarda bo‘lmasin (tug‘ilish bilan bo‘ladimi, keyinchalik fuqarolikka o‘tganmi) ular hamma sohada tengdir.

O‘zbekistonda fuqarolikka ega bo‘lish ochiq va erkinlikka asoslanadi. YA’ni O‘zbekiston fuqaroligiga ega bo‘lish uchun ortiqcha cheklovlar o‘rnatilmagan. Fuqarolik to‘g‘risidagi Qonun, mamlakatda yashovchi fuqaroligi bo‘lmagan shaxslarning borgan sari kamayishini nazarda tutadi.

Qonunning 6-moddasida 1995 yil 1 yanvarga qadar O‘zbekiston Respublikasi hududiga kirib kelib doimiy propiskadan o‘tgan, xorijiy davlat fuqaroligini qabul qilmagan va ushbu qonun kuchga kirgan sanaga qadar O‘zbekiston Respublikasida yashash guvohnomasi asosida istiqomat qilgan shaxs istak bildirgan taqdirda, ushbu qonun bilan O‘zbekiston Respublikasining fuqarosi deb tan olinadi, deb belgilandi.

Hech kim o‘z qarashlariga ko‘ra fuqarolikdan majburiy ravishda chiqarilishi mumkin emasligining o‘rgatilishi fuqarolikning muhim prinsiplaridan biridir. Fuqarolikdan qarashlari, fikrlashiga qarab majburiy chiqarish Sovet tuzumida tez-tez qo‘llaniladigan hodisa edi. Bu xalqaro hujjatlarga mutlaqo ziddir. Chunki ularda fuqarolikdan majburiy chiqarish ko‘zda tutilmagan.

O‘zbekiston fuqarolari mamlakat tashqarisida yashayotgan vaqtlarida ularning manfaatlari davlat tomonidan himoya qilinadi. Chet mamlakatlarda ham ular davlat homiyligida bo‘ladi.

O‘zbekiston Respublikasining fuqaroligi, u qanday asoslarda olinganligidan qat’i nazar, hamma uchun tenglikni kafolatlaydi. O‘zbekiston Respublikasi fuqarolari jinsi, irqi, millati, tili, dini, ijtimoiy kelib chiqishi, e’tiqodi, shaxsiy va ijtimoiy mavqeidan qat’i nazar, qonun oldida tengdir.

Konstitutsiyaga asosan, Qoraqalpog‘iston Respublikasining fuqarosi, ayni vaqtda, O‘zbekiston fuqarosi hisoblanadi. Ular O‘zbekiston fuqaroligini olish uchun hech qanday harakat sodir etmaydi.

Bulardan kelib chiqib, O‘zbekistonda fuqarolik quyidagi prinsiplarga tayanadi, deyish mumkin:

- yagona fuqarolik, ya’ni ikki va ko‘p fuqarolik tan olinmaydi;
- fuqarolikda tenglik prinsipi mavjud;
- fuqarolikka ega bo‘lish, fuqarolikdan chiqish ixtiyoriylikka asoslanadi;

- fuqarolikdan majburiy chiqarishga yo‘l qo‘yilmaydi;

- O‘zbekiston fuqarolari huquqlari, erkinliklari, manfaati mamlakat tashqarisida ham davlat tomonidan himoya qilinadi.

Fuqarolikka ega bo‘lish

Fuqarolik konstitutsiyaviy-huquqiy institutlardan hisoblanadi. Konstitutsiyada fuqarolik asoslari belgilangan bo‘lib, fuqarolikka ega bo‘lish, uni yo‘qotish qonun bilan tartibga solinishi belgilangan.

Qonunning 5-moddasiga asosan, quyidagilar O‘zbekiston Respublikasining fuqarolari hisoblanadi:

a) 1992 yil 28 iyul holatiga ko‘ra O‘zbekiston Respublikasida doimiy yashagan, chet davlat fuqarosi bo‘lmagan va O‘zbekiston Respublikasining fuqarosi bo‘lish istagini bildirgan shaxs;

b) O‘zbekiston hududida yashagan va 1992 yil 28 iyulga qadar o‘qish uchun O‘zbekistondan tashqariga chiqib ketgan hamda uzluksiz ravishda ta’lim olgan yoxud harbiy xizmatni o‘tagan va o‘qish yoki harbiy xizmat tugaganidan keyin bir yil ichida O‘zbekistonga qaytib kelgan hamda O‘zbekiston Respublikasida doimiy propiskadan o‘tgan shaxs, basharti uning chet davlat fuqaroligi mavjud bo‘lmasa;

v) ushbu Qonun kuchga kirgan kunda O‘zbekiston Respublikasining fuqaroligiga ega bo‘lgan shaxs;

g) ushbu Qonunga muvofiq O‘zbekiston Respublikasining fuqaroligini olgan shaxs.

Demak, shaxsni O‘zbekiston fuqarosi hisoblash uchun qonun kuchga kirganda shaxslar O‘zbekiston hududida doimiy yashayotgan bo‘lishi; boshqa davlatlarning fuqarosi bo‘lmasligi; O‘zbekiston fuqarosi bo‘lish istagini bildirgan bo‘lishi; ma’lum sabablar bilan shu davrda boshqa davlatlar hududida yashayotgan bo‘lsa ham, lekin O‘zbekistonda tug‘ilgan bo‘lsa yoki doimiy yashaganligini isbot qilsa, boshqa davlatlarning fuqarosi bo‘lmasligi; qonun kuchga kirgandan so‘ng bir yil ichida O‘zbekiston fuqarosi bo‘lish istagini bildirishi asosiy shart hisoblanadi.

Ushbu qonunning 13-moddasiga asosan fuqarolik quyidagi asoslarda olinadi:

O‘zbekiston Respublikasining fuqaroligi quyidagi hollarda olinadi:

1. tug‘ilganlik bo‘yicha;

2. bola farzandlikka olinganda;

3. O‘zbekiston Respublikasining fuqaroligiga qabul qilish va uni tiklash natijasida.

O‘zbekiston Respublikasining fuqaroligi O‘zbekiston Respublikasining xalqaro shartnomalarida va ushbu Qonunda nazarda tutilgan boshqa asoslarga ko‘ra ham olinishi mumkin. Ota-onalarning fuqaroligi o‘zgarib, ularning har ikkalasi O‘zbekiston fuqaroligiga o‘tganida ularning 14 yoshga to‘lmagan bolalari ham O‘zbekiston fuqaroligiga o‘tadi.

Tug‘ilganlik bo‘yicha fuqarolikka ega bo‘lish qon huquqi va tuproq huquqi prinsiplariga asoslanadi.Qon huquqi bolaning tug‘ilgan joyidan qat’i nazar ota-onasining fuqaroligini olishini nazarda tutsa,tuproq huquqi bola tug‘ilgan joyiga qarab fuqarolikni olishini anglatadi. O‘zbekiston qonunchiligida xar ikkala prinsipga ham tayanilgan.

O‘zbekistonda doimiy istiqomat joyiga ega bo‘lgan fuqaroligi bo‘lmagan shaxslarning O‘zbekistonda tug‘ilgan bolalari, agar ular O‘zbekistonda tug‘ilsa, O‘zbekiston fuqarosi hisoblanadi.

Ota-onasi noma’lum bo‘lgan, O‘zbekiston Respublikasida yashayotgan bola O‘zbekiston fuqarosi hisoblanadi.

O‘zbekiston fuqaroligiga ega bo‘lishning muhim vositalaridan biri, fuqaroligi bo‘lmagan shaxslar yoki chet el fuqarolarining o‘z ixtiyorlariga ko‘ra O‘zbekiston fuqaroligiga o‘tishidir. Bunda shaxs O‘zbekiston fuqaroligiga o‘tishni ixtiyor qiladi, uning iltimosi tegishli tartibda ko‘rib chiqilib, Respublika Prezidenti tomonidan fuqarolikka qabul qilinadi. Qonunga asosan, O‘zbekiston fuqaroligiga qabul qilish uchun shunday istak bildirgan shaxslar oldiga ba’zi talablar qo‘yiladi.

O‘zbekiston Respublikasining fuqaroligiga qabul qilishning umumiy tartibi chet davlat fuqarosiga yoki fuqaroligi bo‘lmagan shaxsga nisbatan quyidagi hollarda amalga oshiriladi, agar u:

a) chet davlat fuqaroligidan chiqishni rasmiylashtirgan bo‘lsa;

b) fuqaroligi bo‘lmagan shaxsga yashash guvohnomasi olingan kundan e’tiboran va O‘zbekiston Respublikasining fuqaroligiga qabul qilish to‘g‘risidagi iltimosnoma bilan murojaat qilgan kunga qadar O‘zbekiston Respublikasi hududida uzluksiz besh yil davomida doimiy yashab kelayotgan bo‘lsa;

v) tirikchilikning qonuniy manbaiga ega bo‘lsa;

g) O‘zbekiston Respublikasining Konstitutsiyasiga rioya etish majburiyatini o‘z zimmasiga olsa;

d) davlat tilini muloqot qilish uchun zarur darajada bilsa. Davlat tilini bilish darajasini aniqlash tartibi O‘zbekiston Respublikasi Vazirlar Mahkamasi tomonidan belgilanadi.

Uzluksiz besh yil davomida yashash sharti O‘zbekiston Respublikasi fuqarosi bilan nikohda bo‘lgan va nikoh tuzilganidan keyin O‘zbekiston Respublikasi hududida turmush o‘rtog‘i bilan birgalikda uzluksiz uch yil davomida yashab kelayotgan fuqaroligi bo‘lmagan shaxsga nisbatan tatbiq etilmaydi.

Qonunning 20-moddasida O‘zbekiston Respublikasining fuqaroligiga qabul qilishning chet davlat fuqarosi bo‘lgan yoki fuqaroligi bo‘lmagan shaxs hisoblangan vatandoshga nisbatan soddalashtirilgan tartibi quyidagi hollarda amalga oshiriladi:

a) O‘zbekiston Respublikasi hududida yashaydigan va O‘zbekiston Respublikasi fuqarosi bo‘lgan, nasl-nasab shajarasi bo‘yicha to‘g‘ri tutashgan loaqal bitta o‘zidan oldingi qarindoshga ega bo‘lsa;

b) tirikchilikning qonuniy manbaiga ega bo‘lsa;

v) O‘zbekiston Respublikasining Konstitutsiyasiga rioya etish majburiyatini o‘z zimmasiga olsa;

g) davlat tilini qonun hujjatlarida belgilangan tartibda muloqot qilish uchun zarur darajada bilsa.

Qonunning 32-moddasida o‘n to‘rt yoshga to‘lmagan bolaning ota-onasi (yolg‘iz otasi yoki onasi) O‘zbekiston Respublikasi fuqaroligini olsa yoki O‘zbekiston Respublikasining fuqaroligidan chiqsa, ushbu bolaning fuqaroligi o‘zgarishi mumkinligi belgilangan. Mazkur holatda O‘zbekiston Respublikasi fuqarosi bo‘lgan bolaning fuqaroligi, basharti bola fuqaroligi bo‘lmagan shaxs bo‘lib qolmasa, o‘zgarishi mumkin.

Ota-onasidan biri O‘zbekiston Respublikasining fuqaroligini olgan taqdirda bolaning O‘zbekiston Respublikasi fuqaroligini olishi quyidagicha amalga oshiriladi:

- Agar ota-onasidan biri O‘zbekiston Respublikasining fuqaroligini olayotgan bo‘lsa, boshqasi esa chet davlat fuqarosi bo‘lib qolaversa, O‘zbekiston Respublikasi fuqaroligini olayotgan otaning yoki onaning iltimosnomasiga ko‘ra, tug‘ilgan joyidan qat’i nazar, bola O‘zbekiston Respublikasining fuqaroligini olishi mumkin.

- Agar ota-onasidan biri O‘zbekiston Respublikasining fuqaroligini olayotgan bo‘lsa, boshqasi esa O‘zbekiston Respublikasida doimiy yashovchi chet davlat fuqarosi bo‘lib qolaversa, o‘n to‘rt yoshga to‘lmagan, O‘zbekiston Respublikasi hududida tug‘ilgan va doimiy yashayotgan bola O‘zbekiston Respublikasining fuqaroligini oladi.

- Agar ota-onasidan biri O‘zbekiston Respublikasining fuqaroligini olayotgan bo‘lsa, boshqasi esa fuqaroligi bo‘lmagan shaxs bo‘lib qolaversa, O‘zbekiston Respublikasi hududida yashayotgan bola O‘zbekiston Respublikasining fuqaroligini oladi.

- Agar ota-onasidan biri O‘zbekiston Respublikasining fuqaroligini olayotgan bo‘lsa, boshqasi esa fuqaroligi bo‘lmagan shaxs bo‘lib qolaversa, O‘zbekiston Respublikasidan tashqarida doimiy yashayotgan bola O‘zbekiston Respublikasining fuqaroligini olayotgan otaning yoki onaning iltimosnomasiga ko‘ra O‘zbekiston Respublikasining fuqaroligini olishi mumkin

O‘zbekiston Respublikasining fuqaroligiga qabul qilish, uni tiklash yoki undan chiqish to‘g‘risidagi iltimosnoma O‘zbekiston Respublikasi Prezidenti nomiga ariza beruvchi tomonidan shaxsan berilishi shart. Iltimosnoma O‘zbekiston Respublikasi hududida yashab turgan shaxs tomonidan doimiy yashash joyidagi ichki ishlar organiga, xorijda yashayotgan shaxs tomonidan esa konsullik muassasasiga beradi.

O‘zbekiston Respublikasining fuqaroligiga umumiy tartibda qabul qilish yoki O‘zbekiston Respublikasining fuqaroligini tiklash to‘g‘risidagi iltimosnomaga quyidagilar ilova qilinadi:

so‘rovnoma;

pasport va (yoki) yashash guvohnomasi;

nikoh tuzilganligi yoki nikoh bekor qilinganligi to‘g‘risidagi guvohnoma;

bola iltimosnomada ko‘rsatilgan taqdirda, uning tug‘ilganlik to‘g‘risidagi guvohnomasi va agar mavjud bo‘lsa yashash guvohnomasi;

tirikchilikning qonuniy manbalari mavjudligini tasdiqlovchi hujjat;

davlat boji (konsullik yig‘imi) to‘langanligi to‘g‘risidagi hujjat.

O‘zbekiston Respublikasida mamlakat fuqarosi bo‘lgan shaxsning chet davlat fuqaroligiga mansubligi tan olinmaydi.

O‘zbekiston Respublikasida fuqarolik masalalari xalqaro xujjatlarga muvofiq,inson va uning manfaatlari e’tiborga olingan holda qonuniy asoslarda hal etiladi.

References:

1.O’zbekiston Respublikasining Konstitusiyasi https://lex.uz/

2.O‘zbekiston Respublikasining Fuqaroligi to‘g‘risidagi qonuni. https://lex.uz/

3.Husanov O.T. Konstitutsiyaviy huquq. Darslik. Toshkent: Yuridik adabiyotlar Publish,2022.

4.Mamatov X.T. Konstitutsiyaviy huquq. Darslik. Toshkent: Yurist-media markazi,2018.

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O’ZBEKISTONDA MA’MURIY SUDLARNING TAKOMILLASHIB BORISHINING HUQUQIY ASOSLARI

Annotatsiya. Mazkur maqolada 2017-2021 yillarda O’zbekiston Respublikasini rivojlantirishning Harakatlar strategiyasi asosida sudlarining vakolatlarini qayta ko’rib chiqish yo’li bilan Ma’muriy sudlarni tashkil etishning huquqiy asoslari yoritilgan. Ma’muriy yustitsiyaning ommaviy xarakterdagi nizolarni hal etishga qaratilgan tashkiliy huquqiy mexanizm hamda har bir shaxsga huquq va erkinliklarini sud orqali himoya qilish, davlat organlari, mansabdor shaxslar, jamoat birlashmalarining g’ayriqonuniy hatti-harakatlari ustidan sudga shikoyat qilishdek konstitutsiyaviy huquqlarni ta’minlashga xizmat qilishi yoritilgan.

Kalit so’zlar: sud vakolatlari, taraflar, ma’muriy sudlar, strategiya, ma’muriy yustisiya.

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LEGAL BASIS FOR THE IMPROVEMENT OF ADMINISTRATIVE COURTS IN UZBEKISTAN

Annotation. This article deals with the establishment of Administrative Courts by reviewing the powers of the courts on the basis of the Action Strategy for the Development of the Republic of Uzbekistan for 2017-2021. Administrative interaction of justice with administrative bodies of individuals are legal entities to resolve disputes of a mass character that arise in a relationship the rights and duties of each person in the organizational, legal and protection of their freedoms through the court, state bodies, officials, appeal to the court over the wrong actions of Public Associations to serve the constitutional rights as a mean of providing coverage.

Keywords: jurisdiction, parties, conciliation agreements, strategy.

Dolzarbligi bugungi kunda Respublikamizda ma’muriy yustitsiyaga alohida ehtibor berilmoqda. Xususan, 2017-2021 yillarda O’zbekiston Respublikasini rivojlantirishning beshta ustivor yo’nalishi bo’yicha Harakatlar strategiyasining ahamiyati katta bo’lib, fuqarolik, jinoyat ishlari bo’yicha sudlar va xo’jalik sudlarining vakolatlarini qayta ko’rib chiqish yo’li bilan ma’muriy sudlarni tashkil etish nazarda tutildi. Konstitutsiyamizga 2017 yil 6 aprelda sud tizimiga oid o’zgartish va qo’shimchalar kiritilib ma’muriy sudlar tashkil etildi [2]. «O’zbekiston Respublikasida Ma’muriy islohotlar kontseptsiyasini tasdiqlash to’g’risida» gi 2017 yil 8 sentyabrdagi farmonga binoan ma’muriy yustitsiya tizimini yanada takomillashtirishga e’tibor qaratildi. Ma’muriy sudlarning tashkil eg’tilishi 2018 yil 8 yanvarda O’zbekiston Respublikasining «Ma’muriy tartib taomillar to’g’risida»gi Qonuni va 2018 yil 25 yanvarda qabul qilingan O’zbekiston Respublikasining Ma’muriy sud ishlarini yuritish to’g’risidagi kodeksi bilan mustahkamlab qo’yildi. O’zbekiston Respublikasi Prezidentining 2020 yil 24 iyuldagi PF-6034-sonli «Sudlar faoliyatini yanada takomillashtirish va odil sudlov samaradorligini oshirishga doir qo’shimcha chora-tadbirlar to’g’risida»gi farmoni bilan 2021 yil 1 yanvardan viloyat va unga tenglashtirilgan fuqarolik ishlari bo’yicha, jinoyat ishlari bo’yicha sudlar va iqtisodiy sudlar negizida sudg’yalarning qathiy ixtisoslashuvini saqlab qolgan va sud ishlarini yuritish turlari bo’yicha alohida sudlov hayhatlarini tashkil etgan holda Qoraqolpog’iston Respublikasi, viloyatlar va Toshkent shahar umumyurisdiktsiya sudlarini tashkil etilib, ma’muriy huquqbuzarliklar to’g’risidagi ishlarni ko’rib chiqish vakolatini ma’muriy sudlardan jinoyat ishlari bo’yicha sudlarga o’tkazildi. Xalqaro miqyosdagi tajribalar, jarayonlar va mamlakatimiz bosib o’tgan taraqqiyot natijalari chuqur tahlil qilgan holda «inson qadri uchun» tamoyili asosida xalqimiz farovonligini yanada oshirish, inson huquqlari va manfaatlarini so’zsiz tahminlash hamda faol fuqarolik jamiyatini shakllantirishga qaratilgan islohotlarning ustuvor yo’nalishlarini belgilash maqsadida Prezidentimizning 2022 yil 28 yanvardagi kungi PF-60 sonli farmoni bilan 2022-2026 yillarga mo’ljallangan Yangi O’zbekistonning taraqqiyot strategiyasi tasdiqlandi. Jumladan, taraqqayot strategiyasining ikkinchi yo’nalishi «mamlakatimizda adolat va qonun ustivorligi taraqqayotning eng asosiy va zarur shartiga aylantirish» deb nomlandi. Ushbu farmon bilan davlat organlari va mansabdor shaxslarning faoliyati ustidan samaralisud nazoratini o’rnatish hamda fuqaro va tadbirkorlarning odil sudlovga erishish darajasini oshirish maqsadida, ma’muriy sudlarda mansabdor shaxslarning qarorlari ustidan berilgan shikoyatlarni ko’rib chiqish mexanizmini takomillashtirish orqali sud nazoratini qo’llash sohasini kengaytirishga alohidaahamiyat berildi.

Material va metodlar Ishda tadqiqot va bilishning mantiqiy, qiyosiy-huquqiy, tizimli, tarixiy-huquqiy, tahlil va sintez usuli kabi umumiy ilmiy va maxsus usullaridan foydalanilgan.

Tadqiqot natijalari 2022 yil 29 yanvarg’ kungi «Davlat organlari bilan munosabatlarda fuqarolar va tadbirkorlik sub’ektlari huquqlarining samarali

himoya etilishini ta’minlash hamda aholining sudlarga bo’lgan ishonchini yanada oshirish chora-tadbirlari to’g’risida»gi PQ-107 sonli qarori qabul qilindi. Mazkur normativ hujjatlar asosida olib borilayotgan islohatlarning samarasi ma’muriy sudlarning maqsad va vazifalari, ma’muriy yustitsiya haqida fuqarolarimiz tomonidan yetarlicha bilim va tasavvurning mavjud bo’lishiga bog’liqdir.

Konstitutsiyamizning 44-moddasida har bir shaxsning o’z huquq va erkinliklarini sud orqali himoya qilish, davlat organlari, mansabdor shaxslar, jamoat birlashmalarining g’ayri qonuniy hatti-harakatlari ustidan sudga shikoyat qilish huquqi kafolatlanishi belgilab qo’yilgan [2].

Ma’muriy yustitsiya-jismoniy va yuridik shaxslarning ma’muriy organlar bilan o’zaro munosabatlarida vujudga keladigan ommaviy xarakterdagi nizolarni hal etishga qaratilgan tashkiliy huquqiy mexanizm hamda har bir shaxsga huquq va erkinliklarini sud orqali himoya qilish, davlat organlari, mansabdor shaxslar, jamoat birlashmalarining g’ayriqonuniy hatti-harakatlari ustidan sudga shikoyat qilishdek konstitutsiyaviy huqlarni ta’minlashga xizmat qiladi.

Xorijiy davlatlar tajribasiga ko’ra Germaniya, AQSH, Rossiyada ma’muriy yustitsiya uch xil modelda tashkil etilganligini ko’rish mumkin. Ya’ni ma’muriy yustitsiyaning umumiy, kvazi, maxsus sudlov shakllari amal qiladi.

Germaniya sud tizimi: konstitutsiyaviy sudlar, umumiy sudlar (fuqarolik va jinoyat ishlari sudlarini o'z ichiga oladi), ma'muriy sudlar, mehnat sudlari, ijtimoiy sudlar, moliyaviy sudlarga bo’linadi. Germaniya sudlarining o'ziga xosligi ularning ixtisoslashganligidadir. Masalan, ma'muriy sudlar moliyaviy, itimoiy va konstitutsiyaviy huquqbuzarliklarda boshqa barcha huquqiy munosabatlar bo'yicha ishlarnni ko'rib chiqadi, umumiy sudlar esa jinoiy, fuqarolik, oilaviy va mulkiy masalarga oid isharni ko'radi, mehnat sudlari ishchilar va korxonalar o'rtasidagi munosabatlarni hal qiladi, ijtimoiy sudlar ijtimoiy xavfsizlikka oid ishlar, xususan, sog'liqni saqlash, sug'urta, pensiya va boshqa ijtimoiy ta'minotga oid masalarni hal etadi, moliyaviy sudlar esa soliq va yig'imlarga taalluqli ishlarni ko'radi [8].

Tadqiqot natijalari tahlili O'zbekiston sud tizimiga Germaniyada takidlangan sud tarmoqlarini kengaytirish va ixtisoslashtirish hamda ishni ko'rib chiqayotgan sudya va xalq maslahatchilarining mavqeyi hamda professional bilimiga qo'yiladigan talablar oshirilishi tadbiq etilganiligini ko’rishimiz mumkin. Aynan yangi tahrirdagi «Sudlar to’g’risida» gi qonunning 4-moddasi bilan sudlarga yuklatilgan vazifalar doirasi kengaytirildi [5]. Endilikda sudning asosiy vazifalariga fuqarolarning Konstitutsiya va boshqa qonunlar, xalqaro shartnomalarda, shuningdek inson huquqlari to’g’risidagi xalqaro hujjatlarda kafolatlangan huquqlari hamda erkinliklari bilan birga davlat va jamoat manfaatlarini, yuridik shaxslar hamda yakka tartibdagi tadbirkorlarning huquq va qonun bilan qo’riqlanadigan manfaatlarini himoya qilish kiritildi. Germaniya sud tizimida mavjud ma’muriy sudlarning respublikamizda tashkil etilishi va sud ishlarini yuritish jarayonida sudyalarning yuridik shaxslar hamda yakka tartibdagi tadbirkorlarning huquq va qonun bilan qo’riqlanadigan manfaatlarini himoya

qilish kabi vazifalarining belgilanishi ma’muriy sudlarning odil sudlov instituti sifatida shakllanishiga asos bo’ladi.

Germaniya kabi Yaponiya tajribasi ham o‘rganildi. Xususan, Yaponiyaning “Ma’muriy sud ishlarini yuritish to’g’risida”gi qonuniga muvofiq, ommaviy-huquqiy munosabatlardan kelib chiqadigan ma’muriy ishlarni birinchi instansiya sudlari sifatida okrug sudlari ko‘rib chiqishishi, umumiy yurisdiksiya sudlari (summary courts) jarima yoki boshqa yengilroq bo‘lgan jazo tayinlanadigan huquqbuzarliklar bo‘yicha ishlarni ko‘rib chiqishi kuzatildi.

Germaniyada ma’muriy sudlarning vazifasi Federal ma’muriy sud boshchiligida boshqaruv jarayonida fuqarolar huquqlariga rioya qilish masalasi bo’yicha davlat xizmatchilari ustidan fuqarolarning da’vo arizalari, davlat xizmatchilarining o’z huquqlari masalasi bo’yicha nizolari, atrof-muhit muhofazasi masalalari, ma’muriy hududiy birliklar o’rtasidagi nizolarni ko’rib chiqadi. Jismoniy va yuridik shaxslarning hukumat hujjatlari ustidan shikoyatlarini ko‘rib chiqish orqali, ommaviy-huquqiy xarakterdagi nizolarni hal qiladi. Mazkur sudlar fuqarolarni davlat hokimiyati organlari bilan o‘zaro munosabatlarda himoya qilishga xizmat qilishadi. Shunday qilib, Germaniyada ma’muriy sudlar tomonidan ma’muriy huquqbuzarlik to‘g‘risidagi ishlar ko‘rib chiqilmaydi [8]. Nizo, eng avvalo, yuqori turuvchi ma’muriy organ tomonidan ko’rib chiqiladi. Agar fuqaro qabul qilingan qarordan norizo bo’lsa, ma’muriy sudga murojaat qilishi mumkin. Bu bir tarafdan ma’muriy sudlarning ish hajmining ortib ketmasligiga sabab bo’lsa, ikkinchi tarafdan esa ma’muriy organlarning ommaviy-huquqiy tusdagi nizolarni ko’rib chiqishdagi faolligining ortishiga sabab bo’ladi.Hozirgi kunda Germaniya ma’muriy sudlarining tizimi O’lka ma’muriy sudi, O’lka oliy ma’muriy sudi, Federal ma’muriy sudidan iborat. Ma’muriy sudlarni tashkil etishga munosabatlar 1960 yilda qabul qilingan «Ma’muriy ishlar bo’yicha sudlar to’g’risida»gi qonun bilan tartibga solinadi. Shu yilda qabul qilingan «Ma’muriy sud ishlarini yuritish to’g’risida»gi qonun bilan ishlarni ma’muriy sudlar tomonidan ko’rib chiqilishiga doir protsessual munosabatlarni tartibga soladi.(Aynan respublikamizda sud huquq tizimiga juda yaqin masalan, MSIYutK amalga joriy etilishi, ma’muriy sudlarning tashkil etilishi kabi -M.U.) Fransiyada ma’muriy sudlar, Germaniya ma’muriy sudlari singari, fuqarolarning shikoyatlari asosida faqat davlat organlarining ma’muriy aktlari qonuniyligini tekshirishadi va ommaviy-huquqiy xarakterga ega bo‘lgan sud ishlarini olib borishga ixtisoslashgan. Rossiya Federatsiyasida ham ma’muriy yustitsiyaning umumiy sudlov shakli amal qiladi. Unga ko’ra ommaviy-huquqiy nizolar ixtisoslashmagan, ya’ni umumiy yurisdiktsiya sudlari tomonidan ko’rib chiqib hal etiladi hamda alohida qonunchilik bilan tartibga solinadi. Bu boradagi odil sudlov Rossiya Federatsiyasining 2015 yil 8 martdagi ma’muriy sud ishlarini yuritish to’g’risidagi kodeksiga asoslanib olib boriladi. Rossiya Federatsiyasida ma’muriy sudlarni tashkil etish bo’yicha takliflar berilib «2023 yilgacha bo’lgan davrda

umumiy yurisdiktsiya sudlarini rivojlantirish va ularning faoliyatini tashkiliy tahminlashni takomillashtirish bo'yicha Dastur» tasdiqlangan [6].

Olimlardan A. Vlasov ixtisoslashtirilgan sudlargina ma'muriy-huquqiy munosabatlardan kelib chiqadigan ishlarni ko'rib chiqishi mumkinligini bildiradi [7]. Uning fikrini olimlardan A. Sapojnikov «ma'muriy sudlarni tashkil etish qonun chiqaruvchining konstitutsiyaviy burchi bo'lib, bu konstitutsiyadagi qoidani mustahkamlagan holda Rossiyani umumevropa standartlari darajasiga olib chiqadi»- deya qo'llab quvvatlaydi. Olimlardan A. Chirinov sudyalarni ma'muriy ishlarga ixtisoslashtirishni taklif etib, Rossiya Federatsiyasida ma'muriy sudlarni tashkil etishning zarurati yo'q ekanini Angliya va AQSH singari davlatlarda ixtisoslashgan ma'muriy sudlar bo'lmasa-da, bu davlatlarda inson huquqlarining himoyasi ixtisoslashgan ma'muriy huquq mavjud bo'lgan Germaniyadan kam darajada emasligi bilan izohlaydi. AQSHda esa ijro xokimiyati organlari va ularning mansabdor shaxslari qarorlari qonuniyligi ustidan nazoratni tahminlaydigan kvazi sudlar yoki tribunallar tashkil etilgan. Kvazi turdagi sudlarga 1969 yilda tashkil etilgan Soliq ishlari bo'yicha Qo'shma Shtatlar sudi misol bo'la oladi. 1950 yilda tashkil topgan Qurolli kuchlar ishlari bo'yicha apellyatsiyaviy sudi birinchi instantsiya sifatida harbiy tribunallar tomonidan ko'rib chiqilgan ishlar bo'yicha qabul qilingan qarorlar yuzasidan kelib tushadigan ishlarni ko'rib chiqadi. 1988 yilda asos solingan Veteranlar da'vosi bo'yicha Qo'shma Shtatlar apellyatsiyaviy sudi veteranlar shikoyatini ko'rib chiquvchi hayhatning qarorlarini ko'rib chiqish vakolatiga ega. Ijro etuvchi hokimiyat tarmog'idagi davlat boshqaruvi organlari tarkibida tashkil etilgan tribunallarda 1300 nafardan ortiq ma'muriy nizolar bo'yicha sudg'yalar faoliyat olib boradi [6].

Xulosa ma'muriy yustitsiya jismoniy va yuridik shaxslarning ma'muriy organlar bilan o'zaro munosabatlarida vujudga keladigan ommaviy-huquqiy xarakterdagi nizolarni xal etishga qaratilgan tashkiliy-huquqiy mexanizm bo'lib, milliy va xorijiy mamlakatlarlar tajribasi uni uch xil shaklda, ya'ni umumiy sudlov shakli, kvazi sudlov shakli, maxsus sudlov shaklida tashkil etish mumkin ekanligini ko'rsatdi. Bugungi kunda esa, ma'muriy sudlar tizimini optimallashtirish maqsadida tuman ma'muriy sudlarini tumanlararo sudlarga aylantirildi, qonun hujjatlariga xorijiy tajribalarni o'rganish, tahlil qilish natijasida o'zgartirishlarning kiritilishi ma'muriy sudlarning ish hajmi kamayishiga olib keldi, ommaviy-huquqiy munosabatlardan kelib chiqadigan ishlarni ko'rib chiqish samaradorligi esa yanada oshirildi.

Ma'muriy sudlarning respublikamizda tashkil etilishi va sud ishlarini yuritish jarayonida sudyalarning yuridik shaxslar hamda yakka tartibdagi tadbirkorlarning huquq va qonun bilan qo'riqlanadigan manfaatlarini himoya qilish kabi vazifalarining belgilanishi ma'muriy sudlarning odil sudlov instituti sifatida shakllanishiga xizmat qiladi.

References:

1. O'zbekiston Respublikasining Konstitutsiyasi 2021 y., (www.Lex.uz)

[The Constitution of Republic of Uzbekistan 2021.]
2. Mirziyoyev Sh.M. “O’zbekiston Resoublikasini yanada rivojlantirish bo’yivcha Xarakatlar strategiyasi to’g’risida”gi, 2017 yil 7 fevraldagi PF-4947-son farmoni. O’zbekiston Respublikasi qonun hujjatlar to’plami, 2017 y., (www.Lex.uz) [Mirziyoyev Sh.M. "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan". Collection of Legislation of the Republic of Uzbekistan, 2017]
3. Mirziyoyev Sh.M. “O’zbekiston Respublikasida Ma’muriy islohotlar konsepsiyasini tasdiqlash to’grisida”gi 2017 yil 8 sentabrgi Farmoni.
[Mirziyoyev Sh.M. Decree of September 8, 2017 "On approval of the Concept of administrative reform in the Republic of Uzbekistan"]
4. Mirziyoyev Sh.M. “Sudlar faoliyatini takomillashtirish va odil sudlov samaradorligini oshirishga doir qo’shimcha chora-tadbirlari to’g’risida”gi, 2020 yil 24 iyuldagi PF-6034-sonli farmoni. 2020 y., (www.Lex.uz)
[Mirziyoyev Sh.M. Decree PF-6034 of July 24, 2020 "On additional measures to improve the functioning of the judiciary and increase the efficiency of justice." 2020 y]
5. O’zbekiston Respublikasining “Sudlar to’g’risida”gi Qonuni. 2021 y. [Law of the Republic of Uzbekistan "On Courts". 2021 y.]
6. Qosimov B. Ma’muriy yustitsiya va uni tashkil etish shakllari: milliy va xorijiy tajriba// Yuridik fanlar axborotnomasi. 2018 y. №2. -B. 20-23.
[Kasimov B. Administrative justice and forms of its organization: national and foreign experience // Bulletin of legal sciences. 2018 y. №2. -B. 20-23.]
7.Власов А.В. Какой будет административная юрисдикция?// Российская юстиция.-2002.-№11.-С.17., Сапожников А.И. К вопросу о создании административной юстиции в РФ//Адвокатская практика.-2008.-№1.-С.42-44., [Vlasov A.V. What will be the administrative jurisdiction? // Russian justice.-2002.-№11.-p.17., Sapozhnikov A.I. On the issue of creating administrative justice in the Russian Federation//Lawyer practice.-2008.-№1.-p.42-44]
8. Saidov A.X. Huquq metafizikasi, davlat huquqi va adabiyoti. Inson huquqlari bo’yicha O’zbekiston Respublikasi Milliy Markazi. Toshkent, 2016 y. -648-bet. [Saidov A.X. Metaphysics of law, state law and literature. National Center for Human Rights of the Republic of Uzbekistan. Tashkent, 2016 page 648]
9. Shayzakov Sh. Ma’muriy sud ishlarini yuritishda taraflarning huquqiy maqomi// Huquq va burch. 2021 y. №4.-B.47.
[Shayzakov Sh. Legal status of the parties in administrative proceedings //Law and duty. 2021 y. №4.- p.47.]
10. Muratayev S.A., Musaev B., Artikov D. Ma’muriy huquq va protsess. Darslik. T.: Yuridik adabiyotlar. Publish, 2022 y. -392 bet. [Muratayev S.A, Musaev B., Artikov D. Administrative law and procedure. Textbook. T.: Legal literature. Publish, 2022 y. page-392]

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FARM PRODUCTION EFFICIENCY AND THE POSSIBILITIES OF ITS INCREASE

Annotation. Efficiency and Economic in economics concepts of efficiency there is They are country, network, enterprise, directions and some products according to to be determined can " Economic the concept of " efficiency " to the concept of " efficiency ". relatively wider to the content have Economical efficiency when you say one year during done increased events system with depends has been costs as a result of them net profit earned amount with is compared. Then spent expenses in return net profit earned amount how much a lot if so, economic efficiency level that's all increased is considered and on the contrary Efficiency and he or this events, work products Cultivation as a result achieved achievements represents So, " efficiency " and " economic efficiency » categories each other with depends has been the most important indicators is considered them upgrade for farms all issues positive solution reach it is necessary Farms of activity efficiency if it increases, our country economy of our people marriage level rises.

Key words: efficiency, farms, social production, crop area, agricultural production

Efficiency created national of income to the resources used ratio with is determined. Efficiency is a synthetic and generalized indicator, which has an integral character, that is, it combines the results of several indicators [1].

The efficiency of social production is the economic result of production activity determined by comparing income with costs in the farm. Increasing the efficiency of agricultural production means increasing the weight of national income and production per unit of labor, material, and financial costs [2].

Production indicators of farm efficiency in crop production consist of the following main indicators of its development: crop area, yield, gross amount of harvested crop, structure of crop area, as well as costs per unit of crop area. In animal husbandry, it consists of: the number of livestock, the annual average amount of cattle and poultry, the productivity of livestock, the gross production of livestock products.

Economic indicators of its production efficiency play a decisive role in the assessment of agricultural activity in the current conditions of scientific and technical development. The main economic indicators of farm production

efficiency are: efficiency of funds, profitability of production, cost of production, level of labor productivity and amount of net income.

Science and technology development includes improvement of existing technology, creation and introduction of new, more efficient technology, technology, raw materials, materials, as well as improvement of labor and production organization. Development of science and technology is one of the decisive directions of intensification of production and increase of its efficiency [3].

Efficiency in agricultural production is an important direction of technical development, consisting of regular improvement of equipment, replacement of outdated equipment with new, somewhat more efficient and economical equipment.

Improvement of machinery in the farm, increasing the power of machines, aggregates and mechanisms, increasing their speed of operation, usually requires a lot of physical labor in management.

is moving from simple machines to semi-automatic and automatic machines and lines, to complex mechanized and automated workshops and enterprises.

Agricultural production is being transferred to intensive technology, all of which contribute to increased production efficiency.

The development, implementation, administration, development and improvement of the management system in the farm is related to certain live, itemized labor costs, their relative weight occupies a significant place in the structure of the total costs of production. Therefore, their reduction is one of the important factors for increasing production efficiency.

Increasing the economic efficiency of agricultural production requires the rational organization of production in agricultural enterprises, the wide use of the achievements of scientific and technical progress, the introduction of new high-efficiency machines and tools, agrotechnical and zootechnical methods, and new methods of labor and production organization. does. In order to select and introduce the most effective methods and methods, it is necessary to check them in advance, to evaluate them from an organizational and economic point of view [4].

Based on these rules, the following main indicators are used to determine the economic efficiency of new methods and methods of production on the farm: the amount of high-quality products obtained per hectare of land and per head of cattle; labor productivity; product cost; net income and profitability; capital funds and their replacement.

the farm:

• creation of high-yielding varieties of crops and high-yielding breeds of livestock, accelerating their introduction into production;

• improvement of land reclamation, water supply of crops and development of advanced irrigation technologies;

• providing livestock with quality feed and feeding at the level of demand;

• ensuring the appropriate use of local, cultural fertilizers and chemical agents in the production processes, taking into account the ecology, at the level of demand;

• quick implementation of logistics measures to improve the quality of products, their transportation and storage processes;

• to speed up the effective deployment, specialization and organization of production;

• full mechanization, automation, electrification of work processes as a result of introduction of new techniques, advanced technologies, effective use of existing means of production;

• employees training and promotion system development;

• period and financial expenses chance level reduce

• village economy products work release, sell liberation, between them equivalence provider marketing activities current to be done acceleration;

• non-state ownership forms set up to be done based on entrepreneurship types development;

• investments attraction to be done provider economic mechanisms current reach and others

Thus, the prospects of increasing the economic efficiency of farm production constitute organizational - economic assessment, planning, organization, control, management and other methods of new methods and methods of production.

References:

1. Ronald D. Kay, William M. Edwards, Patricia A. Duffy. Farm management. Eighth edition. – USA: Texas and M University, 2016.

2. Samatov G'.A., Rustamova I.B., Sheripbaeva U.A. Agricultural Economics and Management. Textbook /– T.: 2012.

3. Umrzakov O'.P., Toshboev A.J., Rashidov J., Toshboev A.A. Agricultural Economics and Management. Study guide. - T.: "Economy - finance", 2008.

4. Kasimova D.S. Management theory: a textbook. - T.: TDIU, 2009.

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SUVNING QATTIQLIGINI INSON ORGANIZMIGA TA’SIRI

Annotatsiya. Ushbu maqolada suvning kimyoviy tarkibi, agregat holatlari, qattiqligi va qattiq yoki yumshoq suv iste’molining inson organizmiga ta’siri haqida bayon qilingan.

Kalit so‘zlar: Trilon-B, erioxrom qora T indikatori, deyteriy, tritiy, og‘ir suv, kompleksonometriya.

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THE EFFECT OF WATER HARDNESS ON THE HUMAN BODY

Abstract. This article describes the chemical composition of water, states of aggregation, hardness, as well as the effect of consuming hard or soft water on the human body.

Key words: Trilon-B, indicator eriochrome black T, deuterium, tritium, heavy water, complexometry.

Suv – shaffof, rangsiz, hidsiz, tamsiz va normal holatda suyuq modda hisoblanadi. Yer sharining 71% qismini suv tashkil qiladi. Lekin barcha qismi ham iste’mol uchun yaroqli emas. Chuchuk suvning katta qismi muzliklarda va yer ostida saqlanadi. Odam organizmining asosiy qismini ham suv tashkil qiladi hamda hayotiy jarayonlarning jadalligi ham suvning konsentratsiyasiga bogliq.

Suv molekulasi tarkibida ikkita vodorod-H va bitta kislorod-O atomlari mavjud. Ba’zi holatlarda vodorod atomi o‘rniga uning izotoplari: deyteriy-D yoki tritiy-T ham qatnashishi mumkin. Bunday holatda qay biri mavjudligiga qarab og‘ir suv-D_2O yoki o‘ta o‘gir suv-T_2O deyiladi. Bu elementlarning o‘zaro sigma bog‘ orqali bog‘lanishi natijasida suv molekulasi - H_2O ni hosil qiladi. Suv molekulalari orasida kuchsiz vodorod bog‘ mavjudligi sababli suv molekulasining molekulyar massasi (Mr) 18 m.a.b. ga teng bo’lsa ham suvning agregat holati

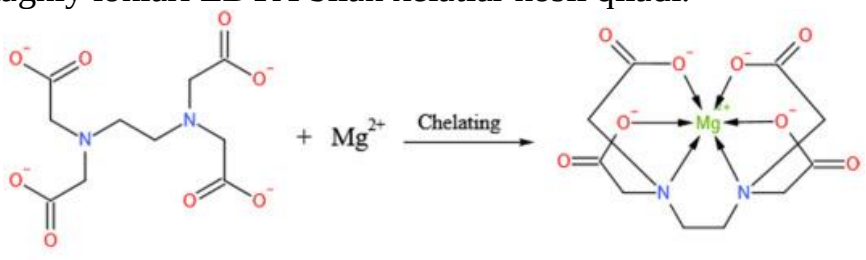
suyuq bo‘ladi. Suv juda yaxshi erituvchi hamdir. Suvda uchta agregat holat mavjud suyuq, qattiq, gaz.

Tibbiyotda turli preparatlarning eritmalarini tayyorlashda suvning yumshoq bo‘lishi katta ahamiyatga ega. Suvning umumiy qattiqligi - P 1suvda erigan Ca^{2+} va Mg^{2+} ionlarining millimollardagi miqdori bilan ifodalanadi. Agar P kichik 2 mmol/l bo‘lsa, suv yumshoq, agar P=2-4 mmol/ l o‘rtacha qattiq, P=4-6 mmol/l bo’lganida qattiq va P=6 mmol/l dan katta bo‘lsa o‘ta qattiq suv hisoblanadi.

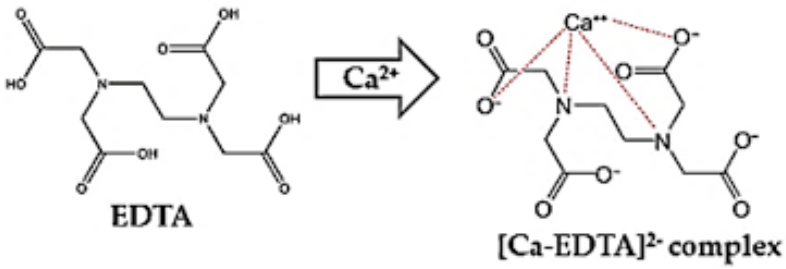
Suvning umumiy qattiqligini aniqlash uchun analitik kimyo fanining analiz usullari qo’llaniladi. Kompleksonometriya usuli miqdoriy analizning sodda usullaridan biri bo’lib, titrlashda ishchi eritma sifatida ko’p hollarda kompleksonlar, Trilon B (EDTA, komplekson III), birlamchi eritma sifatida esa magniy sulfat eritmasi foydalaniladi.

Biz ilmiy tadqiqot ishimizda kimyoviy analiz usullaridan biri bo’lgan kompleksonometriya usuli yordamida Andijon shahri Yu. Otabekov ko’chasidan oqib o’tuvchi soyning suvi, Abdurauf Fitrat ko’chasi ADTI 2-o’quv binosida iste’mol qilinadigan suv, Katta Farg‘ona kanalining Shahrixon tumanidan oqib o‘tgan kanalning suvidan namunalar olib, ularning umumiy qattiqligini tekshirdik.

Ishning bajarilishi: uchta toza titrlash kolbalariga 50 ml dan uch xil suvning namunasidan oldik. Ularga 2 ml dan ammiakli buffer (pH=9) eritma va 4-5 tomchi erioxrom qora T indikatoridan qo‘shdik. Eritmada vino qizil rang paydo bo‘ldi. Byuretka 0,05 n li Trilon-B ning ishchi eritmasi bilan to‘ldirildi va kolbadagi suv titrlandi. Titrlash jarayoni vino qizil rangli eritma ko’k rangga o‘tgunga qadar olib borildi. Titrlash 3 marta amalga oshirildi. Titrlash natijasida suvning tarkibidagi kalsiy va magniy ionlari EDTA bilan xelatlar hosil qiladi.



(a) Chelation of Mg^{2+} by $EDTA^{4-}$



Natijalarga ko‘ra, Yusuf Otabekov ko‘chasidagi soyning suvidagi umumiyqattiqlik P = 4,7, Abdurauf Fitrat ko‘chasidagi ichimlik suvida esa P = 2,1, Farg‘ona kanalining suvida esa P = 4,9 ga teng bo’ldi.

Qattiq suvni muntazam iste’mol qilish organizmda bir qator salbiy holatlarni keltirib chiqaradi. Qattiq suv takibidagi kalsiy va magniy ionlari sovun gidrolizlanishidan hosil bo’ladigan yog’ kislotalari bilan suvda erimaydigan tuzlar “sovunli qoldiqlar” ni hosil qiladi. Ushbu qoldiqlar esa qarish va tashqi muhit ta’sirlaridan himoyalovchi terining yog’ qatlamini parchalaydi, teri teshiklarini yopib, turli xil toshmalarni, teridagi quruqlikni keltirib chiqaradi. Bundan tashqari kalsiy va magniy ionlari hayvon oqsili bilan birikib, qizilo’ngach, oshqozon va ichak devorlariga cho’kib qoladi, oshqozonning peristaltik harakatini susaytiradi, disbakteriozni keltirib chiqaradi hamda yurak-qon tomir, bo’g’im (artrit, poliartrit) kasalliklarini keltirib chiqaradi, organizmda tuz to’planishiga va zaharlanishiga sabab bo’ladi.

Yumshoq suv iste’molining samaradorligi yuqoridir. Unda tuz balansi qattiq suvga nisbatan kam. Shu sababli organizmga bir qator salbiy oqibatlarni olib kelmaydi. Lekin tuz mahsulotlarini butunlay iste’mol qilmaslik organizmdagi suv balansining tushib ketishiga va umumiy suvsizlanishga olib keladi. Shifokor dietologlar tomonidan ortiqcha vazn mavjudligidan aziyat chekayotgan insonlarga qutulish chora-tadbirlari sifatida qattiq suvning iste’molini kamaytirish va tuzli taomlarni kamroq iste’mol qilish tavsiya qilinmoqda.

Xulosa qilib aytganda, inson salomatligi uchun qattiq suvning muntazam iste’moli salbiy oqibatlarga olib kelib, qimmatli hisoblangan inson hayotining qisqarishiga sabab bo’lishi mumkin. Buning oldini olish uchun har doim iste’mol qilayotgan mahsulotlarni organizmga ta’sir qilish xususiyatlaridan habardor bo’lish lozim.

Foydalanilgan adabiyotlar:

1. https://meganorm.ru/Data2/1/4293739/4293739158.pdf
2. https://core.ac.uk/download/pdf/14037097.pdf
3. https://pubs.aip.org/aip/acp/articleabstract/2026/1/020044/682639/Comparison-method-of-calcium-analysis-on-filter?redirectedFrom=PDF
4. https://12.rospotrebnadzor.ru/rss_all//asset_publisher/Kq6J/content/id/282021

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UMUMTA'LIM MAKTABLARIDA TARBIYA FANINING JORIY ETILISHI. TARBIYA FANIGA QO'YILGAN DAVLAT TA'LIM STANDARTLARI

Annotatsiya. Mazkur maqolada umumta'lim maktablarida tarbiya fanining joriy etilishi va fanga qo'yilgan davlat ta'lim standartlari haqida ma'lumotlar berib o'tilgan. Tarbiya fani bo'yicha umumiy o'rta ta'lim muassasalari o'quvchilariga qo'yiladigan malaka talablari umumiy o'rta ta'lim tizimida davlat ta'lim standartining negizi hisoblanadi va "Tarbiya" fanini o'rganishning bosqichlari, ta'lim mazmuni va malaka talablarining tuzilishini belgilaydi. Tarbiya fanining malaka talablari asosida o'quv dasturlari, davlat attestatsiyasi uchun "Tarbiya" fani bo'yicha nazorat-baholash ko'rsatkichlarini ishlab chiqish mexanizmlari haqida axborotlar berilgan.

Kalit so'z: Tarbiya fani, baholash ko'rsatkichlari, o'rganish bosqichlari, samaradorlik, Kompetensiya, Vatanga sadoqat, globallashuv, bag'rikenglik, huquqiy madaniyat, innovatsion fikrlash.

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IMPLEMENTATION OF THE SCIENCE OF EDUCATION IN UNIVERSAL EDUCATION SCHOOLS. STATE EDUCATIONAL STANDARDS FOR EDUCATION

Abstract. This article provides information about the introduction of the science of education in general education schools and the state educational standards set for the science. Qualification requirements for students of general secondary educational institutions in the field of education are the basis of the state educational standard in the general secondary education system, and the stages of learning the subject "Education", the content of education and defines the structure of qualification requirements. Information is provided on the mechanisms for developing educational programs based on the qualification requirements of the science of education, control and evaluation indicators for the science of "Education" for state certification.

Key words: Educational science, evaluation indicators, learning stages, efficiency, Competence, Loyalty to the Motherland, globalization, tolerance, legal culture, innovative thinking.

Kirish. Respublikamizda maktab ta’limini rivojlantirish va o‘sib kelayotgan yosh avlod ongida ma’naviy immunitetni shakllantirish va mustahkamlash, shuningdek, ajdodlarimizning boy ilmiy ma’naviy merosini chuqur o‘rganish, ta’lim-tarbiya jarayoniga mustaqil bilimlarni shakllantirish metodikasini joriy qilish orqali o‘quvchilarning o‘z ustida ishlashi hamda tashabbuskorligini oshirish, o‘quvchilarda axborotlarni tahlil qilish, o‘z bilimlariga tayangan holda xolis xulosa qilish, vaziyatga oqilona baho berish ko‘nikmasini rivojlantirish, turli xil ommaviy madaniyatlarning oldini olish immunetitini shakllantirish hozirgi kunda dolzarb masalalardan hisoblanadi. O‘zbekiston Respublikasi Prezidentining “Ma’naviy-ma’rifiy ishlar samaradorligini oshirish bo‘yicha qo‘shimcha chora-tadbirlar to‘g‘risida”gi qarori asosida yoshlarni mustaqil hayotga dunyoqarashi keng, faol fuqarolar etib tarbiyalash maqsadida Vazirlar Mahkamasining qarori ishlab chiqilib unda tarbiya jarayonida uzluksizlik, uzviylik tamoyillariga tayangan holda avvalo, onaning homiladorlik davrini to‘g‘ri tashkil etish, go‘daklar va bolalarni ma’naviy tarbiyalash bo‘yicha asosiy yo‘nalishlarni belgilash hamda yoshlarda Vatanga sadoqat, tadbirkorlik, irodalilik, mafkuraviy immunitet, mehr-oqibatlilik, mas’uliyatlilik, bag‘rikenglik, huquqiy madaniyat, innovatsion fikrlash, mehnatsevarlik kabi muhim fazilatlarni bosqichma-bosqich shakllantirish masalalari belgilab berilgan.

Tadqiqot metodlari. Globallashuv jarayonlari, fan-texnika taraqqiyoti, innovatsion jamiyatga bo‘lgan ehtiyoj yoshlar uchun ko‘plab imkoniyatlar yaratmoqda. Ular oldiga tezkor qarorlar qabul qilish, innovatsion tafakkurni shakllantirish, intellektual salohiyatni oshirish bilan birga milliy va umuminsoniy qadriyatlarga sodiq bo‘lishdek hayotiy talablarni qo‘ymoqda. Shu bois, O‘zbekistonda «Tarbiya» fani konsepsiyasi ishlab chiqilib, u orqali davlatning ta’lim-tarbiya sohasidagi siyosatini amalga oshirishda mavjud bo‘lgan dolzarb muammolarni hal etishga yo‘naltirilmoqda. Konsepsiya yosh avlod tarbiyasidagi ishlarni yangi bosqichga olib chiqishga qaratilgan ustuvor vazifalar, asosiy maqsad va yo‘nalishlarni belgilab berdi. O‘zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 7-iyuldagi “Umumiy o‘rta ta’lim muassasalarida “Tarbiya” fanini bosqichma-bosqich amaliyotga joriy etish chora-tadbirlari to‘g‘risida”gi 422-son Qaroriga42 muvofiq “Umumiy o‘rta ta’lim muassasalarida “Odobnoma”, “Vatan tuyg‘usi”, “Milliy istiqlol g‘oyasi va ma’naviyat asoslari” hamda “Dunyo dinlari tarixi” fanlarini birlashtirgan holda yagona “Tarbiya” fani 1-9-sinflarda 2020/2021 o‘quv yilidan, 10-11-sinflarda esa 2021/2022 o‘quv yilidan boshlab fanlarga ajratilgan umumiy soatlar doirasida bosqichma-bosqich amaliyotga joriy etish belgilab berilgan edi. Hozirgi kunda ushbu belgilangan vazifalar to’liq amaliyotga tadbiq etilib, maktablarda “Tarbiya” fani bo‘yicha o‘quvchilarga darsliklar joriy qilinib amaliyotda qo‘llanilib kelmoqda.

42 O‘zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 7-iyuldagi “Umumiy o‘rta ta’lim muassasalarida “Tarbiya” fanini bosqichma-bosqich amaliyotga joriy etish chora-tadbirlari to‘g‘risida”gi 422-son Qarori //

Tadqiqot natijalari. Umumiy o‘rta ta’lim muassasalari o‘quvchilarining yoshi va psixofiziologik xususiyatlarini o‘rganishlar natijasida ularning ongiga umuminsoniy qadriyatlar va yuksak ma’naviyatni yanada chuqur singdirish, ularni vatanparvarlik va insonparvarlik ruhida tarbiyalash, umumiy o‘rta ta’lim muassasalaridagi ma’naviy-tarbiyaviy ishlarni yangicha asosda tashkil etish maqsadida umumiy o‘rta ta’lim maktablarida “Odobnoma”, “Vatan tuyg‘usi”, “Milliy istiqlol g‘oyasi va ma’naviyat asoslari” hamda “Dunyo dinlari tarixi” fanlarini birlashtirgan holda yagona “Tarbiya” fani joriy qilindi. Darsliklarni tayyorlashda Yaponiyaning “Axloq ta’limi”, Singapurning “Fe’l-atvor va fuqarolik ta’limi”, Buyuk Britaniyaning “Tafakkur”, “Xulq ta’limi” fanlari va darsliklari yaqindan o‘rganildi. Ushbu darsliklarda ilk marotaba XX asr ko‘nikmalari deb nom olgan “yumshoq ko‘nikmalar” joriy qilindi. Darslik orqali o‘quvchida bilim berishdan tashqari ko‘nikma shakllantiriladi. O‘quv darsliklaridagi amaliyotga yo‘naltirilgan mashg‘ulotlar va mavzular yuzasidan berilgan topshiriqlar o‘quvchida muvaffaqiyatga erishishga motiv uyg‘otadi va faol fuqarolik pozitsiyasini shakllantirishga xizmat qiladi. O‘quv fani mohiyati 50% nazariy, 50% amaliy asosga qurilgan bo‘lib, darslikda “role-model”, ya’ni “namuna keltirish” zamonaviy pedagogik metodidan unumli foydalanilgan. Darslikning motivatsion tarafi shunki, unda milliy va xalqaro miqyosda yuksak natijaga erishgan buyuk insonlarning yutuqlari tahlil qilinadi. 2020-2021-o‘quv yili uchun sinov tariqasida joriy etilgan 1-9-sinfgacha bo‘lgan darslik ustida bitta ijodiy jamoa ishladi. Bu har bir sinf darsligi o‘rtasidagi tafovut va takrorlanishlarni oldini oldi va bir butun, izchillikdagi darslik yaratilishi ta’minlandi.

№	**Standart darajalari**	**Ta’lim bosqichi**	**Darajalarining nomlanishi**	**Tarbiya kompetensiyalari**43
1	A1	Maktabgacha ta’lim	“Tarbiya” fanini o‘rganishning boshlang‘ich darajasi	Bola boshlang‘ich odob-axloq tushunchalarga ega bo’ladi
2	A2	UO‘T 4-sinf bitruvchisi	“Tarbiya” fanini o‘rganishning tayanch darajasi	- orzu qiladi -maqsadlarini aniq qo‘ya oladi va amalga oshirishga intiladi -tanqidiy tafakkurga ega bo‘ladi -mas’uliyatni anglaydi -hamkorlik qila oladi - axloq qoidalariga ega bo‘ladi -to‘g‘ri harakatlarga ega bo‘ladi - jarayonda tashabbus ko‘rsatadi -o‘z-o‘zini rivojlantiradi - faoliyatini tahlil qila oladi -atrof muhitga oqilona munosabatda bo‘ladi

43 Kompetensiya - lotincha: competo — erishyapman, munosibman, loyiqman.

3	A2+	UO‘T 9-sinf bitruvchisi	“Tarbiya” fanini o‘rganishning kuchaytirilgan tayanch darajasi	-maqsad qo‘ya oladi -mas’uliyat va majburiyatiga amal qiladi -hislarni anglaydi va nazorat qila oladi -mustaqil va sog‘lom fikrga ega bo‘ladi -pul topish ko‘nikmalari shakllanadi -liderlik sifatlari namoyon bo‘ladi -biznes va tadbirkorlik g‘oyalarni ilgari suradi -kreativ sifatlarni namoyon qiladi -to‘g‘ri qaror qabul qiladi -faol fuqarolik pozitsiyasiga ega bo‘ladi -axborotni taxlil qiladi axborot xavfsizligidan himoyalana oladi -bag‘rikenglikni namoyon qila oladi
4	B1	UO‘T 11-sinf bitruvchisi	“Tarbiya” fanini o‘rganishning umumiy darajasi	-ish o‘rinlarini yaratishga intiladi mehnat jamoasi va mutaxasislar bilan samarali hamkorlik qiladi - ijtimoiy sharoitga moslasha oladi - o‘z o‘zini rivojlantiradi,bilimini muntazam ravishda oshirib boradi - burch-majburiyatlarini biladi -faol fuqarolik pozitsiyasini shakllantiradi -nizoli vaziyatlarda o‘zini idora qila oladi -muamoli vaziyatlarni tinch yo‘l bilan hal qiladi - ma’naviy-axloqiy fazilatlarga ega bo‘ladi va targ‘ib qila oladi.

Foydalanilgan adabiyotlar:

1. O‘zbekiston Respublikasi Prezidentining «Ma’naviy-ma’rifiy ishlar samaradorligini oshirish bo‘yicha qo‘shimcha chora-tadbirlar to‘g‘risidagi qarori
2. Tarbiya fani bo‘yicha umumiy o‘rta ta’lim muassalari o‘quvchilariga qo‘yiladigan malaka talablari. O‘zbekiston Respublikasi Xalq ta’limi vazirining 2020-yil 14-oktabrdagi 235-son buyrug‘iga ilova.
3. Абу Наср Форобий Фозил одамлар шаҳри – Тошкент.: Янги Аср Авлоди. 2016.
4. https://uz.wiktionary.org/wiki/kompensatsiya
5. https://lex.uz/docs/-4885018

УДК 621.31

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DEVELOPMENT OF USE OF ALTERNATIVE ENERGY SOURCES

Annotation. Various sectors of the national economy (from 1 kW to 1000 kW) are provided with cheap, continuous electricity. It is possible to organize electricity from alternative energy sources, and in many areas it will be possible to use existing renewable energy resources. Installation of wind turbines allows not only to obtain environmentally friendly electricity, efficient use of renewable energy resources, but also to provide electricity to places where electricity does not reach, to save oil and gas products, and to create additional jobs.

Key words: alternative energy source, wind engine, electricity, renewable energy resources, environmentally friendly electricity, continuous supply of electricity.

Wind is one of the first sources of energy used by humans. The energy reserves of the wind are 100 times more than the hydro-energy of the rivers, but today 10,000,000 megabytes of energy are developed worldwide. This indicator is 0.001% of the world's energy balance. Around the world, various programs have been developed for wind energy and its use. Scientists and engineers have now developed powerful and reliable wind turbine designs that are technically advanced for agricultural and industrial applications. Wind energy devices can be divided into 2 types [1]. 1- wind mechanical devices, 2 - wind energy devices. In 1930, a project of a wind power plant was developed, and later in the city of Rome, the world's first 100 kW wind wheel with a diameter of 30 meters was installed. The electricity produced by the SPP was directly connected to the Sevostopil power station, but it was destroyed during the Second World War [2].

Wind speed is determined before installing wind equipment. The wind speed should be above 5 km/h and it can be winged or gusty. According to the installation of the wings of wind equipment, it is divided into transverse and vertical types. The main tools of wind equipment include: Wings, their length depends on the influence of the wind. The height of the column depends on the speed of the wind movement in the vertical direction. Various devices and devices that convert mechanical energy into electrical energy. In modern wind turbines equipped with agrodynamic screws, 150 MW of energy can be obtained when the wind speed is 6-8 km / h and the area of wind influence is 210 m/square [3,4].

Metrologically suitable areas for the construction of wind power stations in Uzbekistan include Navoi, Bukhara, Kashkadarya, It is possible to get districts of Tashkent region and regions of Qaraqalpoghistan [5]. In particular, a wind farm

is operating in order to provide electric energy to the curtain factory in the Kazakh Darya region of Karaganda region. Chorvo village of Tashkent regionin the field of work, the hybrid solar -wind power station will implement the radio transmission devices of the livestock complex, feed preparation, storage, preliminary processing of milk, cleaning of barns from manure and cattle care, and the electrification and mechanization of farms. Today, it is inconvenient to carry wind power lines over the air, As a result of ensuring the economic efficiency of the use of electric energy, the use of it in many areas of production, especially livestock and poultry farming, is increasing significantly [6,7].

In many developed countries, due to the energy crisis, programs aimed at connecting non-conventional energy resources, especially wind energy, have been adopted and are being implemented. Wind is considered a random uncontrollable natural process caused by the influence of the sun and the earth's rotation. As a source of energy, the characteristic of the wind is primarily its non-constantness, mainly due to the great variability of the speed. In this, it is mainly determined by the large variability of speed [8,9]. This causes the kinetic energy of the wind flow to change in relatively small intervals of time and within large limits.

In different areas, the direction and strength of the wind varies depending on the height above the earth's surface. For example, in the Northern Hemisphere, the average speed is 9-25 m/s in places close to the earth's surface. Wind speed exceeding 25-30 m/s can seriously damage the national economy. Therefore, it is considered efficient to convert wind energy into mechanical or electrical energy when the wind speed is 3-25 m/s [10].

Thus, wind energy changes proportionally to the cube of its speed. A windmill can only convert a certain amount of energy into useful work, which is evaluated by the wind energy utilization factor. Modern wind turbines convert no more than 45-48 % of the kinetic energy of the wind into mechanical energy during normal operation [11].

At the same time that non-renewable energy resources are running out, the demand for renewable energy resources is increasing dramatically. Experts estimate that at the end of the first quarter of the new century, electricity from renewable energy resources will make up about 30% of the total electricity production. As we know, several types of energy, such as the potential energy of rivers and streams, wind energy, solar energy, are considered renewable energy resources [12]. The question arises as to which type of renewable energy resources listed above is more efficient and convenient for us to use. Today, energy extraction from wind turbines is developing, of course, the advantages of such equipment cannot be denied, but the main parts of such installations are imported from abroad. But all parts of wind turbines can be built from local raw materials. In different areas, the direction and strength of the wind varies depending on the height above the earth's surface. For example, in the Northern Hemisphere, the average speed near the surface of the earth is 9-25 m/s [13]. Wind speed exceeding 25-30 m/s can seriously damage the property. Therefore, it is considered efficient

to convert wind energy into mechanical or electrical energy when the wind speed is 3-25 m/s.

Wind energy is proportional to the cube of its speed. A windmill can only convert a certain amount of energy into useful work, which is evaluated by the wind energy utilization factor. Modern wind turbines convert no more than 45-48 % of the kinetic energy of the wind into mechanical energy during normal operation. In wind turbines equipped with modern agrodynamic screws, 150 MW of energy can be obtained when the wind speed is 6-8 km - h and the wind influence area 2100 метрis square [14].

Depending on the wind speed, it is possible to obtain energy from several watts to several kilowatts, and this energy can be used for various purposes of life and housing (Fig. 1) [15]. When designing wind engines, it is important to pay attention to the following:

Wind direction in the regions

• Compactness of the device

• Wind speed

• Using the most common types of generators

Figure 1. Extraction of energy from wind turbines

The classification of the final results is given below:

Environmentally friendly energy can be obtained by building, installing and generating electricity from wind turbines. Such engines can serve as the main source of energy in the entire industry. In this way, the following problems can be solved:

- Increase the standard of living of the population
- Obtaining ecologically clean energy
- Saving oil and gas products
- Reducing the price of electricity
- Ensuring continuity of electricity supply

- Creation of new jobs
- A reserve of non-renewable energy resources is a significant saving
- Small business development

References:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.

13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.

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VOLEYBOL SPORT TURINING KELIB CHIQISHI, TARIXI VA HOZIRGI DUNYODAGI AHAMIYATI

Annotatsiya. Dinamik va qiziqarli sport turi bo'lgan voleybolning kelib chiqish tarixi bor. U 1895 yilda Massachusets shtatining Xoliok shahridagi sport ishqibozi va YMCA direktori Uilyam G. Morgan tomonidan ishlab chiqilgan. Basketbol, beysbol, tennis va qo‘l to‘pi elementlarini o‘zida mujassam etgan o‘yinni izlayotgan Morgan voleybolni jamoaviy ish, chaqqonlik va strategiyani ta’kidlaydigan ko‘ngilochar mashg‘ulot sifatida yaratdi. Ushbu sport oddiy qoidalar va zarur bo'lgan minimal jihozlar tufayli tezda mashhur bo'lib, uning global tarqalishiga zamin yaratdi.

Kalit so’zlar: mashhurlik, sport tadbirlari, rivojlanish, ahamiyati, tarixi, o'yinchilar.

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THE ORIGIN, HISTORY AND SIGNIFICANCE OF THE SPORT OF VOLLEYBALL IN THE PRESENT WORLD

Abstract. Volleyball, a dynamic and engaging sport, boasts a fascinating origin story. It was conceived in 1895 by William G. Morgan, a sports enthusiast and director of the YMCA in Holyoke, Massachusetts. Seeking a game that combined elements of basketball, baseball, tennis, and handball, Morgan crafted volleyball as a recreational activity that emphasized teamwork, agility, and strategy. The sport rapidly gained popularity due to its simple rules and the minimal equipment required, setting the stage for its global proliferation.

Keywords: popularity, sport events, developing, significance, history, players.

Kirish: Voleybol so'nggi yigirma yil ichida misli ko'rilmagan o'sishga guvoh bo'ldi. FIVB Jahon chempionati, FIVB Jahon Ligasi, FIVB Jahon Gran-Prisi, FIVB Jahon Kubogi va FIVB Grand Chempionlar Kubogi hamda Olimpiya o'yinlari kabi jahon musobaqalarining katta muvaffaqiyati bilan xalqaro miqyosda barcha darajalarda ishtirok etish darajasi keskin o'sishda davom etmoqda.

Plyaj voleyboli hodisasi ham hayratda qolishda davom etmoqda. Atlantadagi 1996 Olimpiya o'yinlariga kiritilganidan beri plyaj voleybolining

katta tomoshabin va televizion muvaffaqiyati va FIVB Jahon Safari, Jahon chempionati va qit'a Kubogining ajoyib muvaffaqiyati voleybolni butunlay yangi bozorga olib chiqdi.

Nyu-York shtatida tug'ilgan Uilyam G. Morgan (1870-1942) dastlab "Mintonette"nomini bergan voleybol o'yini ixtirochisi sifatida tarixga kirdi.

Yosh Morgan bakalavriat ta'limini YMCA Springfild kollejida (yosh erkaklar nasroniylar assotsiatsiyasi) olib bordi va u yerda 1891 yilda basketbol ixtiro qilgan Jeyms Neysmit bilan uchrashdi. O'qishni tugatgandan so'ng, Morgan birinchi yilini Auburn (Meyn) YMCA shundan so'ng, 1895 yil yozida u YMCA da Holyoke (Massachusets shtati) u yerda jismoniy tarbiya direktori bo'ldi. Ushbu rolda u kattalar uchun mashqlar va sport mashg'ulotlarining keng dasturini yaratish, ishlab chiqish va boshqarish imkoniyatiga ega bo'ldi.

Uning rahbarligi g'ayrat bilan qabul qilindi va darslari ko'payib bordi. U o'z dasturini o'zgartirish uchun ma'lum bir raqobatbardosh o'yin turiga muhtojligini tushundi. Rivojlana boshlagan sport turi bo'lgan basketbol yoshlarga mos keladigandek tuyuldi, ammo keksa a'zolar uchun kamroq zo'ravonlik va unchalik kuchli bo'lmagan alternativani topish kerak edi.

O'sha paytda Morgan unga rahbarlik qiladigan voleybolga o'xshash o'yinni bilmas edi; u buni o'zining sport mashg'ulotlari usullari va YMCA gimnaziyasidagi amaliy tajribasidan ishlab chiqdi. O'zining birinchi tajribalarini tasvirlab, u shunday dedi: "tegishli o'yinni qidirishda tennis xayolimga keldi, ammo buning uchun raketkalar, to'plar, to'r va boshqa jihozlar kerak edi, shuning uchun u yo'q qilindi, ammo to'r g'oyasi yaxshi tuyuldi. Biz uni yerdan taxminan 6 fut, 6 dyuym (1,98 metr) balandlikka, o'rtacha odamning boshidan yuqoriga ko'tardik. Bizga to'p kerak edi va biz sinab ko'rganlar orasida basketbol pufagi ham bor edi, lekin bu juda yengil va juda sekin edi. Shuning uchun biz basketbolning o'zini sinab ko'rdik, u juda katta va juda og'ir edi."

Oxirida Morgan to'p qilish uchun A.G.Spalding va Bros. firmasidan so'radi, ular Massachusets shtatidagi Chikopi yaqinidagi fabrikasida qilgan edi. Natija qoniqarli edi: to'p charm bilan qoplangan, ichki rezina naycha bilan, uning atrofi 25 dan kam bo'lmagan va 27 dyuymdan ko'p bo'lmagan (mos ravishda 63,5 sm va 68,6 sm) va vazni 9 dan kam bo'lmagan va 12 untsiyadan ko'p bo'lmagan (252 gr va 336 gr navbati bilan).

Morgan Holyokedagi ikki do'stidan, doktor Frank Vud va jon Linchdan (uning takliflari asosida) o'yinning asosiy tushunchalarini dastlabki 10 ta qoida bilan birgalikda tuzishni so'radi.

1896 yil boshida konferentsiya tashkil etildi YMCA kolleji Springfildda barcha YMCA jismoniy tarbiya direktorlarini birlashtirgan edi. Doktor Lyuter Xalsi gulik, professional jismoniy tarbiya maktabi direktori (shuningdek, YMCA xalqaro qo'mitasi jismoniy tarbiya bo'limining ijrochi direktori) Morganni yangi kollej stadionida o'z o'yinini namoyish etishga taklif qildi. Morgan har biri besh kishidan (va ba'zi sodiq muxlislardan) iborat ikkita jamoani Springfildga olib bordi, u yerda namoyish Sharqiy gimnaziyadagi konferentsiya delegatlari oldida

o'tkazildi. Jamoalardan birining sardori J. J. Curran va boshqasi jon Linch mos ravishda shahar hokimi va o't o'chirish brigadasi boshlig'i bo'lganlar.

Morgan yangi o'yin gimnaziya yoki mashq zallari uchun mo'ljallanganligini, ammo ochiq havoda ham o'ynash mumkinligini tushuntirdi. Cheksiz ko'p o'yinchilar ishtirok etishlari mumkin edi, o'yinning maqsadi to'pni yuqori to'r ustida, bir tomondan ikkinchi tomonga ushlab turishdir.

YMCA jismoniy tarbiya direktorlari, ayniqsa, jismoniy tarbiya bo'yicha ikkita professional maktab tomonidan rag'batlantirildi, Massachusets shtatidagi Springfild kolleji va Chikagodagi Jorj Uilyams kolleji (hozir Dauners Grove, Illinoys), qo'shma Shtatlar, Kanadadagi barcha jamiyatlarida voleybolni qabul qildi (1900 yilda Kanada qabul qilgan birinchi xorijiy mamlakat bo'ldi). va boshqa ko'plab mamlakatlarda: Filippindagi Elvud S. Braun (1910), Xitoyda J. Xovard Kroker, Yaponiyada Franklin X. Braun (1908), doktor J. H. Birmada, Xitoyda va Hindistonda, Meksika va Janubiy Amerika, Evropa va Afrika mamlakatlarida ham.

1913 yilga kelib Osiyo qit'asida voleybolning rivojlanishi ta'minlandi, chunki o'sha yili o'yin Manilada tashkil etilgan birinchi uzoq Sharq o'yinlari dasturiga kiritilgan edi. Shuni ta'kidlash kerakki, uzoq vaqt davomida Osiyoda voleybol "jigarrang" qoidalarga muvofiq o'ynagan, bu boshqa narsalar qatorida 16 o'yinchidan foydalangan (o'yinlarda ko'proq ishtirok etish uchun).

Qo'shma Shtatlarda voleybolning o'sishining ko'rsatkichi 1916 yilda Spalding voleybol qo'llanmasida chop etilgan va Robert C. Kubbon tomonidan yozilgan maqolada keltirilgan. Ushbu maqolada Kubbon o'yinchilar soni jami 200,000 kishiga quyidagi tarzda bo'linishini taxmin qildi: YMCADA (o'g'il bolalar, yigitlar va keksa erkaklar) 70,000, YVCADA (qizlar va ayollar) 50,000, maktablarda (o'g'il bolalar va qizlar) 25,000 va kollejlarda (yosh erkaklar) 10,000.

1916 yilda YMCA kuchli milliy kollej Atletik Assotsiatsiyasini (NCAA) o'z qoidalari va bir qator maqolalarini nashr etishga undashga muvaffaq bo'ldi va bu kollejning yosh talabalari orasida voleybolning tez o'sishiga hissa qo'shdi. 1918 yilda har bir jamoaga to'g'ri keladigan o'yinchilar soni oltitaga cheklangan va 1922 yilda to'p bilan vakolatli aloqalarning maksimal soni uchtaga belgilangan.

1930-yillarning boshlariga qadar voleybol aksariyat hollarda bo'sh vaqt va dam olish o'yini bo'lgan va faqat bir nechta xalqaro tadbirlar va musobaqalar bo'lgan. Dunyoning turli burchaklarida turli xil o'yin qoidalari mavjud edi; ammo, milliy chempionatlar ko'plab mamlakatlarda o'tkazildi (masalan, o'yin darajasi ajoyib standartga yetgan Sharqiy Evropada).

Shunday qilib, voleybol tobora yuqori jismoniy va texnik ko'rsatkichlarga ega raqobatbardosh sport turiga aylandi.

Xulosa

O'zining kamtarona boshlanishidan tortib, hozirgi global sport maqomiga qadar voleybol uzoq yo'lni bosib o'tdi. Mintonette-dan standartlashtirilgan o'yinga evolyutsiyasi butun dunyo bo'ylab futbolchilar va muxlislarni o'ziga jalb qildi. Voleybolning ahamiyati uning jismoniy foydalaridan tashqarida bo'lib, jamoaviy

ish, inklyuzivlik va shaxsiy o'sishni ta'kidlaydi. Voleybol rivojlanishda va yangi tomoshabinlarni jalb qilishda davom etar ekan, u bugungi dunyoda qadrli va muhim sport turi bo'lib qolmoqda.

Foydalanilgan adabiyotlar:

1. Kraus, Hillary (August 25, 2001). "Volleyball serves up new rules". Spokesman=Review. (Spokane, Washington). p. C7.
2. Bosak, Chris (April 4, 2003). "Rule changes everyone will recognize". The Hour. (Norwalk, Connecticut). p. E1.
3. Chandler, Rob (May 14, 2003). "H.S. volleyball makes big changes". Arlington Times. (Washington). p. B2.
4. Derrick, Chris (September 4, 2003). "Ready or not, rally scoring has arrived". Spokesman-Review. (Spokane, Washington). p. C1.
5. Stamm, Diane (October 10, 2002). "Winds of change blowing through volleyball world". McCook Daily Gazette. (Nebraska). p. 10.

UDK:321

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O‘ZINI-O‘ZI TASHKILLASHTIRUVCHI JARAYONLARNI TADQIQ ETISHNING YAXLIT METODOLOGIYASI

Annotatsiya. Mazkur maqolada hozirgi zamon fan taraqqiyoti rivoji, voqelikdagi narsa va hodisalarning rivojlanishi nochiziqli mohiyatiga ega bulib, har bir tizimning evolyusion jarayonida ko‘p variantli rivojlanish imkoniyatlari mavjud va ular orqaga qaytmaslik tabiatiga eganligi to‘g‘risida fikr yuritiladi.

Kalit so‘zlar: Sinergetika, «xaosdan tartib», o‘zini-o‘zi tashkillashtiruvchi tizimlar, nochiziqlilik, barqarorlik, universal model, o’z-o’zini tashkil etish, sinergetik metodlar, orqaga qaytmaslik.

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COMPREHENSIVE METHODOLOGY OF RESEARCH OF SELF-ORGANIZING PROCESSES

Abstract. This article discusses the fact that the development of modern science, the development of things and events in reality has a non-linear nature, and in the evolutionary process of each system, there are many options for development, and they have the nature of not going back.

Key words: Synergetics, "order from chaos", self-organizing systems, nonlinearity, stability, universal model, self-organization, synergistic methods, non-return.

I.Prigojin, G.Nikolislar sinergetikaning gnoseologik imkoniyatlari haqida gapirib, Sinergetika orqali biz murakkab tizimlarni tadqiq qilishga yordam beradigan muqobil qarashlarni ham bilish imkoniyatiga ega bo‘lamiz1, degan fikrni ilgari suradilar.

Sinergetika doirasida ilmiy tadqiqotlarni olib borayotgan olimlar uning nochiziqli tahlil xususiyati haqida fikr bildirib, «murakkab tadrijiy o‘zgarishlarni tadqiq qiluvchi usullar nochiziqli tahlilga tayansagina bilish jarayonidagi xatoliklarning oldini oladi»2, degan xulosaga keladilar. Ya’ni, tadqiqot olib borishdagi bunday nochiziqli tahlil yangi bilimlarni shakllanishiga keng imkoniyat yaratadi.

O‘zini o‘zi tashkillashtiruvchi tizimlarni bilish, hozirgi zamon ilmiy bilishining dolzarb metodologik muammolarning biridir. Bu muammo bilan bog‘liq bo‘lgan, hozirgi zamon ilmiy bilishida o‘zini o‘zi tashkillashtiruvchi nazariya, yangi ilmiy paradigmaning shakllanish va rivojlanish jarayoni kechmoqda.

O‘zini o‘zi tashkillashtiruvchi nazariya asoschilaridan biri hisoblangan I.Prigojin mazkur nazariyani «xaosdan tartib» deb nomlaydi. Har xil tabiatdagi jarayonlarda, xaosdan tartibning kelib chiqishi va aksincha jarayonlarni modellashtirishning universal metodi mavjudmi degan savolning tug‘ilishi tabiiy. Bu masaladan kelib chiqqan holda, biz bu paragrafda o‘zini o‘zi tashkillashtiruvchi tizimlarni bilishdagi nochiziqli modellashtirishning metodologik ahamiyatini ko‘rsatamiz. Bu kontekstda, hozirgi zamon matematik usullarning gnoseologik imkoniyatlarini, shuningdek o‘zini o‘zi tashkillashtiruvchi jarayonlarni bilishda matematik modellashtirishning rolini tahlil etamiz. Nochiziqli modellashtirishning o‘zini-o‘zi tashkillashtiruvchi tizimlarni bilishda konseptual apparat, universal usullarning biri sifatidagi roli va ahamiyatini yoritamiz. SHu nuqtai nazardan, hozirgi zamon ilmiy bilishda har xil tabiatga ega bo‘lgan o‘zini-o‘zi tashkillashtiruvchi jarayonlarni tadqiq etishning yaxlit metodologiyasi negizini shakllantirish imkoniyatini tahlil etamiz.

Har qanday ilmiy nazariya real voqelik bilan to‘g‘ridan-to‘g‘ri emas, balki bizning paradigmalarimiz, konseptual apparatlarimiz, aniqroq aytadigan bo‘lsak, modellar bilan ish ko‘radi. Fikrimizcha, o‘zini-o‘zi tashkillashtiruvchi tizimlarni klassik va klassik bo‘lmagan kategorial apparatlar asosida modellashtirish tadqiqot ob’ektiga adekvatli emas. Demak, tadqiqot metodologiyasini o‘zgartirishga zarurat tug‘iladi. Va bu muammo, postklassikmas fan arsenalida, «... sinergetika dunyoni «boshqa koordinatalar tizimi» da qarab chiqib, ochiqlik, beqarorlik, muvozanatsizlik, chiziqsizlik tushunchalari qo‘llanadi. Mazkur ilmiy sohaning tushunchalari (nochiziqlik, o‘zini-o‘zi tashkil qiluvchi, ochiqlik, bifurkatsiya, kogerentlik, attraktor, xaos, tasodif va h.) ning nafaqat klassik, shuningdek borliqning noklassik modelidan farq qilishidan guvohlik beradi».3 Bu yo‘nalish, asosan o‘zini o‘zi tashkillashtiruvchi fenomenlarni nazariy asosda o‘rganib, o‘tgan asrning 60-chi yillarida sinergetika nomi bilan G.Xakenning ishlarida, muvozanatsiz jarayonlar termodinamikasi asoschisi I.Prigojinning matematik R.Tom ishlab chiqqan falokat matematik nazariyalari bilan yuzaga keldi. Masalan, G.Xaken, «sinergetika ko‘plab podsistemalardan tashkil topgan har xil tabiatdagi tizimlarni, masalan elektronlar, atomlar, molekulalar, hujayralar, neyronlar, mexanik elementlar, fotonlar, hayvon organlari va shuningdek insonlarni... tadqiq etish bilan shug‘ullanadi. U ko‘plab podsistemalarning birgalikdagi ta’siri oqibatida makroskopik darajada tuzilmaning kelib chiqishini o‘rganadi».4

Mazkur ko‘rsatmalarga asoslanib, G.Xaken evolyusion tenglama deb nomlanuvchi nochiziqli differensial tenglamalar sistemasida o‘zini-o‘zi tashkillashtiruvchi jarayonlarning modelini ishlab chiqdi. SHuningdek I. Prigojin

va uning maktabi esa termodinamika tushunchalari yordamida tuzulmaning kelib chiqishini tushuntirib, «... chiziqsizlik tizimda tartiblilik kelib chiqishining sababi hisoblanib,... dissipativ tuzilmalar o‘zida shuni e’tirob etadiki, ya’ni muvozanatsizlikning demonstrativ qobiliyati tartiblilikning manbai hisoblanadi».6

O‘z vaqtida Lui de Broil, «... bizning bilishimizning har bir yutug‘i, hal etishga qaraganda, ko‘plab muammolarni keltirib chiqaradi,...»8 - deb ta’kidlagan edi. Bu fikrni, bizningcha modellashtirishda zaruriy ravishda hisobga olish kerak bo‘lgan, mohiyatan murakkab, ko‘p komponentli hisoblangan o‘zini-o‘zi tashkillashtiruvchi tizimlarni modellashtirish muammosiga bog‘lash mumkin. Bu bilimlarimizning har vaqt mutlaqo xaotik holatda bo‘lishini bildirmaydi, aksincha, «ijod hamma vaqt ba’zi-bir beqarorlik, ya’ni dunyoning xaotik boshlang‘ich asosini aks ettiruvchi beqarorlik bilan bog‘liqdir»9. YA’ni tartibsizlik faqat buzuvchi emas, balki ba’zi holatlarda hayot, xaos, noaniqlik va beqarorlikni konstruktiv qo‘llanilishi mumkin ekanligiga o‘rgatishi lozim. Bu – o‘zini-o‘zi tashkillashtiruvchi tizimlarni modellashtirish jarayonining o‘zi nochiziqli xarakterga ega bo‘lib, o‘zini-o‘zi tashkillashtirish qonuniyatiga bo‘ysunadi. Masalan, «hozirgi zamonda ko‘plab mutaxassislarning diqqat markazida tuzilmalarning kelib chiqishi jarayoni turadi. Biologlarni hayotning kelib chiqishi, biologik evolyusiya muammosi, morfogenez masalalari bilan bog‘liq hodisalar qiziqtiradi; ekologlarni – murakkab biotsenozning tashkillanishi va barqaror funksionallashuvi qonuniyatlarini bilish nuqtai nazardan; fizik va kimyogarlar – lazerga o‘xshash, prinsipial yangi uskunalarni va qurilmalarni yaratish qiziqtiradi»10 va shunga o‘xshash modellashtirish muammosi bilan chambarchas bog‘liq. Masalan, italiyalik matematiklar A.Lotka va V.Volterra ekologik jarayonlarni matematik modellashtirish bilan shug‘ullanib, bu haqda tadqiqotchi tomonidan «matematik apparatni biologik va ekologik jarayonlarning qonuniyatlarini aks ettirishda samarali hisoblab, matematik modellarga voqelikka yaqinlashish vositasi sifatida qaradi» - deb ta’kidlaydilar.

Hozirgi zamon ilmiy bilishida, shu jumladan gumanitar fanlar - iqtisodiyot, sotsiologiya, psixologiya, lingvistika, sa’nat va h.k. ob’ektlarini modellashtirishda sinergetik metodlar ham qo‘llanilmoqda. Buni G. Xaken12, Dj. Portugali13 ishlarida ko‘ramiz. SHuningdek, sinergetik usullar har xil korxonalarning (firmalarning) raqobati, hukumat va xalqning o‘zaro ta’siri, iqtisodiyotda uzoq vaqtli sikllarni tushunishda katta samara beradi14.

Yuqorida keltirilgan misollardan ko‘rinadiki, hamma jarayonlarga nochiziqlilik xos bo‘lib, bu o‘z navbatida o‘z-o‘zini tashkillashtiruvchi har xil jarayonlarda tuzilmaviy izomorfizmning mavjudligi haqida ta’kidlash imkonini beradi. Demak, o‘z-o‘zicha tashkillanuvchi jarayonlarning eng umumiy qonuniyatlarini tushinishda universal modelga zarurat tug‘iladi. Bu masala bilan bog‘liq ravishda hozirgi zamon matematikasi usullaridan, masalan, nochiziqli differensial tenglamalar, o‘z-o‘zicha tashkillanish kelib chiqadigan har xil jarayonlarni nochiziqli tenglamalar yordamida o‘rganadi. Mazkur tenglamalarni

echmasdan ham ularda aks ettirilgan jarayonning sifatiy yangi belgilari haqida tasavvurga ega bo‘lish mumkin.

Adabiyotlar:

1. Prigojin I., Nikolis G. Poznanie slojnogo. Vvedenie. Seriya "Sinergetika:ot proshlogo k budущemu" M.: Izd Editorial URSS. Perevod s angliyskogo. Izd.2 2003.-5 s.
2. Kurdyumov S.P., Knyazeva E.N. Kvantovыe pravila nelineynogo sinteza koevolyusioniruyuщix struktur // Filosofiya, nauka, sivilizatsiya. Moskva: Editorial Urss, 1999. -222-230 s.
3. Xaken. G. Sinergetika. -M.: 1985.-65 s.
4. Tajibayev, M. A., & Axmedov, J. T. (2022). SINERGETIK YONDASHUV-YOSHLARNING YANGI DUNYOQARASHINİ SHAKLLANTIRISHNING ASOSIY JIHATLARIDAN BIRI SIFATIDA. *Scientific progress*, *3*(3), 527-532.
5. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. *Scientific progress*, *3*(3), 934-937.
6. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. *INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL*, *3*(3), 203-207.
7. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. *FAN, TA'LIM, MADANIYAT VA INNOVATSIYA*, *1*(2), 69-73.
8. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.
9. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
10. Рўзиев, А. (2020). АМИР ТЕМУР ҚАРАШЛАРИДА СИЁСИЙ-ҲУҚУҚИЙ ҒОЯЛАРНИНГ АКС ЭТИШИ. Научно-просветительский журнал" Наставник".

UDK 574.577.575.827.2

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IRON DEPENDENCE OF THE POPULATION INDICATOR OF COVID-19 DISEASE

Key words: wheat, biofortification, anemia, iron, "hidden hunger", viruses, Covid-19, trace elements, immunity, variety, vitamins.

According to world health statistics, many countries have been affected by the coronavirus pandemic. High fever, headache, body aches, diarrhea, dry cough and pneumonia are symptoms of SARS (Severe Acute Respiratory Syndrome) caused by the coronavirus. The word "corona" means "crown". The coronavirus has a small crown of visible spike protein. These spike proteins bind to ACE2 receptors in the cells of the respiratory system. Once inside the cell, the coronavirus injects the encoded viral RNA into our cells to produce more protein and virus. SARS-Cov-2, also known as Covid-19, is the cause of the current pandemic. It was identified in December 2019 in Wuhan, China. The virus had previously been found in a wild animal, most likely a bat, and was found in humans during tests during the Wuhan pneumonia outbreak. Then it spread throughout the world, and on March 15, 2020, the disease returned to Uzbekistan for the first time.

The virus can be airborne and cause breathing difficulties. Other symptoms may be mild or severe. Everyone is weakly protected against the unknown virus, but it most affects older people, those with cancer, obesity, cardiovascular disease, or similar comorbidities. Persons with immunodeficiency and similar individuals are susceptible, and those who recover from the first infection may be re-infected.

Patients with anemia are also more likely to develop other infectious diseases. Iron deficiency in the body leads to a decrease in the number of macrophages and granulocytes in the tissue, as well as to impaired antibody production. The main cause of immunodeficiency in iron deficiency is a decrease in the activity of iron-containing cell receptors, proteins and enzymes. IDA (Iron deficiency Anemia) contributes to disorders of the immune system (lysozyme, B-lysines, complement, decreased levels of certain immunoglobulins and decreased levels of T- and B-lymphocytes), high infectious disease and the emergence of secondary immunodeficiency. Iron in the excretion of harmful substances in the body, enzymes (cytochrome) is also involved in protective activity of the human body. Human tissues contain mainly two iron-containing enzymes, supperoxide dismutase and catalase, which protect the body's tissues from free radicals. Modern research shows that high levels of hemoglobin in erythrocytes are first and foremost due to high levels of iron in brain cells. Iron levels in brain tissue are involved in the regeneration of synaptic nerve impulses, myelination of nerve

fibers, and hypothalamic function. The activity and sensory ability of the brain depends on the amount of iron in the body [2].

Anemia is one of the most common pathologies in the world. According to WHO experts, the prevalence of anemia among the population for health reasons was studied in 3 groups: mild (5% -19.9%), moderate (20% -39.9%) and high (40% or more). In countries with a high prevalence of anemia, a medical approach alone is not enough to solve the problem, so decisions must be made at the state level.

In particular, in the concept of prevention of non-communicable diseases in 2019-2022, support of healthy lifestyles and increasing the level of physical activity of the population "… The level of micronutrient enrichment of wheat flour is 30% of all types of flour produced and imported" [6].

The loss of nutrients during the industrial production of food products leads to a decrease in the nutritional and biological value of products [7, 8, 9].

Today, one in three people in the world are deficient in micronutrients such as vitamin A, zinc and iron, which are essential for a healthy life. The essence of these substances is that they have specific properties in the field of action, are directly part of biologically active substances that regulate life processes. Therefore, such a deficiency of micronutrients can lead to a violation of any chemical changes that do not occur without the participation of enzymes or hormones. This condition is called "hidden hunger" and humanity suffers from it [11].

Although a person looks healthy with anemia caused by chronic malnutrition, actually has a higher risk of developing other infectious diseases. In extreme cases, latent starvation leads to blindness, growth and mental retardation in children, an increased risk of maternal death in women and childbirth, and a decrease in working capacity in adults [12].

Anemia is a disease characterized by a decrease in the amount of hemoglobin and (or) a decrease in the number of red blood cells per unit volume of blood. Anemia is more common in children and pregnant women. It is one of the most serious diseases due to its complications such as anemia, physical development, and impaired iron (Fe) metabolism. Iron deficiency anemia can also lead to other diseases. Anemia affects many organs and systems. The most striking symptom of anemia is constant fatigue and lethargy [12].

Along with other countries of Central Asia, the incidence of iron deficiency anemia in Uzbekistan is very high. According to S.M.Bakhramov, in particular, the incidence of iron deficiency anemia among women of childbearing age is 60% [10].

Usually foods for humans, including wheat flour, are enriched with minerals and vitamins. However, this is not the case for people in many developing countries [11, 13]. In addition, artificial food fortification certainly requires additional costs and labor. Therefore, it is important to focus on

increasing the amount of minerals and vitamins in the grain of new crops, including wheat.

Wheat (*Triticum spp*.) is one of the staple foods consumed by one third of the world's population. While Central Asia ranks first in the world in terms of average annual consumption of flour and bakery products, Uzbekistan and Tajikistan rank first in the region in this indicator [15,16,17].

The main purpose of this study is to investigate the interaction of iron (*Fe*) in some varieties of wheat grown in the grain fields of an anemic country, based on surveys and laboratory analyses.

Conducting survey. The survey was conducted in 2021 in the Kashkadarya region, conditionally divided into 3 study regions. At the same time, the cities of Karshi and Shakhrisabz are the first (central) district; the second (mountain-foothill) territory of Dekhkanabad, Yakkabag, Shakhrisabz, Kitab regions; and Guzar, Kamashi, Karshi, Kasan, Mirishkor, Mubarek, Nishan, Kasbi, Chirakchi regions were divided into the third (desert) zone.

Research results. First of all, for this study, data were obtained on the sown areas of selected varieties for the period 2019-2021. According to the data on the sown area for 3 years, the “Krasnodar-99” variety was sown on 23.9 thousand hectares less than the sown area, and the “Gozgon” variety - 93.9” thousand hectares - is dominant. Of the four selected varieties “Grom” and “Yaksart” were planted on 50.2 thousand and 67.7 thousand hectares, respectively.

In the next part of the study, a special survey was conducted to examine the significance of micronutrients in wheat for public health based on the links between the incidence of anemia and iron deficiency. As mentioned above, the survey was conducted in 2021 in the Kashkadarya region, conditionally divided into 3 regions. 747 respondents took part in the survey. In terms of regions, they were: Central district - 259; mountainous region - 200; and desert area - 288. The survey involved 127 people under the age of 20 (17%), 129 people aged 20-29 (17.3%), 165 people aged 30-39 (22.1%), 150 people aged 40-49 (20.1%).) and 176 (23.6%) respondents aged 50 and older (Fig. 1). 29% (216 people) of the respondents had a higher education and 71% (531 people) had a secondary education.

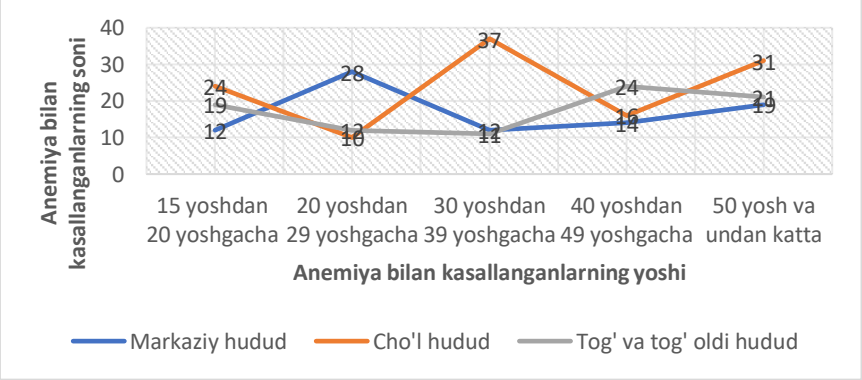

Figure 1. Anemia rate of respondents surveyed in Kashkadarya region

When analyzing the health status of respondents with anemia, it is known that only 39.1% (292 people) suffer from this disease, and 60.9% (455 people) are healthy, i.e. there was no anemia. And 399 of them were found to have consumed wheat grown in the country's grain fields and on their own farms. (Figure 2)

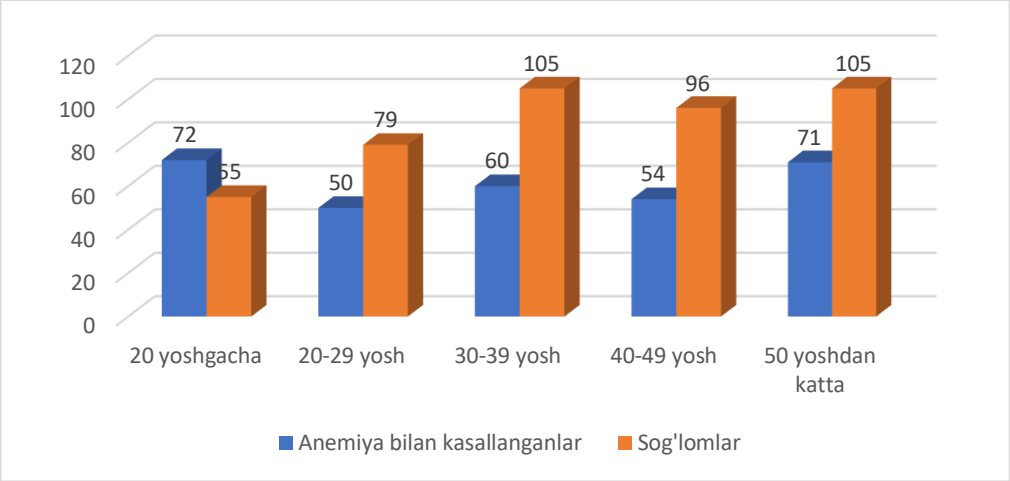

Figure 2. The number of respondents with anemia and healthy in Kashkadarya region

When analyzing this indicator by age, anemia was more common in the mountain population aged 20-29 years (54.5%), and among the urban population aged 30-39 years, the majority of respondents who did not have the disease were (79.3%).).

The frequency of anemia in the central region is 32.4% at the age of 20 years, 40.6% at 20-29 years old, 20.7% at 30-39 years old, 31.1% at 40-49 years old, 50 years and older 38%. In the central region, a high degree of anemia was 38% and 40.6% higher in 20-29-year-olds and 50-year-olds, respectively. The overall incidence of anemia was 32.9%.

In the desert zone - 48% under 20 years old, 26.3% of 20-29 year olds, 49.3% of 30-39 year olds, 30.8% of 40-49 year olds and 42.5% of people aged 50 and older formed. Among the age groups, the age group under 20 years old, 30-39 years old, 50 years and older was 48%, 49.3% and 42.5% higher than the other groups. The overall incidence of anemia was 39.4%.

47.5% of the population under the age of 20, 54.5% of the population aged 20-29, 34.4% of the population aged 30-39, 45.3% of the population aged 40-49 live in the mountains and foothills years, 50 years and older, while 39.6% were found to be anemic in all age groups in the region. The overall incidence of anemia was 44.3%.

According to these indicators, 32.9% of patients with anemia in the central urban area live in the desert, 38.4% in the mountainous foothills and 44.3%.

By regions in the central, desert, mountainous and foothill regions, the share of the population under the age of 20 is 32.4% in the central region, and in the desert, mountainous and foothill regions this figure is higher by 48.0%. It turned out that 47.5%.

In the age group of 20-29 years in the desert area 26.3%, and in the central, mountainous and foothill regions 40.6%, 54.5%, and in the desert zone these figures are relatively low, the central city showed that it is high in mountains and foothills.

In the age group of 30-39 years in the central region it was 20.7%, in the desert - 49.3%, in the mountainous foothills - 34.4%. High rates of anemia have been found in desert, mountainous and foothill regions.

In the central region, anemia was detected in 31.1% of people aged 40-49 years, in desert regions - 30.8%, in mountainous and foothill regions - 45.3%, with the highest rates noted in mountainous and foothill regions. 38% of the population of the central region aged 50 years and over, 42.5% in the desert region and 39.6% in the mountainous and foothill regions had high rates of anemia in all regions.

In the region, 40.4% of people aged 50 years and older were diagnosed with anemia. According to B.B.Gopodeskiy, there is an increase in the incidence of anemia among the adult population of the Russian Federation. This is due to a lack of iron, vitamins and other trace elements in the diet, which affects the absorption of iron in the body. Pregnant women are a special risk group - folic acid deficiency occurs in 30-50% of women. A special group is the elderly, where about 50% of older people suffer from iron deficiency and about 15% from folic acid deficiency. Vegetarians are also at risk of lacking animal feed in their diets [12].

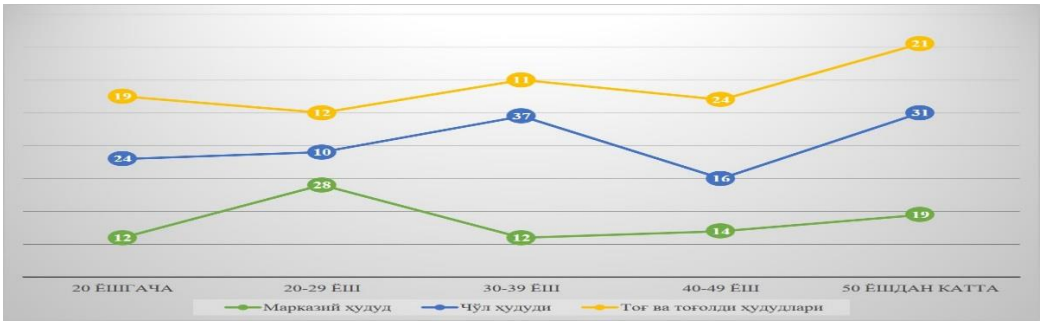

Figure 3. Regional anemia rate.

In all regions, anemia was observed in 32.9% of the total number of respondents in the central city, and 9.6% of the population consumed a mixture of mill and factory flour. Flour products consumed by 90.4% of respondents turned out to be factory-made flour.

In the desert region, anemia was found to be 38.4% of the total respondents. It was found that 38.2% of the flour products consumed by the respondents were mixed with mill and factory flour.

Anemia was observed in 44.3% of respondents surveyed in mountainous and foothill areas. The flour products consumed were mostly grown on private farms in 9% of respondents, while 51% were found to consume a mixture of mill and factory flour.

Table 1

The amount of iron (Fe) in ancient local wheat and wheat cultivated in the region.

T/r	Name of Varieties	Taken place	*Fe* mg/kg			
			x	min	max	V %
1	“Kizil Shark”	Dekhkanabad region Beshbulok vil.	81,46±11,40	58,9	95,6	24,24
2	“Kizil Shalola”	Kamashi region	78,63±5,79	67,8	87,6	12,75
3	“Yaksart”	Kasan region Korabayir vil.	58,85±4,21	50,46	63,8	12,41
4	“Krasnodar-99”	Kasbi region Misit vil.	48,44±1,96	45,3	52,07	7,04
5	“Gozgon”	Kamashi region Okrabod vil.	79,03±8,82	64,14	94,68	19,33
6	“Grom”	Kamashi region	52,79±6,46	43,2	65,09	21,19

Wheat varieties “Kizil Shark” and “Kizil Shalola” were brought from Dekhkanabad, Kamashi district, Kashkadarya region, and the Fe element was tested on them. Variety “Kizil Shark” had the *Fe* element content of 81.46 mg/kg, while the coefficient of variation was 24.24%. In the “Kyzyl Shalola” variety, the content of this element was 78.63 mg/kg, which is 12.75%. 58.85 mg/kg variety “Yaksart”, 48.44 mg/kg “Krasnodar-99”, 79.03 mg/kg varieties “Gozgon” and “Grom” grown in the grain fields of the region 52.79 mg/kg. The maximum content of the *Fe* element was 79.03 mg/kg in the “Gozgon” variety with a variation coefficient of 19.33%.

Thus, the results of the study showed that, in the context of regions, the incidence of anemia was higher than the average in the central urban and rural areas, and higher in mountainous and foothill areas. The ancient local wheat varieties “Kizil Shark” and “Kizil Shalola”, as well as the “Gozgon” variety grown in the fields of our region, are distinguished by a high content of iron. However, ancient local varieties are rarely cultivated and consumed by the population. It is important to use economically feasible forms of iron that are safe, effective, and popular with all segments of the population to combat anemia, using ancient local varieties for biofortification.

The incidence of Covid-19. More than half of the participants (51.1%) reported being infected with Covid-19, and the remaining 365 respondents (48.9%) were not infected with the virus. When analyzing this indicator by age groups of participants, the largest number of patients was in the group of participants over 50 years old and 40-49 years old, and the smallest number of patients was in the group of respondents younger than 20 years old. was found (Fig. 4).

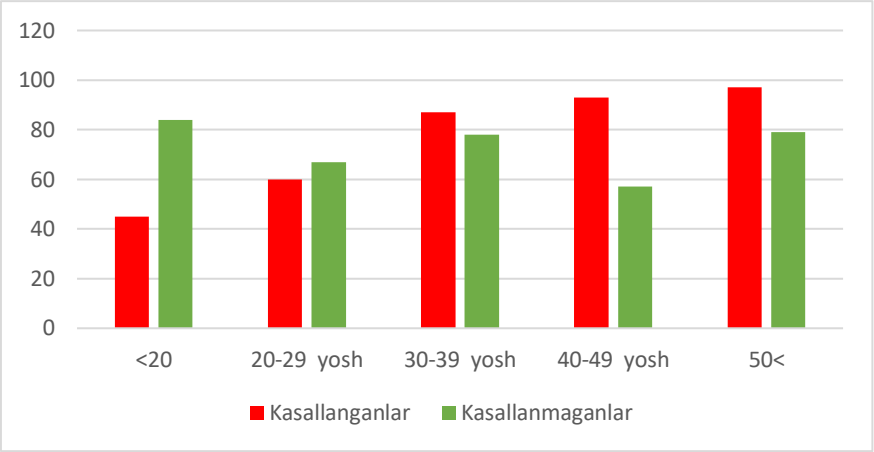

Figure 4. Distribution of Covid-19 patients by age group

When considering the proportion of patients in the group in the total number of respondents, it was found that the highest rate was in groups 3-4-5, and the lowest - in group 1 (under 20 years).

Conclusion. It was revealed that wheat is the most consumed by the population, and the population living in remote areas consumes this product less than fortified foods. This, in turn, requires the selection of natural foods high in *Fe* element. The increase in the incidence of anemia in group 5, that is, in the adult population, in mountainous and foothill areas with the highest overall incidence of anemia, was studied, and a correlation was found between this condition and the incidence of Covid-19.

References:

1. https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Uzbekistan
2. Рукавицына О. А. Анемии. Краткое руководство для практических врачей всех специальностей / под ред.. - М.: ГЭОТАР-Медиа, 2018. - 176 с. - ISBN 978-5-9704-4475-
3. Domenico Girelli, Giacomo Marchi, Fabiana Busti, and Alice Vianello\\ Iron metabolism in inFections: Focus on COVID-19. Seminars in Hematology, Volume 58, Issue 3, July 2021, Pages 182-187.
4. Petek Eylul Taneri, Sergio Alejandro Gomez-Ochoa, Erand Llanaj and et.al. \\ Anemia and iron metabolism in COVID-19: a systematic review and meta-analysis.
5. Tarasova I.S. Jelezodefisitnaya anemiya u detey i podrostkov \\ Voprosы sovremennoy pediatrii. 2011.№10(2).S. 40-48. https://doi.org/10.1007/s10654-020-00678-5
6. O'zbekiston Respublikasi Prezidentining "2019-2022 yillarda yuqumli bo'lmagan kasalliklar profilaktikasi, aholining sog'lom turmush tarzini qo'llab-quvvatlash va jismoniy faolligi darajasini oshirish konsepsiyasi" // O'zbekiston Respublikasi hujjatlar to'plami, 18.12. 2018 yil PQ-4063-son qarori. 2-bob.
7. Gleasson G. R., Sharmanov T. Anemia prevention and control in four Central Asian Republics and Kazakhstan // J.Nutr. -2002. - P. 867-870.

8. Lauren Hund, Christine A. Northrop-Clewes, Ronald Nazario, Dilora Suleymanova //A Novel approach to Evaluating the Iron and Folate Status of Women of Reproductive Age in Uzbekistan after 3 Years of Flour Fortification with Micronutrients// Plos 2013. Vol. 8, Is. 11. - P.1-12.
9. Mikpoelementozы cheloveka: etiologiya, klaccifikasiya, opganopatologiya / A.P. Avsыn i dp. – M.: Medisina. – 1991. – 496 c.
10. Baxramov SM., Farmonkulov X.K., Atadjanova Z.A. Anemii. – Tashkent: Abu Ali Ibn-Sino; 2000. – 26 s.
11. Pehrsson PR, Moser-Veillon PB, Sims LS, Suitor CW, Russek-Cohen E. Postpartum iron status in nonlactating participants and nonparticipants in the special supplemental nutrition program for women, infants, and children. Am J Clin Nutr. 2001;73:86–92.
12. Gopodeskiy B.B., Godylyan O.B. Jelezodefisitnыe coctoyaniya i jelezodefisitnыe anemii: diagnoctiki i lechenie (Metodicheckie pekomendasii). – M.: ID MEDPPAKTIKA-M. – 2008. – 28 c.
13. Institute of Medicine Food and Nutrition Board, Dietary Reference Intakes: energy, carbohydrates, fiber, fat, fatty acids, cholesterol, protein, and amino acids. – Washington, DC: National Academies Press. – 2002.
14. Togayeva M.A. Triticum aestivum L. analiz elementov Fe i Zn v nekotorыx perspektivnыx sortax. Universum: ximiya i biologiya. Vыpusk: 6(84) Iyun 2021.
15. Tog'ayeva M. A., Toshpulatov A. X., Baboyev S. K., Xaliqov Q. Q.. Kushanov F.N. Biofortifikasiyalash uchun ba'zi yumshoq bug'doy navlarini DNK markerlari yordamida o'rganish. NamDU ilmiy axborotnomasi. 2020 yil 8-son. 57-63 b.
16. Koronavirus infeksiyasi tarqalishiga qarshi qo'shimcha chora-tadbirlar to'g'risida. https://lex.uz/docs/-4772484
17. Tog'ayeva M. A., Kushanov F.N., Komilov D.J. Temir moddasi (Fe) yetishmovchiligining Qashqadaryo viloyati aholisida kamqonlik bilan bog'liqligi. NamDU ilmiy axborotnomasi. 2022 yil 3-son. 102-111 b.

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MITE BIOLOGY AND PLANT DAMAGE

Abstract. The demand for agriculture in our republic is increasing year by year. Our fruits and vegetables are being grown by the farmers and are reaching the world markets. But harmful organisms cause serious damage to agricultural products. Harmful and sucking mites are among them. In order to fight against mites, it is necessary to have information about mites. In this article, you can get acquainted with the biology of mites and measures to combat them.

Key words: mites, type, family parasite, body, oral apparatus, idiosome, bisexual, reproduction.

Like insects, ticks go through embryonic and postembryonic development periods in their individual development. And ticks jump like insects. It will be able to fly after the last time. Some species need additional nutrition during this period. Temperature and humidity greatly affect how long a mite lives, while the optimum range can vary widely for different species. Ticks can produce fifteen or more generations during the year. Most mites do not move from place to place very quickly, so they are adapted to slow dispersal by means of spider webs, hypropyl period. In terms of nutrition, ticks can be parasites and predators of various animals. There are many types of mites that damage crops. Phytocelius mite living in Uzbekistan is used in the fight against spider mite in greenhouses.

Ticks are unisexual creatures, but in some species, eggs develop without fertilization, and often male mites hatch from such eggs, which is considered a type of reproduction in the form of parthenogenesis (arrenotochy). The number of mites can be drastically reduced by acariphages. Of these, coccinellid beetles and larvae (stetorus), golden-eye larvae, mite-eating thrips, candals and predatory mites are particularly important. Mite eggs are often oval or round in shape. Egg development is similar to insect eggs in many respects. Post-embryonic development of mites takes place without metamorphosis. A mite larva has three pairs of legs. Due to the absence of the fourth pair of legs, hysterosomes are poorly developed in larvae, external genitalia are often underdeveloped, and sensory organs are simplified. Larvae and adults of the mite are also distinguished by the location and number of hairs covering the body.

Grouping: It is divided into 3 groups depending on the type of nutrition: herbivores, carnivorous mites. and the parasitic mite. Some mites. feeding on plant remains (saprophages) and playing an important role in the process of soil formation (eg, representatives of the shield mite belonging to the Oribalidae family and AcaroideaHHHr); others feed on plant sap (phytophages) and cause great damage to agricultural crops (maye., species of the Tetranychidae family); some feed on simple fungi (mycophages) and parasitic mites. harms farm animals and humans (mites of the family Ixodidae, Argasidae, Dermanyssidae, etc.). A tick that is harmful in nature. along with a number of useful ones, it prevents the increase of agricultural pests. Most mite larvae have 3 pairs of legs, other stages of development have 4 pairs of legs, but a group of 4-legged mites have 2 pairs of legs. ib increases. In some mites, increased parthenogenesis is also observed. During individual development, mites go through the following stages: egg, larva, nymph, and mature mite. Some representatives of acaroid mites living in food reserves also have a hypopyal (hypopus) period between the nymph and deutonymph periods, which have a simplified digestive system and oral apparatus. This period serves for the spread of the mite species and for it to withstand the nocturnal conditions. In resting hippos, the legs are underdeveloped, the sensory organs are simplified, the epidermis is thickened and yellow or brown in color. Resting (sleeping) hippos can lie still for a long time (up to several years). During this time, they survive on the substances they accumulated during the previous nymphal period. When favorable conditions occur, the life of the mite normalizes, and the period of hypopus is completed.

Predatory mites are representatives of the parasitic and acariform K. families. It lives on leaves of fruit trees, mulberry, vine, cotton, alfalfa and vegetable crops, weeds and plant residues. Serkarakat. Spider mite eggs, larvae, nymphs and adults, flat-bodied mites, etc. feeds on small arthropods. Widely distributed in Central Asia, about 50 species belonging to 11 families are known. It is often found in cultivated fields and adjacent weeds. Like herbivorous mites, they also live in fallen leaves, cracks in tree bark, bedding, etc. winters in plant remains. It leaves rural areas when the average daily temperature is above 10°. Irrigation is collected in agricultural agrobiocenosis, mainly in weeds and mulberry trees.

Plant-eating mite. Two sarcoptiform mites (Sarcoptifomes) and thrombidiform mites. (Trombidiformes) is divided into a subfamily. Of the sarcoptiform mite, representatives of 2 families of warehouse mites: flour mite and hairy mite cause great damage (warehouse pests). Trombidiform mites are mites that harm plants by sucking sap during growth and development. enters. The species of the spider mite family, including the spider mite, cause a lot of damage to agricultural crops. The largest (up to 2 mm) and active mite belonging to the Briobind family not only causes damage to plants, but also enters human habitations and contaminates food reserves. The brown fruit mite is a serious pest. Fruit flat mite from the family Tenuipalpidae is harmful in Central Asia. Most

species of the various claw mite family (Tarsonemidae) are herbivores, but there are also carnivores and saprophages. The most harmful is the earthworm mite. Live births are characteristic of the family Pycmotidae. All their development phases take place in the mother's womb; the belly swells up to 100-500 times. A member of this family causes damage to wheat, oats, rye, barley and corn during the growing season. The bellied mite is parasitic on the stock-damaging insect worm; if they get into the human body, the skin disease hay fever occurs. Representatives of the four-legged mite or swelling mite (Eriophyidae) family feed on the plant, change its shape, color of leaves and fruits, kill buds. Some species are free-living on plants, while others form tumors.

References:

1. Mirziyoev Sh.M. Tanqidiy tahlil, qat'iy tartib-intizom va shaxsiy javobgarlik-har bir rahbar faoliyatining kundalik qoidasi bo'lishi kerak. "O'zbekiston" NMIU, 2017. – 103 b.
2. A.Sh. Xamraev B.A. Xasanov B/A. Sulaymonov A.G. Kojevnikova O'simliklarni biologic himoya qilish vositalari Toshkent 2012. 367-bet
3. Sh.T.Xo'jaev O'simliklarni zararkunandalardan uyg'unlashgan ximoya qilish, agrotoksikologiya asoslar.
4. Hakimov A.A., Tashpulatova F.Sh. Limonning Asosiy Zararkunandalari Respublika ilmiy-amaliy konferensiyasi materiallari to'plami(Toshkent, 2017 yil 22 dekabr) B.263-264
5. Tolibjonov O. O. O. G. L. ANORNI ZARARKUNANDALARDANHIMOYaLASh //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – T. 2. – №. 5. – S. 956-959.
6. Mirzaeva S. A., Tuychiev I. U., Talibjanov O. O. The Use of Biological Agents in the Fight Against the Pomegranate Moth //Journal of Optoelectronics Laser. – 2022. – T. 41. – №. 4. – C. 606-610.
7. Abdurahmonov, D., Mirzaitova, M., Mirzaumarov, M., Qo'ziboyeva, S., Shokirova, X., Usmonov, S.,... & Abdullayev, B. (2023). BOG'ZARARKURANDALARIGA QARSHI KURASH USULLARI. Science Promotion, 1(2), 386-394.

УДК: 330.5.055.2.

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O‘ZBEKISTONDA YASHIL O`SISH IQTISODIY RIVOJLANISHNNING MUHIM OMILI SIFATIDA

Anatatsiya. Ushbu maqolada energetika sohasidagi muammolar, yoritib berilgan. Hozirhi kunda dunyodagi energetika tarmoqlaridagi texnologiyalar ularning yutuqlari va kamchiliklari, xalqaro tashkilotlar tadqiqotlari asosida yoritilgan. O‘zbekistonda yashil energetika manbalarini rivojlantirish uchun taklif va tavsiyalar berilgan.

Kalit so‘zlar: quyosh energiyasi, shamol energiyasi, energetika subsidiyalari, energetika investitsiyalari.

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GREEN GROWTH AS AN IMPORTANT FACTOR OF ECONOMIC DEVELOPMENT IN UZBEKISTAN

Abstract. This article describes the problems in the field of energy. Currently, technologies in the world's energy sectors are highlighted based on their achievements and shortcomings, researches of international organizations. Proposals and recommendations for the development of green energy sources in Uzbekistan are given.

Key words: solar energy, wind energy, energy subsidies, energy investments.

Kirish. Bugungi kunda insoniyat yangi global muammolarga duch kelmoqda. Ekologik muammolarning kuchayishi va ekotizimga antropogen bosimning kuchayishi tahdidi bizni an’anaviy iqtisodiy tamoyillarni qayta ko‘'rib chiqishga va ekologik yo'naltirilgan iqtisodiyotga o'tishni boshlashga majbur qilmoqda. Ushbu turdagi iqtisodiyot allaqachon "yashil iqtisodiyot" deb nomlangan va yashil iqtisodiyotga o'tish bo'yicha kompleks strategiya "yashil o'sish" deb atala boshlandi.

Yashil iqtisodiyot endi yangi atama emas va iqtisodiy rivojlanishning alohida turini talqin qilish uchun keng qo'llaniladi, bunda asosiy maqsad insonlar farovonligini oshirish, shu bilan birga ijtimoiy adolatni saqlab qolishdir.

Dunyo davlatlarida iqlim o‘zgarishlarini salbiy oqibatlari chuqurlashib borar ekan, jahon hamjamiyati bu muammoning oqibatlari bilan emas balki sabablari bilan kurashish eng to‘g‘ri yo‘l ekanligini anglab yetmoqda.

Qayta tiklanadigan energiya - bu tabiiy manbalardan olinadigan energiya, ular iste'mol qilinganidan ko'ra tezroq tiklanadi. Quyosh nurlari va shamol, masalan, doimiy ravishda to'ldirilib boriladigan shunday manbalardir. Qayta tiklanadigan energiya manbalari yetrli darajada xisoblanadi.

Qayta tiklanadigan energiya ishlab chiqarish qazib olinadigan yoqilg'ilarni yoqishdan olinadigan energiyaga qiyoslaganda tabiatga deyarli zarar yetkazmaydi. Shuning uchun ham hozirgi vaqtda chiqindilarning asosiy ulushini tashkil etuvchi qazib olinadigan yoqilg'idan qayta tiklanadigan energiyaga o‘tish iqlim inqirozini hal qilishning kalitidir.

Qayta tiklanadigan energiya hozirda aksariyat mamlakatlarda arzonroq va qazib olinadigan yoqilg'iga qaraganda uch baravar ko'p ish o'rinlarini yaratadi. [4]

So'nggi o'n yillikda quyosh panellarini ishlab chiqarish narxi keskin tushish tendensiyasini ko‘rsatmoqda, bu ularni nafaqat arzon, balki ko'pincha elektr energiyasining eng arzon shakliga aylantirdi. Quyosh panellari taxminan 30 yil xizmat qiladi va ishlab chiqarishda ishlatiladigan material turiga qarab turlicha bo'ladi.

Shamol energiyasi esa, quruqlikda yoki dengizda joylashgan yirik shamol turbinalari yordamida harakatlanuvchi havoning kinetik energiyasidan vujudga keladi. Shamol energiyasi ming yillar davomida ishlatilgan, ammo so'nggi bir necha yil ichida quruqlikdagi va dengizdagi shamol energiyasi texnologiyalari ishlab chiqarilgan elektr energiyasini maksimal darajada oshirish uchun rivojlandi - balandroq turbinalar va katta diametrli rotorlar bilan jihozlanmoqda.2023-yilda energiyaga global miqyosda 2,8 trillion dollar sarmoya kiritilishi rejalashtirilgan bo‘lib, shundan 1,7 trillion dollar (61%)dan ortig‘i toza texnologiyalarga, jumladan qayta tiklanadigan manbalar, elektr transport vositalari, atom energetikasi, tarmoqlar, saqlash, kam emissiyali yoqilg‘ilar, samaradorlikni oshirishga yo‘naltirilishi kutilmoqda, qolgan 1 trillion dollardan sal ko'proq qismi ko'mir, gaz va neft asososida energiya ichlab chiqaruvchi sohalarga ajratilmoqda [4].

Tadqiqot mavzusi bo‘yicha adabiyotlar sharhi (taxlili). Umuman “Yashil”iqtisodiyotga o‘tish masalasining zarurligi global miqyosda 2012-yil Meksikaning Los-Kabosda shaxrida “Katta yigirmatalik” (G20) samitida ko‘tarilib, keyinchalik bir qator mamlakatlarning taraqqiyot strategiyalarida aks eta boshladi. O‘zbekistonda 2022-yil 2-dekabrda Prezidentning PQ-436 “2030-yilgacha O‘zbekiston Respublikasining “yashil” iqtisodiyotga o‘tishiga qaratilgan islohotlar samaradorligini oshirish bo‘yicha chora-tadbirlar to‘g‘risida”gi qarori [1]. 16-fevral 2023-yil O‘zbekiston Respublikasi Prezidentining “2023-yilda qayta tiklanuvchi energiya manbalarini va energiya tejovchi texnologiyalarni joriy etishni jadallashtirish chora-tadbirlari to‘g‘risida”gi PQ-57-son qarorilari [2] qabul qilindi, bu qarorlar ijrosini ta’minlash uchun amaliy ishlar olib borilmoqda.

Mashxur ingliz iqtisodchi olimi Artur Pigu “Sanoat tebranishlari” (Industrial Fluctuations, 1929) asarida tashqi tasirlarni neytrallashtirish nazariyasini asoslab uglevodorod chiqindilariga to‘g‘ridan-to‘g‘ri soliq belgilashning axamiyatini tushuntirib bergan. Biroq ta’sirlarni implementatsiya qilish o‘lchashning ratsionalligini idrok qilish hozirgacha qarama-qarshi munozaralarni keltirib chiqarmoqda [3]. Tabiat insoniyat oldigan shunday muammolarni ko‘ndalang qo‘ymoqdaki, insoniyat yashab qolishi uchun ekologik muammolarni tezroq bartaraf etishi, insoniyat oldidagi asosiy vazifaga aylanib ulgurdi.

Tadqiqot metadogiyasi. Tadqiqotning nazariy va uslubiy asoslarini maxalliy va horijiy olimlarning “Yashil” iqtisodiyot va qayta tiklanuvchi energiya resurslariga bag‘ishlangan ilmiy izlanishlari natijalari, Halqaro energetika agentligi (IEA) tadqiqotlari va ushbu sohada qabul qilingan Prezident qarorlari va hukumat dasturlari asos bo‘ldi. Tadqiqotning uslubiyoti energetika sohasidagi tendensiyalar tizimli-funksional va dialektik o‘zaro bog‘liklikda tadqid qilingan.

Tahlil va natijalar muhokamasi. Mutaxasislarning fikricha, Mamlakatimizda bir yilda 300-320 kun atrofida quyoshli kun bo‘lganligi sababli, bu sohaning imkoniyatlari ulkan.

O‘zbekiston Respublikasida 2017-yildan so‘ng olib borilayotgan pragmatik siyosan natijasida iqtisodiyot o‘sib, aholining turmush darajasi oshmoqda bu esa elekter energiyasiga bo‘lgan talabning muttasil oshib borishi kuzatilmoqda.

Mamlakatimiz 2030-yilgacha 25 gigavatt quvvatdagi qayta tiklanuvchi energiya manbalarini yaratishni va energiya balansida uning ulishini 40 foizga yetkazishni maqsad qilgan. 2023-yilda 2 gigavat quvvatdagi yirik shamol va quyosh elektr stansiyalarini ishga tushirmoqda. Shuningdek “yashil vodorod” ishlab chiqarish sohasida ham ilk qadamlar qo‘yilmoqda. [5]

Qayta tiklanuvchi energiya manbalari qurilmalarini o‘rnatish, iste’molchilarni muqobil energiyaga o‘tkazish va energiya tejamkor texnologiyalarni joriy qilish orqali 2023-yilda qo‘shimcha 5 milliard kilovatt-soat elektr energiyasi ishlab chiqarish va 4.8 milliard metr kub tabiiy gazni iqtisod qilish, ushbu maqsadlarga jami 15.4 milliard AQSH dollari miqdoridagi mablag‘larni yo‘naltirish, shu jumladan 13.4 milliard AQSH dollari – davlat-sheriklik loyihalari doirasida investorlar mablag‘lari, 1.1 milliard AQSH dollari – tijorat banklari kreditlari, 610 million AQSH dollari – korxonalarning o‘z mablag‘lari, 150 million AQSH dollari – xorijiy moliyaviy tashkilotlarning mablag‘lari va 100 million AQSH dollari ekvivalentidagi Davlat byudjeti mablaglari yo‘naltirilishi rejalashtirilgan. [2]

1-jadval.

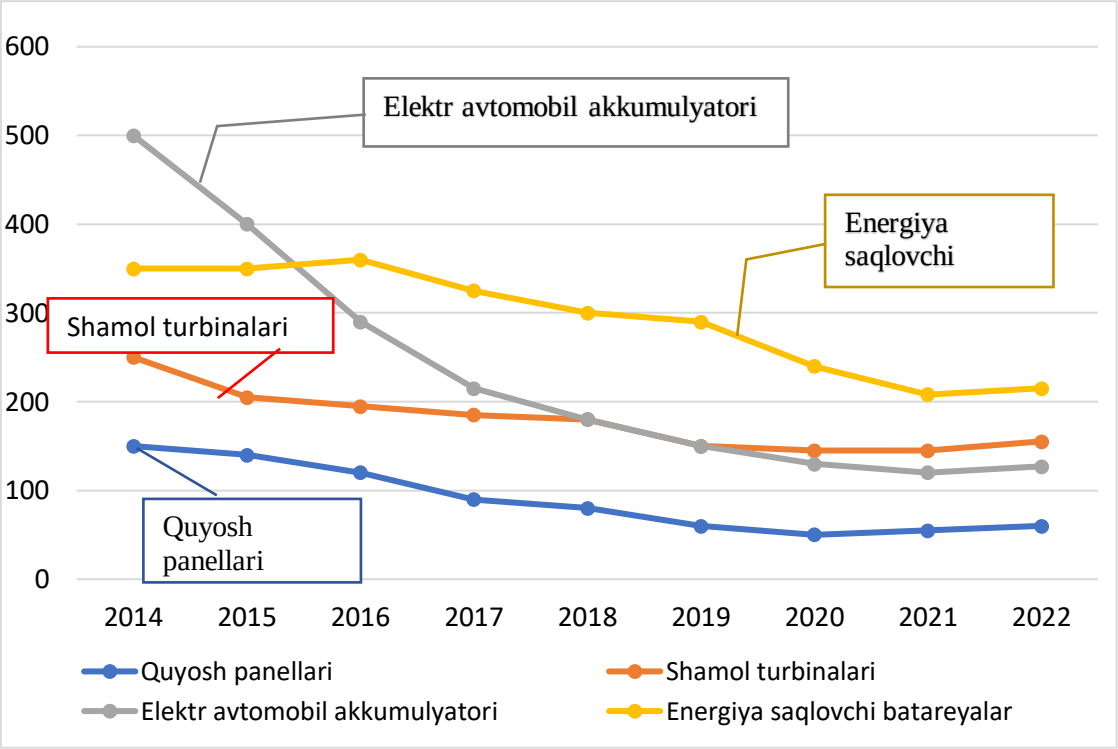
Muqobil energiya manbalarida elektr energiyasi ishlab chiqarish, mln. kVt. Soat, * Ma'lumotlar 2015 yildan yig'iladi [10]

Nomi	2015	2016	2017	2018	2019	2020	2021	2022
Quyosh elektr stantsiyalari tomonidan ishlab chiqarilgan elektr energiyasi *	0,003	0,3	0,7	0,2	0,1	0,03	49,0	435,8
Shamol elektr stantsiyalari tomonidan ishlab chiqarilgan elektr energiyasi*	-	-	-	-	15,5	-	1,2	-

O'zbekiston Respublikasida qayta tiklanuvchi energiya holatini taxlil qiladigan bo'lsak, bu sohada 2015-yildan boshlab statistik ma'lumotlar shakillantirib kelenmoqda, 2015-yilda Quyosh elektr stansiyalari tomonidan ishlab chiqarilgan energiyasi 0.003 mln kVt.soat bo'lgan bo'lsa, 2021-yilda bu ko'rsatkich 49.0 mln kVt.soatni tashkil etib umumiy ishlab chiqarilgan elektr energiyasidagi ulushi 0.07% izni tashkil qilgan (2021-yilda Respublikamizda 71364,6 mln kVt.soat, 2022-yil dastlabki ma'lumotlariga ko'ra 74269,3 mln kVt.soat elektr energiyasi ishlab chiqarilgan) 2022-yilgi daslabki ma'lumotlariga taqqoslasak bu ko'rsatkich 0.6%izni tashkil etadi. Bu ko'rsatkichlar hozirgi zamon talablariga, qo'yilgan maqsadlarga erishish uchun juda kam dep xisoblaymiz (1-jadval).

O'zbekistonda Ilk bor 100 foiz to'g'ridan-to'g'ri xorijiy investisiyalar hisobidan Karmana va Nurobod tumanlarida 2 ta quyosh stansiyasi ishga tushirilib, shu kunga qadar 1 milliard kilovatt soat "yashil" elektr energiyasi ishlab chiqarildi. Navoiy viloyatining Tomdi tumanida barpo etilayotgan zamonaviy shamol stansiyasining 100 megavatti ishga tushirilmoqda. "Gezhouba" kompaniyasi bilan esa Buxoro va Qashqadaryo viloyatlaridagi quyosh stansiyalarining dastlabki 400 megavattli generasiyasi boshlanadi. [11]

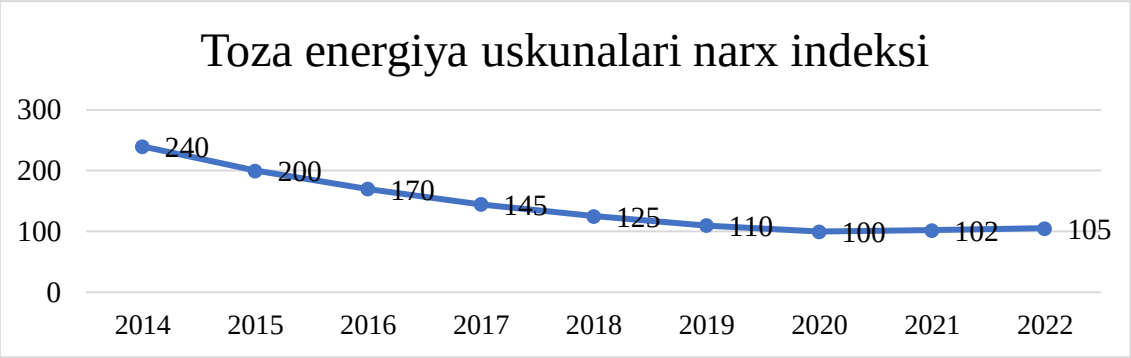
Yashil energiya ishlab chiqarish sohasini Halqaro energiya agentligi (IEA-International Energy Agency) ma'lumotlariga tayanib taxlil qiladigan bo'lsak, shamol turbinalari, quyosh panellari, elektro mobil bateriyalari, energiya saqlovchi bateriyalarni ishlab chiqarish va o'rnatish narxlari tushush tendensiyasida ekanligini ko'rishimiz mumkin (1-rasm).



1-rasm. Yashil texnologi narxlari AQSH dollari/kVt soat (nominal narxlar) (halqaro energiya agentligi ma'lumotlari asosida muallif ishlanmasi) [4]

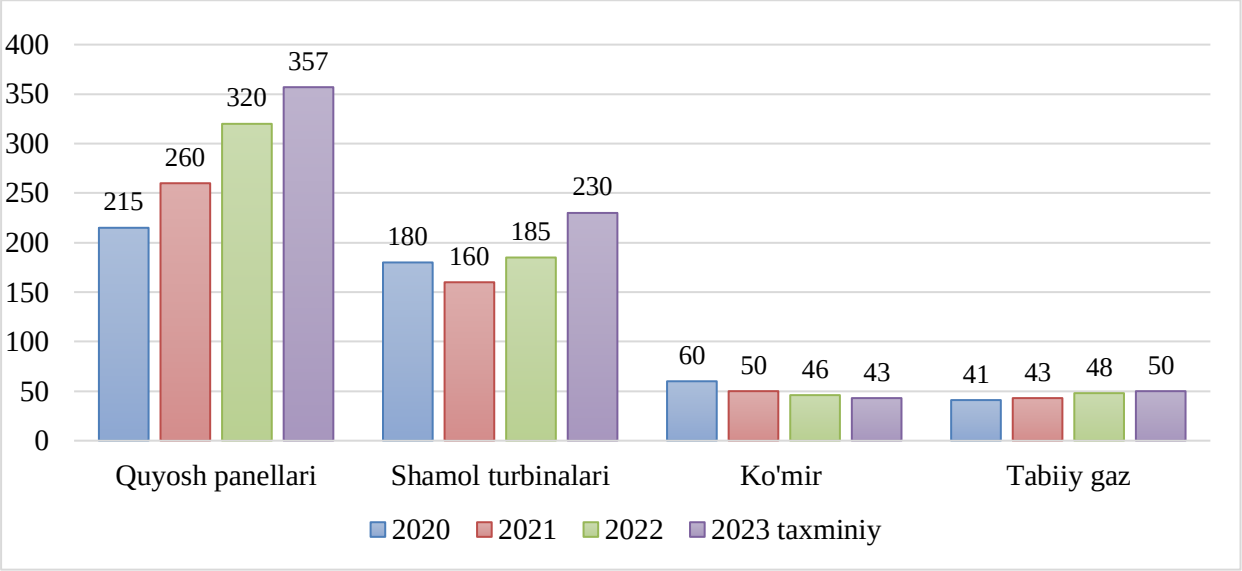
Qushosh panellari narxi 2014-yilda xar bir kVt soati uxhun 150-160 AQSH dollaridan 2022-yilda 70-80 AQSH dolariga, Shamol turbinalari narxi 2014-yilda xar bir kVt soati 1240-260 AQSH dollaridan 2022-yilda 170-180 AQSH dolariga, Elektro avtomabil akkumlyatorlari 2014-yilda xar bir kVt soati 500-550 AQSH dollaridan 2022-yilda 140-150 AQSH dolariga, Energiya saqlovchi bateriyalar narxi 2014-yilda xar bir kVt soati 350-360 AQSH dollaridan 2022-yilda 210-215 AQSH dolarigacha pasayganini ko'rishmiz mumkun. Bu ijobiy tendensiya keying yillarda ham davom etishi kutilmoqda.

Toza energiya uskunalarining narh indeksi umumiy holatda 2014-yil 230-240 million AQSH dollari bir megavatt uchun talab qilingan bo'lsa bu ko'rsatkich 2022-yilga kelib 100-110 million AQSH dollarigacha kamaydi (2-rasm). Bu dunyo mamlakatlari xukumatlari oldiga energetika sohasidagi qarorlarini qabul qilishda bu ijobiy tendensiyalarni ham hisobga olishiga majburlamoqda.



2-rasm. Toza energiya uskunalari narx indeksi Million AQSH dollari/megavatt (nominal narxlar) ***(halqaro energiya agentligi ma'lumotlari asosida muallif ishlanmasi) [4]***

Umuman dunyo davlatlari "Yashil energetika" tizimiga investitsiya kiritish jarayoni ham yil sayin jadallashib bormoqda, masalan, ohirgi uch yilda Energiya ishlab chiqarishga global yillik investitsiyalarni tahlil qiladigan bo'lsak, 2020 yilda Qushosh elektr stansiyalari sohasiga 215 milliard AQSH dollariga yaqin, Shamol elektr stansiyalariga 180 milliard AQSH dollariga yaqin, ko'mirda ishlaydigan elektr stansiyalariga 60 milliard AQSH dollariga yaqin, tabiiy gazda ishlaydigan elektr stansiyalariga 40 milliard AQSH dollariga yaqin investitsiyalar kiritilgan bo'lsa, bu ko'rsankich 2023-yil yakunlari bo'yicha Qushosh elektr stansiyalari sohasiga 360 milliard AQSH dollaridan ortiq yoki 2020-yilga nisbatan 68% ga ko'proq, Shamol elektr stansiyalariga 215 milliard AQSH dollaridan ortiq yoki 2020-yilga nisbatan 19% ga ko'proq, ko'mirda ishlaydigan elektr stansiyalariga 40 milliard AQSH dollariga yaqin yoki 2020-yilga nisbatan 34% ga kam investitsiya qilingan bo'lsa, tabiiy gazda ishlaydigan elektr stansiyalariga 50 milliard AQSH dollariga yaqin yoki 2020-yilga nisbatan 25% ga ko'p investitsiyalar kiritilishi kutilmoqda. Yoqoridagi taxlil natijalaridan hulasa qilish mumkinki yashil energetika sohasiga ko'proq e'tibor bermoqda va bu ko'rsatkichlar yil sayin jadallashmoqda (3-rasm).



3-rasm. Energiya ishlab chiqarishga global yillik investitsiyalar. milliard AQSH dollari (halqaro energiya agentligi ma'lumotlari asosida muallif ishlanmasi) [4]

O‘zbekiston Respublikasi ham oxirgi yillarda yirik shamol va qusosh elektr stansiyalarini qurish jarayonlarini jadallashtirmoqda, aholi tomonidan oshiqcha ishlab chiqarilgan “yashil” elektr energiyasini “Yashil” tariflar asosida sotib olish tizimi yo‘lga qo‘yildi. Qayta tiklanuvchi energiya manbaalarini sotib olishda imtiyozlar subsidiyalar berilmoqda. Bu chora tadbirlar natijasida qayta tiklanuvchi energiya manbalaridan foydalanish darajasi oshmoqda lekin energetika sohasini bozor tamoyillari asosida rivojlantirish, narx shakillanishini liberallashtirish darajasi bizning nazarimizda hali yetarli emas. Hozirda axoli honadonlariga bir kVt elektr energiyasi 295 so‘m yoki 0.024 AQSH dollaari (2.4 sent) atrofida bo‘lsa uning asl tannarxi 970 so‘m atrofida ekanligi Energetika vazirligi tomonidan qayd etilgan [7]. Bir kubometr tabiiy gazning tannarxi esa 1890 so‘mni tashkil etib, aholiga yetkazib berilayotgan tabiiy gaz narxi 380 so‘mni tashkil etmoqda. Axoliga elektr energiyasi va tabiiy gazni past tariflarda yetkazib berish uchun Davlat byudjetidan yiliga 14 trillion so‘mdan ortiq yoki 1,15 milliard AQSH dollaridadan ko‘proq subsidiya ajratilmoqda.

2030 yilga borib sanoat hajmini ikki karra oshirishni, metallurgiya, neft-kimyo va mashinasozlik kabi sohalarni sifat jihatdan mutlaqo yangi darajaga ko’tarishni o’z oldimizga maqsad qilib qo’yganmiz. Umumiy qiymati 150 milliard dollarlik 500 dan ziyod yirik sanoat va infratuzilma loyihalarini amalga oshirishni ko’zlayapmiz. Bu ulug’vor niyatlarimizga erishish uchun bizga kafolatli va barqaror energiya resurslari suv bilan havodek zarur. Hisob-kitoblarimizga ko’ra, kelgusi olti yilda mamlakatimizda elektr energiyasiga bo’lgan talab hozirgi 83 milliarddan 120 milliard kilovatt soatga o’sishi kutilmoqda. Buni, birinchi galda, qayta tiklanadigan energiya hisobidan qoplaymiz. [11]

Tabiiy haqli savol tug‘iladi halq uchun energetika resurslari Davlat byudjetidan moliyalashtirilsa buning nimasi yomon?! Masamaning asl mantig‘i shundaki bizning nazarimizda bu subsidiyalar maqsadlimi?, adolatlimi?, ratsionalmi?... degan haqli savollar o‘rtaga chiqadi. O‘zbekiston Respublikasi konstitutsiyasining 68-moddasida “Yer, yerosti boyliklari, suv, o‘simlik va hayvonot dunyosi hamda boshqa tabiiy resurslar umummilliy boylikdir, ulardan oqilona foydalanish zarur va ular davlat muhofazasidadir…” [8], asosiy qomusimizda shunday ekan bu tartib-tamoilni yuqoridagi savollar asosida mantiqiy taxlil qiladigan bo‘lsak, O‘zbekiston axolisining 100% ga yaqini to‘liq elektr energiyasi bilan ta’minlangan, tabiiy gaz bilan taminlanish darajasi esa 50% atrofida, «O‘zbekistonda aholi jon boshiga tabiiy gaz iste'moli rivojlangan davlatlar va qo‘shni mamlakatlarga qaraganda 3 baravar ko‘proq. Taqqoslash uchun, xorij davlatlarida bir kishi uchun 90 kub metr gaz to‘g‘ri kelsa, O‘zbekistonda bu ko‘rsatkich 400 kub metrdan oshgan [9]. Bitta xonadon yil davomida 5000 kub metr gaz ishlatadi. Taxlillarni davom ettiradigan bo‘lsak, axolining 50 %ga yaqini tabiiy gaz va elektr energiyasi uchun Davlat byudjetidan subsidiya olmoqda, qolgan 50% izi esa faqat elektr energiyasi unun olmoqda. Endi elektr energiya iste’moliga e’tibor beragigan bo‘lsak (2-jadval), axolining sal kam 75 % izi 26% ga yaqin elektr energiyasini iste’mol qilsa 25% dan ortiq axoli 74% dan ortiqroq elektr energiyasini iste’mol qiladi.

2-jadval.

O‘zbekiston aholisining 2023-yil misolida o‘rtacha elektr energiyasi iste’moli

№	Iste'mol hajmi	Obonentlar (ming dona)	ulushi, %	Iste'mol (mln kVt-s	Umushi, %
1	200 kVt-soatgacha	5684	74,91%	5163	25,72%
2	201-300 kVt-soat	737	9,71%	2258	11,25%
3	301-500 kVt-soat	628	8,28%	2932	14,61%
4	501-1000 kVt-soat	393	5,18%	3234	16,11%
5	1001-2000 kVt-soat	82	1,08%	2529	12,60%
6	2001-5000 kVt-soat	54	0,71%	1686	8,40%
7	5001-10000 kVt-soat	6	0,08%	778	3,88%
8	10000 kVt-soatdan yuqori	4	0,05%	1491	7,43%
	Jami:	**7588**	**1**	**20071**	**1**

Bu irrotsional ko‘rsatkichni hukumat tabaqalashtirilgan tariflar bilan bartaraf etmoqchi. Lekin bizning nazarimizda muammoning yechimi bu emas, chunki tabiiy gaz bilan taminlanmagan honadonlar tabiiyki elektr energiyasini ko‘proq iste’mol qiladi albatta. Buning yagona adolatli yechimi, bizning fikrimizcha rivojlangan davlatlar tajribasidan kelib chiqib, bu bozorni erkinlashtirish, bozor tamoyillariga o‘tkazish va axolining kam taminlangan

qismini maqsadli va manzilli energetika subsidiyalari bilan taminlash. Masalan Germaniyada energiya bilan ta’minlash to‘liq bozor tamoyillari asosida yo‘lga qo‘yilgan, kim qancha energiya iste’mol qilsa shunga mos haqqini to‘laydi. Bu tizim axolidan energiya iste’molida tejamkor texnologiyalardan va muqobil energiya manbalaridan foydalanishni rag‘batlantiradi. Aholining kam ta’minlangan qismiga esa manzilli yordam pullari evaziga ijtimoiy himoya qilinadi.

Respublikamizda energetika sohasini bozor tamoyillarini joriy qilish uchun barcha tashkiliy infratuzlma etarli dep o‘ylaymiz, chunki deyarli barcha honadonlarga electron hisoblagichlar o‘rnatilgan, tabiiy boyliklar halq Mulki ekanligi konstitutsiyamizda mustaxkamlab qo‘yilgan, faqat isloxotlarni qilish uchun siyosiy iroda kerak.

Iqtisodiyot nazariyasidan ma’lumki biron bir mahsulot yoki xizmatning narxi arzon bo‘lsa uni iqtisod qilishga va hisobini yuritishga e’tibor shuncha past bo‘ladi. Axoliga yetkazib berilayotgan elektr energiyasi va tabiiy gazda ham shunday holat ko‘zga tashlanmoqda. Tabiiy boyliklardan foydalanish O‘zbekiston fuqorolarining konstitutsion xuquqi ekan buni ratsional, adolatli va manzilli yetkazish mumkin. Buning uchun hozirda ajratilayotgan 1,15 milliard AQSH dollaridada subsidiyani aholi soni (36 mln)ga bo‘lsak 32 AQSH dollari atrofida ya’ni Davlat buyudjetidan yiliga axolining har biriga 32 AQSH dollari ikvivalentidagi subsidiyalar ajratilmoqda. lekin bu ajratilayotgan subsidiyalarning asosiy qismi aksariyat daromadi yuqori oilalarga energetika subsidiyalari shaklida ketmoqda (2-jadval). Endi rasmiy statistika ma’lumotlariga tayanadigan bo‘lsak, 2022-yilda O‘zbekiston axolisining 14.1 %izi [9] (36 mln*0.141=5 mln) kambag‘allik darasida yashamoqda endi shu 5 mln axoliga belgilangan energiya subsidiyalarini moddiy yordam ko‘rinishida beradigan bo‘lsa 5 mln*32 ASH dollari=160 mln (0.16 milliard) AQSH dollari, qolgan 1.15 milliard-0.16 milliard=0.99 milliard AQSH dollari davlat buyudjeti ixtiyorida qoladi. Bundan tashqari energi resurslari narxining bozor tamoyillari asosida faoliyat yuritishi natijasida axolida ushbu resurslardan tejab foydalanish, qayta tiklanuvchi energiya manbaladan foydalanish darajasini rag‘batlantiradi. Bundan tashqari O‘zbekiston energetika bozoriga to‘g‘ridan-to‘g‘ri chet el investitsiyalari va investorlarining kirishini keskin oshiradi, yashil energetikani muhimligi oshadi va axoliga etkazilayotgan energiya resurslarining uzilishlarsim doimiy va me’yorlarda bo‘lishini ta’minlaydi. Chunki narxning bozor talablari asosida shakllanishi raqobatni oshiradi, raqobatning oshishi esa sifatga ijobiy ta’sir ko‘rsatadi.

Hulosa va takliflar. Amalga oshirilayotgan tadqiqotlar va tahlillar asosida yashil iqtisodiyotga o‘tish jarayonida energetika bo‘yicha energiya samaradorligini oshirish, qayta tiklanuvchi energiyaga o‘tish jarayonini tezlatish uchun quyidagilarga etibor qaratish kerak dep hisoblaymiz:

Birinchidan, global miqyosda yashil iqtisodiyotga o‘tish, ekologik innovatsiyalardan foydalanish jarayonini rag‘batlantirish zamon talabi ekanligini anglab yetish, yashil iqtisodiyotning tezroq rivojlanishiga turtki beradi.

Ikkinchidan, yashil iqtisodiyotga o‘tish maqsadlarini qo‘llab-quvvatlovchi maqsadli va manzilli yashil moliya instrumentlarini joriy qilish orqali energetika tariflarini bozor tamoyillari asosida shakillanishiga yo‘l ochib berish zarur. Bu sohaning investitsiya jozibadorligini, raqobatni va xizmatlar sifatining oshishiga, tabiiy resurslardan oqilona foydalanishiga erishish mumkin.

Uchunchidan, energetika sohasining bozor mexanizimlari asosida faoliyat yuritishi Davlat byudjetining energetika subsidiyalari qismi keskin kamayadi, davlat byudjeti mablag‘lari iqtisod qilinishiga erishiladi.

To‘rtinchidan, energetika bozorinig liberallashishi natijasida energiya tejamkor texnologiyalar va qayta tiklanuvchi texnologiyalardan foydalanish darajasi ortadi.

Foydalanilgan adabiyotlar ro‘yhati:

1. O‘zbekiston Respublikasi Prezidentning 2.12.2022-yildagi PQ-436 “2030-yilgacha “yashil” iqtisodiyotga o‘tishiga qaratilgan islohotlar, samaradorligini oshirish bo‘yicha chora-tadbirlar to‘g‘risida”gi qarori. https://lex.uz/docs/6303230
2. O‘zbekiston Respublikasi Prezidentining “2023-yilda qayta tiklanuvchi energiya manbalarini va energiya tejovchi texnologiyalarni joriy etishni jadallashtirish chora-tadbirlari to‘g‘risida”gi 16.02.2023 PQ-57-son qarori. https://lex.uz/docs/-6385716
3. Artur Pigu Industrial Fluctuations, Macmillan Press Ltd.; 2nd Edition (January 1, 1929)
4. https://www.iea.org/reports/world-energy-outlook
5. https://president.uz/uz/lists/view/6846
6. Zokirov Sh. Возобновляемая энергия для устойчивогоразвития. //журнал Экономическое обозрение. 2020, №12(240). – С44-51.
7. https://www.gazeta.uz/uz/2023/09/22/subsidy/
8. O‘zbekiston Respublikasi konstitutsiyasi. https://lex.uz/docs/-6445145
9. https://kun.uz/uz/news
10. https://president.uz/uz/lists/view/6952_O’zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning “yashil” energetika sohasidagi yirik qo’shma loyihalarni ishga tushirishga bag’ishlangan tantanali marosimdagi nutqi

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FUQAROLIK MAS’ULIYATI JAMIYATDAGI DEMOKRATIK O‘ZGARISHLARNING UZVIY QISMI

Annotatsiya. Ushbu maqolada bugungi kunda O‘zbekistonda fuqarolarning o‘z huquq, burch va mas’uliyatlarini yaxshi bilishlari ijtimoiy taraqqiyotning muhim sharti va omillaridan biri haqida fijkr yuritiladi.

Kalit so’zlar: Yangi O’zbekiston, Yangi Uyg’onish davri, Uchinchi Renessans, Fuqarolik mas’uliyati, tenglik, ozodlik, birodarlik, ijtimoiy mas’uliyat, javobgarlik, hisob berishlik, Vatan va xalq manfaati, Ijtimoiy mas’uliyat, siyosiy faollik, vatanparvarlik, jamiyat taraqqiyoti.

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CITIZEN RESPONSIBILITY IS AN INTEGRAL PART OF DEMOCRATIC CHANGES IN SOCIETY

Abstract. In this article, it is considered one of the important conditions and factors of social development that citizens know their rights, duties and responsibilities in Uzbekistan today.

Key words: New Uzbekistan, New Renaissance, Third Renaissance, Civic responsibility, equality, freedom, fraternity, social responsibility, responsibility, accountability, interest of the Motherland and people, Social responsibility, political activity, patriotism, community development.

Kirish

Bugun mamlakatimiz taraqqiyotining eng muhim pallasida turganimiz hech kimga sir emas. Ko’p millatli O’zbekiston xalqi bugun “Milliy tiklanishdan milliy yuksalish sari” shiori ostida birlashib o’z taqdiri va o’z kelajagi taraqqiyotini ta’minlovchi “Yangi O’zbekiston”ni yaratmoqda. Bu borada mamlakatimiz Prezidenti Shavkat Mirziyoev ta’kidlaganidek “O’z kuch va imkoniyatlarimizga bo’lgan ishonch bizni Yangi O’zbekistonni barpo etish va Yangi Uyg’onish davri poydevorini yaratishdek ulug’ maqsad yo’lida birlashtirib, yanada kuchli va mustahkam qilmoqda ”.

Mavzuga oid adabiyotlar tahlili

Bugun Uchinchi Renessansning poydevorini yaratmoqchi ekanmiz. Uyg'onish har birimizga mas'uliyat yuklaydi, chunki islohot va taraqqiyotlar o'z o'zidan bo'lmaydi. "O'zbekistonning yangi Uyg'onish davrini yaratishga kirishgan ekanmiz, har bir yurtdoshimizning qalbi va ongida ana shunday ma'naviyat shu'lasi porlashi va u bizni ezgu ishlarga undab, yuksak mas'uliyat tuyg'usi bilan yashashga da'vat etib turishi zarur". Yangi O'zbekiston Respublikasi Konstitutsiyasi o'zining xalqchiligi, jamiyat va inson ma'nfatlarini o'zida jamlagani bilan bugunda va kelajagdagi mamlaktimiz taraqqiyotining garovi hisoblanadi. E'tiborli jihati shundaki, Yangi O'zbekiston Respublikasi Konstitutsiyasi inson va fuqarolarning haq-huquqiga qaratilgani bilan birga uning o'ziga xos jamiyat va inson oldida mas'uliyati yuklashi bilan ajralib turadi. Nega bugun fuqarolarning mas'uliyatiga yuksak darajada e'tibor qaratilayapti. Bugungi kunda O'zbekistonda fuqarolarning o'z huquq, burch va mas'uliyatlarini yaxshi bilishlari ijtimoiy taraqqiyotning muhim sharti va omillaridan biri bo'lib hisoblanib, qonunlarni bilish, ularga amal qilish, ahloqiy va estetik qadriyatlar, ong va madaniyatni yuksaltirish, jamiyat hayotida mehnat intizomini saqlash, ijtimoiy burchga vijdonan yondashuv kabi masalalarga katta e'tibor berilib, hozirgi sharoitda O'zbekistonda fuqarolar mas'uliyatini har tomonlama rivojlantirish masalasiga katta e'tibor qaratilmoqda.

Tadqiqot metodologiyasi

O'zbekistonning ijtimoiy taraqqiyotida fuqarolik mas'uliyati jamiyatning demokratik rivojlanishi jarayonida erishilgan yutuq va muvaffaqiyatlarga fuqarolarning ongli munosabatini o'zida ifodalaydi. Fuqarolik mas'uliyati jamiyatdagi demokratik o'zgarishlarning uzviy qismi bo'lib, jamiyat o'zining demokratik rivojlanishida fuqarolarga tenglik, ozodlik, birodarlikni hayotiy voqelikka aylantiruvchi turli huquqlarni beradi, shu bilan birgalikda bu huquqlarga rioya qilish, o'z huquqlaridan ijodiy ravishda, jamiyat manfaatlarini ko'zlagan holatda foydalanishni talab qiladi.

Tahlil va natija.

Mas'uliyat - arab tilidan olingan so'z bo'lib, javobgarlik, hisob berishlik degan ma'nolarni bildiradi. O'zbek tilining izohli lug'atida esa, mas'uliyat – biror ish, xatti-harakat oqibati, natijasi uchun bo'lgan javobgarlikdir. Hozirgi davr ijtimoiy fanlarda "mas'uliyat" va "ijtimoiy mas'uliyat" tushunchalari keng qo'llanilib, ushbu tushunchalarning negizida insonning yon-atrofga, ijtimoiy munosabatlarga, olamni anglashga oid tajribasi, ya'ni, faoliyati yotadi. Mas'uliyat arabcha "mas'ul" – javobgarlik, hisob berishlik tushunchalarini ifoda etib, biror ishda xatti-harakat oqibati, natijasi uchun javobgarlik hisoblanadi. Mas'uliyat so'zining o'zagi "mas'ul" - javob beruvchi, javobgar degan ma'nolarni o'zida ifodalab, mas'uliyat yuklatilgan, vazifa javobgarligi zimmasida bo'lgan, javobgar ish natijasi uchun bo'lgan javobgarlik, biror ish xatti-harakatida natijaviy hisobot berishlik hamda mas'uliyatlilik qonuniyatlariga muvofiq qilinadigan hayotiy tajribalarda insonlar oldida turgan mukammal va nihoyatda yuqori o'rinda

turuvchi amaldagi jarayonlar hisoblanadi. SHuningdek, ijtimoiy mas’uliyat fuqarolarning Vatan va xalq manfaati, mamlakat taqdiri hamda ishi uchun fidoyilik bilan xizmat qilishi, jamiyat taraqqiyoti uchun fidoyilik bilan xizmat qilishi, jamiyat taraqqiyoti uchun kamarbasta bo‘lishi, amalga oshirilayotgan ijtimoiy-siyosiy islohotlarda faol qatnashishi, davlat va jamiyatning muhim masalalarini hal qilishda munosib ishtiroki, tinchlik va barqarorlikni ta’minlashga ko‘mak berishidir. Ijtimoiy mas’uliyat deganda aholining jamiyatda olib borilayotgan islohotlar jarayonida mas’uliyat, fidoyilik, jonbozlik ko‘rsatishi va ko‘tarinki ruhda ishtirok etishi tushuniladi. Bu fuqarolarning davlat tomonidan chiqarilgan qonunlar va me’yoriy-huquqiy hujjatlar ijrosini ta’minlashda va ularni amaliyotga joriy etishda chuqur mas’uliyat bilan qatnashishida yaqqol ko‘zga tashlanadi.

Fuqarolar jamiyatdagi siyosiy jarayonlarda faol ishtirokchi bo‘lib, uning mohiyatini teran anglab etsa, siyosiy faolligi oshadi. Jamiyatning siyosiy, iqtisodiy, ijtimoiy, ma’naviy-ma’rifiy, madaniy sohalarida fuqarolik mas’uliyati o‘sha sohaga oid bo‘lgan jarayonlar bilan bog‘liq holda namoyon bo‘ladi.

Bugungi kunda O‘zbekistonda yoshlarning hayotiy maqsadlarini hayotga tatbiq etishlari uchun zarur bo‘lgan barcha sharoitlar yaratilib, yoshlar muammolari davlat siyosati darajasiga ko‘tarilib, yoshlarda fuqarolik mas’uliyatini shakllantirish masalasiga katta e’tibor qaratilmoqda. O‘zbekistonda yoshlar tarbiyasida ta’lim va tarbiya uyg‘unligi masalasiga e’tibor kuchaytirilmoqda.

Xulosa

Yoshlarni yuksak axloq va intizomli qilib tarbiyalash, ularning sifatli ta’lim olishi va vatanparvarlik ruhida voyaga etishi O‘zbekiston taraqqiyotining muhim omili sifatida e’tirof etilmoqda. Yoshlarda fuqarolik mas’uliyatini shakllantirish va rivojlantirish O‘zbekistonda ijtimoiy barqarorlik, jamiyat taraqqiyoti va qo‘lga kiritilayotgan muvaffaqiyatlarning muhim asosi bo‘lib, milliy g‘oya va mafkura asosida muayyan maqsadga yo‘naltirilgan, jipslashgan yoshlarni tarbiyalash masalasiga O‘zbekistonda bugungi kunda katta e’tibor qaratilmoqda.

Foydalanilgan adabiyotlar:

1. Numonova D.U. O‘zbekiston zamonaviy ma’naviy-madaniy taraqqiyotida ayollar mas’uliyatini oshirishning ijtimoiy-falsafiy tahlili. 09.00.04-Ijtimoiy falsafa. Falsafa fanlari bo‘yicha falsafa doktori (PhD) Dissertatsiyasi. Samarqand 2020. 14 bet.
2. Ochilova B., Saitqosimov A., Nazarqosimov S. Fuqarolik jamiyati sotsial mexanizmi va asoslari. O‘quv qo‘llanma. Toshkent, “Tafakkur” nashriyoti, 2021 yil, 296-297 betlar.
3. Shuhrat, T. (2022). Duties and civil responsibility-as a social and philosophical concept.
4. Bakhromovich, T. S. (2021). FACTORS OF CIVIL RESPONSIBILITY FOR THE DEVELOPMENT OF SOCIETY. Conferencea, 9-12.

5. Bakhromovich, T. S. (2021). FORMATION OF CIVIL RESPONSIBILITY AT YOUNG PEOPLE TODAY-SOCIETY IS SUSTAINABLE IS AN IMPORTANT FACTOR OF DEVELOPMENT. Conferencea, 18-21.
6. Tajibaev, M. A., & Rashidova, B. Y. (2022). THE CONCEPTS OF SUSTAINABILITY AND INSTABILITY IN SYNERGETICS ARE AN IMPORTANT PRINCIPLE. Scientific progress, 3(3), 930-933.
7. Kholbekova, M. A. T. U. (2022). APPLICATIONS AND DEVELOPMENTS OF SYNERGETICS. Scientific progress, 3(3), 942-945.
8. Tajibaev, M. A., & Rashidova, B. Y. (2022). CONTENT OF THE CONCEPT OF SYNERGETICS. Scientific progress, 3(3), 938-941.
9. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. Scientific progress, 3(3), 934-937.
10. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(3), 203-207.
11. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. FAN, TA'LIM, MADANIYAT VA INNOVATSIYA, 1(2), 69-73.
12. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.
13. Ruziev, A. J. (2019). ИЗУЧЕНИЕ МИРОВОЗЗРЕНИЯ И ДЕЯТЕЛЬНОСТИ МЫСЛИТЕЛЕЙ КАК ИСТОРИЧЕСКОГО КРИТЕРИЯ. Theoretical & Applied Science, (11), 166-169.
14. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
15. Yahshilikovich, Y. J., Ibodullaevich, K. K., & Mamatqobil, O. (2021, October). Development of Corruption in Society as a Social and Cultural Crisis. In " ONLINE-CONFERENCES" PLATFORM (pp. 168-171).
16. Xidirov, X. (2021). ЁШЛАР ТАРБИЯСИ-ОИЛА ТАЯНЧИ. Журнал истории и общества, (2).

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THE INFLUENCE OF THE MONETARY-CREDIT POLICY OF THE CENTRAL BANK ON THE DEVELOPMENT OF THE COUNTRY'S ECONOMY

Abstract. This article presents the nature of the financial and banking system in our country, theoretical views and practical approaches to the monetary and credit policy of the Central Bank. In addition, the impact of the monetary policy of the Central Bank on the development of the country's economy was studied by the author.

Key words: monetary policy, Central Bank, economy, monetary policy.

The development stages of the world's population, the growth of trade in goods and services largely depend on incomes and their expression in money. After all, any goods or services are produced at certain costs. This depends on the level of money circulation in the process from their production to purchase and consumption and on its working process (value).

Here we will talk about the essence of monetary policy. Monetary policy 44 - the main path of the government in the field of money circulation and credit, and the measures aimed at ensuring the stability of the country's economy and its effective operation, and keeping the monetary system sufficiently stable. Monetary and credit policy is a component of state economic policy and is usually implemented by the Central Bank.

Through the monetary policy, the excess money in circulation is reduced or increased, measures are taken to reduce inflation. In conducting monetary policy, the Central Bank can influence the money market directly - with the help of its management powers and through money issuance.

Monetary policy is implemented through direct and indirect means. Indirect tools are carried out by directly controlling the prices (interest rates) or their volume of financial assets in financial institutions. The Central Bank controls the money in the form of deposits in commercial banks, as well as the prices and volume of loans issued by them.

Indirect means - financial institutions are influenced by the Central Bank through market mechanisms (mandatory reserve requirements, open market operations, refinancing of commercial banks and the Central Bank's discount rate, acceptance of deposits from commercial banks, etc.).

Each of the instruments used by the Central Bank serves to increase interest rates, reduce the volume of lending and borrowing, increase or, on the contrary,

44 https://uz.wikipedia.org/wiki/Pul-kredit_siyosati

decrease interest rates if necessary. Open market operations, minimum reserve requirement, accounting policy, currency policy are the main components of monetary policy.

The new stage of economic reforms aimed at liberalizing the economy and increasing the role of market mechanisms, which began in 2017, determined the priorities for the development of the banking system and monetary policy in the medium term. One of the important decisions in this direction was the practical steps related to the gradual liberalization of the domestic currency market by introducing the principles of formation of the national currency exchange rate based on market mechanisms.

The use of a completely new approach to the formation of the exchange rate, in turn, provides an opportunity to improve the monetary policy while focusing the main attention of the Central Bank on the stability of prices in the domestic market. At the same time, the successful implementation of the reforms on the liberalization of the foreign exchange market is closely related to the improvement of the monetary policy, the strengthening of the activities of commercial banks, and the effectiveness of the banking system development measures.

One of the next important steps in this regard is the adoption of the Decree of the President of the Republic of Uzbekistan on January 9, 2018 "On the fundamental improvement of the activities of the Central Bank of the Republic of Uzbekistan".

This decree defines the task of ensuring price stability as the main goal of the Central Bank, and provides for appropriate measures to ensure the independence and institutional development of the Central Bank.

The concept of development and implementation of monetary policy of the Central Bank of the Republic of Uzbekistan in the medium-term perspective was developed taking into account the leading role of the communication channel in forming public opinion and implementing the inflation targeting regime.

Ensuring internal price stability in the country is a guarantee of macroeconomic and social stability and is a necessary condition for the successful implementation of economic reforms and development programs.

In this case, low and stable indicators of inflation are considered an important factor in ensuring balanced economic growth, production competitiveness and raising the standard of living of the population. From this point of view, the reduction and stabilization of price growth rates should be one of the main goals of the state economic policy.

Experiences of central banks of developed and developing countries and research results of international financial institutions show the undoubted priority of price stability in the implementation of monetary policy.

At the same time, the procedure and sequence of monetary policy implementation differs in different countries depending on the characteristics and structural structure of the economy.

In the conditions of free formation of the exchange rate, the stability of the national currency is achieved by maintaining its internal purchasing power.

In this case, the free-floating exchange rate functions as an internal stabilizer of the economy. In other words, when external shocks and difficulties related to the balance of payments are observed, the corresponding change in the exchange rate serves to stimulate exporters and enterprises producing import substitutes.

At the moment, it is planned to make appropriate changes to the legislation in order to prevent double understanding of the main goal of the Central Bank's monetary and credit policy and to clearly define the main direction of its activity.

In conclusion, it should be emphasized that the monetary policy of the Central Bank is an important tool for the development of the country's economy. Based on this, the following proposals were made:

- monetary policy The purpose of the concept is to convey to the general public and explain in detail the conceptual foundations of the transition to inflation targeting and medium-term plans for creating the necessary conditions for the successful implementation of this monetary policy regime;
- a low and stable level of inflation creates the necessary conditions for the conversion of savings of citizens and legal entities into long-term investments, and serves the effective distribution of available economic resources by reducing the price disparity in the domestic market;
- zero price stability or negative inflation indicators are not assumed. Price stability does not mean that prices remain in a stable state, but rather that they grow at a low level. At first glance, stable prices seem acceptable, but low and stable price changes are the most favorable conditions for the efficient functioning of the economy.

References:

1. O‘zbekiston Respublikasining Qonuni. O‘zbekiston Respublikasi Markaziy banki to‘g‘risida Qonun hujjatlari ma’lumotlari milliy bazasi: No 03/19/582/4014.
2. O‘zbekiston Respublikasi Prezidentining 2018 yil 9 yanvardagi “O‘zbekiston Respublikasi Markaziy banki faoliyatini tubdan takomillashtirish to‘g‘risida”gi Farmoni.
3. https://uz.wikipedia.org/wiki/Pul-kredit_siyosati
4. Мишкин, Ф.С. (2013). Экономическая теория денег, банковского дела и финансовйх рйнков. Пер. с англ. (п.485). Moccow: OOO «I.D. Williams».
5. Taylor, J. (1993). The Robustness and Efficiency of Monetary Policy Rules as Guidelines for InterestRate Setting by European Central Bank. Journal of Monetary Economics, Vol. 43. Issues, b. 655-679.
6. Bobakulov, T.I. (2008). O‘zbekiston Respublikasida milliy valyuta kursi barqarorligini ta’minlash muammolari va ularni hal etish yo‘llari. I.f.d. ilm. dar. ol. three. taqd. et. diss. avtorefer. (b.27). Toshkent.

7. Rashidov, R.I., Murtazayev, N.R., & Baratova, S.S. (2020). Qishloq xo‘jaligini innovatsion rivojlantirish yo‘nalishlari. "Agroprosessing" jurn., vol.7, Issue 2,-b.29-34
8. Alikulov, A. T., Iskandarovich, R. R., & Komiljon, O. (2022). O‘zbekistonda tijorat banklarining barqaror faoliyatini amalga oshirishda raqamli bank hizmatlarini joriy etish. Results of National Scientific Research, 1(2), 62-67.

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O`QUVCHILARNING MUSTAQIL FIKRLASHINI PSIXOLOGIK XUSUSIYATLARI

Annotatsiya. Ushbu maqolada o'qituvchining o'quvchilarni mustaqil fikrlashida mustaqil yondashuv hamda har bir fan sohasidan kelib chiqib turli psixologik va pedagogik yondashuv asosida o'quvchilarni bilim olishida kerakli bo'lgan metodlar va psixologik xususiyatlari ochib berilgan.

Kalit so'zlar: mustaqil topshiriqlar, referat, xotira, diskursiv, verbal, amaliy, nazariy, ixtiyoriy-ixtiyorsiz, konkret, abstrakt, intuitiv, diskursiv, dialektik, reproduktiv, produktiv-ijodiy, visual.

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PSYCHOLOGICAL CHARACTERISTICS OF STUDENTS' INDEPENDENT THINKING

Abstract. In this article, the methods and psychological dynamics necessary for students' learning based on different psychological and pedagogical approaches based on the independent approach of the teacher to the students' independent thinking based on each subject area are revealed.

Keywords: independent assignments, summary, memory, discursive, verbal, practical, theoretical, voluntary-involuntary, concrete, abstract, intuitive, discursive, dialectical, reproductive, productive-creative, visual.

KIRISH. O'quvchilar tafakkuri, asosan, o'qish, amaliy mashg'ulot va mustaqil bilim olish faoliyatlarida jadal va uzluksiz ravishda rivojlanadi. Goho ma'ruza jarayoni ulardan reproduktiv tafakkurni taqozo etsa ham, lekin mustaqil topshiriqlar, laboratoriya darslari produktiv fikr yuritish faoliyatini talab qiladi. Har ikkala ta'lim shakli ham o'quvchilar aqliy mehnati, maqsadga yo'naltirilgan va muvofiqlashtirilgan diqqati yordami bilan amalga oshadi.

Umumiy o'rta maktabdagi mustaqil ishlarning barchasi: konspekt tuzish, referat ishlari o'quvchidan mustaqillikni, ijodiy yondashishni, (kreativlikni) muammoli holatni, murakkab pedagogik-psixologik vaziyatni ham ma'lumotlarni o'zlashtirish bilim-saviyani kengaytirish bilan qanoat hosil qilmasdan,balki ularni tushunish, anglab yetishni talab qiladi, bu esa bevosita tafakkurning funksiyasidir. Xotira bisotidagi bilimlarni izchil ravishda tartibga keltirish, esga tushirish, ular ichidan eng muhim jihatlarni ajratish, o'zaro taqqoslash, turkumlarga kiritish,

umumlashtirish bilish jarayonining aqliy yo'li bilan, ya'ni tafakkur yordami bilan amalga oshiriladi.

Ijtimoiy gumanitar va tabiiy fanlarni o'rganish davomida moddiy borliqdagi narsa va hodisalar o'rtasidagi murakkab ichki bog'lanishlar, aloqalar va ijtimoiy turmush qonuniyatlari yuzasidan chuqur nazariy metodologik, ilmiy-uslubiy xususiyatdagi bilimlar o'zlashtiriladi. Ana shu fan asoslarini o'zlashtirish davomida diskursiv tafakkur turi o'quvchi uchun omilkor aql-zakovat quroli vazifasini bajaradi.

ADABIYOTLAR TAHLILI VA METODOLOGIYASI. Umumiy o'rta maktab ta'limi jarayonida fikr yuritish operatsiyalaridan unumli (analiz, sintez, taqqoslash, konkretlashtirish, mavhumlashtirish, klassifikatsiyalash, sistemalashtirish, umumlashtirish) foydalanish evaziga har qanday murakkab bilimlarni egallash imkoniyati vujudga keladi. O'quvchilar tafakkur shakllarining funksional va operatsional jihatlari bilan yaqindan tanishadilar, shuningdek, ulardan mustaqil foydalanish uchun barcha intellektual rezervlarini aqliy zaxiralarini ishga solishga harakat qiladilar. Hukm chiqarishning barcha ko'rinishlardan o'quv va mustaqil bilim olish faoliyatlarida foydalanish shart-sharoitlari tug'iladi. Xulosa chiqarishning induktiv yo'llaridan muayyan tarzda bilish faoliyatida qo'llashga intiladilar. Tushunchalar mohiyatini anglagan holda ma'lumotlarni egallash bilimlarning barqarorligini ta'minlaydi. Bu narsalarning barchasi tafakkurni rivojlantirishga o'z ta'sirini o'tkazadi.

Umumiy o'rta ta'lim uzluksiz ravishda ijodiy tafakkurni talab qiladigan, muammoli xususiyatdagi topshiriq va masalalar tizimidan iboratdir. Har bir ma'ruza, seminar mashg'uloti, mustaqil topshiriqlar, hatto laboratoriya ishlari ham muammoli vaziyat, holatniig tarkibiy qismlaridan tuzilgan bo'ladi. Ularni hal qilish ijodiy izlanishni vujudga keltiradi, tafakkur va ularning turlarini kamolot sari yetaklaydi. Chunki muammoli holatgacha bo'lgan davr, muammoli vaziyat, muammoli vaziyatdan keyingi aqliy jarayonlar ham o'quvchidan ijodiy qidiruv, tadqiqot faoliyatini taqozo etadi. Topshiriqni mustaqil bajarish o'quvchilardan tafakkur operatsiyalari va shakllaridan foydalanishni talab qiladi.

NATIJALAR. O'quvchilarni o'quv faoliyati yoki ta'limiy usullar bilan tanishtirish tafakkur rivojida alohida ahamiyat kasb etadi. Jumladan, tushunchalarga turli nuqtai nazardan qarash usulini o'quvchilarda tarkib toptirish va uni sharoitga, vaziyatga ko'chirishga o'rgatish yuqori ko'rsatkichlar beradi. Shuni alohida ta'kidlab o'tish kerakki, odatda usullarning ko'chishini "birdaniga", asta-sekin, "buzib-tuzatib", qayta qurish, tarkibini yangidan tuzish, ko'rgazmali materialdan matnli, mantiqiy materialga o'tishi kabi ko'rinishlari mavjuddir. O'quvchilarda o'quv faoliyatining usulini tarkib toptirish quyidagicha amalga oshiriladi va muayyan qoidalar asosida olib boriladi:

– hamkorlik tushunchasiga turli nuqtai-nazardan qarash mumkin, chunonchi, u faoliyat turi, do'stona aloqa o'rnatish, muloqot, muomalaga kirishish, umumiy xatti- harakatlar yig'indisi, o'quv faoliyatining shakli, o'qituvchi bilan O'quvchi harakati, bitim, ijodiy tajriba almashish va hokazo.

Mazkur o’quv faoliyati usulini mustaqnl topshiriqni bajarishga, ya’ni “faoliyat”, “individual faoliyat”, “ijtimoiy faoliyat”, “guruhiy faoliyat” kabi psixologik tushunchalar mohiyatini ochishga ko’chirish mumkin. Psixologiya fanida ko’chishning turlari to’g’risida chet el va sobiq Ittifoq davridagi psixologiyada birmuncha ma’lumotlar mavjud.

Xotira tushunchasini turli nuqtai nazardan qarash mumkin, chunonchi, u bilish jarayoni, produktiv yoki reproduktiv mnemik faoliyat, amaliyotda zarur bilimlar majmuasi, xotira – bu ko’nikma, malaka va odatlar yig’indisi; umumlashgan obrazlar to’plami, grammatik termin, fenominal xotirali shaxs sifati tariqasida va hokazo.

MUHOKAMA. O’quv faoliyatining ushbu usulini mustaqil topshiriq bajarishga, ya’ni “Tafakkur” tushunchasiga ko’chirish imkoniyati quyidagi tarzda namoyon bo’ladi: tafakkur – bu bilish jrayoni, fikr yuritish faoliyati, prognoz qilish, anglashilgan bilimlar, muloqot negizi, grammatik termin, aql sifati, zehni o’tkirlik, shaxs sifati kabi tasavvur qilish mumkinligini ta’kidlab o’tiladi.

Yuqoridagi mulohazalarga qaramasdan, o’quvchilar tafakkurida sub’ektiv-shaxsiy xususiyatga ega bo’lgan zaif jihatlar mavjuddir. Fikr yuritish faoliyatini nazorat qilishda qator kamchiliklarga yo’l qo’yiladi, masalan, faoliyat natijasini tekshirish sifatidagina qo’llaniladi. Ularning aqliy faoliyatida xatti-harakat yoki bilim sifatini baholash va o’z-o’zini baholashda ham, voqelikni baholashda ham voqelikni oqilona, to’g’ri aks ettirish jarayonida illatlar ko’zga tashlanadi. Narsa va hodisalar xususiyati yoki qonuniyati ko’pincha orttirib baholanadi, ba’zan pasaytirib baholash hollari ham namoyon bo’ladi. Ahyon-ahyonda bo’lsa-da, to’g’ri, oqil, haqiqatan aniq baholash ko’zga tashlanadi. Tafakkurning tanqidiylik va tashabbuskorlik sifatlarida ayrim nuqsonlar uchraydi. O’quvchilarning intilishi bilan o’z-o’zini baholash o’rtasidagi munosabat mutanosiblikka, o’zaro uyg’unlikka ega emas, shu tufayli imkoniyat, aqliy zaxira bilan havoiy orzular orasida ziddiyat vujudga keladi, natijada oqillik o’rnini g’ayirlik egallay boshlaydi. Bunday salbiy hissiy kechinmaning, shaxs illatining oldini olish va mutlaqo bartaraf qilish uchun maxsus treningdan foydalanish ijobiy natijalar beradi.

Ta’kidlab o’tilgan nuqsonlar qaramasdan, o’quvchilar tafakkuri ilk o’spirinlik yosh davridan ham sifat, ham mazmun, ham ko’lam jihatidan keskin tafovutlanadi. Bu fikrlar psixologlar tomonidan to’plangan miqdoriy ma’lumotlar bilan allaqachonlar tasdiqlangan. Shunday qilib, muayyan bir sohaning yosh mutaxassis kishisi – o’quvchi yuksak aql-zakovat egasi, uquvli-teran fikrli inson, iymonli, diyonatli shaxs, aniq dunyoqarashga; mustahkam e’tiqodga ega bo’lgan ziyoli, milliy mafkuraning jonkuyari, targ’ibotchisi sifatida ijtimoiy katta hayotga yo’llanma oladi.

XULOSA. O’quvchilar o’quv predmetlari, fan asoslarini egallash faoliyatidaijodiy mahsulotberishuchuntinimsiz harakat qiladilar. Ularning bilishga, bilim olishga undovchi mayllari turg’un, mustahkam va barqaror qiziqishga aylana boradi, badiiy ijodiyot va ilmiy-tadqiqot bobida dastlabki ezgu-

niyatlari, orzularini ushatishga intiladilar. Jumladan, adabiy ta’limdao’quvchilar badiiy ijod bilan, tabiiy-matematika fan sohasidagilar esa kuzatish va tajriba o’tkazish bilan, tarixchi-arxeolog o’quvchilar ijtimoiy turmush solnomalarini ochish bilan shug’ullana boshlaydilar. Hatto o’quvchilar o’zlarining aqliy mehnati mahsullari bilan olimpiada, ilmiy-amaliy anjumanlarda, ixtirochilar va ratsionalizatorlar konkurs-tanlovlarida muvaffaqiyatli qatnasha oladilar. Bularning barchasi tafakkur yordami bilan chiqariladi, moddiy borliqni yanada aniqroq ifodalash, yaratish faoliyatlarida faol qatnashish uchun intilish, muammoli holat va vaziyatlarni hal qilish jarayonlarining mahsuli sifatida namoyon bo’ladi. Bu va standart bo’lmagan muammoli, boshqotirar topshiriqlarni yechish ijodiy fikr yuritishni, sermahsul vositalardan foydalanishni taqozo qiladi.

Shunday qilib, o’quvchilar narsa va hodisalar, voqelikni to’g’ri, oqilona, omilkorlik bilan aks ettirish, ijtimoiy hayot talabi va ehtiyojlarini anglash, ongli ravishda fikr yuritish faoliyatini tashkil qilish va boshqarish imkoniyatiga egadirlar. Ularda ta’lim jarayonida tafakkurning va refleksiv sifatlarini shakllantirish ilmiy, ijodiy tafakkurni vujudga keltiradi. Buning uchun ularni mustaqil bilim olish faoliyatini to’g’ri uyushtirish va boshqarishga o’rgatish yuksak samaraning kafolatidir.

Foydalanilgan adabiyotlar ro’yxati:

1. Avlaev O. U. Talabalar kamolotida ijtimoiy intellektning gender farqlari. “Psixologiya” ilmiy jurnal. 2021. № 1, 34-41 betlar.
2. Avlaev O., Butaeva U. Shaxs kamolotining psixologik determinant. Xalq ta’limi miy-metodik jurnali. 2021. № 6, 87-92 betlar.
3. Иброимов, Ш. И. Ў. Амударё ҳозирги дельтасининг рельеф структураси ва мелиоратив тадбирлар / Ш. И. Ў. Иброимов // Экономика и социум. – 2021. – No 4-2(83). – P. 1115-1119. – EDN OPOOVD.
4. Butaeva U., Avlaev O., Abdumannotova N. Scientific and practical studies of psychological maturity of students./ Journal of critical reviews. JCR. 2020; 7(12): 3063-3070 doi: 10.31838/jcr.07.12.463
5. Burkhanov A., Avlaev O., Abdujalilova Sh. Responsibility as a criterion for determining personal maturity/ E3S Web of Conferences 2021.
6. Abdunazarov, A. (2020). Имконияти чекланган болаларнинг ижтимоий мослашувини ўрганишнинг инновацион усуллари. *Архив Научных Публикаций JSPI*.
7. Abdunazarov, A. (2022). ИНКЛЮЗИВ ТАЪЛИМ ШАРОИТИДА БОШЛАНҒИЧ СИНФ ЎҚУВЧИЛАРИДА СОҒЛОМ МУХИТНИ ШАКЛЛАНТИРИШ ОМИЛЛАРИ. *Журнал Педагогики и психологии в современном образовании*, *2*(1).

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ASSESSMENT OF THE DYNAMIC STATE OF GLACIERS LOCATED IN THE AMUDARYA BASIN IN TERMS OF AGRICULTURAL USE

Annotation. Studying the dynamics of glaciers in the Amudarya Basin, to meet our republic's water needs in full blood and to solve the water shortage circulation that may occur in the future, to monitor the change in the dynamic state of glaciers in the climate change process and calculate how much the water reserve in the glaciers can reach if it continues

Key words: Orolqum, Basin, Glaciers, Wakhan, Kukcha, Sukhrab.

Amudarya is the most turbulent river in Central Asia. It flows through the territories of Tajikistan, Turkmenistan, Uzbekistan and partly along the border of Afghanistan. It is formed by the confluence of the Panj and Vakhsh rivers and is 2,540 km long, with a basin area of 309,000 km 2 (without the basins of the Zarafshan and Kashkadarya rivers, whose flow almost does not enter the Amudarya). The catchment area in the part where the water flows is 227 thousand km 2. It begins in Afghanistan's Hindu Kush, where it is called the Vahandarya, and after joining the Pamir River is called the Panj, and the Wakhsh joins the Amudarya below. The flow is formed mainly in the Pamir-Olay mountain countries (75% of the river basin is located in Tajikistan). On reaching the plain west of the Kohitang range, it crossed the Karakum and Kyzylkum deserts and flowed into the Aral Sea, but due to the fact that not a single drop of water has been given to the Aral for recent years, the Aral dried up and became a large salt marsh instead, Aralqum has appeared.

The Amudarya flow is formed mainly by the flow of the Panj and Vakhsh rivers, which are rivers that are saturated with glacier and snow water (the area of the glacier in their upper reaches is 7.5 thousand km 2). The share of glacial flow is about 15%. As a result of the melting of snow and ice, the increase of water consumption mainly begins in March-April.

The Amudarya basin, including the territory of Afghanistan, is divided into 3 small sub-basins: Vakhan, Kokcha and Sukhrob. Mainly the mountain glaciers in these areas are between 34.58° and 38.35°N latitude and 67.63° and 74.88°E longitude, in addition, most of the Wakhan sub-basin is located between 36.45° and 38.35°N latitude and 70.65° and 74.88°E longitude..

There are 3,277 glaciers with a total area of 2,566 sq km in the Amudarya basin. Of these, 2,047 belong to the Vakhan sub-basin, 913 to the Kokcha sub-basin, and 317 to the Sukhrob sub-basin. The fixed reserve of these glaciers is 163 km. is a cube.

The Wakhan sub-basin is the third largest watershed of the Amudarya in Afghanistan, covering 76% of the total area of the glacier-covered area. Glaciers are qualitatively clean and distinguished by the most frozen mountain massifs, and also by the size of the ice reserve (82%).

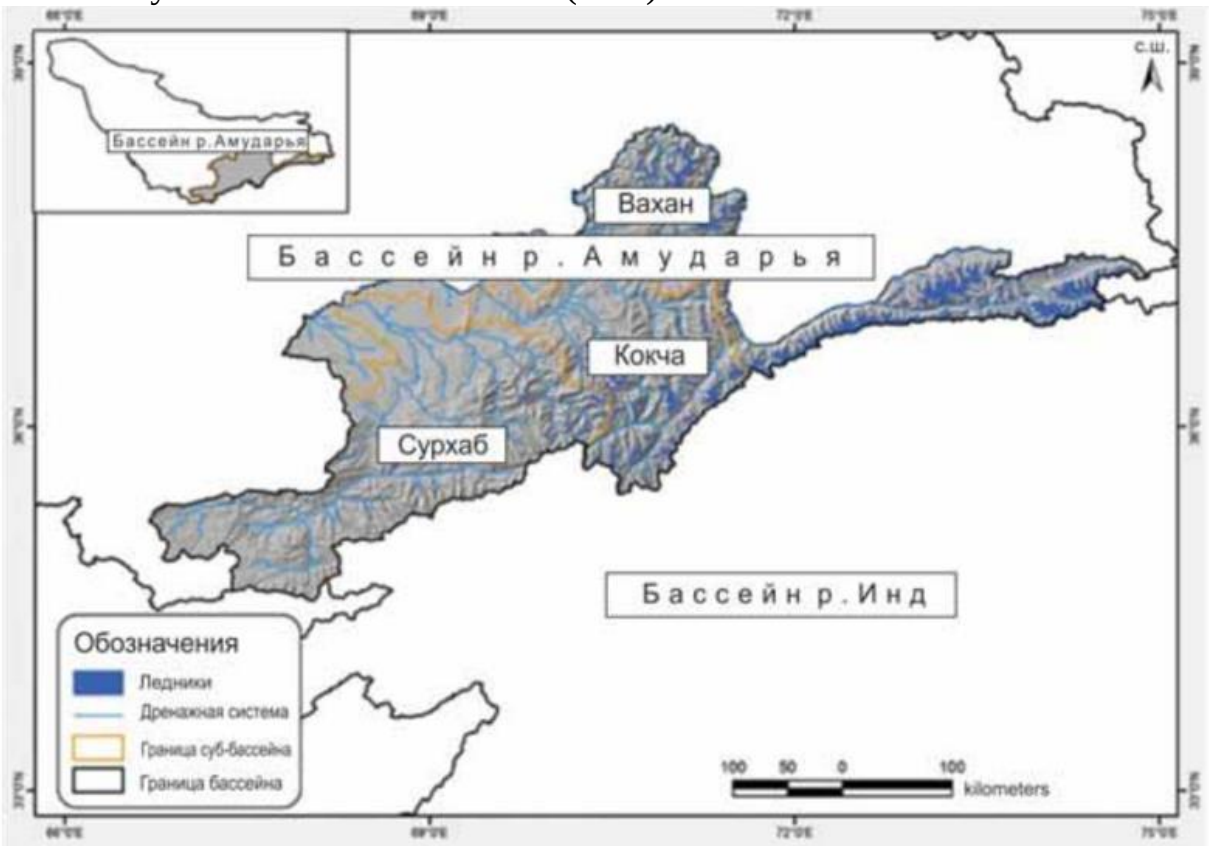

Figure 1. Distribution of glaciers on the territory of the Amudarya basin.

The height of the territory of Afghanistan above sea level is from 7485 meters at the top of Mount Noshak to 258 meters in the valley of the Amudarya River. The highest point (7213 meters) and the lowest point (3131 meters) are both located in the Wakhan sub-basin. Such a wide distribution of elevations in the Wakhan watershed indicates the presence of valley-type glaciers. Fresh ice glaciers from 7213 to 3415 m.m.m. and covered glaciers from 5466 to 3131 m.m.m. located at heights up to A narrower range of elevations for direct shed glaciers indicates the presence of basin-type glaciers.

Figure 2 below shows the percentage of glaciers with different exposure and average angle values. Almost 21% of glaciers have eastern exposure, about 16% southeast, 13-14% northeast, south, southwest or west, 8% northwest and a very small part of glaciers (all Ko 'kcha and Surkhab sub-basins) has a northern exposure.

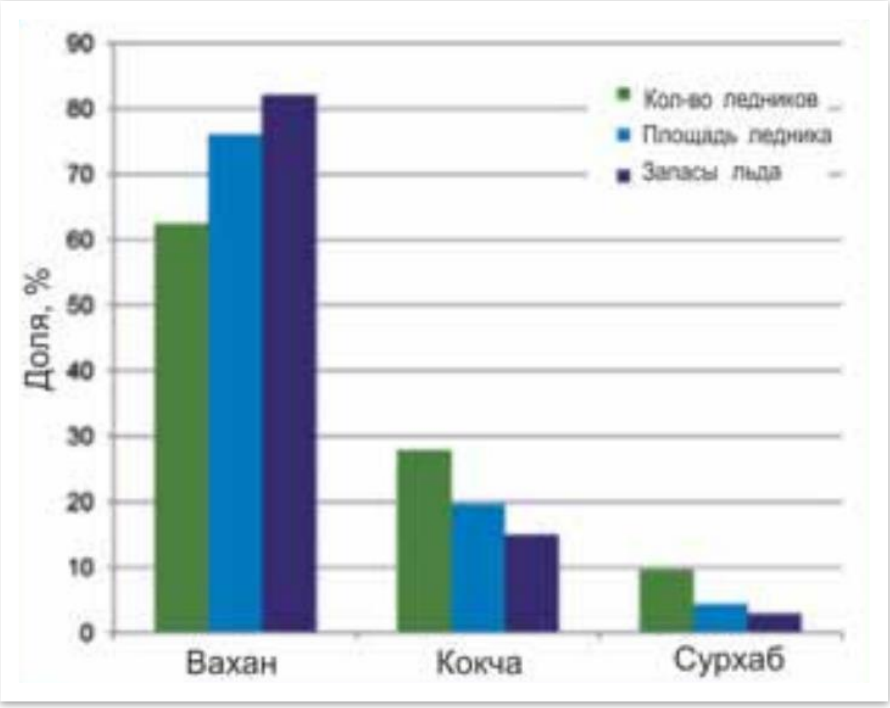

Figure 2. Amount, area and estimated reserve of glaciers in the Amudarya sub-basins.

We are sure that the largest sub-basin, Wakhan, contains almost 82% of the reserve glacier and 76% of the ice area. Kokcha and Sukhrob sub-basins contained 16% and 8% of reserve glaciers, respectively.

We can talk about the economic importance of glaciers and the importance of their use in agriculture in many ways, and this alone proves how much Amudarya water is needed in agriculture. Climate also has a great influence on the dynamic state of glaciers. Precipitation falls in mountainous areas more than in the plains, most of it falls in the form of snow and also affects the growth of glaciers. If the glacier at the source is large and rich in water volume, the amount of water coming from it will be proportional to it, and the importance of water in agriculture is very important.

To conclude from the above, the existing 3277 mountain glaciers are divided into 3 sub-basin areas and water sources are also formed from different glaciers. Studying the dynamic state of each glacier provides the necessary knowledge about its undiscovered information. Glaciers and snows, which are the water base of Amudarya, are decreasing day by day. In order to propose many solutions to this issue in the conditions of climate change, it is considered one of the urgent tasks to study the dynamic state of existing glaciers. In the next aspect, it helps to evaluate the harmful and beneficial sides for agriculture and economic aspects. Now that everyone has a good understanding of the value of water, I think that we should show them the reserve of glaciers, which is our source of water, so that they can become more mature in the economy of using it sparingly.

References:

1. S. Raximov, A. Kamolidinov “От арала до рогуна: современная водохозяйственная обстановка в бассейне Амударьи” 2014.

2. A. Nizomov, A.A. Nugmanova, A.R. Matnazarov “O’zbekiston tog’ muzliklari”. Toshkent- “Fan va texnologiya”- 2016.
3. http://www.ast.uz/ru/geografiya-uzbekistana/reki/amudar-inskij-bassejn

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XIZMAT KO'RSATISH KORXONALARINI BOSHQARISHDA MENEJMENT VA MARKETING SOHASINING TUTGAN O'RNI

Annotatsiya. Ushbu maqolada xizmat ko'rsatish korxonalarini boshqarishda marketing va menejmentning tutgan o'rni hamda O'zbekistonda xizmat ko'rsatuvchi korxonalarning marketing boshqaruvini takomillashtirish yo'llari haqida ma'lumotlar berilgan.

Kalit so'zlar: Menejment. marketing, tadbirkor, iste'molchilar, xizmatlar, xizmat ko'rsatish, korxona, xo'jalik hisobi, konsalting.

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THE ROLE OF MANAGEMENT AND MARKETING IN THE MANAGEMENT OF SERVICE ENTERPRISES

Annotation: this article provides information on the role of marketing and management in the management of service enterprises and ways to improve the marketing management of service enterprises in Uzbekistan.

Keywords: Management. marketing, entrepreneur, consumers, Services, Service, Enterprise, economic accounting, consulting.

Bozor munosabatlariga o'tish bosqichida korxona va tashkilotlar oldida yuzaga kelayotgan qiyinchiliklar ko'p jihatdan korxona rahbar xodimlarining bozor qonunlari va uni o'rganish usullari bilan yetarlicha tanish emasligi tufayli paydo bo'lib bormoqda. To'la xo'jalik hisobi va o'z-o'zini moliyalashtirish tamoyillariga o'tish bosqichida korxona va tashkilotlar ilgari hech bo'lmagan hodisaga duch keldilar: ular ishlab chiqaradigan mahsulotga talab yo'q, korxona mutaxassislari esa uni qanday qilib ichki va jahon bozorlariga chiqarishni bilmaydilar. Yuqoridagi fikrlarni inobatga olgan holda, O'zbekiston bozor iqtisodiyoti sari bormoqda va shu yo'lda ko'p qiyinchiliklarga duch kelmoqda. Bu muammolarning yechimi ko'p jihatdan marketingdan qanchalik ijodiy va

maqsadli foydalanishimizga bog’liqdir. Sababi, marketing bozorda muvaffaqiyatli faoliyat yuritishning jahon tajribasi xazinasi hisoblanadi.

Zamonaviy jamiyat hayotida xizmat ko'rsatish sohasi muhim ahamiyatga egadir. Bugungi kunda turli xildagi darajada xizmat ko‘rsatmaydigan korxona va tashkilotlar deyarli qolmagan va har birimiz har kuni ushbu sohaga qayta-qayta duch kelamiz: uyali telefonlar, internet, savdo va ko‘ngilochar markazlar xizmatlari, ovqatlanish punktlari, go‘zallik salonlari, konsalting, tibbiy va ta’lim muassasalari, turli transport turlarida sayohat va yuklarni tashish. Bu xizmat turlarining barchasi xizmat ko‘rsatish sohasining tushunchasidir. Xizmat ko‘rsatish sohasi korxonalar, tashkilotlar va jismoniy shaxslar tomonidan ko‘rsatiladigan xizmatlarning turli turlarini takror ishlab chiqarishni o‘z ichiga olgan jamlangan umumiy toifasidir. Boshqacha qilib aytganda, bular mamlakat iqtisodiyotining savdo, professional va maishiy xizmatlar ko‘rsatishga ixtisoslashgan tarmoqlaridan biridir. Xizmat ko‘rsatish sohasi moddiy ishlab chiqarishga nisbatan bir qator o‘ziga xos xususiyatlarga egadir.

Birinchidan, tovarlardan farqli o‘laroq, xizmatlar asosan bir vaqtning o‘zida ishlab chiqariladi va iste’mol qilinadi hamda saqlashga to‘g’ri kelmaydi. Ikkinchidan, xizmatlar ko‘pincha mahsulotlarga qarama-qarshidir, garchi xizmat ko‘rsatishning roli sanoatda ham ortib bormoqda - uskunalarni ta’mirlash, sotishdan keyingi xizmat ko‘rsatish va tovarlarni sotish bilan bog’liq. Shuni aytib o‘tishimiz mumkinki, ko‘p hollarda xizmat ko‘rsatishda ishlab chiqarish elementi mavjud. Mahsulot sotish kabi, xizmat ko‘rsatish elementi ham mavjud.

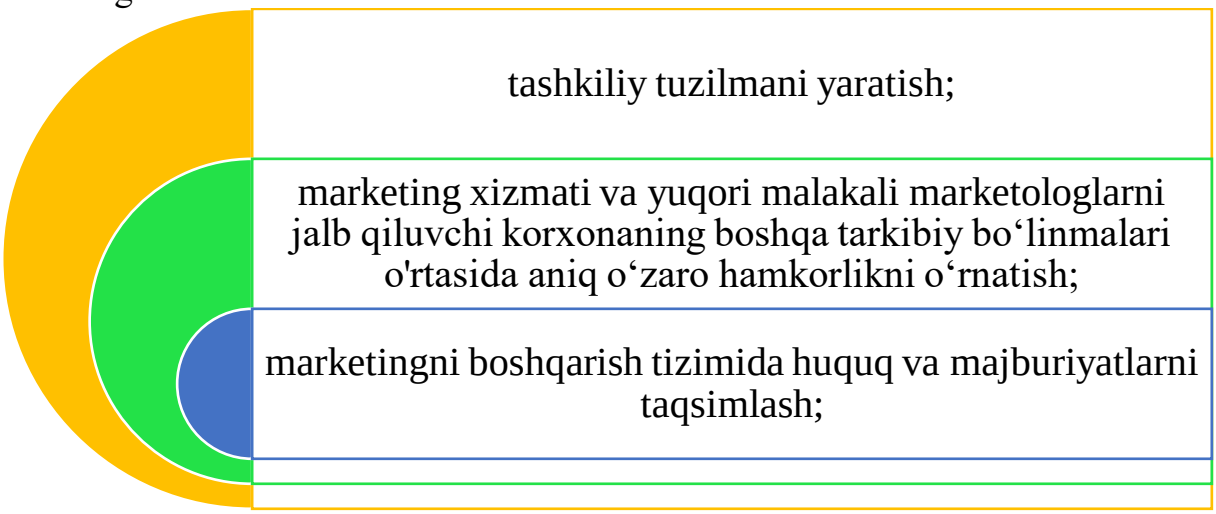
Bizga ma’lumki, birorta xo‘jalik yurituvchi subyekt iqtisodiyotning qaysi tarmog‘ida faoliyat yuritmasin, marketing va menejment xizmatisiz o‘z vazifalarini yaxshi bajara olmaydi. Shu jumladan, insonning ehtiyojlari amalda tugamaydi va kompaniyaning resurslari ko‘pincha cheklangan, shuning uchun marketingning ahamiyati doimiy ravishda oshib boradi. Har bir mavzuning o‘ziga xos ehtiyojlari bor, uni har doim ham sifat jihatidan qondirish mumkin emas. Ularning har biriga shaxsiy yondashuvingiz kerak. Shu sababli, yangi sharoitda iste’molchilarning xohish-istaklarining xilma-xilligini aniqroq ajrata oladigan korxona omon qoladi. Bularning barchasiga marketing xizmati yordam beradi.

Marketing biznes faoliyatining boshqa funksiyalaridan farqli o‘laroq, asosan iste’molchilarga aloqador masalalar bilan shug‘ullanadi. Marketingning maqsadi bir tomondan yuqori darajadagi qiymatni taklif qilgan holda yangi iste‘molchilarni jalb etish, ikkinchi tomondan esa ehtiyojlarni qondish orqali mavjud iste‘molchilarni saqlab qolish hamda ularni sonini oshirib borishdan iboratdir.

Masalan, —McDonald`s—Menga bu yoqadi shiorini mijozlar uchun tanavul qiladigan dunyodagi eng yaxshi joy bo`lishini e`tirof etgan holda amalga oshiradi hamda bu unga atrofdagi to`rtta raqiblarini bozor ulushini birlashtirganda ham, to`rt marta ko`p bozor ulushini berdi.

—Wallmart —Pulingizni tejang va yaxshi yashang degan vadasini amalga oshirish orqali dunyodagi eng katta chakana savdo tarmog`i va eng katta kompaniyaga aylandi.

Har bir korxonada marketing faoliyatini tashkil etish quyidagi jarayonlarni o‘z ichiga oladi:



Marketing so‘zi ingliz tilidan tarjima qilinganda, —bozordagi faoliyat, —bozor faoliyati, —bozorni tadqiq qilish ma‘nolarini bildiradi. Marketingning qachon paydo bo‘lganligi haqida bir qancha fikrlar mavjud. Qat‘iy nuqtai nazarlardan biri shundan iboratki, marketingning birinchi elementlari (og‘zaki reklama, almashuv shakllarini kelishish) odamzod natural xo‘jalikning yakkaligidan xalos bo‘lib, savdoning shakllari paydo bo‘lgan paytdan boshlab vujudga kelgan. Vaholanki, agar reklama marketingning muhim funksiyasi ekanligini tan olsak, bundan uch ming-yil ilgari Vavilonda qochoq qullar evaziga mukofot: ikkita ho‘kiz va‘da qiluvchi maxsus belgilar mavjudligini yodga olish kerakdir.

Marketing - bu kompaniyaning bozorni rivojlantirishga, uni iqtisodiy o‘zgarishlarga moslashtirishga qaratilgan, innovatsiyalarni amalga oshirishga qodir siyosatidan biri hisoblanadi.

Shunday qilib, xizmat ko‘rsatish sohasi korxonasida marketing faoliyati muhim ahamiyatga ega, chunki u iste’molchiga yo‘naltirilgan aniq dasturlarni ishlab chiqish orqali resurslarni oqilona taqsimlashga yordam beradi, natijada marketingning pirovard maqsadi - inson ehtiyojlarini qondirish hisoblanadi.

Marketing menejmenti tahlil qilinishi va eng yaxshi variantni tanlashi kerak bo‘lgan turli xil tadbirlar tizimini o‘z ichiga oladi.

F.Kotler, I.Minko, I.Berezinlar asarlarida ko‘rib chiqilgan. Korxonalar tomonidan marketingdan foydalanish iste’molchilarning talab va ehtiyojlarini to‘liq qondirish uchun eng muhim ijtimoiy -iqtisodiy jarayonni amalga oshirishga yordam beradi.

F.Kotler quyidagi ta’rifni taklif qiladi: marketing – bu tovarlarni yetkazib berish va ayirboshlash orqali shaxslar va guruhlarning ehtiyojlari va talablarini qondirishga qaratilgan ijtimoiy va boshqaruv jarayonidir.

Xulosa qilib aytganda, marketing nafaqat sof marketing maqsad va vazifalarini amalga oshirish, balki rejalashtirilgan ko‘rsatkichlarga erishishni ta’minlash uchun kompaniya faoliyatini muvofiqlashtirish imkonini beradigan eng muhim boshqaruv funksiyalaridan biri bo‘lib xizmat qiladi.

Foydalanilgan adabiyotlar:

1. S.Sayfullayev, N.Komilova. Sanoat iqtisodiyoti. Toshkent, “G’afur G’ulom” nashri. 2019-yil. 123-128-betlar.
2. Bozorov B.U., Jalolov K.M. Industrial va innovatsion iqtisodiyot. Samarqand Davlat Universiteti, 2019-yil. 56-60-betlar.
3. Abdullaev, A., Abdullaeva, G., & Umirova, G. (2022). Содержание стресс-тестирования экономической безопасности банковской системы. InterConf.
4. Sirojiddinov I., Hojiboeva I. Hududlarda xususiy tadbirkorlikni rivojlantirish imkoniyatlaridan samarali foydalanish. Iqtisodiyot va ta‘lim. T.: 2017 № 4, 36 b.
5. Obidova, Feruza Yaxyoevna, and Zevi Odilovna Umarova. "BOSHQARUV FAOLIYATINI AMALGA OSHIRISHDA KADRLARNING GENDER TENGLIGI." *Educational Research in Universal Sciences* 2.3 (2023): 208-215.
6. Umarova, Z. O. "BUSINESS OPPORTUNITY FOR TOURISM DEVELOPMENT." *Экономика и социум* 10 (2020): 275-278.
7. Obidova, F., and Z. Umarova. "FOREIGN EXPERIENCE OF SMALL BUSINESS DEVELOPMENT." *Экономика и социум* 5-1 (2021): 376-379.
8. Umirova, G. Iqtisodiyotimizni rivojlantirishda innovatsiyalarning tutgan o‘rni va ro'li //Qo‘qon universiteti xabarnomasi. – 2022. – T. 5. – C. 64-66.
9. Umirova, G. (2022). Mamlakatimizdagi monopoliyaga qarshi kurashishning raqobat muhitini shakllantirish. *Современные тенденции инновационного развития науки и образования в глобальном мире*, *1*(1), 288-290.

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DEVELOPMENT TREND OF MEDICAL SERVICES IN SAMARKAND REGION

Abstract. In this article, the problems in the development of medical services today and the need to develop medical services are mentioned. Also health care definitions of the term are cited from various sources.

Key words: health care, medical services, health sector, economy, gross domestic product, integration of medical services, effective result, strategic management, private sector, gross domestic product.

The development of medical services is a critical aspect of healthcare systems worldwide, as it directly impacts the quality of patient care and the overall well-being of populations. In recent years, there has been a significant shift in the way medical services are delivered, driven by technological advancements, changing patient needs, and evolving healthcare policies. This article aims to explore the current development trends in medical services.We will analyze the development trend of the last service sector of Samarkand region. If we analyse Samarkand region services in the field small entrepreneurship, we can see that 65.5 % of the population soul per head services volume is 5620.1 thousand sum, total in enterprises services in the field enterprises share is 73.2%, total services volume and in 2023 September 23,335.2 billion soums by month.In recent years, the development of the service sector in Samarkand region has increased significantly. According to the official statistics website, this change was as follows:

Volume of services provided by region in Samarkand region in 2017-2022 (billion soums) 45

Table 1

Years	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Samarkand province	**8 343.2**	**10,043.5**	**12,786.8**	**14,086.1**	**18 259.0**	**22,953.6**
Samarkand city	5 200.1	6 378.5	5 150.7	5 736.8	7 675.5	9,989.3
Kattakurgan city	190.0	222.3	318.6	333.9	426.6	526.3
Districts:						
Bulungur	202.4	232.0	344.0	384.8	496.1	621.1

45https://samstat.uz/uz/rasmiy-statistika/services-2

Jomboy	213.5	253.1	576.5	667.4	801.8	974.6
Ishtix on	212.9	253.2	499.8	536.9	659.5	808.8
Kattakurgan	197.7	231.6	498.8	607.1	731.4	844.6
Narpay	187.3	222.8	452.6	494.9	614.9	756.3
Nurabad	188.6	215.0	272.1	289.3	370.1	443.2
Akdarya	200.1	235.0	418.4	506.5	641.5	712.8
Payarik	202.0	233.3	458.6	523.7	654.7	818.1
Pastdargam	254.7	296.7	902.3	904.3	1 143.2	1 435.3
Pa x tachi	161.5	183.2	263.9	330.4	411.6	509.4
Samarkand	306.7	368.9	862.9	918.8	1 225.5	1 601.5
Taylak	219.4	251.9	570.2	631.4	804.3	977.3
Urgut	245.0	282.6	924.9	924.6	1 233.8	1 480.8
Qushrabot	161.3	183.4	272.5	295.3	368.5	454.2

As can be seen from the data of this table, high rates of growth are observed in all types of services. We can see that the volume of services in Samarkand region increased by 175.5% in 2022 compared to 2017. In terms of regions, the highest absolute indicator of the volume of services by districts belongs to the Samarkand district, which amounted to 1601.5 billion soums in 2022, which increased by 422.8% compared to 2017. In terms of regions, the highest absolute indicator of the volume of services by city and district belongs to the city of Samarkand, which amounted to 9,989.3 billion soums in 2022, an increase of 92.1% compared to 2017. In terms of regions, the lowest absolute indicator of the volume of services for cities and districts belongs to Nurabad district, which amounted to 443.2 billion soums in 2022 and increased by 135% compared to 2017.

It is an important task to further develop the types of services, improve the quality of the market infrastructure, and further increase the volume and types of services. The volume of services in the health sector is the value of market services provided by health institutions for various medical care and sanitary services.

Economical of activity health storage in the field services according to shown services volume

Table 2

Years	2017	2018	2019	2020	2021	2022
Services - total	**8 343.2**	**10,043.5**	**12,786.8**	**14,086.1**	**18 259.0**	**22,953.6**
health storage in the field services (billion soums)	119.4	145.5	193.8	260.7	341.2	464.4

As can be seen from the data of this table, high rates of growth are observed in all types of services. In 2022, we can see that the volume of services in the field of health care increased by 345.0 billion soums or 289% compared to 2017. Also, in 2017, the share of healthcare services in the volume of services was 1.43%, and in 2022 this indicator reached 2.02%.

As of November 1, 2023, the number of enterprises and organizations operating in the field of healthcare and social security services was 1,008 units.

As long as human society exists, products and goods are produced and services are provided. Society has extended reproduction. This means that the product (goods) production is repeated in an expanded volume and assortment. Because, on the one hand, the population is increasing, on the other hand, its needs are expanding, new goods are being produced, and shops (markets) are being filled. Examples of these are mobile phones and computers.

Samarkand region activity walking hospital institutions the number46

Table 3

Years	*2017*	*2018*	*2019*	*2020*	*2021*	*202 2*
Samarkand province	**90**	**85**	**99**	**109**	**120**	**120**
cities:						
Samarkand	48	47	49	57	60	59
Kattakurgan	1	2	2	2	2	2
Districts:						
Akdarya	3	3	6	7	6	6
Bulungur	1	1	1	2	3	3
Jomboy	2	2	2	4	3	4
Ishtikhan	5	5	7	6	7	7

46 https://samstat.uz/uz/rasmiy-statistika/social-protection-2

Kattakurgan	2	1	1	1	2	3
Kushrabot	2	2	2	2	2	2
Narpay	1	2	3	2	3	2
Payarik	4	2	2	2	3	2
Nurabad	3	2	2	2	2	3
Pastdargam	1	2	4	4	6	6
Pakhtachi	6	1	1	1	1	1
Samarkand	3	6	8	8	9	9
Taylok	6	2	4	4	4	4
Urgut	2	5	5	5	7	7

As can be seen from the data of this table, the number of hospital institutions in Samarkand region was 90 in 2017, and this indicator was 120 in 2022 (an increase of 30 in absolute terms). lsa, and the growth rate increased by +33%).

When we analyze the number of hospital institutions by regions, the city of Samarkand is the leader for all the researched years (59 by the end of 2022). In 2017, the number of institutions in this region made up 53% of the total regional institutions, and by 2022, this indicator reached 49%. In 2022, the number of hospital institutions increased by +22.9% compared to 2017.

In terms of districts, when we analyze the number of hospitals, by the end of 2022, Samarkand District (9) is leading. In 2017, the number of institutions in this area made up 3.3% of the total regional institutions, and by 2022 this figure will reach 7.5%. In 2022, we can see that the number of hospital facilities increased by +200% or 3 times compared to 2017.

When we analyze the number of hospital institutions by regions, the lowest indicator for all the studied years corresponds to Pakhtachi district (1 by the end of 2022). In 2017, the number of institutions in this area was 6.6% of the total regional institutions, and by 2022, this indicator reached 0.83%. In 2022, compared to 2017, the number of hospital institutions decreased by -84%.

References:

1. Smith, J. (2019). Development Trends in Medical Services. Journal of Healthcare Management.

2. https://samstat.uz/uz/rasmiy-statistika/social-protection-2

3.Ortikniyozovich, U. F. (2023). Health Care System in Our Country Development. Best Journal of Innovation in Science, Research and Development, 2(5), 56–57. Retrieved from https://www.bjisrd.com/index.php/bjisrd/article/view/176

4.Ortikniyozovich, U. F.. (2023). ISSUES OF FINANCING THE HEALTHCARE SYSTEM IN MODERN CONDITIONS. Horizon: Journal of

Humanity and Artificial Intelligence, 2(5), 72–73. Retrieved from https://univerpubl.com/index.php/horizon/article/view/1366

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CURRENT ISSUES OF DEVELOPMENT OF MEDICAL SERVICES

Abstract. In this article, the problems in the development of medical services today, the need to develop medical services, and the role and importance of medical services in calculating the standard of living of the population are presented.

Key words: health care, medical services, health sector, economy, gross domestic product, integration of medical services, effective result, strategic management, private sector.

A number of positive results are being achieved in the field of services, including the development of medical services. The basis of the legal and economic basis of the activities of the subjects of this field was created after independence. As a result, the share of the service sector in the GDP is increasing, but we can see that the achieved results are still far below the indicators of developed countries. We can say that as a result of the economic reforms and attention to the service sector in our country, the type of services provided to the population and their volume per capita have increased somewhat. But it is difficult to say that the attention to the medical service sector, which is one of the sub-sectors of the service sector, is insufficient. It is characterized by the fact that the main part of the subjects of this field belongs to the state sector. Organization of entities with other forms of ownership in this area and increasing their share in the economy is one of the urgent issues of today.

In recent years, the system of providing primary medical and sanitary care has been improved in our country through the establishment of rural medical centers, urban and rural family polyclinics, and the population's opportunities to use these services have been somewhat expanded. A unified centralized system of emergency medical care has been created, the network of republican specialized scientific-practical medical centers providing high-tech medical care to citizens, including on-site, is being improved.A number of national programs aimed at strengthening the reproductive health of the population, protecting motherhood and childhood have been implemented. As a result, in 1991-2017, the total mortality rate decreased by 20%, maternal and infant mortality decreased by 3.1 times. The average life expectancy has increased by 4.6 years compared to 1995 and today is 73.7 years.

That's it with together, health storage field activities organize in reaching last in years collected the rest systematic shortcoming and problems of citizens health protection to do system more to improve directed tasks efficient solution

to do obstacle is doing In particular this to problems the following our input can 47:

Firstly, health storage system manage and planning according to concept and strategic of goals there is that it is not due to this in the field reforms complete didn't happen in the form done increasing, this while of the population medical help to quality circle desire and requirements answer does not give;

secondly, The estimated financing system in the health sector is based on outdated mechanisms that do not correspond to modern international practice, which leads to inefficient use of financial resources and chronic underfunding of the sector.

thirdly, diseases prevention to do and early identification, patronage and healthy marriage style formation according to affairs efficiency low of citizens specialized medical help asking appeal to do increase reason is happening

fourthly, there is poor coherence in the various levels and stages of providing medical care to the population, including treatment and rehabilitation;

fifth, the current personnel policy does not allow forecasting the prospects of providing specialists at all levels of medical care, especially at the primary level, as well as training health system organizers and management personnel;

sixth, the slow integration of medical practice with education and science, together with the low innovation potential of specialized centers, has a negative effect on the introduction of modern medical achievements into the treatment-diagnosis process;

seventh, there are no uniform standards in the field of e-health, modern software products that ensure the integration and effective management of medical services have not been introduced, existing information systems and technologies are fragmented and narrowly focused, and we list many other similar factors possible

The main goal of these problems is the formation of conceptually new models of the organization and financing of the health care system, which will ensure a radical increase in the quality, efficiency and popularity of medical care for the population, and the introduction of modern achievements of medical science and technology.

Regarding the term **health care, different definitions are given in the literature.** In particular, **health care 48**is a system of social, economic and medical activities aimed at protecting the health of the population. Health care includes general activities aimed at preventing and treating diseases, creating healthy living and working conditions, ensuring high working capacity and longevity; its main task is to provide assistance to patients in a modern, specialized and appropriate manner.

47https://xs.uz/uz/post/ozbekiston-respublikasi-sogliqni-saqlash-tizimini-fundan-perfektiv-bojicha-complex-measures-togirsida
48https://uz.wikipedia.org/wiki/Sog%CA%BBliqni_saqlash

If we look at history, health care has a long history in the East, especially in Uzbekistan. Especially in the Middle Ages, high levels of medicine were achieved in this area. During this period, ancient medical works from Greek and other languages were translated into Arabic, and their recommendations were put into practice. At the same time, Eastern thinkers created famous works on medicine. In this regard, Abu Rayhan Beruni's "Medicine Medicine" ("Kitab Assaydana Fittib") and Abu Ali Ibn Sina's "Medical Laws" ("Al Qonun Fittib") are famous and have been the main guide in world medicine for a long time. Especially Abu Ali Ibn Sina became very famous in his time as a doctor (judge) using new methods of treatment. In later times, medicine became the main form of health care in Turkestan. Physicians were trained in madrasahs or learned to treat various diseases, fractures, wounds and prevent many other diseases through apprenticeship. Theirs most of them not only patients treatment, maybe medicines preparation who also dealt with. Sahibkiran Amir Temur paid special attention to public health protection, among other educational activities. Famous doctors from other countries brought to the capital Samarkand and opened special hospitals. Special buildings for hospitals began to be built in Movarounnahr and Khorasan in the 8th-9th centuries. There were many hospitals in cities like Samarkand and Bukhara in the 15th century. Such public hospitals were called "Dor ushshifa" ("House of Healing"), where the learned doctors of the time treated patients. Pharmacists prepared medicines for patients in special pharmacies of "Dor usshifo". In some hospitals, in addition to treating patients, doctors were also involved in the science of medicine. We can see that it is well known from history that Alisher Navoi attached great importance to opening hospitals. Currently, the processes of economic reform and modernization in the socio-economic life of our country are aimed at ensuring the further development of the service sector. The share of this industry is increasing sharply in all aspects, including the gross domestic product, the composition of the employed in the economy, taxes paid to the state budget, creating new jobs, filling the domestic market of our country with consumer goods, and in the future. a legal basis for the continuation of this process has been created. The service industry is the most profitable industry in the world today. It covers the scientific-theoretical and practical issues of improving the service sector, as well as the priority directions related to the development of our country's economy through innovative factors, and ensuring the economic and social development of society through the improvement of the use of scientific achievements. These factors serve as the main source for the further development of the economy of our country, increase in the well-being and standard of living of the population, and increase in the level and quality of life.

References:

1. Smith, J. (2019). Development Trends in Medical Services. Journal of Healthcare Management.
2. https://samstat.uz/uz/rasmiy-statistika/social-protection-2

3. Ortikniyozovich, U. F. (2023). Health Care System in Our Country Development. Best Journal of Innovation in Science, Research and Development, 2(5), 56–57. Retrieved from https://www.bjisrd.com/index.php/bjisrd/article/view/176
4. Ortikniyozovich, U. F.. (2023). ISSUES OF FINANCING THE HEALTHCARE SYSTEM IN MODERN CONDITIONS. Horizon: Journal of Humanity and Artificial Intelligence, 2(5), 72–73. Retrieved from https://univerpubl.com/index.php/horizon/article/view/1366

DOI 10.5281/zenodo.10716066

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GEOGRAFIK QOBIQ – GEOGRAFIYA FANINING O'RGANISH OBYEKTI

Annotatsiya. Ushbu maqolada geografik qobiq geografiya fanining o'rganish ob'ekti ekanligi yoritilgan. Shuningdek, geografik qobiqda kechayotgan tabiiy va iqtisodiy-ijtimoiy jarayonlar o'rganilgan. Geografik qobiqning qonuniyati va xususiyatlari bugungi kun nuqtai nazardan ilmiy tahlil qilingan.

Kalit so'zlar. Geografik qobiq, yer shari, geosferalar, rivojlanish, bir butunlik, tizim, antropogen ta'sir, geokomponentli, geosferali, geotizimli.

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GEOGRAPHIC SHELL - STUDY OBJECT OF GEOGRAPHY

Annotation. This article explains that the geographical envelope is the object of study of the science of geography. Natural and economic-social processes occurring in the geographic environment are also studied. The patterns and features of the geographical envelope have been scientifically analyzed from the standpoint of today.

Key words. Geographical envelope, globe, geospheres, development, integrity, system, anthropogenic impact, geocomponent, geosphere, geosystem.

Kirish. Geografiya fanlarini o'rganish ob'ekti geografik qobiqdir. Tabiat g'oyatda xilma-xildir. Materiyaning ba'zi shakllari yerning qobiqlari uchungina xos bo'lib, ular sayyoramizdan tashqarida, koinotda tamomila boshqachadir. Yer shari yuzasida, Yer po'stining ma'lum bir chuqurligi bilan atmosferaning ma'lum bir balandligigacha bo'lgan qismida maxsus moddiy tizim vujudga kelgan. Hozirgi vaqtda geografik qobiqda biron joy yo'qki, u kishilik faoliyatining ozmi-ko'pmi bevosita yoki bilvosita ta'sirida bo'lmagan bo'lsin. Ba'zi hollarda bu

ta’sir shu qadar kuchli va uzoq davom etganki, tabiiy sharoitning tub o‘zgarishlariga olib kelgan hamda «antropogen» landshaftlarni vujudga keltirgan.

Masalan, sanoat yuksak darajada rivojlangan va shaharlar ko‘p to‘plangan hududlarda yoki dehqonchilik madaniyati ming yillik tarixga ega bo‘lgan jarayonlarda tabiatning takrorlanmas o‘zgarishlari va haqiqiy tabiiy komplekslarning (majmualarning) buzilishlari ro‘y beradi. Hatto, inson faoliyati tabiatga muntazam ta’sir ko‘rsatmaydigan joylarda, chunonchi, okeanlarning markaziy qismlarida yoki atmosferaning quyi qatlamlarida ham har holda insonning bilvosita ta’siri u yoki bu darajada namoyon bo‘ladi. Sayyoramizning ushbu ustki qobig‘i uchun moddalarning uch holatda: gaz, suyuq va qattiq holatda bo‘lishi hamda modda harakatining xilma-xil shakllari xosdir.

Asosiy qism. Yerning ichki qismidan chiqadigan modda va issiqlik ham, koinotdan keladigan modda va issiqlik ham shu joyda to‘planadi. Yerning ichki qismidagi moddalarning tabaqalanishi natijasida litosfera bilan gidrosfera tarkib topgan. Yer yuzasi tabiati rivojlanishining ma’lum bir bosqichida hayot paydo bo‘lgan va tirik moddalar litosfera, gidrosfera hamda atmosferaning taraqqiyotiga faol ta’sir ko‘rsatadigan omil bo‘lib qolgan. Tirik modda ta’sirida mazkur qobiqlar hozirgi xususiyatga ega bo‘lgan. Yerning qulay fazoviy sharoitida uzoq davom etgan rivojlanish jarayonida uning o‘ziga xos murakkab va bir butun tabiiy tizim vujudga kelganki, u **geografik qobiq** deb ataladi.

Geografik qobiqning hozirgi bosqichidagi eng muhim xususiyati unda odamzodning mavjudligidir. Geografik qobiqni inson uchun yashaydigan **muhit** deb atash qabul qilingan. Geografik qobiqning tarkibiy qismlari: tog‘ jinslari, suvlar, havo, tirik modda va boshqalar har xil ko‘rinishda bo‘lishi mumkin (qattiq, suyuq, gaz). Yerdagi barcha kimyoviy elementlar geografik qobiqda mavjud. Geografik qobiqga Quyosh va koinotdan keladigan issiqlikdan tashqari yerning ichki qismidan ham issiqlik kelib turadi.

Geografik qobiqning yuqorigi va quyi chegarasi hayot tarqalgan joylar chegarasiga to‘g‘ri keladi. Geografik qobiq o‘rtacha balandligi 11 km bo‘lgan troposferaning, yer yuzasidagi qalinligi okeanlarda 11 km gacha boradigan butun suv qobig‘ini hamda litosferaning yuqorigi 2-3 km qatlamini o‘z ichiga oladi.

Geografik qobiqning tarkibiy qismlari orasida doimo modda va energiya almashinuvi sodir bo‘lib turadi. Ushbu almashinuv havo va suv harakati, yer osti va yer usti suvlarining hamda muzlarning harakatida namoyon bo‘ladi. Geografik qobiqning tarkibiy qismlarini o‘zaro ta’siri natijasida uning eng muhimi xususiyatlaridan biri bo‘lgan, **yaxlitlik va bir butunlikning** namoyon bo‘lishiga olib keladi. Geografik qobiqdan tashqarida hamma narsa unga nisbatan tashqi narsalar hisoblanadi. Bularga atmosferani yuqori qatlamlari, yerning ichki qismi ham kiradi.

Binobarin, geografiya butun yer haqidagi fan emas, balki yerning muayyan va yupqa qobig‘i bo‘lgan geografik qobiqni o‘rganadi. Mazkur qobiq doirasida ham tabiatni qator fanlar (ekologiya, biologiya, okeanografiya, gidrologiya, meteorologiya va hokazolar) ham o‘rganishadi. Mazkur fanlarni har biri yer

yuzasidagi tabiiy tizimning ma’lum bir tomonini tadqiq etadi. Ammo uni har tomonlama, kompleks (majmuaviy) o‘rganmaydi.

Geografik qobiqni esa kompleks o‘rganish juda katta ahamiyatga ega. Chunki, u tabiat bir butun hosilasidir. Geografik qobiqni, undagi tabiiy va iqtisodiy-ijtimoiy jarayonlarni xuddi shunday bir butun holda o‘rganish geografiyaning asosiy maqsadi hisoblanadi [1].

Haqiqatdan ham, geografik qobiq, landshaft qobig‘i, epigeosfera – Yerning litosfera, gidrosfera, atmosfera va biosferalar o‘zaro tutashadigan va bir-biriga ta’sir etadigan qobig‘i. Geografik qobiqning tarkibi va tuzilishi juda murakkab. Uning yuqorigi va pastki chegaralari ham shartlidir. Atmosferada Geografik qobiq stratopauza bo‘ylab o‘tadi deb hisoblaydilar, chunki Yer yuzasining atmosfera jarayonlariga bo‘lgan issiqlik ta’siri shu chegaragacha davom etib, litosferada esa gipergenez oblasti quyi qismigacha boradi. Geografik qobiq butun gidrosferani, Yer po‘stining yuqori qavatini va atmosferaning quyi qismi (25-30 km qalinlikdagi qatlam) ni o‘z ichiga oladi. Geografik qobiqning eng qalin qismi 40 km ga yaqin.

Geografik qobiq Yerdagi va kosmosdagi jarayonlar ta’sirida shakllanadi. Litosfera, atmosfera tutashib, o‘zaro ta’sir etib turadi-turli xil erkin energiyalarga nihoyatda boy, unda moddalarning barcha agregat holati uchraydi. Quyoshdan keladigan issiqlik to‘planadi. Insoniyat jamiyati mavjud.

Yer po‘stini tashkil etadigan tog‘ jinslari relyef bilan birga, havo massalari, suv, tuproq qatlami va biotsenozlar, qutbiy kengliklarda va baland tog‘lik joylarda to‘plangan muzliklar-Geografik qobiqning asosiy moddiy komponentlaridir. Gravitatsion energiya, sayyoraning ichki issiqligi, quyoshning nur energiyasi va kosmik nurlar energiyasi esa asosiy energetik komponentlaridir.

Geografik qobiq quyidagi muhim xususiyatlarga (qonuniyatlarga) ega:

-tarkibiy qismlari o‘rtasida beto‘xtov modda va energiya almashinishi tufayli Geografik qobiq yaxlit bir butunni tashkil etadi;

-moddalar (ular bilan bog‘liq holda energiya) aylanma harakat qilib turadi. Tabiatda moddalarning aylanib yurishi turlicha. Ulardan ba’zilari mexanik harakatlardir (atmosfera sirkulyasiyasi, dengiz oqimlari), boshqalarida moddaning agregat holati o‘zgaradi, uchinchilarida uning kimyoviy tarkibi ham o‘zgaradi (biologik aylanma harakat);

-ritmiklik, ya’ni jarayon va hodisalarning vaqt o‘tishi bilan takrorlanishi. Bu, asosan, astronomik va geologik sabablarga bog‘liq. Sutkalik (kun va tunning almashinishi), yillik (yil fasllarining o‘zgarishi), asr ichida (masalan, har 25-50 yilda) iqlim, muzlik, ko‘l sathi, daryolardagi suv miqdori va boshqalarning takroriy o‘zgarib turishi, asrdan ko‘p (masalan, har 1800-1900 yillarda va salqin-sernam iqlimli davrning quruq va issiq iqlimli davr bilan almashib turishi), geologik ritmlar (kaledon, gersin, alp tog‘ hosil bo‘lish bosqichlaridan har birining 200-240 mln. yil davom etishi) va hokazolar ritmlar farq qilinadi;

-ekzogen va endogen kuchlarning o‘zaro ta’siri ostida Geografik qobiqniig yaxlit sistema sifatida beto‘xtov rivojlanishi;

-Yerning shakli va Quyosh energiyasining yer yuzasida taqsimlanishidan kelib chiqadigan zonallik hamda regionallik xususiyati [2].

Geografik qobiqni tabiiy geografiya o‘rganadi. Geografik qobiq g‘oyasiga dastlab P. I. Brounov (1910) va R. I. Abolin (1914) yondashdi. Geografik qobiq terminini A. A. Grigorev (1932 y. dan) asosladi.

Geografik qobiqning mavjudligi va u o‘ziga xos xususiyatlari bilan tabiiy geografiyaning ob’ekti ekanligi ko‘pchilik geograflar tomonidan tan olingan. Ammo uning nomlanishi, uning yuqori va quyi chegaralari, hamda ularga bog‘liq holda, qalinligi haqida turlicha fikrlar yuzaga kelgan. Geografik qobiq haqidagi ta’limotning asoschisi hisoblangan A.A.Grigorevning o‘zi ham uni turlicha nom bilan atagan. **Masalan,** 1930 yilda "geografik muhit", 1937 yilda "tabiiy geografik qobiq" va 1964 yilda esa "geografik qobiq" deb atagan.

Geografik qobiq va uning umumiy qonuniyatlar

Yerning ichki va tashqi (koinot) omillari va jarayonlari yer po‘stining yuza qismida to‘qnashib va o‘zaro ta’sirlashib sayyoramizning boshqa hech bir qismida uchramaydigan o‘ziga xos tabiiy tizim-geografik qobiqni vujudga keltirgan.

Geografik qobiqning mohiyati shundaki, faqat undagina suv uch xil holatda uchraydi, hayvonlar va o‘simliklar yashaydi, tuproq qoplami hosil bo‘ladi, turli tog‘ jinslari va relyef shakllari vujudga keladi, quyosh energiyasi to‘planadi va xususiyatlarini o‘zgartiradi. Eng asosiysi, hayot mavjud, kishilik jamiyati faqat shu qobiqda paydo bo‘lib yashamoqda va rivojlanmoqda.

Geografik qobiq juda murakkab tuzilgan bo‘lib, unda 3 tarkibiy tuzilish darajalari ajratiladi: **geokomponentli, geosferali, geotizimli.**

Geokomponentli eng sodda tuzilish darajasi. Geokomponentlar yer yuzidagi bir xil holatdagi (qattiq, suyuq, gazsimon) moddalardir. Bular tog‘ jinslari, tuproq, suv, havo, o‘simlik va hayvonlar.

Geosferali tuzilish bitta geokomponentdan tashkil topgan geosferalardan iborat. Geosferalar geografik qobiqning vertikal tuzilishini belgilaydi, ular solishtirma og‘irligi bo‘yicha vertikal tabaqalanib **joylashgan:** litosfera, gidrosfera, atmosfera va biosfera. Litosfera, gidrosfera va atmosfera deyarli bir xil moddalardan tarkib topgan va uzluksiz, yaxlit qobiqni hosil qiladi. Biosfera esa tirik moddalar tarqalgan qobiq bo‘lib, yaxlit qobiq hosil qilmaydi. U boshqa qobiqlar tarkibiga kiradi va yuqorida aytilgan qobiqlarning tutashgan joyida yupqa qatlamni hosil qiladi.

Geotizimli tuzilish geografik qobiqning gorizontal tuzilishini ifodalaydi.Geotizimlar barcha komponentlarni qamrab olib, ularning o‘zaro ta’sir va aloqalaridan hosil bo‘lgan murakkabtizimlardir. Geografik qobiqning o‘lchamlari, pastki va yuqori chegaralari haqida turli olimlarning fikrlari turlicha. Uning chegarasini barcha geokomponentlar o‘zaro ta’sirda bo‘ladigan va

geografik qonuniyatlar namoyon bo‘ladigan yuzadan, sathdan o‘tkaziladi. Bu chegara Yer yuzining turli qismlarida har xil qalinlikka ega [3].

Geografik qobiq uni tashkil qiluvchi qobiqlardan ko‘p xususiyatlariga ko‘ra farq qiladi, ulardan asosiylari quyidagilardan **iborat:**

-Geografik qobiq moddiy tarkibi va tuzilishining xilma-xilligi. Geografik qobiqda moddalar uch xil, ya’ni qattiq, suyuq va gazsimon holatda uchraydi. Ularning fizik va kimyoviy xususiyatlari turlicha va o‘zgaruvchan. Moddalarning tuzilishiga ko‘ra, organik, noorganik va aralash turlari ajratiladi;

-Geografik qobiqda energiyaning turli xillari uchraydi. Quyosh energiyasi kimyoviy jarayonlar, issiqlik va mexanik energiyaga aylanadi;

-Geografik qobiqda issiqlikning o‘zgarishi va to‘planishi. Geografik qobiqga issiqlik koinotdan va Yerning ichki qismidan keladi. Ushbu issiqlikning bir qismi organik moddalarda va ularning qoldiqlarida to‘planadi (ko‘mir, gaz, neft, torf va h.k.);

-Geografik qobiqda uni tashkil etuvchi komponentlar va geosferalarning o‘zaro ta’siri va aloqalari natijasida sifat jihatidan yangi hosilalar-geotizimlar vujudga kelgan;

-Geografik qobiqda hayotning mavjudligi. Tirik organizmlar, jumladan inson uchun faqat shu yerdagina qulay muhit mavjud;

-Geografik qobiq o‘ziga xos **qonuniyatlar** asosida rivojlanadi. Geografik qobiqning bir nechta qonuniyatlari mavjud bo‘lib, eng**asosiylari: bir butunlik, zonallik, azonallik, modda va energiyaning aylanma harakati, ritmiklik** [4]**.**

Geografik qobiqning **xususiyatlarini (qonuniyatlarini)** kengroq mazmunda ko‘rib chiqsak, maqsadga muvofiq bo‘ladi.

Xulosa. Geografik qobiqning bir butunligi qonuniyati muhim qonuniyatlardan biri bo‘lib, barcha komponentlarning bir-biri bilan chambarchas bog‘liqligi va ulardan birining o‘zgarishi butun qobiqningyaxlitligini buzilishiga olib kelishida namoyon bo‘ladi. Chunki, geografik qobiq- tabiat komponentlarining oddiygina yig‘indisi bo‘lmasdan, balki maxsus xususiyatlarga ega bo‘lgan va yaxlit, bir butun rivojlanuvchi sifatiy yangi hosiladir.

Geografik qobiqning bir butunligi va komponentlarning o‘zaro bog‘liqligini to‘rtlamchi davr muz bosishlari misolida yaqqol ko‘rish mumkin. Muz bosish davrlarida katta hajmdagi suv muzliklarda to‘planadi. Bu esa Dunyo okeani sathining sezilarli pasayishiga (100–110 m) olib kelgan. Dunyo okeani sathining pasayishi, o‘z navbatida, Yerning butun tabiatida aks etadi: shelfning qurishi yuz beradi, materiklar va okeanlarning qirg‘oq chegaralari, qiyofasi o‘zgaradi, orollarning ayrimlari materiklar bilan tutashadi, ayrim bo‘g‘ozlar (masalan, Bering, Gibraltar) quruqlikka aylanib materiklar tutashib ketadi va "kontinental ko‘priklar” vujudga keladi.

Ushbu "ko‘priklar” orqali turlarning migratsiyasi ro‘y berib, o‘simliklar va hayvonlar yangi yerlarni egallaydi. Yer yuzining barcha daryo havzalarida eroziya ba’zisining pasayishi natijasida chuqurlatma eroziya faollashadi. Muz bosish davrlari oralig‘idagi issiq vaqtlarda materik muzliklari erib, daryo

suvlarining okeanga quyilishi va okeanlardagi muzliklarning erishi natijasida Dunyo okeani suv sathi ko‘tarilgan. Eroziya ba’zisining ko‘tarilishi hisobiga daryolarda yonlama eroziya faollashgan. "Kontinental ko‘priklar” yo‘qolib, quruqlik organizmlarining migratsiyasini chegaralab, suv organizmlari migratsiyasini kuchaytirgan. Agar, "kontinental ko‘priklar” so‘nggi muz bosish davrlarida vujudga kelmagan bo‘lsa, materik va orollarda (masalan, Avstraliya, Madagaskar) o‘ziga xos o‘simlik va hayvonot dunyosi shakllangan, ularda endemiklar ko‘proq uchraydi.

Modda va energiyaning aylanma harakati. Geografik qobiqda modda va energiyaning aylanma harakati uning bir butunligini ta’minlaydi. Aylanma harakatda litosfera, gidrosfera, atmosfera va biosferadagi moddalar ishtirok etadi. Litosferada, asosan, gipergenez zonasigacha, ya’ni nuragan g‘ovak jinslar tarqalgan chegaragacha bo‘lgan moddalar aylanma harakatda ishtirok etadi. Atmosferada aylanma harakat atmosferaning umumiy sirkulyatsiyasida namoyon bo‘ladi, sayyoraviy miqyosdagi shamollar (havo oqimi) ning shakllanishi sodir bo‘ladi. Atmosferaning umumiy sirkulyatsiyasiga mintaqaviy va mahalliy aylanma harakatlar qo‘shiladi. Gidrosferada suvning katta va kichik aylanma harakati sodir bo‘ladi. Okeanda suv massalarining gorizontal va vertikal aylanma harakati, quruqlikda suvning daryo o‘zanlari bo‘ylab oqishi, ko‘llarning, muzliklarning va yerosti suvlarining hosil bo‘lishi va boshqalar kuzatiladi. Katta ahamiyatga ega biologik aylanma harakat-organik moddalarning hosil bo‘lishi va parchalanishida namoyon bo‘ladi.

Aylanma harakatlar murakkabligi bo‘yicha turlichadir. Ayrim aylanma harakatlarda moddaning mexanik aralashmasi (masalan, atmosferaning umumiy sirkulyatsiyasi, okean oqimlari) yuz bersa, boshqalarida modda holatining o‘zgarishi (masalan, suvning aylanma harakatida gaz, suyuq, qattiq holatga o‘tishi) kuzatiladi, uchinchi xilida esa kimyoviy aylanish (fotosintez reaksiyasi) kuzatiladi.

Bir butunlik hamda modda va energiyaning aylanma harakati qonuniyatlarini o‘rganish tabiatdan, uning boyliklaridan to‘g‘ri foydalanishda juda muhim.

Ritmiklik deb, bir yo‘nalishda rivojlanuvchi tabiiy hodisa va jarayonlarning muayyan vaqt davomida takrorlanib turishiga aytiladi. Ritmiklikning ikki xil shakli **ajratiladi:**

-davriylik-bir xil davom etadigan ritmiklik bo‘lib, hodisa va jarayonlarning aniq bir vaqt davomida takrorlanib turishi;

-sikllik-vaqti-vaqti bilan davom etadigan ritmiklik bo‘lib, hodisa va jarayonlarning turli muddatda takrorlanishi.

Ritmik hodisalar turlicha davomiylikda **bo‘ladi:** ko‘p asrlik, asr ichidagi, yillik, sutkalik. Yer tarixidagi eng katta ritmiklik quyosh sistemasining galaktika markazi atrofda aylanishi bilan bog‘liq va 180-220 mln yilni o‘z ichiga oladi. Yer tarixida ular tektonik davrlarda namoyon **bo‘lgan:** kaledon (kembriy, ordovik, silur), gersin (devon, tosh ko‘mir, perm), mezozoy (trias, yura, bo‘r), kaynozoy.

Bu davrda tektonik harakatlar, vulqon otilishlari faollashadi, materiklarning qiyofasi, iqlim, oxir oqibatda Yer tabiati o‘zgarishini keltirib chiqaradi.

Ko‘p asrlik ritmik hodisalardan 1800-2000 yil davom etadigan ritmiklik yaxshi o‘rganilgan. Bu hodisa Yerda qalqish hodisasini hosil qiluvchi kuchlarning o‘zgarishi bilan bog‘liq. Taxminan, 1800-yilda bir marta Quyosh, Oy va Yer bitta tekislik va bitta to‘g‘ri chiziqda joylashadi. Quyosh bilan Yer orasidagi masofa eng kichik bo‘ladi. Bu hodisada 3 faza-transgressiv, regressiv, oraliq fazalari ajratiladi.

Asr ichidagi ritmik hodisalardan Quyosh faolligi bilan bog‘liq bo‘lgan 11, 22 va 33 yillik siklliklar yaxshi o‘rganilgan. Olimlarning fikricha, ushbu siklliklar bilan Yerdagi ko‘p jarayonlar **bog‘liq:** epidemiyalarning tarqalishi, vulqon faolligining kuchayishi, siklonlar hosil bo‘lishining ortishi, qurg‘oqchiliklar yoki zararkunanda hasharotlarning (masalan, chigirtkalar) ko‘payishi va h.k.

Yillik (fasliy) ritmiklik Yerning Quyosh atrofidagi harakati va aylanish o‘qining 66,5° qiyaligi bilan bog‘liq. Yil fasllarining almashinishi bilan bog‘liq fasliy ritmiklik barcha geosferalarda kuzatiladi: atmosferada namlik, harorat, atmosfera yog‘inlarining yillik o‘zgarishi, mussonlar (mavsumiy shamollar) ning esishi va hokazolar. Litosferada yil davomida nurash va boshqa ekzogen jarayonlarning faolligi o‘zgaradi. Gidrosferada suvning harorati, sho‘rligi, zichligining yillik o‘zgarishi, baliqlarning mavsumiy migratsiyasi kabilar kuzatiladi. Fasliy ritmiklik tirik organizmlarda birmuncha aniq namoyon bo‘ladi.

Turli kengliklarda har xil miqdordagi fasllar ajratiladi. Ekvatorial kengliklarda yil bo‘yi issiq va nam, faqat bitta fasl hukmron. **Subekvatorial** kengliklarda 2 ta fasl ajratiladi-quruq va nam. **Mo‘tadil** kengliklarda yilning to‘rt fasli aniq ifodalangan-bahor, yoz, kuz va qish.

Fasliy ritmiklikning sababi turli kengliklarda turlicha: quyi kengliklarda namlik bilan, mo‘tadil kenglikda quyosh radiatsiyasi faolligining o‘zgarishi bilan, qutbiy kengliklarda esa yorug‘lik bilan bog‘liq.

Sutkalik ritmiklik Yerning o‘z o‘qi atrofda aylanishi natijasida vujudga keladigan tun va kunning almashinishi bilan bog‘liq. Sutkalik ritmiklik barcha meteoelementlarning sutka davomida o‘zgarishida namoyon bo‘ladi: fotosintez faqat kunduzi, yorug‘da sodir bo‘ladi. Inson ham "quyosh soati” bo‘yicha yashaydi: organizmning faolligi soat 2 dan 5 gacha va 12 dan 14 gacha pasayadi. Bu paytda yurak urishi chastotasi sekinlashadi, xotira bo‘shashadi, tana harorati pasayadi. Ritmiklik geografik qobiq rivojlanishining muhim qonuniyatlaridan biri bo‘lib, ularni o‘rganish tabiiy hodisa va jarayonlarni prognoz qilishda muhim ahamiyatga ega.

XXI-asrning boshlarida Yer aholisi 8 milliard kishidan oshdi va insonning tabiatga ta'siri sayyoraviy nisbatlarga yetdi. Ushbu ta'sirning asosiy shakllari quyidagilardir: ifloslantiruvchi moddalar chiqindilari, o'rmonlarni kesish, shudgorlash va melioratsiya, texnologik jarayonlarga katta miqdordagi chuchuk suvlarni jalb qilish, tabiiy landshaftlarning o'zgarishi va ularning tabiiy-antropogen va antropogenga aylanishi, demografik va ijtimoiy bosimning

kuchayishi, iqtisodiy bosimning o'ziga xos shakllarining kengayishi va boshqalar. Ko'pincha mahalliy hududda amalga oshiriladigan bunday ta'sirlar keng maydonlarni qamrab olgan salbiy zanjirli reaktsiyalarni keltirib chiqaradi, bu esa oxir-oqibat geografik qobiqga tahdid soladi.

Foydalanilgan adabiyotlar:

1.O‘.Q.Abdunazarov, M.T.Mirakmalov, Sh.M.Sharipov, R.A.Ibragimova, A.A.Ibraimova. Umumiy tabiiy geografiya. «Vneshinvestprom», 2019.-324-bet
2.Vahobov H. va boshqalar. Umumiy Yer bilimi. Darslik. - T.: Bilim, 2005.
3.SH.S.Zokirov. Landshaftshunoslik. Toshkent.-Universitet. 2009 y.-176 b.
4.Nazarov I.Q. Geografiya fanining asosiy muammolari.-T: “Muharrir”, 2013-212 b.
5. Хидиралиев, Комил Эсанович, Товбаев Ғофур Зулқайнар Ўғли, and Дилшодбек Бўрибой Ўғли Холдоров. "ТАШҚИ ИҚТИСОДИЙ АЛОҚАЛАРНИНГ ҲУДУДИЙ ЖИҲАТЛАРИ (СИРДАРЁ ВИЛОЯТИ МИСОЛИДА)." Science and innovation 1 (2022): 136-142.
6. Tovbayev, G. Z. "GLOBAL EKOLOGIK MUAMMONI HAL QILISH YO ‘LLARI." Экономика и социум 5-2 (92) (2022): 279-283.

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MAHMUD KOSHG 'ARIYNING HAYOT VA IJOD YO'LI

Annotatsiya. Mahmud Koshg'ariyning islomdan ilgarigi va ilk islom davri turkiy madaniyat obidalarini tadqiq etish, to'plash va avlodlarga yetkazib berishdagi xizmatlari nihoyatda ulkandir. Uning tarix, etnografiya, geografiya xususidagi keng bilim doirasi, til va adabiyot sohasidagi qomusiy salohiyati, tadqiq qudrati bugungi kunda ham hayratlanarli darajadadir.

Kalit so 'z: filologiya, tilshunoslar, folklorchilar, yaylov, vodiy, dara, yo 'l, dovon, ko 'l.

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THE WAY OF LIFE AND CREATIVITY OF MAHMUD KOSHGARI

Abstract. Mahmud Koshgari's services in researching, collecting and passing down the pre-Islamic and early Islamic monuments of Turkish culture to generations are enormous. His extensive knowledge of history, ethnography, geography, encyclopedic potential in the field of language and literature, and his research power are amazing even today.

Key words: philology, linguists, folklorists, pasture, valley, gorge, road, pass, lake.

Kitobda jamlangan aniq-ravshan ma 'lumotlar VIII–XI asrlar ham turkiy adabiy til va badiiy adabiyotning, ham og 'zaki xalq ijodi va turli lahjalarning boy manbai sanaladi. "Devonu lug 'atit turk"ni o'sha davrlarda Markaziy Osiyo mintaqasida yashagan turkiy xalqlar hayoti haqidagi qomusiy asar deb atash mumkin. Mahmud Koshg 'ariy Markaziy Osiyoda ilk o'rta asr madaniyatining buyuk arboblaridan bo 'lib, tilshunoslik sohasida, xususan, turkiy tillarni o 'rganish sohasida mashhur bo'ldi va tarixda o'chmas iz qoldirdi. Mahmud Qoshg'ariy - XI asrning o'rta osiyolik filolog-olimi. 1072-1074 yillar arab tilida "Turk tili lahjalari"ni tuzgan. Mahmud Qoshg'ariyning arab filologiyasi ilmiy uslublarini qo'llab yozgan asari tilshunoslar, folklorchilar va adabiyotshunoslar uchun qadr-qimmatga ega. Bu - erta davr turk shevashunosligining yagona yodgorligidir. Mahmud ibn al-Husayn ibn Muhammad al Qoshg'ariy Qoraxoniylar sulolasi hukmronligi davrida tug'ilgan va qoraxoniy a'yonlarining oliy tabaqasidan kelib chiqqan. Uning otasi Bolasog'un shahrini boshqargan. Oliy

tabaqadan kelib chiqishi olimga o‘z davrining yirik siyosiy va madaniy markazi bo‘lmish Qashqarda ajoyib ta ‘lim olish imkonini berdi. Bir qator turkiy tillar bilan birga, Mahmud Qoshg‘ariy arab va fors tillarini ham bilgan. Ehtimol, ta ‘limni Buxoro, Nishopur, Samarqand, Marv, Bog‘dodda davom ettirgan, u yerlarda olim uzoq vaqt yashagan, kitobi uchun zaruriy ma ‘lumotlar to‘plagan. U vaqtlar saljuqlarga tegishli Bog‘dodda bo‘lgan vaqti Qoshg‘ariyda kitobning g‘oyasi paydo bo‘ladi, unga ko‘ra, turkiy xalqlar hayotining ko‘p qirralari, fikrlashi, odatlari, jo‘g‘rofiy joylanishi va eng avvalo, tili ta ‘riflanishi joiz bo ‘lgan. Mahmud al Qoshg‘ariyning mashhur kitobi “Devoni lug‘at at-turk” turkiy ensiklopediya ko‘rinishidadir. Unda umumiy tarixiy-madaniy, etnografik va tilshunoslik ma ‘lumotlari to ‘plangan va jamlangan. Al Qoshg ‘ariyning “Devoni”- turkiy madaniyat yodgorligi bo ‘lib, o‘zida axloqiy qadriyatlar va tarbiya tartiblarini, avvalgi ajdodlardan barcha merosni o‘zlashtirgan XI asrdagi turkiy xalqlarning o‘ziga xos dunyoqarashini jamlagan. Kitobda qadimiy zoroastr-shomoniylik dunyoqarashlari bilan birga, yangi mafkura - islom va so‘fiylik kabi tarmoqlari tasvirlangan. Mahmud al Qoshg‘ariy mehnatining yagona nusxasi 1915-yil olim va kutubxonachi Ali Emir tomonidan Istambul bozorida ko‘chirma nusxa ko‘rinishida topilgan, hozirgi vaqtda Istambul Milliy kutubxonasida saqlanadi. Qo‘lyozmani Muhammad ibn Abu-Bakr ibn Abu-l-Fath as-Saviy ko‘chirgan. “Devonu lug ‘at at turk”ning birinchi noshiri turk olimi Rifat Bilge bo‘lib, u kitobni birinchi bo‘lib turk tiliga tarjima qilgan. Mahmud Qoshg ‘ariyning “Devonu lug ‘at at turk” asari o ‘zbek tiliga professor Solih Mutallibi tomonidan tarjima qilingan va 1960-1963-yillar Toshkentda nashr etilgan. Mahmud Qoshg‘ariyning “Devonu lug‘at at turk” asari noyob hisoblanib, odatiy lug‘atga xos so‘zlar bilan bir qatorda, ko‘plab badiiy asarlar ham uchrab, folklorlikka oid qismlari asosiy timsolda gavdalanadi. Muallifning o‘zi shunday yozadi: “Mazkur kitobni men alifbo tartibida joyladim, maqol, saj, matal, she ‘r, rajaz va nasr parchalari bilan bezadim”. “Turkiy shajaralar lug ‘ati”da turkiy tilda so‘zlashuvchilar folklorining asosiy janrlari keltirilgan - marosimiy va lirik qo ‘shiqlar, qahramonlik dostoni, tarixiy rivoyat va afsonalar. Shu bilan birga, unda anatomiya, tibbiyot, veterinariya, astronomiya, jo‘g‘rofiya, etnografiya va boshqalar haqida ma’lumotlar mavjud. “Turkiy shajaralar lug ‘ati” ikki qismdan iborat. Birinchi qismida Mahmud Qoshg‘ariy kitobning maqsadini ochib bergan, turkiy tilga so ‘zlashuvchi qabila va urug ‘lar haqida ma ‘lumotlar keltirgan. Asarning ikkinchi qismida turkiy til shajarasining lug‘ati taqdim etilgan, hikmatli iboralar, og‘zaki xalq ijodining namunalari keltirilgan. Quyida kitobidan keltirilgan parchalar orqali Qoshg‘ariyning nuqtai nazari haqida tasavvur hosil qilish mumkin. “Kunlar vaqtni shoshirar, inson kuchini toliqtirar, dunyoni yerlardan ayirar... Uning odati shu-da, barchaning qismati shu yerda. Agar dunyo mo‘ljalga olib, o‘qni otsa, tog‘ cho‘qqilari ajralib ketadi”. “O‘g‘lim, senga yaxshilikka eltuvchi pand-nasihat merosimni qoldiraman. Yaxshi insonni uchratsang, unga ergash”. “Tun-u, kun daydi kabi o‘tib ketadi. Uning yo‘lida kesishib qolsang, kuchdan ayirar”. “Insonning mol-dunyosi - uning dushmanidir.

Boylik to ‘plab, suv oqimi to‘xtashini o‘yla, go ‘yo xarsanglar pastga dumalab tushayotgani kabi. Barcha erlar buyumlarni deb adashdi. Boylikni ko‘rib, ular, go‘yo burgut o ‘ljaga yopishgani kabi otiladilar. Ular mulkini yashirib, uni ishlatmay, xasisliklaridan yig ‘lashar, oltinlarni to ‘plashar. Mulklari sabab, Xudoni yodga olishmas, o‘g‘illarini, qarindoshlarini ular bo‘g‘arlar”. “Yaxshilik qilishga shoshil, maqsadingga erishgach, g‘ururlanma”.Mahmud Qoshg ‘ariyning “Devoni” (Lug ‘ati) - fonetik va morfologik hodisalar va dialektik shakllarning xususiyati haqida tasavvur beruvchi erta davr turkiy dialektikasining yagona yodgorligidir. “Lug‘at” shuningdek, turkiy tilda so‘zlashuvchi O‘rta Osiyo, Sharqiy Turkiston, Povolojya, Orol bo‘yi qabila va xalqlarining og‘zaki-she‘riy ijodi haqidagi matlarni ham o‘z ichiga olgan. Mahmud Qoshg‘ariyning arab filologiyasining ilmiy uslublaridan foydalangan holda yozilgan mehnati bugun ham tilshunoslar, folklorchilar va adabiyotshunoslar orasida, shubhasiz, qadr-qimmatga egadir. Mahmudning otasini ismi Husayn, bobosiniki Muhammad bo‘lib, kelib chiqishi va tiliga ko‘ra Koshg‘ariy nisbatini olgan. U yashab ijod etgan davrda Movarounnahrda Somoniylar o‘rnini Qoraxoniylar sulolasi egallagan, turkiy adabiy til mintaqada keng urf bo‘la boshlagan edi. Hatto Abbosiylar xalifaligi markazlarida, azaldan arab va boshqa somoniy xalqlar yashab kelgan o ‘lkalarda turkiy elatlar namoyandalari ko ‘payib, turkiy tilga e ‘tibor oshgan edi. Mahmud Koshg ‘ariy ham o‘zining uzoq yillar davomida yaratgan “Devonu lug‘atit turk” kitobini 1075 yilda tugallagan. Asarning asosiy matni o ‘sha davrda keng mintaqa musulmon Sharqida, butun Yaqin va O‘rta Sharkda din, fan tiliga aylangan arab tilida yozilgan bo‘lib, turkiy tilning boyligini, mazmundor va rang-barangligini tushuntirish uchun yozilgan. Mahmud Koshg‘ariy Balasog‘unda tug‘ilib, shu yerda yigitlik chog‘larini kechirgan bo‘lsa ham, uzoq yillar Qoshg‘ardan boshlab butun Movarounnahr, Xorazm, Farg ‘ona, Buxoro, hozirgi Shimoliy Afg ‘onistonga qadar cho ‘zilgan turkiy o ‘lkalarni, turkmanlar, o ‘g ‘uzlar, chigillar, yag‘molar, qirg‘izlarning shaharlarini, qishloq va yaylovlarini kezib chiqdi, turli sheva va lahja xususiyatlarini o ‘rgandi, ularni adabiy til bilan chog ‘ishtirdi, o ‘z ishi uchun nihoyatda boy material to ‘pladi. Lug ‘at tuzishda arab tilshunoslari yaratgan an ‘anadan unumli foydalangan holda, ishga ijodiy yondashdi, turkiy til qonuniyatlarini birinchi navbatda inobatga olib kitobiga tartib berdi. Koshg ‘ariy asari, o ‘zi ta ‘kidlashicha, “… oldin hech kim tuzmagan va hech kimga ma ‘lum bo ‘lmagan alohida bir tartibda” tuzilgan. Unda ko ‘p shevashunoslikka oid qiyosiy qoidalar, grammatik, morfologik, leksik, semantik alomatlar ko ‘rsatilgan. Asar foydalanuvchilarga osonlik tug ‘dirish uchun sodda yozilgan. Unda qadim turk alifbosi, fonetik qonuniyatlar va orfografik qoidalar puxta tushuntirib berilgan. Lug ‘atda turkiy so ‘z tuzilishi an ‘analari, jumladan so ‘z tartibi, fe ‘l shakllari, so ‘z etimologiyasiga oid fikrlar bayon etilgan. Muallif ko ‘rsatishicha, kitob bo ‘limdan, muqaddima va xulosadan iborat. Har bir bo ‘limda ot-ism so ‘zlar, fe ‘llar qulaylik uchun alohida ajratib berilgan. Asarda 7500 dan oshiq turkiy so ‘z va iboralar izohlangan. “Devonu lug ‘atit turk” ham adabiy til, ham asosiy turkiy shevalarni qamrab olgan bo ‘lib,

undagi adabiy til, sheva unsurlari nisbati o ‘rtacha adabiy tildagi 10–12 so ‘zga, shevaga oid bir so ‘zga to ‘g ‘ri keladi, ya ‘ni umumturkiy adabiy tilga ayricha ahamiyat ajratilgan. Bu holat o ‘sha davr islom mintaqasida turkiy adabiy til qancha keng tarqalgani va mustaxkam mavqega ega bo ‘lganini tasdiqlovchi qat ‘iy dalildir. Lug ‘atda yuzlab kishi ismlari, shahar va qishloq, o ‘lka nomlari, daryo, tog ‘, yaylov, vodiy, dara, yo ‘l, dovon, ko ‘l, soy kabi geografik atamalar, turli qabila, urug ‘, elat, sayyora, yulduzlar, fasllar tilga olinadi. Asarga Mahmud Qoshg ‘ariy tuzgan dunyo xaritasi, dunyoning doira shaklidagi tasviri ham ilova qilingan.

Foydalanilgan adabiyotlar:

1. Elguzarov, B. B. O. G. L., & Haydarov, S. (2021). TARIX FANINI O ‘RGANISHDA MITANNI DAVLATCHILIGINING O ‘RNI VA AHAMIYATI. *Scientific progress*, *1*(6), 616-619.
2. Erkinov, A. S. O., & Haydarov, S. (2021). YUNON-BAQTRYA PODSHOLIGINING IJTIMOYI TUZIMI, XO ‘JALIGI VA MADANIYATI. *Scientific progress*, *1*(6), 620-622.
3. Nematov, M. D. O., & Haydarov, S. (2021). TARIX FANINI ORGANISHDA SHUMER-AKKAD DAVLATCHILIGINING ORNI VA AHAMIYATI. *Scientific progress*, *1*(6).
4. Do ‘stmurodov, S., & Haydarov, S. (2021). TARIX FANINI O ‘QITISHDA XVI-XVIII ASRLARDA HINDISTONNI O ‘RGANISH. *Scientific progress*, *1*(6).
5. Mengboyev, S. N., & Haydarov, S. (2021). TARIX FANINI O ‘QITISHDA URARTU PODISHOLIGINING O ‘RNI. *Scientific progress*, *1*(6).

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MUHAMMAD SODIQ QOSHG'ARIYNING PEDAGOGIK QARASHLARI

Annotatsiya: maqolada "Sodiq" taxallusi bilan turk va fors tillarida g'azal, muhammas, ruboiy, masnaviy, qit'alar yaratgan, o`zida shaxs va uning tarbiyasini yo`lga qo`yish masalalarini aks ettiruvchi asarlarini va pedagogik bilimlarini yarata olgan tarixchi, tilshunos, olim va adib Muhammad Sodiq Qoshq`ariyning ta`lim tarbiyaga oid qarashlari, tasavvuf ta`limoti rivojiga qo`shgan hissasi hamda pedagogik qarashlari haqida mulohaza yuritiladi.

Kalit so`zlar: Qoshg`ariy, ta`lim-tarbiya va uning vazifalari, "Odob as-solihin" asari, ma`rifat, dunyoqarash.

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PEDAGOGICAL VIEWS OF MUHAMMAD SADIQ KASGHARI

Abstract. Historian, linguist, scientist who wrote ghazals, muhammas, rubai, masnavi, and poems in the Turkish and Persian languages under the pseudonym "Sadiq" in the article, and who was able to create his works and pedagogical knowledge reflecting the issues of the individual and his upbringing. and writer Muhammad Sadiq Kashqari's views on education, his contribution to the development of Sufism, and his pedagogical views are discussed.

Key words: Kashghari, education and its tasks, "Odob as-salihin", enlightenment, worldview.

Qoshg`ariy tomonidan yaratilgan Odob as-solihin asari muallifning o`zi ta`kidlab o`tkanidek, muqaddima 7 bobdan iborat bo`lib har bir bob o`zida 4 faslni aks ettiradi. Muqaddimada asarning maqsadi ochib beriladi. Asarning yozilishidan ko'zda tutilgan maqsad borasida so'z yuritilar ekan, insonning ijobiy hulq - atvorga ega bo'lishini taqozo etuvchi ijtimoiy zaruriyat mohiyati batafsil ochib beriladi. Asarda ilgari surilgan asosiy g'oya - insonlarning ijobiy xulq atvorga ega bo'lishlari jamiyatda ruhiy xotirjamlik va moddiy farovonlikni qaror toptiruvchi asosiy omil ekanligini asoslashdan iboratdir. Alloma mazkur g'oya mohiyatini sharhlar ekan, inson odob - axloq qoidalarini egallay olmasa hamda ijobiy hulq - atvori bilan muaddab (odobli) va muzazzab (toza) bo'lmasa, nafaqat o'zi, balki butun dunyoga yomonlik tarqatadi degan qarashni ilgari suradi.

Birinchi bob salomlashish, ko'rishish, qo'l olishish hamda ruxsat so'rash qoidalari to'g'risida ma'lumotlar berishga yo'naltirilgan bo'lib mazkur bob to'rt fasldan tashkil topgan. Ikkinchi faslda esa salomlashish odobining o'n ikki qoidasi borasida fikr yuritiladi.Mazkur o'rinda salom berish va alik olish masalasida bugungi kunga qadar davom etib kelayotgan munozaraga nuqta qo'yilgan. Muallifning fikriga ko'ra, salom bermak sunnat, javobi farzu ayyondir. Muhammad Sodiq Qoshg'ariyning e'tirof etishicha, salom quyidagi holatlarda quyidagi kishilar tomonidan berilishi maqsadga muvofiqdir: ulug' kichikka, otliq piyodaga, yuruvchi o'ltirguvchiga, ozchilik ko'pchilikka, xonaga kirib keluvchi, xona ichkarisida o'tirgan kishilarga salom bergay ", deb ta'kidlar ekan, bir kishi ko'pchilik oldiga kirib kelganda, birinchi bo'lib salom berishi, ko'pchilik esa baravar ovoz chiqarmasdan salomga alik olishi joizligiga alohida e'tiborni qaratadi. Allomaning salomlashish odobi xususidagi fikrlari bilan tanishar ekanmiz, ta 'lim muassasalarida muallim sinf xonasi yoki auditoriyaga kirib kelganda, "Kim oldin salom berishi kerak?“,degan muammoning yechimini topgandek bo'lamiz. Birinchi bobning uchinchi faslida berilgan muloqot (uchrashuv) odobiga oid tavsiyalar ham diqqatga sazovor. Bunda uchrashganda qo'l berib ko'rishish lekin qo'l uchi bilan emas, astoydil, biroq qo'lni silamay, ochiq yuz bilan ko'rishish odobi bayon etiladi. Quchoqlashib ko'rishish, safardan qaytgan kishi hamda yosh bolalar bilan ko'rishish, o'pib ko'rishish odoblari bayon etiladi. Uchinchi bobda suhbatlashish odobi borasida so'z yuritiladi. Asrlar o`tsa hamki bizgacha o`tmishdan qon-qonimizgacha singan ilm va tarbiyaga oid bilimlar va insonni odob-axloqiga oid har xil qarashlar mavjud. Tarixdagi eng buyuk mutafakkir ulamolar tomonidan ta`lim-tarbiyaga oid moddiy meroslar bor bo`lib, bu madaniy va moddiy meroslar pedagogika faniga borib taqaladi. Muhammad Sodiq Qoshg`ariy ham o`zining ta`lim-tarbiyaga oid ilmi orqali sharq pedagogikasi tarixiga o`zining hissasini qo`shgan ulamolardan biri hisoblanadi. Mahmud Qoshg‘ariy Bolasog‘un shahrida dunyoga keladi. Uning to‘liq ismi Mahmud ibn Husayn ibn Muhammaddir. Mahmud Qoshg‘ariy umri davomida qilgan mashaqqatli mehnati evaziga qomuschi olim va tolmas sayyoh bo‘lib tanildi. Mahmud Qoshg‘ariy turk tilining nozik bilimdoni va tolmas targ‘ibotchisidir. U «arab tili bilan ikki uloqchi ot singari teng poyga qilib, o‘zib borayotgan turk tilini» ko‘klarga ko‘taradi, uning o‘ziga xos xususiyatlarini mahorat bilan ko‘rsatib beradi. «Devon» sahifalari orqali tanishish ko‘z oldimizda Mahmud Qoshg‘ariyni geograf, botanik, zoolog, biolog, etnograf, tilshunos, folklorshunos, adabiyotshunos, tarixchi olim sifatida namoyon qiladi. Shuning uchun ham uni qomusiy olim deb ataymiz. Muhammad Sodiq haqida bizgacha juda oz ma`lumot yetib kelgan. Lekin hozirgi paytda bizga ma`lum bo`lgan “Odob as- solihin” asarining o`ziyoq bizga uni mashhur pedagog olim sifatida tanitadi. Bizgacha uning “Zubdat al-masoyil” (“Masalalarning qaymog`i”), (“Dur al-muzoxir”) (“Ko`makdoshlarning durdonasi”) hamda (“Tazkirai xojagon”) (“Xojalar tazkirasi”) nomli asarlari yetib kelgan.Ko`plab ilmga va pedagogikaga oid asarlar yaratish mavjud bo`lgan davrda Muhammad

Sodiq Qoshg`ariy tomonidan turkiy tilda (“Odob as- solihin”) “Yaxshi kishilar odobi “Zubdat as- masoyil” nomli asarlar yaratildi. “Odob as- solihin” 5 marta, 1889 hamda 1901-yillarda Toshkent shahrida va 1892 hamda 1986-yillarda Istanbul shahrida qayta nashr etilgan. Mazkur asar nomi va mazmunidan ham anglanib turganidek, unda ilgari surilgan g`oyalar insonning hayoti davomida zarur ahamiyat kasb etuvchi xulq-odob qoidalari xususida kishilar, shu jumladan, yoshlarga muayyan darajada ma`lumotlar berishga xizmat qiladi. (“Odob as solihin”) asrida ijtimoiy hayot hamda kundalik turmushda har bir inson qat`iy amal qilinishi zarur bo`lgan zohiriy va botiniy odob va axloq qoidalari, ularning ijtimoiy ahamiyati, yoshlar tarbiyasida ijtimoiy hayotni yo`lga qo`yishdagi o`rni va roli borasida batafsil so`z yuritiladi. Muhammad Sodiq Bizga yaxshi ma'lumki, suhbatlashish odobi va uning shartlariga amal qilish ijtimoiy munosabatlarning mo'tadil kechishini ta'minlovchi asosiy va o'ta muhim aksariyat mualliflar tomonidan omillardan bir axloq - odob muammolariga bag'ishlangan hamda asarlar mazmunidan alohida o'rin olgan. “Odob as – solihin” asarida ham muallif suhbatlashish odobi va uning o'ziga xos jihatlari borasida batafsil so'z yuritadi. Mazkur o'rinda quyidagi fikrlar ilgari suriladi: uylanadigan yigit nikohdan oldin o'zi uylanmoqchi bo'lgan qizni ko'rmog'i, uylanadigan qizning bokira bo'lishi, shuningdek, to'rt narsa: umrda, qomatda, molda va nasabda erdan past va uch narsa: husn-u jamolda, xulq (odob)da hamda iffatda erdan yuqori bo'lishi zarurligi muallif tomonidan alohida ta'kidlanadi. Yuqorida qayd etilgan fikrlarning ahamiyati amaliy turmushda o'z isbotini topgan bo'lib, ularni bilish hamda mazkur fikrlarga amal qilish oilalarda tinchlik totuvlik, farovonlik va xotirjamlikning barqaror bo'lishini kafolatlovchi omillar bo'lib xizmat qiladi. Sodiq kasal holini so'rash, tashg'ariy “ Odob as - solihin ” asarida, ta'ziya va musibat odoblari haqida ham fikr yuritadi. Ushbu holatlarda amal qilinadigan qoidalar mohiyatidan xabardor bo'lish ham har bir kishi uchun foydadan holi bo'lmaydi. Yuqoridagilardan ko'rinib turibdiki, Muhammad Sodiq Qoshg'ariy tomonidan yaratilgan " Odob as solihin " asari jamiyat a'zolari, shu jumladan, yoshlarning ma`naviy axloqiy jihatdan barkamol bo'lishlarida katta ahamiyatga ega. Mazkur asar har bir inson tomonidan o'rganilishi va kundalik turmushda qat'iy amal qilinishi zarur bo'lgan xulq odob qoidalarining majmui sanaladi. Shu bois Sharq pedagogikasi tarixida mazkur asar ham Unsurul-Maoliy Kaykovusning " Qobusnoma " asari kabi o'z o'rni va mavqeiga ega. Pedagogik deganda o`z navbatida ma`naviyat va ma`rifat tushunchalari ham ko`z o`ngimizda gavdalanadi. Ma’rifat – kishilarning ong –bilimini, madaniyatini oshirishga qaratilgan ta’lim –tarbiya, maorif hamdir. Nemis mumtoz falsafasining asoschilaridan biri Kant mazkur tushunchaning mazmun va mohiyatini ochib berishga harakat qilgan. U o‘zining «Ma’rifat nima? degan savolga javob» nomli maqolasida bayon qilishicha, ma’rifat inson shaxsini tarbiyalash, uning aqli, axloqi imkoniyatlaridan jamiyatning ilgarilama, ya’ni yuksaklik tomon taraqqiyoti manfaatlari yo‘lida foydalanishdir. Jamiyat taraqqiyotini ma’rifatsiz tasavvur etib bo‘lmaydi. Bu so‘z qadim zamonlardan

tortib, to XX asr boshlarigacha asosan bilim va ilm, uni egallash borasida amalga oshirilgan ta’lim-tarbiya jarayoni ma’nosida qo‘llab kelingan. Dunyoqarash - insonning tevarak atrofini qurshab turgan voqelik to‘g‘risidagi, olamning mohiyati, tuzilishi, o‘zining undagi o‘rni haqidagi qarashlar, tasavvurlar, bilimlar tizimidir. Dunyoqarash insonning dunyoni va o‘zini ma’lum ma’noda anglashi, tushunishi, bilishi va baholash usuli bo‘lishi jihatdan uning har qanday moddiy va ma’naviy faoliyatida o‘z ifodasini topadi.

Foydalanilgan adabiyotlar:

1. Muhammad Sodiq Qoshg`ariy pedagogik qarashlari referat // O‘zbek tili va adabiyoti. Toshkent, 1972. 4-5 sonlar.
2. Ahmad Yassaviy. Hikmatlar. Toshkent, 1990. 256 bet.
3. Xoja Ahmad Yassaviy. Devoni hikmat. Toshkent, 1991. 268 bet.
4. Ibrohim Haqqul. Tasavvuf saboqdari. Buxoro, 2000. 78 bet.
5. Khaydarov, S. A. (2021). The role of the use of fine arts in teaching the history of the country. International scientific and practical conference. CUTTING EDGE-SCIENCE. In *Conference Proceedings* (pp. 41-43).

УДК: 620.92

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QUYOSH QOZONLARINI DASTURLASHTIRISH XOSSALARI

Annotatsiya. Maqolada an'anaviy issiqlik manbalari (ko'mir, gaz va suyuq yoqilg'ilarda ishlaydigan issiqlik chiqarish uskunalari) bilan bir qatorda, an'anaviy bo'lmagan manbalardan, masalan, quyosh va geotermal suvlar energiyasidan foydalanish mumkin. O'zbekiston sharoitida isitish uchun, ayniqsa, quyosh energiyasidan foydalanish maqsadga muvofiqdir, chunki respublikamiz gelio resurslarga juda ham boydir.

Tayanch so'zlar: quyosh nurlanishi, quyosh radiatsiyasi, quyosh energiyasi, passiv quyoshli isitish tizimlar, aktiv past haroratli quyoshli isitish.

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PROGRAMMING PROPERTIES OF SOLAR BOILERS

Abstract. In addition to traditional heat sources (heat-generating equipment using coal, gas and liquid fuel), the article can use non-traditional sources such as solar and geothermal water energy. In the conditions of Uzbekistan, it is especially advisable to use solar energy for heating, since our republic is very rich in solar resources.

Keywords: solar radiation, solar radiation, solar energy, passive solar heating systems, active low temperature solar heating.

Kirish. Quyosh radiatsiyasi deyarli tugamas va ekologik toza energiya manbayidir. Quyosh energiyasi oqimining quvvati atmosferaning yuqori chegarasida 1,7 x 10^{14} kVt bo'lsa, yer yuzining sathida l,2xl0^{14} kVt ga teng. Yil davomida yerga tushayotgan quyosh energiyasining umumiy miqdori l,05xl0^{l8}kVt/soatga tengdir, shu jumladan yerning quruqlik yuzasiga 2xl0^{17} kVt/soat to'g'ri keladi. Ekologik muhitga zarar yetkazmasdan turib, umumiy tushayotgan quyosh energiyasining 1,5% gacha foydalanish mumkin. Bu juda katta energiya miqdoridir. Agar bu miqdordan ko'proq quyosh energiyasidan foydalanilsa, unda parnik effekti natijasida yerning iqlimi o'zgarishi va ekologik muhit buzilishi mumkin [1].

Quyosh nurlanish oqimining o'rtacha sutkalik intensivligi tropik zonalari va cho'llarda 210-250 Vt/m^2 [18-21,2mJ/(m^2 sut)], O'zbekistonda 186-214 Vt/m^2

[16,1 +28,47 mJ/(m^2 • sut)], maksimal miqdori esa (yer yuzining sathida)- 1000 Vt/m^2, quyosh doimiysi 1530Vt/m^2 teng (atmosferaning yuqori chegarasida quyosh nurlariga perpendikular sirtda). Markaziy Osiyo respublikalarida yil davomida quyosh nur sochishining davomiyligi 2700-3035 soatga teng. Yil davomida 1 m^2 gorizontal sirtga Ashxabotda-1720 kVt • soat, Toshkentda-1684 kVt soat, Nukusda-1632 kVt soat, Termizda-1872 kVt • soat energiya tushadi [2].

Quyoshli isitish tizimlari deb, issiqlik manbasi sifatida quyosh energiyasidan foydalaniladigan tizimlarga aytiladi. Quyoshli isitish tizimlari boshqa past haroratli isitish tizimlaridan, quyosh energiyasini qabul qilish va uni issiqlik energiyasiga aylantirish uchun xizmat qiladigan, maxsus elementi-quyosh kolektori mavjudligi bilan farqlanadi.

Quyosh radiatsiyasidan foydalanish usuliga ko‘ra past haroratli quyoshli isitish tizimlari passiv va aktiv turlarga bo'linadi.

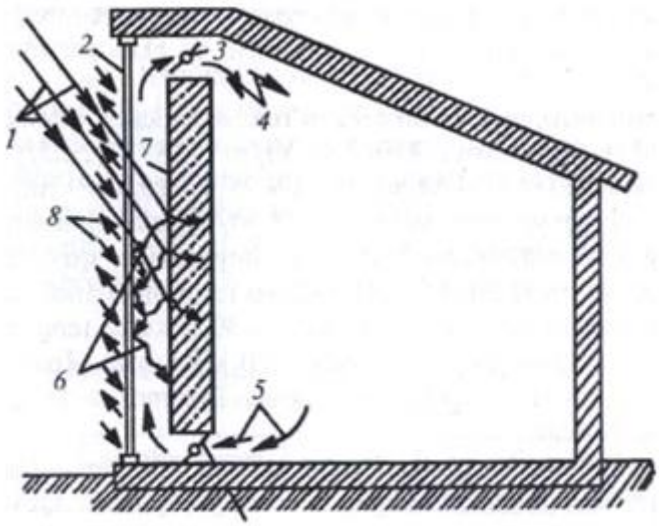
Passiv quyoshli isitish tizimlarda**,** quyosh radiatsiyasini qabul qiladigan va issiqlikka aylantiradigan element sifatida binoning o'zi yoki uning alohida qismlari (devorlar, tom va shunga o'xshash) xizmat qiladi (3.1-rasm) [3].

«Bino-kollektor «turdagi passiv quyoshli isitish tizimda, quyosh radiatsiyasi yorug'lik oraliqlari orqali xonalarga kirib, issiqlik tutqichga tushganday bo'ladi. Qisqa to‘lqinli quyosh nurlari deraza oynalaridan erkin o‘tib (o‘tkazish koeffisiyenti 0,85÷1,0 ga teng), ichki to‘siqlar va mebellarga tushib, issiqlikka aylanadi. Sirtlaming harorati oshadi, issiqlik havoga va xonaning yorug‘lik tushgan sirtlariga konveksiya va nurlanish orqali beriladi. Bunda sirtlar nurlanishi uzun to'lqinli sohada sodir bo'ladi va nurlar deraza oynalaridan yomon o‘tib (o'tkazish koeffisiyenti 0,1÷0,15 ga teng), xonaning ichiga qaytariladi [4].

Shunday qilib, xonaga kirgan quyosh radiatsiyasi unda deyarli butunlay issiqlikka aylanadi va xonaning issiqlik yo‘qolishlami to‘liq yoki qisman qoplash mumkin. Ichki massiv to'siqlar issiqlik bir qismini akkumulatsiyalashi quyosh radiatsiyasi to‘xtagandan so‘ng uni asta-sekin 6-8 soat davomida xonaga berishi mumkin.

Aktiv past haroratli quyoshli isitish tizimlari deb, quyosh kollektorlari alohida mustaqil binoga tegishli bo‘lmagan qurilmalar ko‘rinishiga kirgan tizimlarga aytiladi.

Hozirgi kunda aktiv quyoshli isitish tizimlarida ikki turdagi quyosh kollektorlaridan foydalaniladi: konsentratsiyalaydigan (3.2-rasm) va yassi. Bunday quyosh kollektorlari bilan ishlaydigan quyoshli isitish tizimlari 3.3-rasmda keltirilgan [5].



3.1-rasm. Devor-kollektor turdagi past haroratli quyoshli isitish tizimi:1—quyosh nurlari; 2-nurga shaffof to'siq; 3-havo qatlami; *4-x*onaga uzatiladigan qizdirilgan havo; 5-xonada sovugan havo; 6-devor massivi o‘zining uzun to'lqinli nurlanishi; 7-devorning qora nur qabul qiluvchi sirti; 8-rostlanuvchan to‘sqichlar.

O‘zbekiston sharoitida faqat quyosh kollektorlari yordamida xonalarni isitish iqtisodiy nuqtayi nazardan o‘zini oqlayolmadi. Shuning uchun bunday isitish tizimlarda qo'shimcha an’anaviy issiqlik manbayi qo’llaniladi [6]. Bunda quyosh energiyasining ulushi issiqlik yuklamasidan taxminan 30-50% ni tashkil qiladi [7].

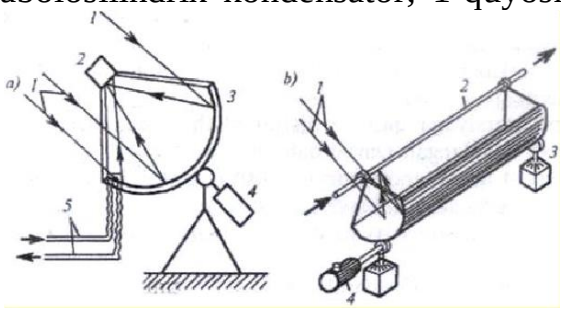
Isitish tizimi montaj qilinganidan so‘ng ekspluatatsiyaga, ya’ni, foydalanishga topshiriladi.

Eksplutatsiya tashkilotlarining asosiy vazifasi isitish tizimlarining barcha bo‘g‘inlarini avariyasiz va ishonchli ishlashini, issiqlikni uzluksiz yetkazib berishini hamda ulardan oqilona foydalanishni ta’minlaydi [8].

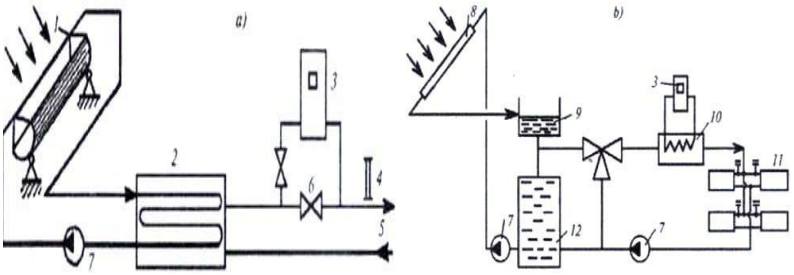
Eksplutatsiyaga qabul qilishni shahar (tuman) hokimiyati tomonidan tayinlangan Davlat qabul hay’ati bajaradi.

Bu hay’at davlat arxitektura-qurilish nazorati, buyurtmachi, bosh pudratchi, loyihalash tashkiloti, sanitarya yong'indan saqlash nazorati hamda binoni eksplutatsiya qilish tashkiloti vakillaridan tuzilgan bo'ladi [9].

3.2-rasm. Konsentratsiyalaydigan quyosh kollektorlari:*a*-parabolik konsentrator; *b*— parabolosilindrik kondensator; 1-quyosh nurlari; 2-issiqlikni



qabul qiluvchi element; 3-nur qaytaradigan oyna; *4*- kuzatish mexanizmi; 5—isitish tarmog'i; 6-oyna.



3.3-rasm. Konsentratsiyalaydigan (a) va yassi (b) kollektorli quyoshli isitish tizimlari: 1-parabolosilindrik konsentrator; 2-suyuqlik issiqlik akkumulatori; 3— qo‘shimcha issiqlik manbayi; 4-termometr; 5-isitish tarmog‘i; 6—rostlash ventili; 7—nasos; 8—yassi quyosh kollektori; 9-kengayish idishi; 10—issiqlik almashtirgichi; 11—isitish asbobi; 12-bak-akkumulator.

Ishchi hay’at quyidagilarni tekshirishi lozim: bajarilgan qurilish-montaj ishlarini loyiha-smeta hujjatlariga mosligini; tizimning sinov ishlari to‘g‘ri o‘tkazilganligini va bajarilgan qurilish-montaj ishlarining sifatini.

Isitish tizimi qabul qilinganda quvurlami to‘g‘ri o‘tkazilganligi, isitish asboblari joylashganligi, armaturalar butunligi va quvurlar ulangan joylarida suv oqmasligi tekshirilishi lozim [10].

Asosiy e’tibor tizimni gidravlik va issiqlik sinovlariga qaratilishi lozim. Gidravlik sinov vaqtida tizimga gidravlik bosim berilib, uning qismlari mustahkamligi, suv oqmasligi ma’lum vaqt davomida tekshiriladi.

Issiqlik sinov vaqtida to‘g‘ri sozlanganligi (regulirovka qilinganligi), hamma isitish asboblarini bir tekisda qizishi tekshirilib ko‘riladi. Bu sinov qish paytida suvning hisobiy temperaturasida (ya’ni 95÷105 °C), yoz paytida esa 65÷70 °C da bajariladi [11].

IST tarmoqlari ishchi bosimdan 5 kg/sm^2 dan yuqori bo‘lgan bosimda sinaladi. Ammo bosim 10 kg/sm^2 dan ortiq bo'lmasligi lozim. Sinovni o‘tkazishdan oldin tizimdan havo chiqarib tashlanadi. Sinash 10 daqiqa davom etadi, ushbu davr mobaynida bosim 0,5 kg/sm^2 dan ortiq kamaymasligi lozim.

Issiq suv quvurlarining tarmoqlari gidravlik sinovdan keyin issiqlik sinovidan o'tkaziladi. Haqiqiy harorat hisobiy haroratdan farqi 15 °C dan oshmasligi lozim [12].

Issiqlikning almashinuvi ishchi bosimidan 1,5 barobar ortiq bo‘lgan gidravlik bosimda o‘tkaziladi. Ammo u 4 kg/sm^2 dan kam va 10 kg/ sm^2 dan ortiq bo‘lmasligi kerak. Agar 5 daqiqa mobaynida bosim pasaymasa, issiqlik almashuvi sinovdan o‘tgan hisoblanadi. Quvurlar va issiqlik almashtirgichlar sinovdan o'tkazilguniga qadar izolatsiyalanmaydi [13].

ISTni montaj qilishdagi mehnatni muhofaza qilishda qo‘llaniladigan chora-tadbirlar, issiqlik tizimini montaj qilishda qo'llaniladigan chora-tadbiriarga o‘xshashdir.

Sinovlar o‘tkazilgandan so‘ng topshirish aktlari tuziladi va isitish tizimi eksplutatsiyaga qabul qilinadi [14].

Isitish tizimida issiqlik manbai sifatida quyosh energiyasidan foydala-nilsa, mazkur jarayon isitish tizimida quyosh nuridan foydalanish de- yiladi (gelio qurilma).

Quyosh nurini qabul qiluvchi gelio qurilrama quyosh radiatsiyasini o'ziga qabul qilib, uni issiqlik energiyasiga aylantirib beradi.

Xulosa

Isitish va issiq suv taminoti uchun aktiv quyosh kollektorli qurilmalar va ularning ishlash tartiblari keltirilgan. Qishda, past temperaturalarda quyosh kollektoridagi suv muzlamasligi uchun choralar ko‘rsatilgan. Bino-uyni isitish va uy-ro‘zg‘ori uchun issiq suv taminotida quyosh issiqlik yuklamasini hisoblash uslubiyoti keltirilgan. Quyosh kollektorli tizimning issiqlik unumdorligi, issiqlik texnikaviy tavsiflari, quyosh kollektori va issiqlik akkumulyatorining o‘lchamlari aniqlangan.

Adabiyotlar:

1. ogli Yuldashev, F. M. (2023). QUYOSH ELEMENTLARINING FOYDALI KOEFFITSIENTI. *Innovative Development in Educational Activities*, *2*(24), 363-368.
2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.

9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).
14. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.

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MAKTABGACHA TA`LIM TASHKILOTLARIDA TARBIYACHILIK KASBI VA UNING JAMIYATDA TUTGAN O‘RNI

Annotatsiya. Ushbu maqolada maktabgacha ta`lim tashkilotlarida tarbiyachilik kasbi va uning jamiyatda tutgan o‘rni yoritilgan. Maktabgacha ta`lim tashkilotlarida tarbiyachilik kasbi va uning jamiyatda tutgan o‘rni keng ko‘lamda o‘rganilgan.

Kalit so‘zlar: Maktabgacha ta`lim, tarbiyachi, axloqiy sifatlar. o`sib ulg`ayish, kamol topish, farovonlig, shaxs manfaatlari, ijtimoiy xulq-atvor.

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TEACHING PROFESSION IN PRESCHOOL EDUCATIONAL ORGANIZATIONS AND ITS ROLE IN SOCIETY

Abstract. This article describes the educational profession in preschool educational organizations and its role in society. The educational profession and its role in society have been widely studied in pre-school educational organizations.

Key words: Pre-school education, educator, moral qualities. growth, maturity, well-being, personal interests, social behavior.

Jamiyatimizning taraqqiy etishi, ijtimoiy yo`naltirilgan bozor iqtisodiyotini shakllantirish, jahon hamjamiyatiga qo`shilishini ta'minlaydigan huquqiy demokratik davlat qurishni etuk va malakali yoshlarsiz hal etib bo`lmaydi. Shu bois respublikada amalga oshirilayotgan islohotlarning asosiy maqsadi va vazifasi inson va uning har tomonlama o`sib ulg`ayishi, kamol topishi, farovonligi, shaxs manfaatlarini ro`yobga chiqarishning sharoitlarini, ularning ijtimoiy xulqatvorning andozalarini o`zgartirishga qaratiladi.

Hozirgi davrda har tomonlama rivojlangan barkamol insonni tarbiyalashning maqsad va vazifalari manaviy boylik, axloqiy poklik, jismoniy mukammallikni o`zida mujassamlashtirgan ijtimoiy faollikni tarbiyalashni taqozo etadi. Shu jihatdan olib qaralganda maktabgacha ta'lim uzluksiz ta'lim tizimida muhim o`rin tutadi. Maktabgacha ta'lim – bola tug`ilganidan to etti yoshgacha har tomonlama tarbiya berish qonuniyatlarini, maktabgacha ta'lim tashkilot sharoitida

talim-tarbiya ishini tashkil etishning mazmuni, metodi va shakllarini o`z ichiga oladi. Har bir jamiyat o'zining ijtimoiy-iqtisodiy va ma'naviy ravnaqi uchun ma'suliyatli vazifani his etadigan, har tomonlama barkamol shaxsni tarbiyalashdan manfaatdir. Zero, jamiyatimiz ijtimoiy-iqtisodiy zimmasiga har bir shaxs o'zining hayotidagi, o'z layoqati yo'nalishlarini kashf etishi, anglashi, xalq farovonligini oshirish yo'lida qo'lidan kelganicha samarali mehnat qilishi kabi ma'suliyat yuklangan. Jamiyatga yuklatilgan ushbu vazifalarni hal qilish ko'p jihatdan kelajak bunyodkorlarini tayyorlashga katta hissa qo‘shuvchi tarbiyachilarning kasbiy mahoratiga bog‘liq.

Bugungi kunda uzluksiz ta'limning muhim bo‘g‘ini bo‘lgan maktabgacha ta'lim bosqichiga e'tibor har qachongidan ortib bormoqda. Ushbu ta'lim bosqichi keyingi ta'lim bosqichlarining poydevori ekani ham barchaga ma'lum.

O‘zbekiston jahon andozalariga mos keladigan ko‘p bosqichli ta'lim tizimiga o‘tmoqda. O‘quv-tarbiya jarayonida qo‘llanilayotgan ta'lim texnologiyalari shaxsni rivojlanishiga, mustaqil ishlashga o‘rgatishi zarur. Xorijiy tajribalarini o‘rganib, ularni mavjud sharoitimizga moslab tatbiq, amaliyotda foydalanish maqsadga muvofiq bo‘ladi.

Ma'lumki, respublikamiz ta'lim-tarbiya tizimining boshlang‘ich poydevori bo‘lgan maktabgacha ta'limni sifatli va zamon talabi darajasida tashkil etilishini ta'minlash borasida bir qator chora-tadbirlarni amalga oshirmoqda. Xususan, maktabgacha ta'lim tizimini yanada takomillashtirish, moddiy texnika bazasini mustahkamlash, maktabgacha ta'lim tashkilotlari tarmog‘ini kengaytirish, malakali pedagog kadrlar bilan ta'minlash, bolalarni maktab ta'limiga sifatli tayyorlash darajasini tubdan yaxshilash, ta'lim-tarbiya jarayoniga zamonaviy ta'lim dasturlari va texnologiyalarini tatbiq etish, bolalarni har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlantirish uchun shart-sharoitlar yaratish maqsadida O‘zbekiston Respublikasi Prezidentining “2017-2021 yillarda maktabgacha ta'lim tizimini yanada takomillashtirish chora-tadbirlari

to‘g‘risida”gi Qarori qabul qilindi. Shu qaror bilan tasdiqlangan “Maktabgacha ta'lim tizimini yanada takomillashtirish bo‘yicha 2017-2021 yillarga mo‘ljallangan dastur”ning asosiy maqsadi, vazifalari va yo‘nalishlari qatorida ilg‘or xorijiy tajribani hisobga olgan holda bolalarni har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlantirish sharoitlarini yaratish belgilangan. Shuningdek, O‘zbekiston Respublikasi Prezidentining “Maktabgacha ta'lim tizimini tubdan takomillashtirish chora-tadbirlari to‘g‘risida”gi Qarori da mavjud tizimli kamchiliklar, maktabgacha ta'lim sohasida davlat siyosatini to‘liq amalgaoshirishga to‘sqinlik qilayotgan sabablar ko‘rsatilgan. Ahamiyatli tomoni dunyo tajribasida hali kuzatilmagan yana bir qaror, ya'ni yurtboshimiz tomonidan “O‘zbekiston Respublikasi Maktabgacha ta'lim vazirligi faoliyatini tashkil etish to‘g‘risida” PQ-3305-sonli Qaror qabul qilindi. Mazkur qarorga berilgan sharhda ta'kidlanganidek: «... bugungi kunda maktabgacha ta'lim tashkilotlari faoliyatini tubdan yaxshilash, maktabgacha yoshdagi bolalar qamrovini oshirish, ilg‘or xorijiy tajribani o‘rgangan holda, har

jihatdan zamonaviy tizim yaratish masalasi dolzarbligicha qolmoqda». “O‘zbekiston Respublikasi maktabgacha ta’lim tizimini 2030-yilgacha rivojlantirish Konsyepsiyasi” sida esa “...maktabgacha yoshdagi bolalarning har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlanishi uchun shart-sharoitlar yaratish” masalasi ustuvor vazifalardan biri sifatida belgilab qo‘yildi”.

Yuqoridagi kabi Prezidentimiz tomonidan qabul qilingan Farmon va Qarorlar uzluksiz ta’lim tizimining muhim bo‘g‘ini hisoblangan maktabgacha ta’lim tizimini yanada takomillashtirish, maktabgacha ta’lim tashkilotlarining davlat hamda nodavlat tarmog‘ini kengaytirish, ularni malakali pedagog kadrlar bilan ta’minlashda dasturilamalga aylandi. «Ilk va maktabgacha yoshdagi bolalarning rivojlanishiga qo‘yiladigan davlat talablari» va «Ilk qadam» Davlat dasturining ishlab chiqilishi uzluksiz ta’lim tizimida maktabgacha ta’limni samarali amalga oshirish uchun keng imkoniyatlar yaratdi. Albatta maktabgacha ta’limni ham shaklan, ham mazmunan yangilashga qaratilgan bu kabi innovatsiyalar ota-onalardan tortib barcha pedagoglar bola tarbiyasi, uning ta’lim olishga tayyorgarligiga zamon talablaridan kelib chiqqan holda yondashuvini talab etadi. Maktabgacha ta’lim tashkilotlari guruhlarida tashkil etiladigan rivojlanish (rivojlanish) markazlaridagi jarayonlar bolalarning doimiy ravishda yangi bilimlarni o‘zlashtirishga, mustahkamlashga yordam beradi. Bolalarni o‘z bilimini mustaqil ravishda to‘ldirib borish, kechayotgan yangilanish jarayonlariga munosib moslashib borishga o‘rgatish rivojlanish markazlarining asosiy maqsadidir. Pedagogik tajribalar shuni ko‘rsatadiki, maktabgacha ta’lim tashkilotlarida shaxsga yo‘naltirilgan yondashuv yetarlicha tadbiq etilmayapti. Shu maqsadda tadqiqotchilar tomonidan tarbiyalanuvchilarni pedagogik qo‘llab-quvvatlash, ularning faolligini va bilishga bo‘lgan qiziqishlarini rivojlantirishning didaktik shart-sharoitlari, vositalarini va metodikasini ishlab chiqish muhimdir. Bola shaxsini rivojlantirishga yo‘naltirilgan o‘qitish texnologiyalari ilmiy texnikaviytaraqqiyot jadallashayotgan davrda rivojlangan davlatlarda ancha ilgari shakllanganini inobatga olgan holda ular rivojlanishi, etimologiyasi, mashg‘ulotlarda qo‘llanilishi yuzasidan tarbiyachilar kengroq tasavvurga ega bo‘lishlari lozim. Chunki bola shaxsiga yo‘naltirilgan ta’lim tarbiyachi va tarbilanuvchi o‘rtasidagi o‘zaro munosabat, hamkorlik va tanlash erkinligiga asoslanib, ta’lim oluvchini qadriyat sifatida e’tirof etilishi uchun sharoit yaratadi.

Foydalanilgan adabiyotlar:

1. Erkaboyeva N.Sh. Mustaqillik yillarida O‘zbekistonda pedagogik fikrlarning rivojlanshi (2002-2005-yillar), Monografiya. – T., 2006.
2. Zunnunov A. O‘rta Osiyoda pedagogik fikr taraqqiyotidan lavhalar. – T.: Fan, 1996.
3. Boboyev H, G‘afurov Z. O‘zbekistonda siyosiy va ma’naviy-ma’rifiy ta’limot lartaraqqiyoti. – T., 2001

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FUQAROLARNING SHAXS HAQIDAGI MA`LUMOTLARINI HIMOYA QILISH

Annotatsiya. Fuqarolarga berilgan mehnat huquqi, nafaqat milliy qonunchilik bilan balki xalqaro hujjatlarda ham alohida ta'kidlangan xususan, inson huquqlari to`g`risidagi umumiy qoidalarni o`z ichiga olgan inson huquqlari Umumjahon Deklaratsiyasining 23-moddasida ta`kidlanganidek, har bir shaxs mehnat qilish, ishni erkin tanlash, adolatli va qulay mehnat sharoitlariga ega bo`lish va ishsizlikdan himoyalanish huquqiga ega. Adolatli va qulay mehnat sharoitlari inson mehnati himoyalanganligini ko`rsatadi. Ushbu qoida barcha fuqarolarning adolatli mehnat sharoitlarida ishlash huquqini kafolatlaydigan

Kalit so'zlar: shaxs haqidagi ma`lumotlar, raqamli texnologiyalar, ma'lumotlarni himoya qilish.

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PROTECTION OF PERSONAL DATA OF CITIZENS

Annotation. The right to work granted to citizens is emphasized not only by national legislation, but also by international documents, in particular, as stated in Article 23 of the Universal Declaration of Human Rights, which includes general provisions on human rights, every person has the right to work, has the right to freely choose work, have fair and comfortable working conditions and be protected from unemployment. Fair and comfortable working conditions indicate that human labor is protected. This provision guarantees the right of all citizens to work under fair working conditions.

Key words: personal data, digital technologies, data protection.

Shaxs haqidagi ma`lumotlar- deganda biz elektron, qog`ozda va/yoki boshqa moddiy tanada qayd etilgan ma`lum bir shaxsni ko`rsatish yoki aniqlash imkonini beruvchi ma`lumotlar hisoblanadi.

Xodimlarning shaxs haqidagi ma`lumotlarini himoya qilish kontseptsiyasini talqin qilish uchun, birinchi navbatda, qonun normalarini tahlil qilish lozim. Ta`kidlash joizki, O`zbekiston Respublikasida mehnatni muhofaza qilish masalasi yangi tahrirda qabul qilingan "Mehnatni muhofaza qilish to`g`risida" gi O`zbekiston Respublikasi Qonuni va "Jismoniy shaxslar to`g`risida

ma`lumot to`g`risida"gi O`zbekiston Respublikasi Qonuni, O`zbekiston Respublikasining "Jismoniy shaxslar to`g`risida ma`lumot" qonunlari bilan tartibga solinmoqda.

Xorijiy mamlakatlar tajribasiga e'tibor qaratsak AQShda shaxsiy ma`lumotlarni himoya qilishning birinchi huquqiy bazasi 1948 yildagi axborot xavfsizligi siyosati bilan bog`liq. Amerika qo`shma Shtatlari ulkan mehnat bozoriga ega davlatdir. Mamlakat yuqori daromad olish va aholi bandligini ta`minlash bo`yicha dunyoda yetakchi hisoblanadi. Ma`lumotlarga ko`ra, 2020-yillarda mamlakatda xususiy ishchilar soni 160,14 millionni tashkil etdi. Xususiy mehnat atamasi mehnat statistikasi byurosi tomonidan kamida 16 yosh va undan katta bo`lgan yoki ish izlayotgan amerikalik ishchilar toifasini tavsiflash uchun ishlatiladi [1]. 2020-yil sentabrda ishsizlik darajasi 0,5% dan 7,9% gacha tushdi va ishsizlar soni 100 million kishiga kamaydi. Shu sababli, har bir xodimning ma`lumotlarini himoya qilish har bir davlatning asosiy instituti sifatida har kuni dolzarb masalaga aylandi. Amerika Qo`shma Shtatlari 50 ta shtatdan iborat federal davlat bo`lib, ularning huquqiy tizimlari va qonunlari bir-biridan mustaqildir. Shu sababli, barcha ish beruvchilarga taalluqli bo`lgan mehnat munosabatlarini tartibga soluvchi yagona qonunlar to`plami mavjud emas. Shu munosabat bilan ular axborot xavfsizligi masalalarida turli xil siyosatlarni amalga oshiradilar.

Germaniya Federativ Respublikasi Konstitutsiyasi doirasida mustaqil mehnat sudining tashkil etilishi mamlakat huquqiy siyosatining izchil rivojlanishining yaqqol namunasidir [2]. Shuni ta`kidlash kerakki, Yevropa Ittifoqining huquqiy hujjatlari Germaniyaning mehnat qonunchiligiga sezilarli ta`sir ko`rsatadi. Mamlakat qonun chiqaruvchi organi qonunni qabul qilish jarayonida Ittifoqning normativ hujjatlari va ko`rsatmalarining ustuvor yo`nalishlarini, shuningdek Evropa Adliya sudining qonunni talqin qilish to`g`risidagi qarorlarini hisoblashi shart. Ammo shuni ta`kidlash kerakki, Germaniyada mehnat to`g`risidagi qonun umumlashtirildi va butun kodga aylanmadi. Mehnat munosabatlari to`g`risidagi qonun hujjatlari bir nechta farmonlardan iborat bo`lib, qonundagi bo`shliqlar sud hujjatlari bilan tartibga solinadi. Ushbu holat ish beruvchilar va xodimlar tomonidan mehnat Qonunini to`g`ri qo`llash va to`g`ri qo`llash jarayonida juda ko`p muammolarni keltirib chiqaradi [3].

Germaniyaning "mehnat sharoitida xavfsiz ma`lumot" qonuni Evropa Ittifoqi va xalqaro xususiy standartlar asosida qabul qilingan. Chunki Evropa hamjamiyatini tashkil etuvchi shartnoma A`zo davlatlardan ish muhitini yaxshilashga, ishchilarning salomatligi va xavfsizligini himoya qilishga yordam berishni talab qiladi. Ushbu maqsadga erishish uchun Evropa Kengashi mehnatni muhofaza qilish va ish joyida oshkor qilmaslik sohasida minimal satandartlarni belgilash bo`yicha ko`rsatmalar ishlab chiqdi, ular milliy mahnat xavfsizligiga kiritilishi kerak. Yevropa kengashining bu sohadagi eng taniqli ko`rsatmasi – bu 1989-yil 12-iyunda qabul qilingan 89/391/ECC-sonli "Ishchilar xavfsizligi va

sog`lig`ini yaxshilashni rag`batlantirish choralarini ko`rish to`g`risida”gi Direktivasidir. O`tgan yillar davomida Germaniya Federativ Respublikasida ushbu ko`rsatma asosida ish joyidagi mehnatni muhofaza qilishning turli xil sohalari (masalan, ish joylari, ish jihozlari, shaxsiy himoya vositalari, ekranli uskunalarni boshqarish, yuklarni qo`lda boshqarish, xavfli moddalar bilan ishlash, biologik vositalar, qurilish maydonchalari kabi) bo`yicha individual ko`rsatmalar chiqarildi.

Shuni ta`kidlash kerakki, mehnatni muhofaza qilish instituti normalarining o`ziga xos xususiyati uning texnik va sanitariya qoidalari bilan chambarchas bog`liqligidadir. Ya`ni, xodimning shaxs haqidagi ma`lumotlarini himoya qilish jarayonida mehnat huquqi haqidagi munosabatlar bilan bir qatorda boshqa munosabatlar ham paydo bo`ladi. Bu ish beruvchilarga ko`proq mas`uliyat beradi.

O`zbekiston Respublikasi “Shaxsga doir ma`lumotlar to`g`risida”gi Qonunining 27-moddasida shaxsga doir ma`lumotlarini himoya qilish kafolatlari belgilangan. Unga ko`ra, Davlat shaxsga doir ma`lumotlarning himoya qilinishini kafolatlanishi ko’rsatilgan [4].

odamlar foydalanuvchi hisoblarini ro`yxatdan o`tkazganda yoki Internet-messenjerlar, saytlar va ijtimoiy tarmoqlarda guruhlar yoki kanallarni tashkil qilganda, odam haqidagi ma`lumotlardan foydalanish va tarqatish keskin oshishi, ya`ni. uning fotosurati, ismi, ish joyi, joylashgan joyi va boshqalar.., uning roziligisiz. Natijada, ko`plab Internet foydalanuvchilari shaxsiy hayoti va fe`l-atvori to`g`risida ma`lumot tarqatish bilan bog`liq huquqbuzarliklardan aziyat chekmoqda.

Shu sababli, shaxsga oid ma`lumotlarni himoya qilish va xavfsizligini ta`minlash eng dolzarb ahamiyatga ega bo`lgan masala sifatida qaralmoqda. Jumladan, O`zbekiston Respublikasida ham «Shaxsga doir ma`lumotlar to`g`risida» gi Qonun qabul qilindi va bu qonunda inson va fuqaroning konstitutsiyaviy huquq va erkinliklariga rioya etish, shaxsga doir ma`lumotlarga ishlov berish maqsadlari va usullarining qonuniyligi, shaxsga doir ma`lumotlarning aniqligi va ishonchliligi, shaxsga doir ma`lumotlarning maxfiyligi va himoya qilinganligi, sub`ektlar, mulkdorlar va operatorlar huquqlarining tengligi, shaxs, jamiyat hamda davlatning xavfsizligi asosiy printsiplar sifatida mustahkamlangan [5].

Raqamli texnologiyalar asrida yashayotganimizda, biz yuqorida shaxslar haqidagi ma`lumotlarni himoya qilish tobora muhim ahamiyat kasb etayotganiga guvoh bo`ldik. Chunki huquq va manfaatlarni himoya qilish shaxslarning eng muhim huquqlaridan biri bo`lgan immunitetni turli axborot hujjatlaridan himoya qilishda ko`proq ko`rinadi. Shu sababli, shaxslar to`g`risidagi ma`lumotlarni himoya qilish, undan turli xil manipulyatsion maqsadlarda foydalanishni oldini olish va shaxsning irodasiga zid bo`lgan usul va shakllarda foydalanishni oldini olish masalasi har qachongidan ham dolzarbdir. Axborot texnologiyalaridagi o`zgarishlar shaxsiy hayotning shaxsiy hayotini himoya qilish zarurligini yanada oshirdi. Sun`iy yo`ldoshlarning ortib borayotgan imkoniyatlari, shuningdek,

dunyoning istalgan nuqtasidan inson hayotini kuzatishga imkon beradi. Bu fuqarolarning shaxsiy hayotni himoya qilish choralarini kuchaytirishni talab qiladi.

Foydalanilgan adabiyotlar ro`yxati:

1. O`zbekiston Respublikasi Mehnat kodeksi. O`zbekiston Respublikasi Oliy Majlisining Axborotnomasi, 1996 y., 1-songa ilova; O`zbekiston Respublikasi qonun hujjatlari to`plami, 2016 y., 17-son, 173-modda, 52-son, 597-modda.
2. O`zbekiston Respublikasi Prezidentining 2017 yil 7 fevraldagi “O`zbekiston Respublikasini yanada rivojlantirish bo`yicha Harakatlar strategiyasi to`g`risida”gi PF 4947-sonli Farmoni. O`zbekiston Respublikasi qonun hujjatlari to`plami, 2017 y., 6-son, 70-modda.
3. Usmanova M.A., Tursunov Y. Mehnat huquqi. T.: TDYUI, 2009. – 223 bet.
4. O`zbekiston Respublikasi Mehnat kodeksiga sharxlar. Mualliflar jamoasi. – T.: TDYUI, 2008. – 985 bet.
5. Mualliflar jamoasi. Mehnat huquqi. Darslik. –T.: TDYU nashriyoti, 2018. – 547 bet.

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MEDIA VA AXBOROT SAVODXONLIGI

Annotatsiya: ushbu maqolada media va axborot savodxodligining rivojlanish tarixi hamda hozirgi kundagi ahamiyati haqida ma’lumotlar keltirilgan.

Kalit so’zlar: Mediasavodxonlik, axborot, muloqot, falsafa, madaniyatshunoslik, etnologiya, etnografiya, san’atshunoslik, sotsialogiya, til, savodxonlik.

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MEDIA AND INFORMATION LITERACY

Annotation: this article presents information about the history of the development of media and information literacy, as well as its importance in the present day.

Keywords: Mediasavodkhanism, information, communication, philosophy, cultural studies, Ethnology, ethnography, art studies, socialogy, language, literacy.

Mediasavodxonlik va axborot madaniyatining hayotimizga chuqur kirib borishi orqali axborot hajmi ham oshdi hamda bunday global jarayonda ommaviy demokratik muloqotning eng yaxshi kafolati hisoblanadi. Muloqotning bu turi inson huquqlarini amalga oshirishning asosiy omili hisoblanadi.

Shuningdek, dunyodagi barcha voqea va hodisalar u yoki bu tarixiy manbaga o‘ziga xos tarzda oydinlik kiritishi va ayni paytda muhim tarixiy ma’lumotlarning ochilishi uchun sabab bo‘lishi mumkin. O‘tmish tarixi, ijtimoiy va gumanitar fanlarni o‘rganishda falsafa, madaniyatshunoslik, etnologiya, etnografiya, san’atshunoslik, sotsialogiya va boshqa shu kabi fanlar yetakchilik qilmoqda. Lekin, mohiyatiga ko‘ra, bu fan tarixining muhim tarkibiy qismidir.

Tarixiy manbalarga murojaat qiladigan bo‘lsak, ibtidoiy odam o‘z fikrini o‘zi o‘ylab topgan turli belgilar va tasvirlar yordamida ifodalashga harakat qilganligini bilamiz. Inson hayotida muhim ahamiyatga ega bo‘lgan til, yozuv va muloqot shakli shu tarzda paydo bo‘lgan degan argument bor. Agar biz tilning tarixi va evolyutsiyasi haqida fikr yuritmoqchi bo‘lsak, uni ilmiy jihatdan o‘rganishimiz zarur.

Jahon tarixida ibtidoiy tasviriy san’at, ayniqsa, g‘orlar devorlariga turli tasvirlarni yozish paleolit davriga to‘g‘ri keladi, O‘rta Osiyodagi g‘or va qoyalarga chizilgan rasmlar esa mezolit davriga mansubdir. O‘rta Osiyoning tog‘li hududlarida keng tarqalgan qoyatosh rasmlari ishlov berish usuliga ko‘ra ikki turga bo‘linadi. Ularning ba'zilari bo‘yoq (oxra) bilan chizilgan rasmlar (petrogliflar), ikkinchi turi o‘yilgan va ishqalangan. Biroq til, nutq, yozuv va uning muhim elementlari inson evolyutsiyasida ahamiyat kasb etish bilan birgalikda millionlab yillar davomida shakllangan va shakllanmoqda. Til jamiyat boyligi bo‘lib, u jamiyat a’zolarining o‘zaro munosabatlarini amalga oshiradi, insonning moddiy va ma’naviy hayotida sodir bo‘layotgan barcha hodisalar haqida bilimlarni to‘playdi, ular haqida hisobot berib boradi.

«Axborot» atamasi ko‘plab tavsiflarga ega bo‘lib, u ma’lumotlar, tadqiqot jarayonida olingan bilimlar, tajriba yoki tahsil olish, shuningdek, signal yoki belgilarni anglatishi mumkin.

Soddaroq qilib aytganda, axborot — bu to‘plangan, qayta ishlangan va izohlangan, foydalanish uchun qulay bo‘lgan ko‘rinishda taqdim etiladigan ma’lumotlardir. Axborotni yana bir boshqacha tavsifi — «tushunishga oson shaklda berilgan bilimlar» hisoblanadi.

O‘tmishda mazkur tushunchani odamlar tomonidan bir-biriga og‘zaki, yozma va boshqa usulda beriladigan ma’lumotlar tushunilgan. Keng ma’noda axborot ta’rifi kibernetika fanida keltirilgandir. Uning asoschisi Norbert Vinerning yozishicha, “axborot — bu biz unga va uning bizning hissiyotlarimizga moslashuvchi, tashqi dunyodan olingan mazmun tavsifidir”.

Axborot tushunchasiga juda ko‘p olimlar tomonidan turlicha ta’riflar berilgan. **Axborot** — «bizni o‘zgartiradigan» tushuncha (Stafford Beyer, 1979).

Axborot — bu «insonning ongiga yetib boradigan va uning bilimini oshiradigan» tushuncha (Blokdjik and Blokdjik, 1987).

«Axborot — bu uni oladiganlar uchun ma’noga ega shaklga keltirilgan va joriy yoki keyingi harakatlar yoki qarorlar uchun haqiqiy yohud potensial qiymatga ega ma’lumotlar» (Davis and Olsen, 1984).

Media va boshqa axborot manbalari tomonidan taqdim etilayotgan axborotdan to‘g‘ri foydalanish, insonlarning o‘zida axborotga bo‘lgan ehtiyojini anglashi, ma’lumotni topish va unga egalik qilish hamda sifatini baholash imkonini beradi.

Aksariyat hollarda iste’molchi u yoki bu maqsadga erishish uchun nimani bilishi zarurligini anglaydi va o‘z qidiruvishini ma’lum bir natijaga albatta qaratadi. Masalan, inflyatsiya sharoitida har bir kishini narx-navoning o‘sishi qiziqtiradi. Abituriyent oliy ta’lim muassasasiga kirish qoidalariga oid barcha ma’lumotni o‘rganib boradi. Tadbirkor va moliyachini birinchi navbatda birjadagi narx kotirovkasi bilan qiziqadi.

Axborot manbasi, odatda, ijtimoiy ahamiyatga molik (ya’ni, keng ommaga qiziq va kerak bo‘lgan) axborotga ega bo‘lgan shaxs yoki tashuvchidir. Axborot manbalari an’anaviy (rasmiy manbalar, ya’ni hujjatlar, OAV materiallari, hukumat qarorlari, hayotning o‘zi va h.k.) va noan’anaviy (“ishonch telefonlari”, ijtimoiy sog‘lomlashtirish markazlari, ikkilamchi xomashyo, shisha qabul qilish, mashina yuvish va yonilg‘i quyish shahobchalari, bozorlar va h.k.) turlarga ajratiladi.

Axborot borasida savodxon insonlar qo‘yidagi tayanch ko‘nikmalarga ega bo‘ladilar: tanqidiy fikrlash, axborotni tahlil qila bilish va undan o‘z fikrini bayon etishda foydalanish, mustaqil ta’lim olish qobiliyati, davlat faoliyati va jamiyatda kechayotgan demokratik jarayonlarda ishtirok etish, xabardor fuqaro va o‘z kasbining ustasi bo‘lishga tayyor bo‘lishdir.

“Media” tushunchasi va media savodxonlik «Media» atamasi (lotincha — medium, ya’ni vosita, vositachi, usul) turli ko‘rinishdagi kommunikatsiya va axborot vositasini anglatadi. Media tushunchasiga axborotni yaratish, nusxalashtirish, tarqatish vositasi hamda mualliflar va ommaviy ravishda axborot almashinuvining texnik vositalari kiradi.

Bugungi kunda media atamasidan OAV yoki massedia tushunchalarining sinonimi sifatida ham foydalaniladi. Hozirgi zamon jamiyati taraqqiyotiga medialarning ta’siri yil sayin oshib borib, ular vositasida insonlar atrof-voqelikni ijtimoiy va ruhiy jihatdan anglamoqda va baholamoqda. Zamonaviy medialarning asosiy jihatlariga tadqiqotchilar kreativlik (yaratuvchanlik, ijodkorlik) va innovatsiyalarni kiritmoqda. Shu bilan birgalikda boshqa manbalarda ham media atamasiga shu tarzdagi tavsiflar berilganini ko‘ramiz. «Media — ommaviy axborot vositalari, ham keng, ham maxsus auditoriyaga mo‘ljallangan ko‘ngilochar takliflarni tavsiya etuvchi, yangilik, axborot va reklama axborotini tarqatishga yo‘naltirilgan ko‘p sonli va serqirra funksiyalarni amalga oshiruvchi kommunikatsiya kanallaridir».

Ayrim hollarda mutaxassislar media atamasi o‘zagida aynan ushbu tavsifni ko‘radi. Medialar elektron bo‘lmagan bosma medialar hamda elektron medialarga ajratiladi.

Mediasavodxonlik - insonning jamiyatdagi fuqaro sifatidagi mas’uliyatini his qilgan holda faol va savodli bo‘lishi, mediamatnlarni qabul qila olishi, yaratishi, tahlil eta olishi va baholashi, zamonaviy mediani ijtimoiy-madaniy va siyosiy mazmunini tushuna olishi demakdir.

Xulosa qilib aytganda, media va axborot savodxonligi bizga huquqiy demokratik jamiyatimizning to‘laqonli, faol fuqarosi sifatida amalga oshirilayotgan islohotlar mazmun-mohiyatini tushinishga, OAV orqali uzatilayotgan va qabul qilinayotgan kundalik axborotni saralash ko‘nikmalarini shakllantirishga, axborot orqali inson ongini boshqarishga yo‘l qo‘ymaslik va har qanday vaziyatda to‘g‘ri qarorlar qabul qilishga zarurdir.

Adabiyotlar:

1. Y.Mamatova, S.Sulaymanova. O‘zbekiston mediata’lim taraqqiyot yo‘lida. O‘quv qo‘llanma. Extremum-press, 2015-94.b
2. Yahyo, Muhammad Amin. Internetdagi tahdidlardan himoya.Yordamchi o‘quv qo‘llanma. Movarounnaxr, 2016.-672 b
3. А.В. Федоров. Медиаобразования и медиаграмотность. Учебное пособие. М. 2018 г.
4. Медиа ва ахборот саводхонлигини шакллантиришнинг педагогик жихатлари. Ўқув-амалий қўлланма. - Extremum-press, 2017-142.б

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SOG’LIQNI SAQLASH SOHASIDA TELETIBBIYOT XIZMATLARINI KO‘RSATISHNING XALQARO-HUQUQIY JIHATLARI

Annotatsiya. Hozirgi vaqtda raqamli texnologiyalarning rivojlanishi bilan sog‘liqni saqlash sohasida teletibbiyot va teletibbiyot usullarining rivojlanishining yangi bosqichida turibmiz. Shubhasiz, teletibbiyot xizmatlarining yanada rivojlanishi raqamli texnologiyalar rivojlanishiga bog‘liq (ma’lumotlar saqlash, sun’iy intellekt va robototexnika texnologiyalari, kvant texnologiyalari va boshqalar), shuningdek, hali noyob tibbiy texnologiyalar va innovatsiyalar yaratilgani yo‘q.

Kalit so‘zlar: teletibbiyot, raqamli texnologiyalar, raqamli transformatsiya, telesalomatlik.

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INTERNATIONAL-LEGAL ASPECTS OF THE PROVISION OF TELEMEDICINE SERVICES IN THE FIELD OF HEALTH CARE

Abstract. Currently, with the development of digital technologies, we are at a new stage of development of telemedicine and telemedicine methods in the field of health care. Undoubtedly, the further development of telemedicine services depends on the development of digital technologies (data storage, artificial intelligence and robotics technologies, quantum technologies, etc.), and unique medical technologies and innovations have not yet been created. In the era of globalization, many international legal documents are being developed and ratified by countries in order to apply and regulate the use of information and telecommunication technologies in the field of health care

Keywords: telemedicine, digital technologies, digital transformation, telehealth.

Sog‘liqni saqlash tizimida raqamli texnologiyalardan foydalanish inson huquqlarini ta’minlashga qaratilgan eng muhim universal va mintaqaviy xarakterdagi deyarli barcha xalqaro hujjatlarda o‘z aksini topgan. Xususan, Iqtisodiy, ijtimoiy va madaniy huquqlar to‘g‘risidagi xalqaro paktning 12-

moddasida sog‘liqni saqlash sohasida insonlarga sog‘liqni saqlash texnologiyalaridan foydalangan holda sifatli tibbiy yordam bilan ta’minlash zarurati nazarda tutilgan [1] 2000-yilda Iqtisodiy, ijtimoiy va madaniy huquqlar qo‘mitasi tomonidan 14-sonli umumiy Izoh qabul qilingan unda davlatlar tomonidan insonlarning salomatlik huquqlarini ta’minlashda bir-biriga bog‘liq bo‘lgan bir necha element aniqlangan. Ulardan biri insonlarning sog‘liqlari haqidagi ma’lumotlardan axborot texnologiyalaridan foydalangan holda bemalol olishlari, izlashlari, tarqatish huquqlarini o‘z ichiga oladi. Biroq ushbu ma’lumotlarning maxfiyligini saqlagan holatdagina amalga oshirishlari belgilangan [2].

Marinelli S, Basile G, Zaami fikriga ko’ra “Jahon sog‘liqni saqlash tashkiloti teletibbiyot sohasini huquqiy tartibga solish qanchalik muhim ahamiyatga ega ekanligini ko‘p marotaba ta’kidlab o‘tgan, bu esa uning rivojlanish omillaridan biri sifatida tavsiflangan” [3.33] deb takidlashgan.

Toshkent davlat yuridik universiteti dotsenti, yuridik fanlar bo‘yicha falsafa doktori N.E. Gafurovaning fikriga ko‘ra, bugungi kunda tibbiyotni raqamlashtirish deganda zamonaviy axborot texnologiyalaridan foydalanish, tibbiyotning barcha sohalariga bosqichma-bosqich joriy etish tushuniladi. Ammo ushbu sohaning o‘ziga yarasha muammoli taraflari mavjud, ular – bemorlarning shaxsiy ma’lumotlari tarqalishi, inson huquqlari buzilishi, shaxsiy ma’lumotlarning maxfiyligini saqlovchi huquqiy jihatlar ishlab chiqilmaganligi. Shu sababli ushbu sohani raqamlashtirishda qonunchilik bazasini takomillashtirish lozim [4.34].

1986-yilda BMT Bosh Assambleyasi tomonidan Rivojlanish huquqi to‘g‘risidagi deklaratsiyada davlatlar sog‘liqni saqlash sohasini rivojlantirishi va asosiy resurslardan foydalanish orqali insonlarning ushbu huquqlardan foydalanishlari uchun o‘z milliy huquq tizimlarida barcha choralarni ko‘rishlari zarurligi ko‘rsatilgan [5]

1994-yilda sog‘liqni saqlash texnologiyalaridan foydalanish, sog‘liqni saqlashning muhim elementi va inson xavfsizligi, tibbiy xizmatlarning samarali amalga oshirilishi xaqida birinchi marotaba “Inson xavfsizligining yangi o‘lchovlari” haqidagi Birlashgan Millatlar Tashkilotining Taraqqiyot dasturida ko’rsatilgan. Shu bilan birga, 2000-yilda Bosh Assambleya tomonidan tasdiqlangan “Mingyillik rivojlanish” Maqsadlari doirasida sog‘liqni saqlash sohasida texnologiyalardan foydalanishning to‘liq amalga oshirilishi lozimligi ko‘rsatib o‘tilgan.

1923-yilda Millatlar Ligasi qoshida sog‘liqni saqlash tashkiloti tashkil etilgan, ushbu tashkilot Jahon sog‘liqni saqlash tashkiloti samarali ish olib borishi uchun zarur shart-sharoitlar yaratish uchun xizmat qilgan. Bundan tashqari, tadqiqotchilar qayd etishicha, Millatlar Ligasi qoshidagi sog‘liqni saqlash tashkiloti kasalliklarni, holatni hisobga olishning statistik usullarini joriy etishgan va ular tomonidan sog‘liqni saqlash bilan bog‘liq xalqaro amaliyotga oid ko‘plab savollar o‘rganilgan [6].

Hozirgi kunda WHOdan tashqari, bir qator xalqaro nodavlat tashkilotlar mavjud, ular turli yillarda tashkil etilgan va turli xil masalalarga qaratilgan, shu jumladan, Jahon tibbiyot assotsiatsiyasi (1947), Tibbiyot huquqi bo‘yicha Jahon assotsiatsiyasi (1967), Xalqaro bioetika assotsiatsiyasi (1992) va boshqalar. Bunday uyushmalarning sa’y-harakatlari bilan kongresslar, konferensiyalar o‘tkaziladi, ularda tibbiyot sohasidagi qonunchilikni rivojlantirish va sog‘liqni saqlashni raqamlashtirish, tartibga solish masalalari muhokama qilinadi va tegishli xalqaro hujjatlar ishlab chiqildi.

2005-yilda Jahon sog‘liqni saqlash assambleyasi tomonidan electron tarzda sog‘liqni saqlash bo‘yicha WHA58.28 sonli rezolyutsiyasi [7] qabul qilingan, unga asosan, a’zo davlatlarni sog‘liqni saqlash sohasini raqamlashtirish, elektron tibbiyotdan foydalanish bo‘yicha uzoq muddatli rivojlanish dasturlarini ishlab chiqishga chaqiradi.

Undan tashqari, 2013-yilda Assambleya tomonidan WHA66.24 sonli rezolyutsiya [8] qabul qilindi va a’zo davlatlarni sog‘liqni saqlash sohasini elektronlashtirish bo‘yicha o‘zaro muvofiqlik va sog‘liqni saqlash sohasini standartlashtirish va qonunchilik mexanizmlarini ishlab chiqishga chaqirdi.

Yuqorida keltirilgan rezolyutsiyalarga asoslangan holda 2018-yil Jahon sog‘liqni saqlash assambleyasi tomonidan Sog‘liqni saqlash tizimini raqamlashtirish to‘g‘risida WHA71.7 sonli rezolyutsiya [9] qabul qilindi va Bosh direktorga a’zo davlatlar bilan maslahatlashgan holda sog‘liqni saqlash sohasida Global strategiyani ishlab chiqish vazifalari yuklatildi.

2019-yil mart WHO va Ijroiya Kengashining 146-sessiyasi davomida 2020-2025-yillarga mo‘ljallangan Global raqamli sog‘liqni saqlash strategiyasi qabul qilindi. Ushbu global strategiyaning asosiy maqsadi sog‘liqni saqlash sohasida raqamli telekommunikatsiya texnologiyalaridan foydalanish, sog‘liqni saqlash tizimini raqamlashtirish, teletibbiyot rivojlantirish, bemorlar va sog‘liqni saqlash xodimlarining barcha ehtiyojlarini qondirishga qaratilgan.

References:

1. Varyushin M.S. Pravovoye regulirovaniye telemeditsiny v Rossii i YES: dva shaga vpered i odin nazad [Legal regulation of telemedicine in Russia and the EU: two steps forward and one back]. *Law*, 2018, no. 1, p. 165.
2. Elektronnyye meditsinskiye karty v yevropeyskikh stranakh [Electronic health records in European countries]. Available at: www.aksimed.ru/download/center/present/europe.pdf (accessed 11.12.2014).
3. Bashshur R.L. Telemedicine Effects: Cost, Quality, and Access. *Journal of Medical Systems*, 1995, vol. 19, no. 2, pp. 81–91.
4. Gafurova Nozimahon Eldarovna voprosi razvitiya I pravove regulirovanie sivravizatsii medicine v Respublike Uzbekistan vestnik yurista №4, vipusk 2-34
5. Deklarsiya o prave na razvitie prinyata Rezolyusiye 41/128 Generalnoy Assamblei ot 4 dekabrya 1986 goda https://ww.un.org/ru/documents/decl_conv/declarations/right_to_development.shtml

6. Orlov O. Rossiyskoy telemeditsine – byt' [Russian telemedicine – to be]. Available at: https://www.itweek.ru/idea/article/detail.php?ID=53109 (accessed 19.06.2021).
7. Document 7.WHA58.28 eHealth "Standardization and interoperability: sixty-sixth world health assembly agenda item 17.5 https://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R24-en.pdf

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INVESTMENTS AND INVESTMENT ACTIVITY STATISTICS

Abstract. This article reveals the essence of the concept of investment and investment activities, investments in business assets and investments attracted to the working capital reserve, and analyzes the types of investment activities on the basis of international and national legal documents.

Keywords: investments, statistics, state, investments, investment activities, subjects of investment activities, capital investments, financial investments, real investments.

INTRODUCTION. In today's process of economic globalization, investment activity is an important element in the economy of every country. Therefore, this activity serves to expand and develop the level of industrial production in the country, as well as the stable and progressive growth of the economy. Therefore, each country that supports investment activities develops a road map that expresses its specific goals in this regard. In particular, various plans and programs have been developed in our country to attract investments to various fields, expand their flow, and stimulate investment activities.

The concept of investment activity is based on concepts such as investment and investor, and in order to have a complete idea of this, it is appropriate to talk about these concepts first. The term "investment" is derived from the Latin word "invest", which means "put". In general, investment refers to funds, securities, tangible and intangible assets, including rights to property, that are involved in business or other activities for the purpose of obtaining profit or achieving another beneficial goal.

The main part: The composition of investments is studied in several directions. Investments in economic assets are divided into two:

- financial investments - invested in financial assets. They are implemented by economic organizations by providing loans to banks, securities and other enterprises' chartered funds, state and country bonds, and other organizations and enterprises;

- non-financial investments - in the direction of MHT, tangible and intangible capital is added to the increase in the volume of tangible working capital, assets, tangible and intangible non-financial assets.

The next direction of the analysis of investment activities is the study of investments in fixed capital, and they are studied in the following directions:

- new construction;
- expansion of existing enterprises;
- technical rearmament and reconstruction of existing enterprises.

The term "new construction" refers to the constructions carried out for the purpose of building a new building or structures in the areas where the building was removed.

The expansion of existing enterprises means the construction of new workshops and facilities on the territory of existing enterprises or the construction of new or additional production facilities in areas close to them.

Reconstruction of existing enterprises is understood as improvement of production in shops and objects of enterprises in order to increase production capacity, improve product quality and nomenclature, and raise its technical and economic level to a higher level.

Investments involved in the reserve of material working capital characterize the change in their balance during this period. It is taken as the difference between the balance at the beginning and the end of the period.

Their composition includes engineering research, design, construction and assembly work, purchase and creation of machines and equipment, their installation, etc. in various proportions. expenses divide the following elements into the technological structure of investments:

- design and research expenses. These include the costs of engineering research and design work on the construction of the main fund object and complex;

- construction costs. These are the main part of the costs of capital investments. Construction includes raising, expanding, reconstructing and restoring buildings and structures included in the project. For example, excavation of trenches for the foundation, picking of building bricks, installation of metal and reinforced concrete structures, improvement of the territory of construction objects, etc.

Although there is a specific definition of the concept of investment activity in our national legislation, in our opinion, the original content of this activity is complete, Article 5 of the Law of the Republic of Uzbekistan "On Investments and Investment Activity" refers to the intended object of investment. according to which the types of investments in the Republic of Uzbekistan are divided into capital, financial and social types according to the intended object. Capital investments include investments in the creation and reproduction of fixed assets, including new construction, modernization, reconstruction, technical re-equipment, as well as the development of other forms of material production.

Investments in shares, corporate, infrastructural and government bonds, as well as other types of securities, are included in the list of financial investments. Social investments include investments in the development of human potential, skills and production experience, as well as in the development of other forms of intangible assets. Capital investments mainly refer to investments aimed at material production, creation and re-creation of fixed assets and development of other forms of material production. Financial investments are the most popular type of investment today, and this type of investment activity is mainly carried out in the stock market. In this case, financial investments mean placing the means of the investor in shares, bonds, promissory notes, bonds and other securities, in a word, in financial assets, in order to obtain income and increase the capital. Financial investments are of a speculative nature or aimed at long-term investment of capital. Among the investments listed above, social investments are of special importance. Therefore, social investments are directed to increase human knowledge, skills and talent, to train high-potential personnel, to develop new innovative production experiences, scientific research and design-construction work.

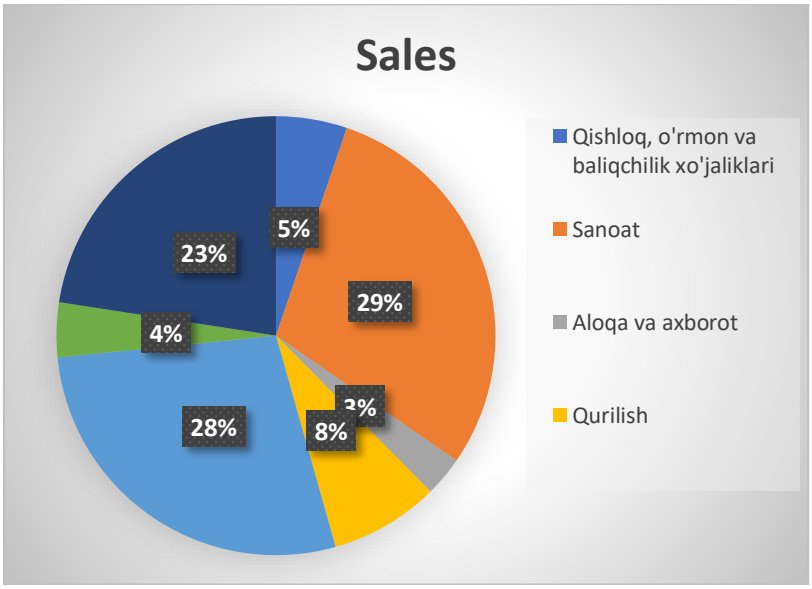

Figure 1. In 2021, the distribution of enterprises with foreign investments by sectors of the economy of Uzbekistan.

Although there is a specific definition of the concept of investment activity in our national legislation, in our opinion, the original meaning of this activity is directed to full growth, training of personnel with high potential, development of new innovative production experiences, scientific research and project construction work.

In some literature, investment activity is divided into the following types according to the field in which it is carried out:

-in the field of production (industry, agriculture, housing construction);

-in the field of service (trade, mediation, service);

-in the social sphere (science, healthcare, education, education);

-in other areas (creating intellectual property, know-how).

CONCLUSION. In short, investment activity is the placement of capital in various fields of activity and their management by any individuals and legal entities, as well as investment subjects such as citizens and legal entities of foreign countries, in order to obtain income, increase existing capital or achieve other useful results. is a set of practical actions. From this point of view, it can be said that the meaning of the concept of investment activity includes the purpose, object and directions of investment, organizational and legal actions related to investment, and finally, the motive of obtaining a certain positive effect (profit). The classification of investment activities allows investors to have a clear idea of the area of capital investment and to obtain more objective information about them when determining the purpose and object of capital investment.

References:

1. Azamat, Z., Javdod, O., Ravshan, A., Gulizahro, T., & Dilafruz, A. (2023). METHODOLOGY FOR IMPROVING AGRICULTURAL PRODUCTION IN UZBEKISTAN. Horizon: Journal of Humanity and Artificial Intelligence, 2(4), 277-279.

2. Azamat, Z., Elmurod, S., & Izatillo, Z. (2023). BUXORO VILOYATI SANOATI RIVOJLANISHINING O'ZIGA HOS XUSUSIYATLARI VA STATISTIK KO'RSATKICHLARI. Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения, 1(6), 151-153.

3. Sevara, S., Munavvar, J., & Azamat, Z. (2023). STATISTIK KUZATISH MA'LUMOTLARINI JAMLASH VA GURUHLASH. Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения, 1(6), 122-124.

4. Azamat, Z., Usmon, R., & Sulton, T. (2023). TURIZMNI RIVOJLANTIRISH STRATEGIYALARI BO'YICHA STATISTIK KO'RSATKICHLAR. Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения, 1(6), 157-159.

5. Muhammadjon, R., Farid, N., & Azamat, Z. (2023). STATISTIK KO 'RSATKICHLARNING MOHIYATI, TASNIFLARI VA TURLARI. Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения, 1(6), 125-127.

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ANDIJON VILOYATIDA PAXTA-TO'QIMACHILIK KLASTERLARINI HUDUDIY BAHOLASH VA SWOT-TAHLILI

Annotatsiya. Ushbu maqolada, paxta-to'qimachilik klasterlarini hududiy tahlili va baholash amalga oshirilgan. Andijon viloyatidagi paxta-to'qimachilik klasterlari SWOT- tahlili amalga oshirilgan.

Kalit so'zlar: tabiiy omillar, iqtisodiy-ijtimoiy va demografik omillar, qo'shimcha qiymatli maxsulot yaratish,. SWOT-tahlili, ishlab chiqarishni hududiy tashkil etish, innovatsion faoliyat, boshqaruvni tashkil etish, ishlab chiqaruvchi hamkor tashkilotlar hamkorligi.

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REGIONAL ASSESSMENT AND SWOT ANALYSIS OF COTTON TEXTILE CLUSTER IN ANDIJAN REGION

Abstract. This article provides a regional analysis and assessment of cotton-textile clusters. A SWOT analysis of cotton-textile clusters in Andijan region was carried out.

Key words: natural factors, economic, social and demographic factors, creation of value-added products. SWOT analysis, territorial organization of production, innovation activity, management organization, cooperation of partner production organizations.

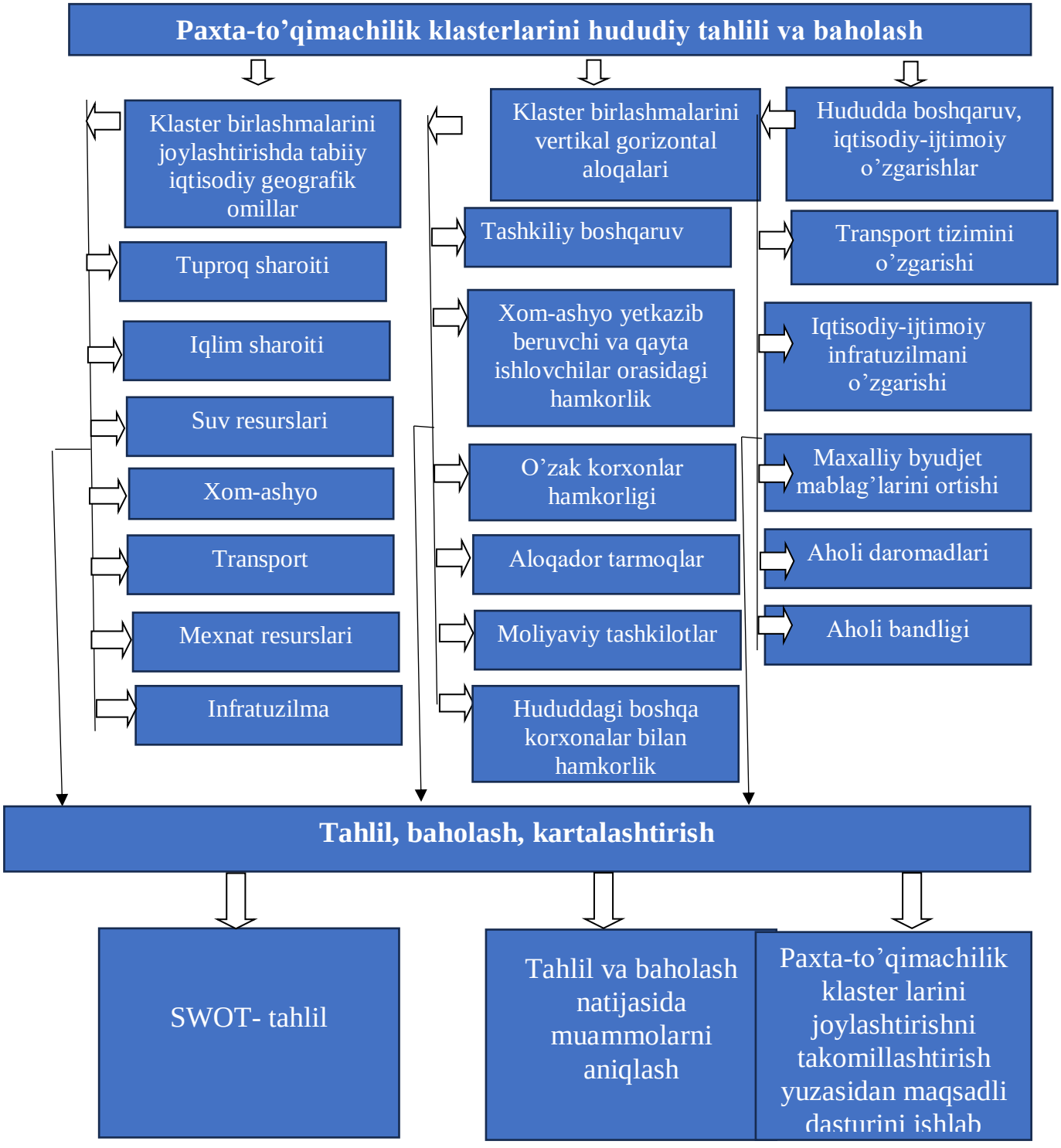
Kirish: Mamlakatimiz barcha sohalarini birdek rivojlanishini ta'minlash maqsadida "O'zbekiston-2030" strategiyasi ishlab chiqildi va hayotga izchillik bilan tadbiq qilinmoqda. Strategiyaning 1-ilovasida mamlakat eksport salohiyatini ko'tarish maqsadida alohida band kiritilgan. "Milliy iqtisodiyotning eksport salohiyatini kuchaytirish va uning tarkibida qo'shilgan qiymati yuqori bo'lgan mahsulotlar ulushini keskin oshirish" maqsadi belgilangan. Yanada

aniqroq aytganda, eksport hajmini 2 barobar oshirish va 45 milliard dollarga yetkazish, eksportchi korxonalar sonini 6,5 mingtadan 15 mingtaga yetkazish. Eksport tarkibida tayyor va yarim tayyor mahsulotlar hajmini 3,3 barobar ko'paytirish, Yevropa davlatlariga GSP+ va boshqa tizimlari doirasida tayyor va texnologik mahsulotlar eksportini kengaytirish [1] maqsadlari belgilab olingan. Aynan yengil sanoatda klasterlar shu maqsadni amalga oshirishda peshqadam bo'lib kelmoqda.

Adabiyotlar tahlili: Klaster atamasi fransuzcha so‘z bo‘lib “panja”, “bosh”, “bog‘lam”, “guruh”, “to‘planish”, “turg‘un” ma’nolarini bildiradi. Klaster nazariyasiga oid ilk fikrlar M. Porterga tegishli bo‘lib uning fikriga ko‘ra, “Klaster” bu- ma’lum hududda o‘zaro bog‘liq bo‘lgan bir nechta korxonalarning to‘plamidan iborat bo‘lgan (asosiy vositalarni yetkazib beruvchilar, maxsus xizmat ko‘rsatuvchi infratuzilmalar, mol yetkazib beruvchilar, ilmiy tadqiqot muassasalari) bir-birini raqobatbardoshligini oshirishga xizmat qiluvchi va o‘z navbatida, klasterni ham rivojlanishini ta’minlaydigan o‘zaro manfaatli hamkorlar jamlanmasidir [2,3,4,5,6]. Maykl Yujin Porter fikri bo‘yicha, hududiy klasterlarni shakllantirish uchun quyidagi omillar talab qilinadi: cheklangan geografik hududda barcha klaster ishtirokchilarining konsentratsiyasi; mazkur mintaqada, klasterni shakllantirishga va korxonalarni qo‘llab quvvatlash va xizmat ko‘rsatishga yordam beradigan raqobatbardosh ustunlikka ega bo‘lgan yetakchi kompaniyalarning mavjudligi; ishtirokchilar o‘rtasida hamkorlik muvofiqlashtirish; klaster tarkibiga, mahalliy darajada hamkorlik qilish orqali mintaqalararo darajada raqobatlashish uchun, klasterning "yadrosi"ni tashkil etadigan ilmiy-tadqiqot institutlari, ta’lim muassasalari, turli professional va jamoat birlashmalarini olishi mumkin [2,3,8]

Asosiy qism: Klaster boshqaruv tizimini joriy etishda yagona qolip mavjud emasligini tushungan holda mavjud tabiiy, iqtisodiy-ijtimoiy sharoitdan kelib chiqib nazariy asoslarni amaliyotga joriy etish lozim [9]. Paxta-to’qimachiilik klasterlarini hududiy o’rganish o’ziga xos tartib va yondashuvni talab etadi. Hududiy majmuada ishlab chiqarish sikli xom-ashyo yetishtirishdan boshlanadi, ekin turlarini tuproq iqlim sharoitidan kelib chiqib joylashtirish olinadigan maxsulot sifati va xajmiga ta’sir ko’rsatadi. Tuproq tarkibi, ekin maydonini nishabligi, litologik tarkibi, musbat haroratlar yig’indisi, atmosfera namligi, suv resurslari bilan ta’minlanganligi haqidagi ma’lumotlar olish bilan tadqiqot boshlanadi. Yuqorida ta’kidlaganmizdek xom-ashyo, mehnat resurslari, transport yengil sanoat korxonalarini hududiy tashkil etishga birlamchi ta’sir ko’rsatuvchi omillardir. Bu omillar yengil sanoatning turli tarmoqlari uchun turlicha ta’sirga ega. Ilmiy tadqiqotda bu omillarni qay darajada ta’sirga ega ekanligini aniqlash va shunga ko’ra tizmning tarkibiy qismlarini joylashtirish yuzasidan taklif tavsiyalar ishlab chiqish kerak bo’ladi. Boshqaruvni to’g’ri tashkil etish mavjud sharoitdan kelib chiqib shakllantirib boriladigan jarayon. Ilmiy tadqiqot davomida hududning tabiiy, iqtisodiy-ijtimoiy va demografik hususiyatidan kelib chiqib boshqaruv tizimini shakllantirib borilishi yuzasidan tavsiya ishlab chiqish lozim.

Klaster ma’lum bir hududda ishlab chiqarish tarmoqlarini uyg’un joylashuvi hisoblanar ekan mavjud tarmoqlar orasidagi aloqalarni tartibga solish ular orasidagi davomli aloqalarni o’rganish katta ahamiyatga ega. Geografik omillarni o’rganish tashkiliy masalalarni tahlil qilish, baholash va kartalashtirish bilan hududda va tizmdagi mavjud muammo va o’zgarishlarni ko’rish mumkin. SWOT-tahlili orqali hududga klaster tizimini joriy etish yuzasidan maqsadli dastular yaratish va amaliyotga joriy etish bilan ilmiy tadqiqotni so’ngi bosqichi yakunlanadi.



Andijon viloyati paxta-to'qimachilik klasterlarini kuchli va kuchli tomonlarini, imkoniyatlar va tahdidli tomonlarini aniqlashga asoslangan SWOT tahlili

	Kuchli tomonlari	Kuchsiz tomonlari
Tabiiy sharoit	Paxta xom-ashyosi yetishtirish uchun tuproq sharoiti va iqlim sharoit mos, mamlakatning boshqa hududlariga nisbatan suv resurslari bilan yaxshi ta'minlangan. Viloyatning orografik tuzilishi sug'orma dexqonchilik uchun qulay. Yerlarni meliorativ holatini yaxshilash uchun kerakli texnikalarga ega	Klaster kompleks ish tashkil etganligi uchun ba'zi hollarda yerga bo'lgan munsobat o'zgarishi mumkin
Transport	Klasterga birikkan korxonalarning biri-biriga yaqin joylashgani va paxta xom-ashyosini shu yerning o'zida to'liq qayta ishlashga erishishi transport xarajatlarini kam bo'lishiga olib keladi. Logistika markazlari tashkil etadi	Tayyor maxsulotni xorijga yetkazib berishda kerak bo'ladigan transport turlariga ega bo'la olmaydi. Transport to'rini tashkil etishda imkoniyati cheklangan ya'ni ta'sir doirasida shakllantira oladi
Mexnat resurslari	Mexnat resurslarining xarakati yaxshi, mexnat taqsimoti yaxshi yo'lga qo'yilgan. Malakali mexnat resurslari yetarli. Mexnat resurlari malakasini oshirishga alohida etibor qaratilgan	Mexnat faoliyatining mavsumiyligi. Mexnat resurslarini yangicha tizmiga moslashuvchanligi sekin kechadi
Ishlab chiqarishni hududiy tashkil etish	Geografik yaqin hududlarda, texnologik bog'langan, klaster manfaatlariga mos, iqtisodiy-ijtimoiy va demografik vaziyatdan kelib chiqib joylashtiriladi. O'sish qutblarini shakllantiradi	Ma'muriy chegaralar bilan chegaralangan, hamkor tashkilotlarni bir hududda joylashtirish mumkin emas
Innovasion faoliyat	Fan va ishlab chiqarish integratsiyasi yuzaga keladi. Ta'lim talab va taklif asosida shakllanadi. Ilmiy tadqiqot institutlari aniq maqsadli qo'llab quvvatlanadi. Venchur korxonalar paydo bo'ladi	Fan yutuqlarini ayniqsa to'qimachilik mashinasozlikda erishilgan yutuqlarni moliyaviy qo'llab quvvatlash uchun chettdan yordam kerak bo'ladi
Investisiyani jalb qilish	Hudud tabiiy, iqtisodiy-ijtimoiy va demografik imkoniyatlarga ega. Jahon bozorida pirovard maxsulotga domiy talab mavjud. Asosiy fondlarni barpo qilish boshqa sanoat tarmoqlariga nisbatan arzon	Jahon va mintaqa bozorida qiyosiy ustunlikga ega bo'lish qiyin, mavsumiylik, texnologik jarayonni bosqichlarini ko'pligi tufayli daromadning kechikishi, sanoatning ayrim tarmoqlariga nisbatan samaradorligini pastligi, yuqori hosil olish kafolatmaganligi
Hudud va tarmoq	Eksport salohiyat yuksaladi. Paxta xom-ashyosi miqdori va uni qayta ishlashdagi mutannosiblik yuzaga	Tarmoq korxonalaridagi ishlab chiqarish jarayoni umumiy maqsadga bo'ysundirilganligi tufayli ba'zi

	keladi.To’liq siklli ishlab chiqarish shakllanadi. Qishloq xo’jaligi zamon talablari asosida rivojlanadi. Moliyaviy imkoniyatlar ortishi tufayli asosiy fondlar xajmi ortadi. Aholi daromadlari va bandligi ortadi. Iqtiodiy-ijtimoiy infratuzilmalar shakllanadi	korxonalar o’zining natijasi uchun emas umumiy natija uchun ishlaydi. Kompleks ihtisoslashuv natijasida bozordagi arzimas o’zgarishlarga ishlab chiqarishga ta’sir ko’rsatadi
	Imkoniyat	**Tahdid**
Xom-ashyo	Xom-ashyoni o’zi yoki hamkor ishlab chiqaruvchilar bir hududda yetishtiradi	Xom-ashyo sifati kuzgi ob-xavo sharoitiga bog’liq. Hosildorligi mavsumdagi ob-xovoga bog’liq va xom-ashyo tan narxida kutilmagan o’zgarishlar bo’lishi mumkin
Boshqaruvni tashkil etish	Mexnat resurslariga bo’lgan talab ortadi. Boqimanda ish o’rinlari keskin kamayadi. Mexnat resurlarining xarakati tezlashadi. Iqtisodiyotda katta kuch sifatida umumiy muammolarni tez hal qiladi. Konsalting firmalar faoliyatini yo’lga qo’yish orqali istemol bozori yaxshi o’rganiladi. To’liq iqtisodiy tizm joriy etiladi. Davlatning ishtiroki kamayadi	Boshqarishada katta samara bergan usul bu hududda aksincha bo’lishi mumkin. To’liq iqtisodiy tizmni joriy etilganligi tufayli bozordagi sharoitni o’zgarishi keskin qarorlar qabul qilishga sabab bo’ladi. Tez fursatlarda yirik korxonalarni barpo etish ulrning keyingi faoliyatini nazorat qilishni qiyinlashtiradi
Ishlab chiqaruvchi tashkilotlar hamkorligi	Paxta-to’qimachilik klasterlarini egasi bir bo’lishi ishlab chiqaruvchi tarmoqlarni bir maqsadga bo’y sundiradi. Umumiy infratuzilmadan foydalanish iqtisodiy samaradorlikga olib keladi. Moliyaviy muammolarni birgalikda hal qilinadi bir maqsad sari intiladi. Venchur korxonalar, ilmiy tadqiqot institutlarini tashkil etish hamda marketing bo’limlarini yaxshi ish tashkil etishi katta imkoniyat beradi	Hududiy majmuaning bir-biriga qattiq bog’lanishi va ishlab chiqarish jayonini yirik ko’lamda amalga oshirilishi tashqi ta’sir vaqtida sharoitga moslashuvchanlikni pasaytiradi
Aloqador tashkilotlar hamkorligi	Ishlab chiqarishda bilvosita ishtirok etadigan korxonalar bilan kelishuvlar faqat iqtisodiy manfaatlarga tayanadi hamda yangi bosqichga ko’tariladi. Ba’zi aloqador tashkilotlarning hududiy yaqinlashuvi kuzatiladi	Ma’muriy tizim ta’siri kam bo’lganligi uchun aloqador tashkilotlarda ishlab chiqrarish jaryonidagi o’zgarishlar yoki silkinishlar klaster tizimiga tez ta’sir qiladi

Yuqoridagi SWOT- tahlilining ba'zi bir jihatlariga izox berib lozim. Paxtani ekishdan tortib undan tayor maxsulot yaratishgacha bo‘lgan jarayonda yerni egasini topish zarur va bu bo‘g‘in o‘z mehnatidan manfatdor bo‘lishi kerak. Klaster tizimidagi ishchi-xizmatchilarga alohida e’tibor kerak va bu e'tiborni xodim sezishi lozim, yangi tizm imkoniyatlarini tushintirish ularga iqtisodiy, ma'naviy yordam

berish kerak bo‘ladi. Andijon viloyatida hududiy tashkil etilayotgan paxta-to‘qimachilik klasterlari ma'lum bir ma'muriy hudud ichida tashkil etilmoqda bu holat klasterlar orasida raqobatga ta'sir qiladi. Shu sababidan klasterlarni aniq bir chegarada tashkil etishni olib tashlash kerak, tuzilma hududiy kengayib yirik transmilliy korparasiyaga aylansin shunda jahon miqiyosidagi brendlar yaratiladi. Mintaqa va jahon miqiyosida ustunlikga ega bo‘lish qiyin buning eng asosiy sababi, to‘qimachilik bilan bog‘liq mashinasozlik zavodlari bugungi kun talabi darajasida ishlash imkoniga ega emasligi, bu esa daromadning katta qismi chet elga chiqib ketishiga sabab bo‘ladi va oqibatda tannarx ortadi. Shu sababdan kichik sexlar barpo qilish bu sexlar butlovchi qismlar tayorlashi kerak bo‘ladi, keyinchalik bu sexlar kengayib borishi lozim. Imkon bo‘lsa bu sexlar klasterning ilmiy tadqiqot markazlari bilan birikib ishlab chiqaruvchining o‘ziga xos ustun jihatlarini yaratishi lozim. Paxta-to‘qimachilik klasterlariga eng katta taxdid bu ob-havoning qanday kelishi, urug‘chilikni rivojlantirish klasterga bu tahdiddan qisman qutilish imkoniyatini beradi. Klasterlarda ishlab chiqarish sikllining uzoq davom etishi va yirik majmua shakllanishi ba'zi xollarda bozordagi o‘zgraishlarga tez moslashuvchanlikni pasaytiradi. Bir-biriga bog‘liq turli tarmoqlarni bir maqsad yo‘lida biriktirish davomida, bir tarmoqdagi o‘zgarish boshqa tarmoqlarga ham tez va kuchli ta'sir ko‘rsatadi.

Xulosa: Klasterlarni iqtisodiy geografik tahlil etish, hududiy-tizmli tahlil qilishni talab etadi;

•Paxta-to‘qimachilik klasterlarini hududiy tashkil etishda tabiiy, iqtisodiy-ijtimoiy va demografik omillarni tahlil qilish;

•Ishlab chiqaruvchi tarmoqlar aloqalarini tahlil qilish;

•Ishlab chiqarishni hududiy tashkil etish natijasida sodir bo‘layotgan o‘zgarishlarni baholash;

•Baholash, mavzuli kartalar yaratish, SWOT-tahlilini amalga oshirish;

•Majmuadagi mavjud va kutiliyotgan muammolarni aniqlash va shu yuzasidan aniq maqsadli dasturlar ishlab chiqish.

Foydalangan adabiyotlar:

1. O‘zbekiston Respublikasi Prezidentining 2023 yil 11 sentyabrdagi PF158-son Farmoniga 1-ILOVA

2. Портер Майкл. Конкуренция: Пер. с англ. / Майкл Портер. – М. и др.: Вильямс, 2003. 605 с.

3.Портер М.Э. Конкуренция. Пер. с англ. - М.: Издат. Дом «Вильямс», 2001.

4. Баранчиков Е.В., Горохов С.А., Козоренко А.Е. и др. под ред. Баранчикова Е.В. География – 6 е-изд., стер. – М.: Издателский центр «Академия» 2009. – 480 с.

5. Бергман Э., Фезер Э. Индустриальные и региональные кластеры. М.: Деловой экспресс, 2014. - 222 с.; 1.1 бор

6. Костенко О.В. Региональная кластерная политика: – Киров: Вятская ГСХА, 2016. - 162 с.; 1.1 бор

7. Лаврикова Ю.Г. Кластеры как рыночный институт пространственного развития экономики региона. Автореф. дис. докт. экон. наук: – Екатеринбург, 2009. - 47 с.; 1.1 бор
8.Портер М.Э. Международная конкуренция. - М.: Международные отношения, 1993. - 896 с.; 1.1 бор
9. Ergashev S.A. Andijon viloyatida klasterlar tashkil etishning hududiy jihatlari.- "Экономика и социум" №7(110) 2023

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STUDY ON RESPONSE OF ECOLOGICAL ENVIRONMENT IN URBANIZATION PROCESS OF ORDOS, CHINA

Abstract. Taking Ordos in Inner Mongolia as the research object, a coupling coordination and decoupling model was constructed to analyze the interaction and coupling relationship between urbanization and ecological environment in Ordos from 2003 to 2018. The results showed that: (1) the comprehensive development level of urbanization and ecological environment showed an upward trend, and the development of urbanization was ahead of the ecological environment for a long time; (2) The coupling degree and coupling coordination degree of urbanization and ecological environment continue to increase; (3) The decoupling index shows mainly three decoupling regimes: strong decoupling, weak decoupling and strong negative decoupling. (4) It is suggested to explore the ecological economic development model that is compatible with the carrying capacity of resources and environment.

Key words: Urbanization；Ecological environment；Coupling Coordination Model；Decoupling index; Ordos.

Coordinated development of urbanization and ecological environment is an important research content for ecological security and high-quality development in the Yellow River basin. Ordos, as an important ecological node city in the Yellow River basin, is located in the southwest of Inner Mongolia Autonomous Region, surrounded by the Yellow River on three sides in the northwest, the ancient Great Wall on the south, and adjacent to three provinces and regions of Jin, Shaanxi and Ning. It is a typical resource-based city, with extremely rich coal and gas resources. With the implementation of the strategy of opening up to the West and the rapid development of Inner Mongolia's industrial economy, Ordos has rapidly developed into the country's largest coal production base and a resource-based industrial city dominated by the coal and gas industries. Its social economy continues to grow at a rapid rate, and the level of industrialization and urbanization continues to improve. At the same time, ecological and environmental issues have become increasingly prominent in the rapid urbanization process. Ecological and environmental issues have become important obstacles to high-quality development in urbanization.

Therefore, ecological environment response studies have been carried out during the urbanization process, and corresponding countermeasures and recommendations have been proposed for sustainable development policies and coordinated development of urbanization and ecological environment in the Ordos region.

1. Literature review

Academics from home and abroad have made rich research achievements on the interplay between urbanization and the ecological environment. A large number of empirical studies have been carried out in foreign countries, mainly using PSR model [1], EKC curve [2] and decoupling theory [3]. Chinese scholars have innovatively proposed the Coupled Rubik's Cube theory [4], focusing on multiple research directions such as coupling model analysis and prediction [5], coupling driving mechanism [6], decoupling model [7], and geographic detector [8]. Empirical analysis has focused on the Yangtze River Basin, Yellow River Basin, Beijing-Tianjin-Hebei Province and other levels. Based on this, this paper takes Ordos from 2003 to 2018 as an example to construct a coupling coordination model of urbanization and ecological environment, and diagnoses the interaction between the two with the help of decoupling theory, in order to provide references for the coordinated development of urbanization and ecological protection in resource-based cities.

2. Index system and research methods

2.1 Index System

In accordance with the principles of scientific comprehensiveness and data availability, we construct a comprehensive system of evaluation metrics for urbanization systems and ecological environment systems, and establish the weights of each metric using the entropy weighting method. The urbanization system consists of population urbanization, social urbanization, economic urbanization, and spatial urbanization. The eco-environment system consists of three sub-systems: eco-environment level, eco-environment pressure, and eco-environment response. The data used in the study are mainly from the China Municipal Statistical Yearbook and the Ordos Statistical Yearbook from 2004 to 2019. In order to eliminate line effects, the raw data was normalized using bias-normalized data processing when evaluating the integrated development levels of the two systems.

2.2 Research method

Coupling degree model: Based on the relevant research results of the coupling model, $\boldsymbol{T}$ is the comprehensive development index of urbanization $\boldsymbol{U}(\boldsymbol{x})$, ecological environment $\boldsymbol{E}(\boldsymbol{y})$; $\boldsymbol{D}$ is the degree of coupling coordination, reflecting the level of system development; $\boldsymbol{C}$ is the degree of coupling, the strength of the interaction between the reacting systems; $\boldsymbol{\alpha}$, $\boldsymbol{\beta}$ is the undetermined weight, which is proposed as $\boldsymbol{\alpha} = \boldsymbol{\beta} = 1/2$ in this study.

$$C = \sqrt{\frac{U(X) \cdot E(y)}{\left(\frac{U(X) + E(y)}{2}\right)^2}}; \quad D = \sqrt{C \times T}; \quad T = \alpha f(x) + \beta g(y)$$

Decoupling model: DI_t represents the decoupling index of ecological environment to urbanization in t period. E_t and E_{t-1}represent the comprehensive index of ecological environment in year t and year t-1 respectively. U_t and U_{t-1} represent the comprehensive index of urbanization in year t and year t-1 respectively.

$$DI_t = \frac{(E_t - E_{t-1})/E_{t-1}}{(U_t - U_{t-1})/U_{t-1}}$$

3. Results and analysis

3.1 Timing analysis of the comprehensive level of urbanization

From 2003 to 2018, the overall urbanization index showed a rapidly fluctuating upward trend, rising from 0.0613 in 2003 to 0.8289 in 2018, with an average annual growth rate of 0.0467. Due to the impact of the global financial crisis and regional industrial structure optimization policies, the urbanization index showed a rapidly fluctuating upward trend. The two small fluctuations in 2008 and 2015 were reduced. After 2015, the comprehensive urbanization index showed a period of steady development, with sustained and rapid economic and social development on the back of abundant natural resources and the vigorous development of the resource-based economy.

3.2 Time series analysis of ecological environment comprehensive level

The overall composite index of ecological environment systems showed a slow fluctuation and upward trend, rising from 0.4447 in 2003 to 0.6601 in 2018. The overall index of the ecological environment has grown relatively slowly, and the protection and construction of the ecological environment has achieved certain results. In urban economic development, where natural resources are the leading industry, ecological environment governance and ecological environment construction have largely achieved synchronized development. It is particularly important to accelerate the improvement of the resource and energy structure, optimize the economic and industrial structure of the city, and continuously promote the construction of an ecological environment.

3.3 Timing analysis of coupling degree between urbanization and ecological environment

The coupling ratio increased from 0.6527 in 2003 to 0.9936 in 2018, an increase of 0.3409 and an annual increase of 0.0213. The trend of the change in the degree of coupling shows a rapid rise and tends to stabilize. The coupling degree type experienced the coupling evolution process of running-in (2003) - high-level coupling (2004) - high-quality coupling (2005-2018), and the coupling degree of urbanization system and ecological environment system was always in the high-quality coupling stage from 2009 to 2018, and maintained a long-term stable development trend of high-quality coupling.

3.4 Timing analysis of coupling coordination degree between urbanization and ecological environment

The degree of coupling coordination increased from 0.4064 in 2003 to 0.8601 in 2018, an increase of 0.4537 and an annual increase of 0.0284. The trend of the

degree of coupling coordination shows a fluctuating, slowly rising trend. The coupling coordination degree type experienced the coupling coordination process of mild dissonance (2003-2006) - moderate coordination (2007-2008) - good coordination (2009-2018), and reached the maximum coupling coordination degree of 0.8601 in 2018, but there is still a certain gap from achieving high-quality coupling.

3.5 Analysis of the decoupling index between urbanization and ecological environment

From 2003 to 2018, the urbanization and ecological environment decoupling index mainly shows five types of decoupling states: strong decoupling, expansionary negative decoupling, weak decoupling, strong negative decoupling, and regressive decoupling. In terms of the proportion of time in the decoupling index, the strong decoupling is 35.71 %, the expansionary negative decoupling is 28.57 %, the weak decoupling is 21.43 %, and the strong negative decoupling is 21.43 %. The overall process alternates between four decoupled states, indicating that the urban development of Ordos is in a passive and unsustainable state for the ecological environment.

4. Conclusions and Suggestions

Based on the coupling degree model and decoupling theory, this paper analyzes the ecological environment response in the process of urbanization by taking Ordos as an example, and draws the following conclusions: Ecological environment is an important factor restricting the development of urbanization, ecological environment governance and protection is an important basis and guarantee for realizing high-quality development of urbanization, and the basic concept of urbanization development with ecological priority and green development must be established; the decoupling exponents mainly show four decoupling regimes: strong decoupling, expansive negative decoupling, weak decoupling, and strong negative decoupling. Urbanization and the ecological environment have been in a long-term evolution of mutual adaptation and change, with the rate of urbanization growing faster than the rate of resource consumption and discharge of pollutants, while the regional ecological environment has not been effectively improved.

Ordos delves into ecological economic development models that are compatible with the carrying capacity of resources and the environment. The first is to strengthen the comprehensive management of the ecological environment, promote regional green development and speed up the construction of ecological protection barriers. We will jointly control water pollution in key river basins and strengthen cross-regional prevention and control of air pollution. The second is to optimize and adjust the industrial structure, change the economic development pattern, focus on ensuring a national energy security strategy, increase the utilization rate of energy and mineral resources, and promote industrial chain refinement and modernization. Third, vigorously introduce high-tech enterprises and research and development institutions, promote the upgrading of traditional industries and emerging industries in the region, promote the upgrading and development of

traditional industries, vigorously develop emerging industries such as cultural tourism, and promote the integrated development of urban and rural economy and enhance the attractiveness of cities.

Acknowledgment:

This study is supported by the Natural Science Foundation of Inner Mongolia Autonomous Region of China (Grant No.2021MS04005),and the Scientific research project of universities in Inner Mongolia Autonomous Region (Grant No. NJZY21241, NJZY21243), and The Annual project of the Academy of Social Sciences of Inner Mongolia(Grant No.2022SKF018, 2023SKF053), and the Scientific Research Project of Jining Normal University (Grant No. jsky202212).

References:

[1]BERGER A R, HODGE R A.Natural Change in the Environment: A Challenge to the Pressure State-Response Concept [J].Kluwer Academic; Publishers,1998,44(2):255-265.

[2]GROSSMAN G M, KRUEGER A B. Economic Growth and the Environment [J].Nber Working Papers,1995,110 (2):353-377.

[3]BRAN F, IOAN I.Indicators to Measure Decoupling of Economic; Growth from Ecologic; Pressure [J].Metalurgia Internationa1,2009,14:158-162.

[4]LIU Haimeng, FANG Chuanglin, LI Yonghong.The Coupled Human and Natural Cube: A conceptual frameworkfor analyzing urbanization and eco-environment interactions [J].ActaGeographicaSinica,2019,(08):1489-1507.

[5] Cui Mu-hua.The Relationship of Coupling Coordination between Urbanization and Ecological Environment-A Case of Urban Cluster in the Central Plains [J].Economic Geography,2015,(07):72-78.

[6] SUN Huangping，HUANG Zhenfang，XU Dongdonget al. The Spatial Characteristics and Drive Mechanism of Coupling Relationship between Urbanization and Eco-Environment in the Pan Yangtze River Delta [J].Economic Geography,2017,37(02): 163-170+186.

[7] Liu Hehe, Yang Qingshan, Zhang Yu.Urbanization and Ecological Environment Effect in Northeast China Based on Decoupling Analysis [J].Scientia Geographica Sinica, 2016,36(12): 1860-1869.

[8] REN Ya-wen，CAO Wei-dong，ZHANG Yu，SU He-fang ，WANG Xue-wei. Temporal and Spatial Coupling Characteristics of Urbanization and Ecological Environment of Three Major Urban Agglomerations in the Yangtze River Economic Belt [J].Resources and Environment in the Yangtze Basin, 2019,28(11): 2586-2600.

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RESEARCH ON THE COUPLING RELATIONSHIP BETWEEN TOURISM AND NEW-TYPE URBANIZATION IN INNER MONGOLIA, CHINA

Abstract. Coordinated development of tourism and urbanization is an important path for new-type urbanization. The coupling degree model was used to empirically analyze the interplay between tourism and new-type urbanization in Inner Mongolia. The research results show that the overall development level of tourism and new-type urbanization shows a slow rising trend, while tourism lags behind new-type urbanization. The overall coupling is high, and the long-time coupling properties are of high quality. The degree of coupling coordination is improved more quickly, and high-quality coordination is eventually achieved; Proposals have been put forward to build beautiful new towns and promote green tourism.

Key words: Tourism; New-type urbanization; Coupling coordination; Inner Mongolia.

Promoting new-type urbanization is an important path for high-quality development in Inner Mongolia and an internal driving force for sustainable and balanced growth of the regional economy in the future. Due to its special advantages of low energy consumption, low pollution, high added value, strong industrial linkage and high resource utilization efficiency, tourism has become an important new engine for the construction of ecological security barrier in northern China, and a new power source for promoting new-type urbanization and economic growth [1-2]. The coordinated development of tourism and urbanization is an important path for new-type urbanization [3]. As a national strategic highland for ecological and environmental protection and high-quality development in the Yellow River basin, Inner Mongolia has taken an important role in promoting high-quality development in the Yellow River basin and exploring new-type urbanization development models. Identifying a coordinated development mechanism for tourism and new-type urbanization in Inner Mongolia will help promote the construction of new-type urbanization in the Yellow River Basin and explore high-quality development models for new-type tourism urbanization.

Relevant scholars at home and abroad have conducted in-depth analysis of the interaction between tourism and urbanization [4-8], which provides important theoretical support for the study of this paper. With the deepening process of new-type urbanization, the interactive development relationship between tourism and new-type urbanization has become a new research focus. As an important ecological security barrier in northern China, Inner Mongolia has witnessed rapid development of tourism and urbanization in recent years. However, research on the coupling between tourism and new-type urbanization in Inner Mongolia is relatively lacking. Therefore, in this paper, we study Inner Mongolia based on panel data from 2000 to 2020 and analyze the coupled interaction dynamics of tourism and new-type urbanization in Inner Mongolia in a comprehensive way using the theory of cooperative development and the coupling degree model.

1. Research methods and data sources

1.1 Index system construction

Based on the comprehensive consideration of the interaction mechanism between tourism development and new-type urbanization, and following the principles of scientific, comprehensive, representative and accessible data and indicators, the tourism subsystem index system is constructed from four aspects: tourism market, tourism economy, tourism industry and tourism support. The new-type urbanization subsystem index system is constructed from four aspects: economic urbanization, population urbanization, social urbanization and land urbanization.

Table 1. Tourism and New-type Urbanization index system

Structure type	Index type	Index
Tourism	Tourism Market	Number of domestic tourists, Number of inbound tourists, Total number of tourists
	Tourism Economy	Domestic tourism revenue, International tourism revenue, Total tourism revenue
	Tourism Industry	Total number of travel agencies, Number of star hotels, Number of employees in the tertiary industry
	Tourism Support	Passenger turnover, Per capita consumption expenditure of urban residents, Mileage of highway routes
New-type Urbanization	Economic Urbanization	Gross regional product, Gross tertiary industry product, Gross regional product per capita
	Population Urbanization	Total population at year end, Urbanization rate, Number of employed persons
	Social Urbanization	The number of college students, The number of health technicians, The number of full-time teachers
	Land Urbanization	Gross regional product, Per capita urban road area, Green coverage rate of built-up areas

1.2 Data Sources

The index data of tourism and new-type urbanization in this paper are from Inner Mongolia Statistical Yearbook (2001-2021) and China Tourism Statistical

Yearbook (2001-2021), and the individual missing data are supplemented by interpolation method.

1.3 Research Methods

Data processing: Due to the different data dimensions and orders of magnitude of the original data, the original data need to be normalized before analysis. This paper chooses the standardized method to process the original data.

Coupling degree model: The concept of coordination degree model in physics is adopted to measure the interaction and mutual influence between tourism and the new-type urbanization system.

$$C=\sqrt{\frac{U(X)\cdot E(y)}{\left(\frac{U(X)+E(y)}{2}\right)^2}}\ ;\quad T=\alpha U(x)+\beta E(y)\ ;\quad D=\sqrt{C\times T}$$

Where, ***E (y)*** is the new-type urbanization function; ***U (x)*** is the tourism function; T is the comprehensive evaluation index; ***C*** is the coupling degree; ***D*** is the coupling coordination degree; ***α*** and ***β***are undetermined coefficients. This paper considers that tourism and new-type urbanization are equally important in the system. According to the research practice, ***α***=***β***=0.5 is taken.

2. Result analysis

2.1 Comprehensive evaluation of tourism

From 2000 to 2020, the integrated index of tourism in Inner Mongolia showed a slow rise and sudden decline, rising from 0.0310 in 2000 to 0.9614 in 2019 and then suddenly falling to 0.5724. The evolution process was comprehensively manifested in two important development periods, the slow rise from 2000 to 2019 and the rapid decline from 2019 to 2020 when all urban economic activities were halted due to the novel coronavirus epidemic and the tourism industry was severely affected. Overall, new-type urbanization provides important tourism infrastructure such as culture and education, medical and health care, and public transportation for the rapid development of tourism. Inner Mongolia's tourism industry has strong overall development potential and has become a new economic growth point in the city's economic development.

2.2 Comprehensive evaluation of new-type urbanization

The composite index of new-type urbanization showed a slow rise. From 2001 to 2018, the 2020 composite index for new-type urbanization has long been ahead of the 2020 composite index for tourism, rising from 0.0119 in 2000 to 0.9123 in 2020. The composite index of new-type urbanization shows strong capacity for continued growth. At the same time, it can be divided into two phases. The 2000-2010 periods were a period of rapid growth, and infrastructure construction during the period of urbanization achieved remarkable results. From 2011 to 2020, affected by the policy adjustment of regional economic and industrial structure, it shows an evolutionary process of slow rise to stability, the construction of urban infrastructure tends to be perfect, the construction of urban ecological environment contributes to the beautification of urban landscape, and the construction of urban human environment and tourist reception capacity improves year by year.

2.3 Comprehensive analysis of coupling degree

The trend of the degree of coupling shows a rapid rise and tends to stabilize. The coupling rapidly increases from 0.8951 in 2000 to 0.9997 in 2019 and decreases slightly in 2020. The tourism industry and the new-type urbanization system have shown excellent cooperation in developing and evolving processes and trends. The coupling degree type has experienced two coupling evolution stages, including high-level coupling (2000) and high-quality coupling (2001-2020). From 2001 to 2020, the tourism and new-type urbanization systems have been in a high-quality coupling phase for a long time and have maintained a steady trend of high-quality coupling for a long time. In 2020, the coupling will only decrease very slightly due to the impact of the novel coronavirus epidemic, but it still has strong potential for sustainable development.

2.4 Comprehensive analysis of coupling coordination degree

The change trend of coupling coordination degree shows a steady and slowly rising evolution trend, and the coupling coordination degree slowly rises from 0.1385 in 2000 to 0.9679 in 2019 and drops to 0.8501 in 2020, which can be divided into three stages: 2000-2003 was a period of slow growth, 2014-2019 was a period of sustained rapid growth, and 2020 showed a decline. The coupling coordination degree type experienced six coupling coordination degree evolution processes, including severe coordination (2000-2003), mild coordination (2004-2006), moderate coordination (2007-2011), good coordination (2012-2016), good coordination (2017-2019), and good coordination (2020). From 2017 to 2019, the tourism industry system and the new-type urbanization system have achieved coordinated development. Despite the impact of the novel coronavirus epidemic, 2020 has shown good coordination characteristics, with tourism and new-type urbanization already on a good trend of coordinated development.

3. Conclusions and Suggestions

3. 1 Conclusion

Based on the theory of collaborative development and the coupling degree model, this paper analyzes the interactive coupling relationship between tourism and new-type urbanization by taking Inner Mongolia as an example, and draws the following conclusions: Both tourism and new-type urbanization have shown a good ability of sustainable growth and a trend of collaborative development. Tourism in Inner Mongolia has developed into a new driving force and a new engine for the sustainable and high-quality development of the regional economy;Both the degree of coupling and the degree of coordination between the two showed continuous growth trends, and the ability of tourism and new-type urbanization to develop in a synergistic manner improved significantly, indicating that new-type urbanization has played a positive role in promoting tourism and regional economic development. New-type urbanization is conducive to boosting tourism, which will be an important new driving force for high-quality development in Inner Mongolia in the future.

3.2 Suggestions

Define the development goals for new-type urbanization, take into account the actual development of different regions, and strive to build beautiful new towns

suitable for living, working and traveling, so as to enhance people's happiness in life. Give full play to the role of tourism in promoting urbanization development, make full use of the comprehensive benefits of the tourism industry, and comprehensively use "tourism + real estate", "tourism + technology", "tourism + transportation", "tourism + poverty alleviation" and other means to promote urbanization construction; coupling the development plans of tourism and urbanization, promoting the integration of tourism in Inner Mongolia, enhancing the city's reception service functions, and enhancing tourism service awareness and service capacity; change the mode of tourism development, promote high-quality global tourism, promote the transformation and upgrading of Inner Mongolia's tourism industry, advocate green tourism, fully release the driving force of tourism to promote the development of new-type urbanization, so as to promote the coordinated and high-quality development of tourism and new-type urbanization.

Acknowledgment:

This study is supported by the Jining Normal University College Students' Innovation and Entrepreneurship Training Program: Research on the coupling coordination mechanism and spatio-temporal differentiation Pattern of tourism and new-type urbanization in Inner Mongolia (Grant No. S202211427019).

References：

[1] Wang Qin, Yu Qiuyue, Huang Dayong. Study on the dynamic relationship between new-type urbanization and tourism development-A case study of the Yangtze River Economic Belt [J]. Statistics & Decision, 2021, 18:72-75.

[2] Zhang Guanghai, Wang Xinyue. The Concept of Touristization and the Relationship with the New Four Modernizations [J]. Business and Management Journal, 2014, 36(1):110-121.

[3] Zhong Jiayu, Liu Siwei, Xiong Xi. Analysis on the Regional Difference of Coordinated Development between Tourism and Urbanization [J].Economic gcography,2014,34(2):187-192.

[4]Mullins P. Tourism Urbanization [J].International Journal of Urban and Regional Research, 1991,15(3):326-342.

[5] Akama J S, Kieti D. Tourism and Socio-economic Development in Developing Countries: A Case Study of Mombasa Resort in Kenya [J].Journal of Sustainable Tourism, 2007, 15(6):735-748.

[6] Huang Zhenfang, Wu Jiang, Hou Guolin. Preliminary probing into tourism urbanization: a case study of metropolitan interlocking region in Yangtze River delta [J].Resources and Environment in the Yangtze River Basin, 2000, 9(2):160-165.

[7]Lu Lin, Ge Jingbing. Research progress and enlightenment of tourism urbanization [J].Geographical Research, 2006, 25(4):741-750.

[8]Tang Hong, Liu Yujing, Ma Xuefeng.Evaluation on the coordinated development effect of tourism and new-type urbanization: a case study of Zhangjiajie [J].Economic gcography,2017,37(2):216-322.

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STUDY ON HARMONIOUS DEVELOPMENT OF POPULATION, ECONOMY, RESOURCES AND ENVIRONMENT IN INNER MONGOLIA, CHINA

Abstract. Scientific evaluation of the synergistic development capacity of the population, economy, resources and environment of Inner Mongolia has important theoretical value for promoting high-quality development in Inner Mongolia. By constructing an index system that comprehensively assesses the population, economy, resources and environment of Inner Mongolia, analyze the interplay of the three from 2000 to 2021. The results show that: (1) the comprehensive development index is fluctuating and rising, and the comprehensive economic development index is developing ahead of time; (2) the coupling degree and coupling coordination degree show an upward trend, and the coupling coordination degree still has a certain space from the high-quality coupling stage; (3) propose to optimize the industrial structure and enhance the ability of sustainable economic growth; save energy and resources, enhance ecological environment management and protection; Population structure should be optimized, and investment in education and talent recruitment should be strengthened.

Key words: coupling coordination; Population - Economy - Resources and Environment; Inner Mongolia.

1. Introduction

The coordinated development of population, economy, resources and environment is an important category to measure the relationship between man and nature and between man and social life [1]. A large number of scholars have carried out a great deal of useful exploration and practice on the coupling and coordinated development of population, economy, resources and environmental systems. The perspective of academic research has gradually changed from the initial qualitative research to quantitative research [2-7], and they all believe that the coordinated development of population, economy, resources and environment is the fundamental path to achieve sustainable development. It is a central and key issue for the regional social economy to achieve high-quality sustainable development. To explore in depth how to regard the regional development process as a complex system composed of population, economy, resources and environment, and to

clarify the interactive coupling mechanism and coupling process formed by multiple correlations among the three, so as to effectively promote the coordinated development of population, economy, resources and environment and achieve more sustainable regional development. This is important for the high-quality development of the country's regional economy.

Inner Mongolia, in the western part of China, is a vast region with stark regional differences. It is a typical research area that comprehensively reflects the characteristics of sustainable development in terms of population, economy, resources and environment. By comprehensively applying multidisciplinary theories and methods, this study makes a quantitative analysis of the coupling and coordinated development of population, economy, resources and environment, expands the research idea of sustainable development, enhances the theoretical significance of population, economy, resources and environment in the context of high-quality development in Inner Mongolia, and enhances the credibility of regional sustainable development in terms of research methods. It provides a theoretical basis for the state to formulate a sustainable development strategy and a regional development plan for Inner Mongolia, as well as a macro-control policy for Inner Mongolia's population, economy, resources and environment. The study on the coordinated development of Inner Mongolia's population, economy, resources and environment will be of great theoretical and practical value in promoting the high-quality economic development of Inner Mongolia Autonomous Region, guiding the construction of a new type of urbanization in the new period of Inner Mongolia's development, and promoting the sustainable development of the region.

2. Research method

2.1 Establishment of index system

By referring to the statistical index system of relevant literature and data in the CNKI database and relevant statistical yearbook data, and in full accordance with the scientific accuracy and accessibility of data acquisition, the evaluation index system was strictly screened through frequency statistics, correlation analysis, expert consultation, and other methods from three dimensions: population, economy, resources and environment. A total of 18 representative indicators were selected to construct a comprehensive system of evaluation indicators for population, economy, resources, and environment.

Table 1. Index system of population-economy-resources and environment comprehensive evaluation

System layer	Index level	Unit	Attribute	Weight
Population system	Total population at year end	People	+	0.1797
	Urbanization rate	%	+	0.2093
	Male to female sex ratio		+	0.1166
	Birth rate	‰	+	0.1081
	Mortality rate	‰	+	0.3001
	Natural rate of population growth	‰	+	0.0861
Economic	Gross regional product	Yuan	+	0.2095

system	Gross domestic product per capita	Yuan	+	0.2111
	The proportion of secondary industry	%	+	0.1081
	The proportion of tertiary industry	%	+	0.1099
	Total retail sales of consumer goods	Yuan	+	0.2023
	Total import and export trade	Yuan	+	0.1592
Resource environment system	Total energy production	Tce	+	0.1625
	Total annual water supply	Ton	-	0.1471
	Total annual electricity consumption	kw·h	-	0.1457
	Domestic garbage removal volume	Ton	+	0.1408
	Per capita public green space	m^2/People	+	0.1915
	Green coverage rate of urban built-up areas	%	+	0.2122

2.2 Indicator data source and processing

The data in this study were all sourced from the China City Statistical Yearbook (2001-2022) and Inner Mongolia Statistical Yearbook (2001-2022), so as to ensure the authenticity and authority of the obtained data.

In order to eliminate the effect of the differences in the dimensionality of each index within the subsystems and among the main influence factors on the results of the calculations, and to ensure a scientifically rigorous evaluation of the results, the original data was normalized using range normalization in this study.

2.3 Calculation of weight

In order to eliminate subjective arbitrariness in the process of index weighting as much as possible and overcome the shortcomings of the single objective weighting method, this paper adopts the entropy method and the coefficient of variation method in the objective weighting method to respectively assign weights to the original indicators. Finally, the arithmetic mean of the two methods is used as the combined weight to improve the realism and accuracy of the quantitative analysis of the calculated results.

2.4 Construction of coupling model

$$c = \left\{ \frac{f(x) \cdot g(y) \cdot h(z)}{\left[\frac{f(x) + g(y) + h(z)}{3} \right]^3} \right\}^{\frac{1}{3}} ; \quad D = \sqrt{C \times T} ; \quad T = \alpha f(x) + \beta g(y) + \chi(z)$$

Based on the relevant research results of the coupling model, ***T*** is the comprehensive development index of population ***f(x)***, economy ***g(y)***, resources and environment ***h(z)***; ***D*** is the degree of coupling coordination, reflecting the level of system development; ***C*** is the degree of coupling, the strength of the interaction between the reacting systems; α, β, χ is the undetermined weight, which is proposed as $\alpha = \beta = \chi$ =1/3 in this study.

3. Results and analysis

3.1 Comprehensive horizontal time series analysis

The integrated development index for population and the development index for resources and environment in Inner Mongolia showed a relatively clear upward trend. In particular, the integrated development index for resources and environment showed a clear fluctuating feature from 2000 to 2012 and a steady trend after 2013 due to the optimization of resource and energy structures and the transformation and upgrading of industrial structures. The integrated population development index has shown a slow growth trend in recent years due to declining birth rates and natural population growth rates. The Economic Development Index has been showing a trend of rapid and sustained growth, rising from 0.0278 in 2000 to 0.9336 in 2021, representing a growth rate of 0.9058 and an annual growth rate of 0.0412. The Economic Composite Development Index has shown advanced development since 2015. Moreover, the gap between the total population development index and the integrated development index for resources and the environment is growing year by year. Further optimizing the population structure, improving the utilization efficiency of natural resources, and strengthening the governance and protection of the ecological environment are central and key to improving the coordinated development capacity of the system.

3.2 Coupling degree timing analysis

From 2000 to 2021, the coupling degree of population, economy, resources and environment system in Inner Mongolia experienced three stages, namely run-in (2000) - high-level coupling (2001-2003) - high-quality coupling (2004–2021). The high-level coupling stage was realized in 2001 and the high-quality coupling stage in 2004. The long-term steady development trend of high-quality coupling continued into 2021, with the degree of coupling increasing from 0.6361 in 2000 to 0.9782 in 2021, with a growth rate of 0.3421 and an annual growth rate of 0.0156. The trend of the change in the degree of coupling coordination shows a continuous rise towards a steady trend. Through the above coupled evolutionary process, the population, economy, resources and environmental systems of Inner Mongolia have always been able to integrate with each other and develop cooperatively, as reflected in the overall picture. The advantages of rich natural resources and ecological environments have played a positive role in accelerating urbanization, promoting population development, and fostering sustainable economic growth. In the process of rapid urbanization, the industrial structure is optimized and upgraded, the urban infrastructure is constantly improved, the social medical, health, education, and other public utilities are improved year by year, and the overall economic and social environment is constantly optimized, thus achieving a high-quality coupling stage of long-term synergistic interaction between population, economy, resources and environmental systems.

3.3 Timing analysis of coupling coordination degree

From 2000 to 2021, the coupling of population, economy, resources and environmental systems in Inner Mongolia continued to increase, from 0.3696 in 2000 to 0.8420 in 2021, an annual increase of 0.6526 and 0.0215, respectively. The trend of the degree of coupling coordination shows a steady and continuous rise

(Figure 2). The coupling coordination type has experienced coupling coordination processes such as mild disadjustment (2000-2002), moderate coordination (2003-2009), and good coordination (2010-2021), and has been in a good coordination evolution stage for a long time, and has shown a good development trend. It comprehensively reflects that the type of coupling coordination degree of population, economy, resources and environment system in Inner Mongolia has experienced continuous optimization and adjustment in the past 22 years, and the overall coupling coordination degree has a trend of continuous improvement, but there is still a certain gap between reaching high-quality and high-quality coordination. In addition, through the comparative analysis of the comprehensive index of population, economy, resources and environment systems from 2000 to 2021, it was found that the advanced coupling and coordination type of resources and environment is more dominant, which can also reflect that good resources and environmental advantages are an important engine to continuously promote the sustainable development of the regional economy in Inner Mongolia. Capacity for sustainable regional economic growth and improved economic well-being are the main limiting factors that constrain the development of coupling and coordination in the system.

4. Conclusion and suggestion

4.1 Conclusion

This paper reviews relevant studies on the coordinated development of population, economy, resources and environment in Inner Mongolia, constructs a comprehensive evaluation index system of population, economy, resources and environment in Inner Mongolia, uses the coupling degree model to study the comprehensive development level and interactive coupling relationship of the three systems of population, economy, resources and environment in Inner Mongolia from 2000 to 2021, and draws the following conclusions:

(1) From the perspective of the comprehensive development level of the system, the comprehensive development index showed a continued slow rise, the comprehensive economic development index continued to grow prominently, the comprehensive resource and environment development index dominated from 2000 to 2014, the comprehensive economic development index advanced from 2015 to 2021, and the comprehensive population development index fluctuated;

(2) From the perspective of the coupling degree evolution process, the coupling evolution process consists of three stages: running-in (2000), high-level coupling (2001-2003) and high-quality coupling (2004–2021). After 2004, the coupling process was in the midst of a long period of high-level and high-quality coupling, reflecting a long period of well-coordinated development of population, economy, resources and environment.

(3) From the perspective of the evolution process of coupling coordination degree, the coupling coordination type experienced three coupling coordination stages, namely mild discoordination (2000-2002), moderate discoordination (2003-2009), and good coordination (2010-2021). Although the phase of good

coordination was reached in 2010 and will continue until 2021, there is still a large gap from the phase of high-quality coordination.

4.2 Suggestion

(1) Optimize the industrial structure and enhance the capacity for sustained economic growth.

Continue to implement the innovation-driven strategy and the action of "rejuvenating Mongolia through science and technology", optimize and upgrade our energy and strategic resource bases, enhance our ability to support scientific and technological innovation, transform traditional industries and enterprises with high and new technologies and advanced and applicable technologies, and expand and extend chains to make them more high-end, intelligent and green. Promote high-quality and efficient transformation of agricultural and livestock production bases, foster strategic emerging industries, transform and upgrade traditional industries, and accelerate the establishment of a modern industrial system with green features and advantages.

(2) Save energy and resources, and strengthen ecological and environmental governance and protection.

Coordinate the use of energy and resources and the distribution of industries to build a global model of ecological security. We should establish a new concept of ecological development, increase investment in science and technology, increase the application of science and technology in production, accelerate the green development of industries and the circular development of resource-based industries, optimize the efficiency of resource allocation, improve the utilization rate of energy and resources, and realize the circular use of resources. Upgrade the regional industrial base and modernize the industrial chain, raise the level of scientific and technological innovation in the region, and enhance regional innovation and development capabilities.

(3) Optimize the population structure, strengthen education investment and talent introduction

Further policy incentives to have a second child and increase the birth rate of the newborn population. Strengthen the development of higher education and vocational and technical education and expand the pool of innovative personnel who can meet the demands of transformation and development. Invest more in higher education, focus on personnel training, increase the proportion of higher-level talent, and provide intellectual support for industrial restructuring and economic development. Enhance vocational and technical training, improve the overall technical level and professional quality of corporate personnel, and provide adequate human capital for transformation and development.

Acknowledgment:

This study is supported by the Natural Science Foundation of Inner Mongolia Autonomous Region of China (Grant No.2021MS04005),and the Scientific research project of universities in Inner Mongolia Autonomous Region (Grant No. NJZY21241, NJZY21243), and The Annual project of the Academy of Social

Sciences of Inner Mongolia(Grant No.2022SKF018, 2023SKF053), and the Scientific Research Project of Jining Normal University (Grant No. jsky202212).

References:

[1] Zeng Weihua, Wang Huadong, Xue Jiyu, et al. Environment carrying capacity: a key to the coordination of the development of population, resources and environment [J]. China Population Resources and Environment,1991(2):33-37.

[2]Ma Shijun,Wang Rusong. The social-economic-natural complex ecosystem [J].Acta Ecologica Science,1984(1):1-9.

[3]Liu Xiaolin. Quantitative evaluation of coordinated development of regional population, resources, environment and economic system [J]. Statistics & Decision,2007(1):64-65.

[4]Qi Xiaojuan,Tong Yufen. Coordinative Development between Population, Economy, Resources and Environment in North-west Area of China [J]. China Population Resources and Environment,2008(2):110-114.

[5]Liu Jianhua, Huang Liangchao, Zuo Qiting. Evaluation of harmonious development of economy-population-resource-environment in the lower reaches of the Yellow River [J]. Resources Science, 2021, 43(2): 412-422.

[6]Cai Shaohong, Gu Cheng, Zhang Zaijie. Research on the Coordinated Development of Population-Resources-Environment-Economy in Western China from the Perspective of Space-Time Evolution [J]. Ecological Economy, 2022, 38(2): 168-175.

[7]Duan Yonghui, Jing Jianbang, Zhang Naiming. Analysis on the Coordination of Population, Resources, Environment and Economic Development in Shanxi Province [J]. Ecological Economy,2017(4):64-68,79.

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STUDY ON COUPLING RELATIONSHIP BETWEEN POPULATION STRUCTURE AND REGIONAL ECONOMY IN ORDOS, CHINA

Abstract. Population and economy are the central issues in the new-type urbanization. Coupling degree models are used to analyze the coupling between population structure and regional economy in Ordos. The results show that the coupling shows a trend of fluctuating rise and stabilization in the bulk, undergoing a process of high-level coupling and high-quality coupling. Coupled coordination shows a slow upward trend, and can be classified into five types: severe imbalance, mild imbalance, moderate coordination, good coordination and high-quality coordination, finally achieving the characteristics of coordinated development and evolution of population structure and regional economy. It has been proposed to coordinate the development of urban and rural areas, build urban-rural integrated industrial layouts and improve the region's endogenous development momentum. Suggestions include accelerating the transformation and upgrading of traditional industries, scientifically guiding the development of emerging industries, and improving regional scientific and technological innovation capabilities.

Key words: population structure; Regional economy; Coupling coordination; Ordos.

Population issue is an important foundation and core factor for the sustainable development of regional economy and society [1-2], and the change of population structure and regional economic development have a close relationship of mutual influence and mutual restriction. The evolution of the population structure in any country or region affects the sustainable development of the regional economy, and at the same time, in the process of adjusting and transforming and upgrading the industrial structure of the regional economy, it is often accompanied by a corresponding adaptive change in the population structure. At present, some scholars have analyzed the interaction between population and economy from a single research perspective such as age structure, gender structure, urban and rural structure, industrial structure and cultural structure [3-6]. Therefore, it is necessary to study quantitatively the relationship between population structure and regional economy from the macro perspective of the whole population structure.

The city of Ordos is located in the southwest of Inner Mongolia, with a total area of 87,000 square kilometers. It is an important export base for China's coal, natural gas and other natural resources, an important part of the Hohhot-Baotou-Erdos-Yulin urban cluster in the national plan, and an important node city in the Yellow River Basin ecological protection and high-quality development strategy. Under the background that the population structure is changing and the sustainable development ability of regional economy needs to be improved, exploring the coupling mechanism of the two systems of population structure and regional economy is of great significance to optimize the population structure of Ordos and promote the high-quality development of regional economy.

1. Research methods and data sources

1.1 Index system construction

Based on the interaction between population structure and regional economy, the index system for the population structure subsystem is constructed from four aspects: urban-rural structure, gender structure, employment structure, and cultural structure, based on scientific, systematic, and data availability principles. The index system for regional economic subsystems is constructed from four aspects: economic aggregate, economic structure, economic level and economic support.

Table 1. Population Structure and Regional Economic index system

Structure Type	Indicator Type	Indicator
Population Structure	Urban-rural Structure	Urban population, Rural population, Natural growth rate of population
	Gender Structure	Male population, Female population, Gender ratio
	Employment Structure	The proportion of employment in the primary industry, The proportion of employment in the secondary industry, The proportion of employment in the tertiary industry
	Cultural Structure	Number of full-time teachers, Number of scientific research practitioners, Number of health technicians
Regional Economic	Economic Aggregate	Gross regional product, Gross secondary industry product, Gross tertiary industry product
	Economic Structure	The proportion of the primary industry, The proportion of the secondary industry,The proportion of the tertiary industry
	Economic Level	Per capita GDP, Per capita disposable income of urban residents, Per capita disposable income of farmers and herdsmen
	Economic Support	Investment in fixed assets, Expenditure on education, Expenditure on science and technology

1.2 Data Sources

The data of population structure and regional economy indicators in this paper are all from Inner Mongolia Statistical Yearbook (2001-2023) and Ordos Statistical

Yearbook (2001-2023), and some missing data are supplemented by moving smoothing method.

1.3 Research Methods

Data processing: Due to the different data dimensions and orders of magnitude of the original data, it is necessary to normalize the original data before the analysis. In this paper, standardized methods are used to process the original data.

Coupling degree model: The concept of coordination degree model of physics is used to measure the interaction and mutual influence between population structure and regional economic system.

$$C=\sqrt{\frac{U(X)\cdot E(y)}{\left(\frac{U(X)+E(y)}{2}\right)^2}}\ ;\quad T=\alpha U(x)+\beta E(y)\ ;\quad D=\sqrt{C\times T}$$

Where, ***U (x)*** is the function of population structure; ***E (y)*** is the regional economic function; ***C*** is the coupling degree; ***D*** is the coupling coordination degree; ***T*** is the comprehensive evaluation index; ***α*** and ***β*** are undetermined coefficients. This paper considers that population structure and regional economy are equally important in the system, and takes ***α***=***β***=0.5.

2. Result analysis

2.1 Comprehensive evaluation of population structure

The composite index of population structure in Ordos shows a slowly fluctuating rise and change process from 2000 to 2022, rising from 0.0794 in 2000 to 0.8250 in 2022. The integrated performance is three important development periods, with 2000-2009 being a period of slowly fluctuating upswing. 2009-2010 is a period of rapid growth and 2011-2022 is a period of steady, slow growth. Influenced by the continuous growth and development of the urban economy in recent years, the overall population structure shows a relatively prominent trend of continuous optimization. Overall, population structure provides an important human resource foundation for regional economic development. The urban-rural structure is an important factor limiting the sustainable development of the regional economy in the long term.

2.2 Comprehensive evaluation of regional economy

The overall trend of the regional economic composite index showed a slow and continuous rise. The regional economic composite index for 2021-2022 exceeded the population structure composite index, rising from 0.0201 in 2000 to 0.8297 in 2022, showing strong capacity for continued growth. At the same time, it can also be divided into two phases, with 2000-2016 being a period of slow growth that lags behind the integrated index of population structure for a long time; from 2016 to 2022, affected by the adjustment of regional economic and industrial structure, it shows an evolutionary feature of first declining and then rising. After 2021, the regional economic composite index is ahead of the population structure composite index, showing the strong ability of the regional economy to develop sustainably.

2.3 Comprehensive evaluation of coupling degree

The trend of the coupling degree shows a rapid fluctuation followed by a steady increase from 0.8029 in 2000 to 1.0 in 2022, indicating a good co-evolution process between the population structure and the regional economic system. The coupling degree type experienced two coupling evolution stages, namely high level coupling (2000-2005) and high quality coupling (2006-2022). The coupling between the population structure system and the regional economic system in 2006-2022 has been in the high-quality coupling phase for a long time, and a steady trend of high-quality coupling has been maintained for a long time.

2.4 Comprehensive evaluation of coupling coordination degree

The trend of the coupling coordination degree shows a slow and continuous upward evolution, with the coupling coordination degree slowly increasing from 0.1998 in 2000 to 0.9096 in 2022 with a growth rate of 0.7098. 2000-2010 is a period of rapid growth and 2011-2022 is a period of slow growth. The type of coupling coordination degree experienced five evolution stages of coupling coordination degree, including severe coordination (2000-2003), mild coordination (2004-2007), moderate coordination (2008-2009), good coordination (2010-2020), and excellent coordination (2021-2022). In 2021-2022, the population structure system and the regional economic system have achieved coordinated development and entered an important period of high-quality coordinated development.

3. Conclusions and Suggestions

3.1 Conclusion

Based on the coupling degree model and cooperative development theory, this paper analyzes the interactive coupling relationship between population structure and regional economy by taking Ordos as an example, and draws the following conclusions: Both population structure and regional economic composite index show a good process of continuous growth and cooperative development trend, and urban and rural structure is an important factor restricting the sustainable development of regional economy in the long run; Both the degree of coupling and the degree of coupling coordination showed an increasing trend, and the ability to coordinate the development of population structure and regional economy improved significantly, indicating the positive impact of population structure change on regional economic development.

3.2 Suggestions

In line with the rural revitalization strategy, integrate the differences between urban and rural development needs, coordinate urban and rural integrated development, and increase endogenous impetus for regional development. Based on regional resources and environmental carrying capacity, and with market demand as an important guide for regional economic development, continue to optimize regional industrial structures and build urban-rural integrated industrial layouts. Vigorously develop higher education and vocational education to provide professional and technical personnel to support regional transformation and development. Make vigorous efforts to bring in high-level professionals and technical personnel to improve the regional capacity for scientific and technological

innovation. Accelerate the development of the social security system and continue to optimize the population structure. Accelerate the transformation and upgrading of traditional industries, promote deep integration of advanced technologies with traditional industries, guide the development of emerging industries in a scientific way, and create new drivers for economic growth.

Acknowledgment:

This study is supported by the Natural Science Foundation of Inner Mongolia Autonomous Region of China (Grant No.2021MS04005), and the Scientific research project of universities in Inner Mongolia Autonomous Region (Grant No. NJZY21241, NJZY21243), and The Annual project of the Academy of Social Sciences of Inner Mongolia(Grant No.2022SKF018, 2023SKF053), and the Scientific Research Project of Jining Normal University (Grant No. jsky202212).

References：

[1]Lin F, Chen J. A Study on the interactive relationship between regional human capital and industrial structure adjustment in Shanghai [M].London: Springer-Verlag, 2013.

[2]Golley J, Zheng W. Population dynamics and economic growth in China [J].China Economic Review, 2015(35):15-32.

[3]He Hailin, Tu Jianjun et al. Grey Relational Analysis of Population Structure and Economic Structure Coupling in China [J]. Journal of Southwest University (Natural Science), 2013.35(10):140-145.

[4]Wu Lianxia, Zhao Yuan, Ma Dingguo, et al. The Space-time Coupling Between Population and Economic Development in Jiangxi Province [J]. Scientia Geographica Sinica, 2015,35(6): 742-747.

[5]Xiong L, Zhang P Y, Tan J T, et al.Spatial-temporal coupling characteristics between population structure and economic development in Northeast China [J]. Journal of University of Chinese Academy of Sciences, 2017,34(3): 342-350.

[6]Yu Tingting, Song Yuxiang, A Rong et al. The Coupling Relationship Between Population Structure and Economic Development in Northeast China [J]. Scientia Geographica Sinica, 2018, 38(1): 114-121.

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MATCHING SECURITY: STRATEGIES FOR A SECURE FUTURE

Annotation. Traffic safety is a critical concern in modern society, as the number of vehicles on the roads continues to increase. With traffic-related accidents causing significant loss of life and property damage, it is crucial to implement effective strategies to ensure the safety of all road users. This article explores various approaches to enhance traffic safety and create a safer future for everyone.

Keywords: automobil, passenger, Pedestrian lane, traffic, traffic light, Traffic signs.

According to the data, a total of 10,001 traffic accidents occurred in Uzbekistan in 2021, resulting in 2,426 deaths and 9,230 deaths. Check out these statistics related to the causes of traffic accidents:

problems in organizing movement - 20.1 percent;
non-observance of the prescribed speed -20.1 percent;
crossing the place where the pedestrian crossing is not marked -13.8 percent;
inexperience of the driver - 9.1 percent;
neglecting children - 5 percent;
drunk driving - 1.4 percent.

Data on the number of traffic accidents committed in the 9th month of 2022 have not yet been disclosed.

As can be seen from the above statistics on the causes of the accidents, one out of every five accidents was caused by non-observance of the speed rule, and in the same number of cases, traffic accidents were caused by "problems in the organization of movement".

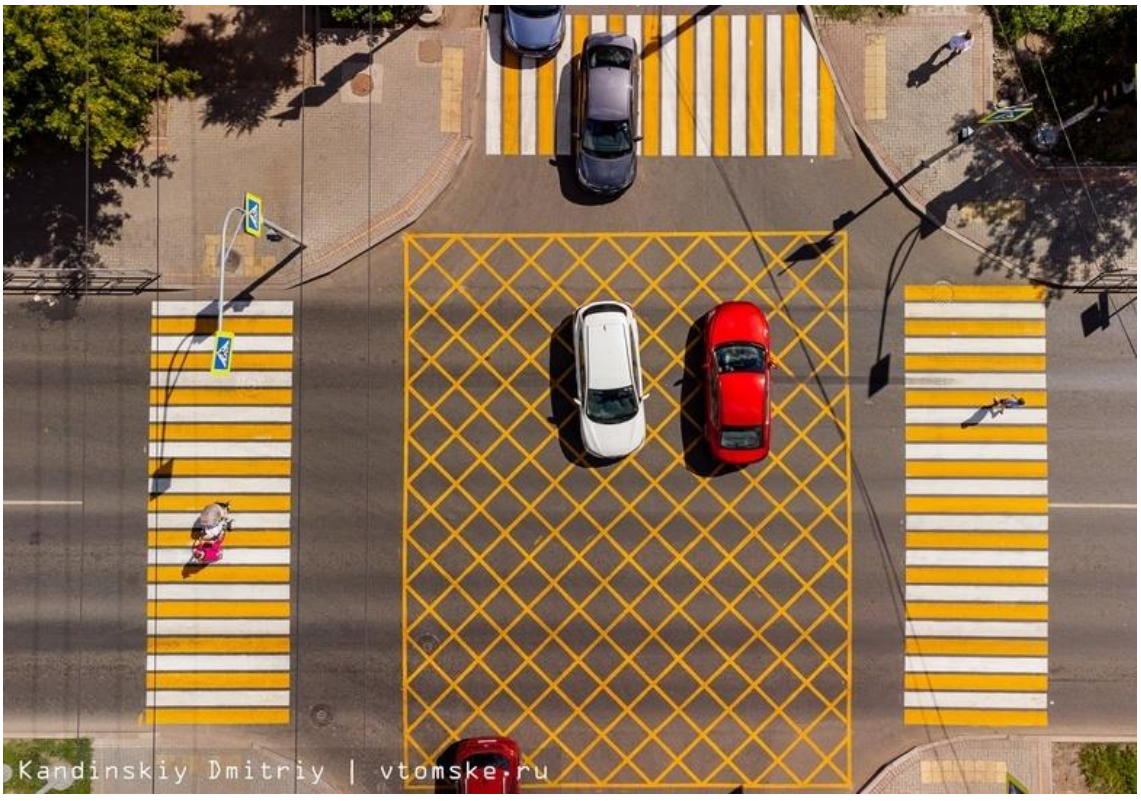
Traffic safety is a critical concern in modern society, as the number of vehicles on the roads continues to increase. With traffic-related accidents causing significant loss of life and property damage, it is crucial to implement effective strategies to ensure the safety of all road users. This article explores various approaches to enhance traffic safety and create a safer future for everyone.

Infrastructure Development One of the fundamental aspects of traffic safety is the development and maintenance of robust road infrastructure. Governments and transportation authorities must invest in well-designed roads, bridges, and highways that meet safety standards. This includes proper signage, well-marked lanes, and clear instructions for drivers. Additionally, the construction of pedestrian-friendly sidewalks, crosswalks, and dedicated cycling lanes promotes the safety of vulnerable road users.

Public Awareness and Education Raising public awareness about traffic safety plays a critical role in reducing accidents. Educational campaigns can be conducted to inform the public about safe driving practices, the importance of obeying traffic rules, and the risks associated with reckless behavior. These campaigns can be targeted towards different age groups and can include workshops, seminars, and public service announcements. In schools, traffic safety education can be incorporated into the curriculum to instill responsible behavior in young road users.

Strict Enforcement of Traffic Laws Stringent enforcement of traffic laws is essential to deter dangerous driving practices. Police departments should actively monitor roads, issue citations for traffic violations, and ensure that penalties are enforced. This includes cracking down on speeding, drunk driving, distracted driving, and other hazardous behaviors. The presence of law enforcement officers on the roads acts as a deterrent and promotes compliance with traffic regulations.

Technology and Innovation advancements in technology have the potential to revolutionize traffic safety. Intelligent transportation systems (ITS) can be employed to manage traffic flow, detect and respond to incidents promptly, and provide real-time information to drivers. Technologies such as adaptive cruise control, collision avoidance systems, and lane departure warnings can assist drivers in avoiding accidents. Furthermore, emerging technologies like autonomous vehicles hold promise for reducing human error, which is a leading cause of accidents.



Pedestrian and Cyclist Safety Protecting vulnerable road users such as pedestrians and cyclists is of utmost importance. Infrastructure improvements, including the construction of sidewalks, crosswalks, and dedicated cycling lanes,

help create a safer environment for these individuals. Promoting pedestrian-friendly urban planning, traffic calming measures, and public transportation systems can also contribute to reducing accidents involving pedestrians and cyclists.

Collaboration and Data Analysis Collaboration among various stakeholders, including government agencies, law enforcement, transportation authorities, and community organizations, is vital for effective traffic safety management. Sharing data and conducting comprehensive analysis of accident patterns, road conditions, and driver behavior can lead to evidence-based strategies and targeted interventions. By identifying high-risk areas and implementing appropriate measures, resources can be utilized efficiently to maximize safety.

Conclusion Enhancing traffic safety requires a multifaceted approach that encompasses infrastructure development, public awareness and education, strict law enforcement, technological advancements, and a focus on vulnerable road users. By implementing these strategies and fostering collaboration among stakeholders, we can strive towards a future with reduced traffic accidents, injuries, and fatalities.

Adabiyotlar ro'yxati:

1. O‘zbekiston Respublikasi prezidentining ―Avtomobil transportini boshqarish tizimini yanada takomillashtirish chora –tadbirlari to‘g‘risidagi qarori 07.03.2018-yil.
2. Q. H. Azizov ―Harakat xavfsizligini tashkil etish asoslari. –T., ―Fan va texnologiya, 2009, 268-bet.
3. O‘zbekiston Respublikasi Ichki ishlar vazirligi yo'l harakati xavfsizligi bosh boshqarmasi 2021-yil noyabr oyigacha respublika yo'llarida sodir bo'lgan yo'l-transport hodisalari haqida statistikasi.
4. Nurullayev, U. A., & Zukhurova, D. M. (2021). Warranty and post-warranty service for vehicles. The Scientific Journal of Vehicles and Roads, 2021(4), 34-40. 245
5. Allaqulovich, N. U. (2022). Development of a mechatronic control system for automotive engines. Journal of Academic Research and Trends in Educational Sciences, 1(4), 1-8.
6. Нуруллаев, У., Отақулов, З., & Эгамназаров, Н. (2021). Қиш мавсумида автомобиль йўлларининг ўтказиш даражасига қўйиладиган талаблар. Academic research in educational sciences, 2(2), 181-189.
7. Umirov, I., Turushev, S., & Ravshanov, F. (2021). Йўл бўлакларининг ҳаракатланиш хавфсизлигига таъсирини таҳлил қилиш. Academic research in educational sciences, 2(2).
8. Мирзабеков, М. С. (2016). Особенности режима и безопасности движения на горных автомобильных дорогах Узбекистана. Молодой ученый, (7-2), 64-67.

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YO'LLARDAGI TIRBANDLIKLAR QACHON BARHAM TOPADI?

Annotatsiya. So'nggi yillarda poytaxt axolisi nafaqat ishga borish va qaytish vaqtida balki kunning boshida paytlarida xam tirbandlik va jamoat transportining sifatsiz xizmati bexuda vaqt sarfi kabi bir kator muammolarga duch kelmoqda. Nafakat Toshkent shaxar balki dunyo buyicha bu muammo avj olib bormoqda.Shu jixatdan quyidagi soxaga oid zamonaviy tadqiqotlar shaxar transporti tizimi bilan boglik muammolarni bartaraf kilishiga qaratilgan bir necha yechimlar keltirilmoqda.

Kalit so'zlar: yo'llar, ko'chalar, tirbandliklar, avtotransportlar, yo'l-transport, jamoat transporti.

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WHEN WILL THE TRAFFIC ON THE ROADS END?

Abstract. In recent years, the residents of the capital have been facing a number of problems not only during the commute to and from work, but also at the beginning of the day, such as traffic jams and poor quality public transport service, wasting time. This problem is increasing not only in the city of Tashkent, but also in the whole world. From this point of view, modern researches in the following field provide several solutions aimed at solving the problems related to the urban transport system.

Key words: roads, streets, traffic, motor vehicles, road transport, public transport.

Yo'llar, ko'chalar ko'z o'ngimizda avtotransportlar bilan to'lib boryapti. Shaharlar markazlarida tirbandliklar jiddiy muammoga aylanib, tezkor yechimlarga ehtiyoj kundan kunga ortmoqda. Kechagi shaharsozlik normalari esa bugungi kun talabiga javob bermayapti. Takliflar yo'q emas. Avtomobil sanoati keskin rivojlana boshlagandan buyon yirik shaharlarda tinimsiz ravishda tirbandliklar sodir bo'lmoqda. Oqibatda, ko'plab insonlarning qimmatli vaqti ko'chada o'tib ketmoqda. Shu jumladan, Toshkentda ham.2023 yil 23 oktyabr kuni Toshkent shahridagi ko'plab asosiy ko'chalarda ulkan tirbandliklar kuzatildi. Ma'lum bo'lishicha, tirbandlikka poytaxt ko'chalaridagi qurilish-ta'mirlash ishlari sabab bo'lgan. 2023 yil 23 oktyabr kuni poytaxtda 10 balli tirbandliklar sodir bo'lgani. oqibatda shaharning asosiy ko'chalarida mashinalar harakati to'xtab qoldi va bu avtobuslar harakatiga ham ta'sir ko'rsatdi. Urbanizatsiya hisobiga bosh shaharda

harakatlanishga bo‘lgan ehtiyoj kundan kunga ortmoqda. Endilikda zarur choralar ko‘rilmas ekan, yo‘llardagi tirbandliklar darajasi umuman kamaymaydi. Xo‘sh, bu borada nima choralar qilinadi? Tirbandlikka nima sabab bo‘lyapti?Shaharda tirbandlik kuzatilishi bir qancha omillar bilan bog‘liq. Ma'lumotlarga ko‘ra, bugungi kunda shaharda 5 mln nafar aholi bo‘lib, uning soni yiliga 100 mingtaga, hozirda harakatlanayotgan 760 ming avtotransport esa 76 mingtaga ko‘payib boryapti. Aholining kunlik harakatlanishga bo‘lgan ehtiyoji 9 mlnni tashkil etib, undan 3 millioni piyoda harakatlanish, 6 millioni esa transportda harakatlanishga to‘g‘ri keladi.Kunlik transportda harakatlanishning 25 foizi, ya'ni 1,5 millioni avtobus, metro va mikroavtobuslarda, qolgan 75 foizi, 4,5 millioni shaharda kun davomida harakatlanadigan (760 mingta Tirbandliklarning oxiri va yechimi bormi? Doimiy ro‘yxatdagi va 240 mingta kunlik kelib ketuvchi) avtotransportda amalga oshiriladi. Xozirda poytaxtda 472 km doimiy transport harakatlanib turadigan asosiy shohko‘chalar mavjud. Bosh rejaga muvofiq, bu yo‘l 380-400 ming avtomobil harakatlanishi uchun mo‘ljallangan. Yuqorida esa kunlik harakatlanishlar soni 1 mlnga yetgani aytilmoqda. Vaziyat qisqaroq tushuntirilsa, Toshkent yo‘llarida mo‘ljallangan quvvatdan ko‘proq avtomobil yurayotgani kelib chiqadi. Yuqoridagi sabablar, yo‘l ta'mirlash ishlari hamda transport oqimini samarali boshqarish tizimi yo‘qligi, tirbandliklarda xarakat tezligi 7 km/soatgacha tushib ketishi, aholining yo‘lga sarflaydigan vaqti bundan 3-4 yil oldingiga nisbatan qariyb ikki barobarga ortgani transportlarning ortiqcha yoqilg‘i sarfi va zararli gazlarni chiqarishiga olib kelmoqda.

Muammo qanday yechilyapti?Aholining kunlik harakatlanishga bo‘lgan ehtiyojini qondirish, bunda yo‘lga sarflanadigan vaqt va moddiy resurslar samaradorligini oshirishga, jaxon tajribasiga ko‘ra, sifatli, qulay, xavfsiz va jozibador jamoat transporti tizimini joriy etish orqali erishiladi.Bu borada quyidagi ishlar amalga oshirilayotgani ma'lum qilindi. Qayd etilishicha, gavjum joylargacha “bir qadam” tamoyili asosida joylashtirilgan bekatlar va infratuzilma ob'ektlari, barqaror tezlikda xarakatlanadigan, yo‘nalishlari qulay bog‘langan jamoat transporti tizimini joriy etish, uchta asosiy yo‘nalishlarda olib boriladigan ishlar hisobiga bo‘ladi.

Birinchidan, shahardagi mavjud oqimlarning yo‘l, ko‘cha tarmog‘i bo‘yicha taqsimlanishini, yangi zichlashtiriladigan hududlardan yo‘l tarmog‘iga tushadigan yuklamalar oldindan baholash vositasi sifatida Toshkent shahri transport makromodeli ishlab chiqildi. Bu model “Jaxon banki” grant mablag‘lari hisobiga jalb qilingan ekspertlar guruhi bilan hamkorlikda kalibrovka ishlari amalga oshirilayotgani, ishlar noyabr oyida yakunlanishi ta'kidlandi.

Ikkinchidan, jamoat transporti yangilangan harakat tarkibidan samarali foydalanishni yo‘lga qo‘yish, aholiga ko‘rsatilayotgan xizmatlar sifatini oshirish maqsadida avtobuslar yo‘nalish tarmog‘ini doimiy takomillashtirish ishlari olib borish kerak.

Uchinchidan, asosiy arteriyalar hisoblangan ko‘chalarda jamoat transporti harakat ustuvorligi, bekatlar va piyodalar uchun qulay va xavfsiz infratuzilma,

transport oqimining samarali muvofiqlashtirilgan boshqaruvi (aqlli svetoforlar) tizimini ichiga olgan kompleks chora-tadbirlari tizimli ravishda amalga oshiriladi.

Kelgusida nima choralar ko‘rishimiz kerak?Shular qatorida joriy holatni yaxshilash, aholining harakatlanishga bo‘lgan ehtiyojini sifatli, qulay va xavfsiz xizmatlar orqali qondirish maqsadida quyidagi ishlar amalga oshirilishi kutilmoqda:

1. Jamoat transporti samaradorligini oshirish, yo‘lovchilarning harakatlanishga sarflaydigan vaqtlarini kamaytirish maqsadida qisqa masofali avtobus yo‘nalishlarini joriy etish;

2. Tirband ko‘chalarda avtobuslar harakat xavfsizligini ta'minlash, harakatlanishda yo‘qotilayotgan vaqtni kamaytirish maqsadida shohko‘chalarda faqat to‘g‘ri harakatlanadigan magistral avtobus yo‘nalishlarini yo‘lga qo‘yish;

3. Poytaxtga shahar atrofi hududlaridan kunlik kirib keladigan hamda yetkazib chiquvchi va magistral yo‘nalishlar kesishgan joylarda piyodalar uchun qulay xavfsiz muhitni (infratuzilmani) yaratish;

4. Koridor tamoyili asosida svetoforlarning muvofiqlashtirilgan boshqaruv tizimini, jamoat transporti infratuzilmasini takomillashtirish, umumiy uzunligi 472 km bo‘lgan va ayni vaqtda 605 ta svetofor ob'ektlari bo‘lgan koridorlardagi ishlarni yakunlash;Bu ishlarning birinchi bochqichi umumiy uzunligi 125 km bo‘lgan asosiy yuklamalar va tirbandliklar kun davomida kuzatilayotgan ko‘chalarda amalga oshiriladi.

5. Aglomeratsiya xududini bog‘laydigan temiryo‘l yo‘lovchi tashish (elektrichka) tizimini takomillashtirish, yangi avtobus yo‘nalishlarini joriy etish hamda qulay transport o‘tish bog‘lamalarini tashkil qilish orqali shaharga kiruvchi transport oqimini kamaytirish;

6. Shaharda yuk transporti harakatini cheklash va TXAY bo‘ylab aylanma harakatlanishga yo‘naltirish, shahar ichidagi yuk transporti harakatlanadigan vaqti va yo‘llarini aniq belgilab berish.Ma'lumotlarga ko‘ra tirbandlikdan dunyodagi juda katta shaxarlar xam aziyat chekmokda bunga kura eng ko‘p Hindiston aholisi aziyat chekadi. Chunki bu davlatda turli transport vositalari juda tartibsiz harakatlanadi va ularni hatto politsiya ham yetarlicha nazorat qila olmaydi.Ayrim davlatlar esa tirbandliklarning oldini olish uchun ma'lum cheklovlar kiritishgan. Masalan, Singapurda shaxsiy mashinaga ega bo‘lish huquqi sotiladi.Singapurdagi markaziy ko‘chalardan biri. Jamoat transporti va piyodalar uchun keng joy ajratilgan.Hozir bu davlatda shaxsiy mashinaga ega bo‘lish uchun ruxsatnoma olish 70 mingdan 106 ming dollargacha bulyapti. Odamlar shaxsiy mashina uchun juda katta pul sarflashdan ko‘ra, juda yaxshi rivojlangan jamoat transportida yurishni afzal bilishadi.

Indoneziyada esa 1992 yilda qabul qilingan qonunga ko‘ra, yirik shaharlarda haydovchilar o‘zi bilan yana ikki kishini olib yurishga majbur. Agar ko‘chada harakatlanayotgan mashinada yolg‘iz haydovchining o‘zi bo‘lsa uni jarimaga tortishadi.Los-Anjelesda esa haydovchi mashinaga kamida ikki kishini olib ketayotgan bo‘lsa unga alohida bo‘lakdan yurib, tirbandlikni chetlab o‘tish imkoniyati taqdim etiladi.

Tirbandliklardan qochish uchun ayrim mamlakatlarda, yirik shaharlarda mashinalarning raqami bo‘yicha cheklovlar joriy qilingan. Ya'ni bir kun oxiri toq, ikkinchi kun oxiri juft son bilan tugagan mashinalar harakatlanishiga ruxsat berilsa maqsadga muofiq bo’lardi. Xulosa urnida shuni aytish joizki tirbandliklarni oldini olish xar bir insoniyat uchun global muammolardan biridir.Buni oldini olish biz uchun xam jamiyat va kelajak uchun xam muhum vazifalardan biridir.

Adabiyotlar ro’yxati:

1. O’zbekiston Respublikasi Prezidentining “Avtomobil transportini boshqarish tizimini yanada takomillashtirish chora –tadbirlari to’g’risidagi” qarori 07.03.2018-yil.
2. Q. H. Azizov “Harakat xavfsizligini tashkil etish asoslari”. –T., “Fan va texnologiya”, 2009, 268 !» bet.
3. O’zbekiston Respublikasining davlat standarti O’z DSt 3196; 22.08.2017
4. O’zbekiston Respublikasi Ichki ishlar vazirligi yo‘l harakati xavfsizligi bosh boshqarmasi 2021 yil noyabr oyigacha respublika yo‘llarida sodir bo‘lgan yo‘l-transport hodisalari haqida statistikasi.
5. Nurullayev, U. A., & Zukhurova, D. M. (2021). Warranty and post-warranty service for vehicles. The Scientific Journal of Vehicles and Roads, 2021(4), 34-40.

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МЕТОДЫ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ ЗАБОЛЕВАНИЙ МОЗГА

Аннотация. Это обзорная статья о роли магнитнорезонансной томографии в диагностике нейродегенеративных заболеваний. Актуальность проблемы и возможности различных методов сформулированы. Стандартные и нетрадиционные методы магнитнорезонансной томографии представлены.

В рамках данного обзора рассматриваются современные методики МРТ, применяемые в ранней диагностике заболеваний головного мозга.

Ключевые слова. Магнитно-резонансная томография (МРТ); нейродегенеративные заболевания; диагностика.

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METHODS OF MAGNETIC RESONANCE IMAGRAPHY IN THE DIAGNOSIS OF BRAIN DISEASES

Annotation. This is a review article on the role of magnetic resonance imaging in the diagnosis of neurodegenerative diseases. The relevance of the problem and the possibilities of various methods are formulated. Standard and non-traditional magnetic resonance imaging methods are presented. This review examines modern MRI techniques used in the early diagnosis of brain diseases.

Keywords. Magnetic resonance imaging (MRI); neurodegenerative diseases; diagnostics.

Актуальность. Наиболее часто встречающимися заболеваниями головного мозга, связанными с нейродегенерацией, являются: болезнь Альцгеймера, болезнь Паркинсона, болезнь Хантингтона, боковой амиотрофический склероз и рассеянный склероз. Идентификация этих заболеваний особенно сложна на ранних стадиях, поэтому вопросы ранней диагностики нейродегенеративных заболеваний и их дифференциации являются актуальными. За последние годы было внедрено множество мощных методов, которые позволили визуализировать структуру и функции различных органов человека. Одним из таких методов нейровизуализации является магнитно-резонансная томография (МРТ), которая детально визуализирует структуру и измеряет функционирование отдельных областей человеческого мозга и в результате играет решающую роль в клинических и исследовательских приложениях.

Результаты. При постановке диагноза по изображениям МРТ огромную роль играют четкость и точность различий всех морфологических образований исследуемого объекта. На контраст в МРТ оказывают влияние большое количество факторов, которыми можно манипулировать, добиваясь требуемого качества изображений. Особенностью магнитно-резонансной томографии по сравнению с другими методами томографии является возможность, меняя условия получения исходных данных для построения изображения, изменять локальную интенсивность принимаемого сигнала в зависимости от различных параметров, характеризующих ядерный магнитный резонанс. Изменение вида ЯМР-изображений при этом называют контрастированием изображения по параметру. Различают так называемые истинные изображения пространственного распределения параметра, и взвешенные по параметру изображения [1]. В первом случае из полученных данных по измеренным локальным значениям ядерной намагниченности вычисляется значение параметра как функция координат, которая и отображается как двумерное распределение. Во втором случае отображается пространственное распределение самих значений намагниченности. В этом случае яркость изображения определяется не только интересующим параметром, но и всеми другими факторами, влияющими на интенсивность сигнала ЯМР. Тем не менее, во многих приложениях взвешенные по параметру изображения обеспечивают получение необходимой информации об объекте. При этом удается использовать упрощенные методы, что существенно экономит время.

Области с аномальной интенсивностью МР-сигнала могут представлять собой как острые, так и хронические очаги. При наличии очагов различного возраста Т1- взвешенные изображения лучше всего дифференцируют острые очаги от хронических. Острые и подострые очаги характеризуются малым количеством демиелинизации и, как правило, показывают меньшее изменение

сигнала на Т1-взвешенных изображениях, где они изоинтенсивны или только минимально гипоинтенсивны. Такие очаги, к тому же, обычно слабо очерчены на Т1-изображениях и намного лучше выявляются на Т2-изображениях. Хронические очаги отражают демиелинизацию и глиоз и видны как области более слабого сигнала на Т1-изображениях по сравнению с острыми очагами, которые более резко очерчены и обычно легко определяются на Т1-изображениях. Они также видны на Т2-изображениях, где показывают сильный сигнал. Скопление гипоинтенсивных очагов (так называемые, «черные дыры») коррелирует с прогрессией заболевания и степенью инвалидности. В последнее время выявлена и активно изучается взаимосвязь между накоплением металлов, в основном комплексов железа, в головном мозге и такими нейродегенеративными заболеваниями как болезнь Паркинсона, болезнь Альцгеймера, деменция и ряд других. Определение содержания комплексов металлов в тканях головного мозга крайне важно для ранней диагностики этих заболеваний. В МРТ существуют различные методики как качественной, так и количественной оценки концентрации металла в ткани.

Вывод. Таким образом, МРТ играет важнейшую роль в диагностике заболеваний головного мозга. Наряду с большей чувствительностью и разрешающей способностью по сравнению с методами рентгеновской компьютерной томографии (КТ) и позитронно-эмиссионной томографии (ПЭТ), МРТ позволяет оценивать динамику заболевания и эффективность лечения.

Использованные источники:

1. Усманова Д. Д., Наджмитдинов О. Б. Роль нейронспецифических белков в патогенезе развития диабетической полинейропатии у женщин в постклимактерическом периоде //Проблемы биологии и медицины. – 2020. – №. 3. – С. 116-119.
2. Наджмитдинов О.Б. РЕЗУЛЬТАТЫ ЛАБОРАТОРНЫХ ДАННЫХ НЕКОТОРЫХ ЦИТОКИНОВ НА РАЗВИТИЕ ХРОНИЧЕСКОЙ ИШЕМИИ МОЗГА У ПАЦИЕНТОВ С САХАРНЫМ ДИАБЕТОМ 2 ТИПА // Экономика и социум. 2022. №11-2 (102). URL: https://cyberleninka.ru/article/n/rezultaty-laboratornyh-dannyh-nekotoryh-tsitokinov-na-razvitie-hronicheskoy-ishemii-mozga-u-patsientov-s-saharnym-diabetom-2-tipa (дата обращения: 30.01.2024).
3. Мадаминов О.Р., Наджмитдинов О.Б. РОЛЬ РАДИОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ ПРИ ДИАГНОСТИКЕ НАРУШЕНИЙ В БИЛИАРНОМ ТРАКТЕ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/rol-radiologicheskih-issledovaniy-pri-diagnostike-narusheniy-v-biliarnom-trakte (дата обращения: 30.01.2024).
4. Абдиолимов М.Х., Наджмитдинов О.Б. ИСПОЛЬЗОВАНИЕ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ПРОТРУЗИИ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/ispolzovanie-magnitno-rezonansnoy-tomografii-pri-diagnostike-protruzii (дата обращения: 30.01.2024).

5. Наджмитдинов О.Б., Набиев Р.Р., Шокиров Ш.Т. ИСПОЛЬЗОВАНИЕ КОМПЬЮТЕРНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ЗАБОЛЕВАНИЙ СЕЛЕЗЁНКИ // Экономика и социум. 2022. №12-1 (103). URL: https://cyberleninka.ru/article/n/ispolzovanie-kompyuternoy-tomografii-pri-diagnostike-zabolevaniy-selezyonki (дата обращения: 30.01.2024).
6. Усманова Д.Д., Наджмитдинов О.Б. ФАКТОРЫ РИСКА И ОЦЕНКА ПСИХОЛОГИЧЕСКОГО СТАТУСА ЖЕНЩИН С ДИАБЕТИЧЕСКОЙ ПОЛИНЕЙРОПАТИЕЙ В ПОСТКЛИМАКТЕРИЧЕСКОМ ПЕРИОДЕ // Медицинские новости. 2020. №8 (311). URL: https://cyberleninka.ru/article/n/faktory-riska-i-otsenka-psihologicheskogo-statusa-zhenschin-s-diabeticheskoy-polineyropatiey-v-postklimakternicheskom-periode (дата обращения: 30.01.2024).

УДК 616.155.294

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ИЗУЧЕНИЕ ЗНАЧЕНИЯ ТРОМБОПОЭТИНА В РАЗВИТИИ ПЛОДА У ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА

Резюме. В статье описан клинический случай ведения беременной с впервые возникшей иммунной тромбоцитопенией во время беременности. У беременной, в сроке 26 недель, диагностирована ИТП. Беременная получала терапию согласно новейшим рекомендациям. Родоразрешение в сроке 33–34 недели. После родоразрешения проведена комплексная терапия тромбоцитопении.

Ключевые слова: тромбоцитопения, беременность, рекомбинантный человеческий тромбопоэтин.

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TO STUDY THE IMPORTANCE OF THROMBOPOIETIN IN FETAL DEVELOPMENT IN WOMEN OF REPRODUCTIVE AGE

Resume. The article describes a clinical case of management of a pregnant woman with newly developed immune thrombocytopenia during pregnancy. A pregnant woman, at 26 weeks, was diagnosed with ITP. The pregnant woman received therapy according to the latest guidelines. Delivery in the period of 33–34 weeks. After delivery, a complex therapy of thrombocytopenia was carried out.

Key words: thrombocytopenia, pregnancy, recombinant human thrombopoietin.

Введение. Важность изучения проблемы тромбоцитопений у беременных определяется не только возможностью кровоточивости у плода, но в большей степени риском развития кровотечения у матери, не исключаемым при любом способе родоразрешения [2,9,12].

Тромбоцитопения является состоянием, обусловленным повышенным разрушением (чаще всего) или потреблением тромбоцитов, а также недостаточным образованием последних [6,8,11].

Тромбоцитопении могут быть наследственными (связанные с изменениями функциональных свойств тромбоцитов) и приобретенными: иммунными или в результате воздействия различных повреждающих факторов [3,4,7].

Наиболее часто диагностируется идиопатическая тромбоцитопеническая пурпура (ИТП), на долю которой приходится до 90% всех тромбоцитопений.

Справочный диапазон количества тромбоцитов в норме у небеременных женщин и новорожденных составляет 150,0-400,0 · 10^9/л, однако у беременных женщин он в среднем может быть несколько ниже [1,5,10].

В соответствии с этиологией и патогенезом, а также клиническим течением принято различать следующие варианты тромбоцитопенической пурпуры.

Цель исследования. У женщин - носительниц наследственных дефектов гемостаза с привычным невынашиванием беременности в 20% случаев отягощен семейный тромботический анамнез, в 12% - отягощен собственный тромботический анамнез; в 28% случаев отмечаются многократные (от 5 до И) репродуктивные потери.

Материалы и методы исследования. Для выполнения задачи мы отобрали 60 женщин с патологией беременности и тромбоцитопенией.

Результаты исследования. Основные наследственные тромбофилии (мутации генов MTHFR C677T, FII G20210A, FV(Leiden), а также полиморфизм гена PAI-1 при, привычном невынашивании беременности встречаются в 31,9% случаев и в зависимости от генотипа, ее сочетания с другими видами наследственных дефектов, гемостаза или с антифосфолипидном синдроме представляют собой существенный неблагоприятный фактор для» качества жизни женщины, течения беременности и ее исходов, а также тромботических осложнений.

Гомозиготная мутация-гена MTHFR C677T является фактором риска репродуктивных потерь и гестационных осложнений. Так, по сравнению с гетерозиготной мутацией отношение шансов репродуктивных потерь при' гомозиготной мутации гена MTHFR C677T составило 14 (95% доверительный интервал 1,3-150,02), а отношение шансов развития гестационных осложнений - 7,93 (95% доверительный интервал 1,47 - 42,7); сочетание с антифосфолипидным синдромом отмечалось в 3 раза чаще, что усугубляет течение беременности и является высоким риском репродуктивных потерь, и что особенно важно - тромботических осложнений. Изолированная гетерозиготная мутация гена MTHFR C677T не является фактором риска как гестационных так и тромботических осложнений.

Гипергомоцистеинемия не связана с генотипом мутации гена MTHFR C677T.

У женщин с полиморфизмом гена PAI-1 (4G/4G и 4G/5G) риск образования ретрохориальных/ретроамниотических гематом в I-II триместрах беременности не зависит от генотипа. Доказан «дозозависимый» эффект аллели 4G с достоверностью аппроксимации 0,98. При этом отношение шансов данного осложнения беременности составило 4,93 (95% доверительный интервал 1,44 - 16,87) по сравнению с отсутствием полиморфизма гена PAI-1 5G/5G.

Прогностически наиболее неблагоприятным является сочетание наследственных тромбофилий и антифосфолипидного синдрома, заметно отягощающих течение беременности и послеродового периода. Отношение шансов последующей репродуктивной потери при этом составило 7,32 (95% доверительный интервал 1,56- 34,14), а отношение шансов тромботических осложнений - 67,43 (95% доверительный интервал 7,31-621,86).

Комплексная дифференцированная предгестационная подготовка с применением низкомолекулярных гепаринов в профилактических/терапевтических дозах в сочетании с малыми дозами антиагрегантов на фоне динамического клинико-лабораторного мониторинга у женщин с привычным невынашиванием беременности способствуют благоприятному исходу беременности и рождению жизнеспособных детей в 88% случаев.

Определение влияния основных наследственных тромбофилий (мутации генов MTHFR C677T, FV (Leiden), FII G20210A и полиморфизм гена PAI-1) на частоту и сроки репродуктивных потерь, течение беременности и послеродового периода у женщин с привычным невынашиванием беременности и обоснование дифференцированных лечебно-профилактических мероприятий.

Проведенное исследование показало целесообразность обследования всех женщин с привычным невынашиванием беременности в анамнезе и нарушениями в системе гемостаза на наличие наследственных тромбофилий (мутация гена MTHFR C677T, полиморфизм гена PAI-1 4G/4G и 4G/5G, мутации генов FV (Leiden) и протромбина F II G20210A).

Согласно полученным данным, гомозиготная мутация гена MTHFR C677T является фактором риска репродуктивных потерь и гестационных осложнений и в сочетании с АФС, также, как и мутации генов FV (Leiden) и протромбина F II G20210A), снижают качество жизни женщины, что требует проведения противотромботической терапии и пожизненного гемостазиологического мониторинга.

Результаты настоящего исследования выявили «дозозависимый» эффект аллели 4G при полиморфизме гена PAI-1 (достоверность аппроксимации 0,98) в образовании ретрохориальныхУретроамниотических гематом, что обусловило- разработку целенаправленных лечебно-профилактических мероприятий.

На основании изучения особенностей течения беременности и послеродового периода в зависимости от вида и генотипа наследственного дефекта гемостаза предложены оптимальные лечебно-диагностические мероприятия у женщин с наследственными тромбофилиями и привычным невынашиванием беременности в анамнезе на этапе предгестационной подготовки, в течение беременности и послеродового периода.

Вывод. Таким образом, ИТП - приобретенное аутоиммунное заболевание, характеризующееся изолированным снижением количества тромбоцитов в периферической крови, повышенным или нормальным числом

мегакариоцитов в костном мозге, укорочением жизненного цикла тромбоцитов у больных без клинических проявлений или факторов, способных вызвать тромбоцитопению.

Использованные источники:

1. Арифджанов Ш.Х. и др. Соматоневрологические осложнения тромбоцитопенической пурпуры //Вестник экстренной медицины. 2013. №. 2.
2. Давлатов С.С. и др. Экстракорпоральные методы гемокоррекции в хирургической практике (текст): Монография / С.С. Давлатов, Ш.С. Касымов, З.Б. Курбаниязов - Ташкент: ИПТД «Узбекистан», 2018. - 160 с.
3. Насирова З.А., Ахмедова А.Т. Недостатки и преимущества применения внутриматочной контрацепции во время кесарева сечения //Вестник врача. - 2017. - С. 26.
4. Машарипова И.Ю., Рахманова У. У. Идиопатическая тромбоцитопеническая пурпура (итп) у до-призывников южного приаралья, изучение особенностей гемостаза и иммунологических механизмов //Молодые ученые-медицине. - 2017. - С. 171.
5. Петрухин В.А. и др. Тромбоцитопении у беременных //Российский вестник акушера-гинеколога. - 2011. - Т. 11. - №. 2. - С. 20-26.
6. Тютюнник В.Л. и др. Опыт ведения беременных с рефрактерной тромбоцитопенией //Акушерство и гинекология: Новости. Мнения. Обучения. - 2017. - №. 2 (16).
7. Цхай В.Б., Гребенникова Э.К. Идиопатическая тромбоцитопеническая пурпура у беременных. Акушерские и перинатальные риски //Акушерство, гинекология и репродукция. - 2015. - Т. 9. - №. 2.
8. Шалина Р.И. и др. Беременность и роды у пациенток с идиопатической тромбоцитопенической пурпурой //Вопросы гинекологии, акушерства и перинатологии. -2012. - Т. 11. - №. 2. - С. 44-50.
9. Aminov Z., Haase R., & Carpenter D. O. (2016). Diabetes in Native Americans: Elevated risk as a result of exposure to polychlorinated biphenyls (PCBs). Reviews on environmental health, 31(1), 115-119.
10. Shamsiyev A.M., Khusinova S. A. The Influence of Environmental Factors on Human Health in Uzbekistan //The Socio-Economic Causes and Consequences of Desertification in Central Asia. -Springer, Dordrecht, 2008. - С. 249-252.
11. Yamada H., Fujimoto S. Perinatal management of idiopathic thrombocytopenic purpura in pregnancy: risk factors for passive immune thrombocytopenia //Annals of hematology. - 1994. -Т. 68. - №. 1. - С. 39-42.
12. Won Y. W. et al. Clinical aspects of pregnancy and delivery in patients with chronic idiopathic thrombocytopenic purpura (ITP) //The Korean journal of internal medicine. - 2005. - Т. 20. - №. 2. - С. 129.

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АФОРИЗМЫ В ПРЕПОДАВАНИИ ЛАТЫНИ

Аннотация. В статье рассматривается термин «крылатые слова», которые толкуются в широком смысле. Проводится комплексный анализ народных поговорок, присловий, всевозможных образных выражений. Изучается история возникновения некоторой части крылатых слов. Анализируются произведения церковнославянской, греческой, латинской литературы и изречения древних врачей и мыслителей.

Ключевые слова: афоризмы, древняя письменность, крылатые слова, образные выражения, пословицы.

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APHORISMS IN TEACHING LATIN

Annotation: the article discussed the term «winged words», which are interpreted in a broad sense. A comprehensive analysis of folk sayings, sayings, all kinds of figurative expressions is carried out. The history of the emergence of some of the winged words is being studied. The works of Church Slavonic, Greek, Latin literature and sayings of ancient doctors and thinkers are analyzed.

Key words: aphorisms, ancient writing, winged words, figurative expressions, proverbs.

Латинские пословицы, изречения, афоризмы и другие устойчивые словосочетания, возникнув в эпоху греко-латинской цивилизации, живут в европейском культурном пространстве на протяжении многих веков, постоянно повторяясь в научных трудах, художественных произведениях и устной речи. Они обогащают, оживляют и украшают речь любого специалиста, так как в выразительной и легко запоминающейся форме точно и лаконично передают глубокие мысли. Большинство латинских изречений принадлежит античным ученым, писателям или государственным деятелям, однако есть и немало таких, авторство которых забылось. Немало латинских афоризмов появилось и в постантичное время: одни из них – парафразы античных изречений, другие – вполне оригинальны по содержанию.

Изучение античных афоризмов раскрывает учащимся мир непреходящих интеллектуальных и морально-этических ценностей,

запечатленных в звучной и лаконичной латыни. Многих заинтересует и авторство того или иного изречения, поэтому наряду с указанием автора приводятся и краткие сведения о его жизни. Предлагаем будущим стоматологам ознакомиться и с теми устойчивыми латинскими выражениями, которые традиционно употребляются в научном и профессиональном языке европейских врачей.

Афоризмы являются одним из средств образной и выразительной литературной речи. Название это восходит к Гомеру, в поэмах которого («Илиада и Одиссея») оно встречается много раз («он крылатое слово промолвил», «между собой обменялись словами крылатыми тихо»). Гомер называл афоризмы «крылатыми» словами потому, что из уст говорящего они как бы летят к уху слушающего.

«Крылатые слова» стали термином языковедения и стилистики. Термином этим обозначают вошедшие в нашу речь из литературных источников краткие цитаты, образные выражения, изречения исторических лиц, имена мифологических и литературных персонажей, ставшие нарицательными [6, 25].

Нередко термин «крылатые слова» толкуется в более широком смысле: им обозначают народные поговорки, присловия, всевозможные образные выражения [2, 67].

Крылатые слова многообразны по своему происхождению. Одни из них возникли в отдалённые эпохи, другие совсем недавно. «Крылатые слова» с удивительной меткостью выражают сущность явлений [4, 89]. В 1864 г. немецкий учёный Георг Блюхман выпустил сборник крылатых выражений, прочно вошедших в немецкую литературную речь. Книга Блюхмана «Крылатые слова» выдержала много изданий. Беллетрист-этнограф С.В.Максимов (1831-1901) в 1891 в свою книгу «Крылатые слова» включил устойчивые выражения, происхождение которых связано с различными сторонами быта. Книга Максимова, вышедшая вторым изданием в 1899 году, переиздана в 1955 г.

История возникновения некоторой части крылатых слов не может быть освещена в полной мере. Для древнейших эпох едва ли возможно решить, принадлежат ли крылатые слова автору данного памятника древней письменности и отсюда перешло в литературную речь, или же оно создано народом и только впервые записано автором данного памятника. Эти классификационные трудности в равной мере относятся к греко-римской и библейской мифологии.

Некоторые из выражений принадлежат знаменитым людям глубокой древности. Но бывает так, что отыскать человека, который произнёс то или другое крылатое слово или написал его, всё-таки удаётся, ибо история просто не сохранила его имени. *Chirurgus mente prius et oculus agat, guam armata manu. – Пусть хирург действует умом и глазами, прежде чем вооружённой рукой. Bene dignoscitur, bene curator. – Хорошо распознаётся, хорошо лечится.*

Amor tussique non celantur. – Любовь и кашель не скроешь. Invia est in medicina via sine lingua Latina. – Непроходим к медицине путь без латинского языка. Существует множество крылатых выражений, отражающих медицинскую тематику [3, 18].

Medice, cura te ipsum. – Врачу, исцелися сам. Вот интересный пример того, как по грамматическим формам слов можно определить происхождение пословицы. В современном русском языке «врачу» - форма дательного падежа от слова «врач», а в данном выражении слово «врачу» является формой звательногопадежа. Это предложение значит: «Врач, прежде чем лечить других, вылечись сам». Такая форма звательного падежа существовала в старославянском языке. Из древних церковнословянских книг дошла до нас и эта поговорка. Смысл её прост: *прежде чем указывать на недостатки других, исправь свои собственные недочёты.*

Nosce te ipsum – Познай самого себя. По преданию, сообщаемому Платоном в диалоге «Протогор», семь мудрецов древней Греции (Фалес Питтак, Биант, Солон, Кмобул Мисон, Хилон, сойдясь в храме Апполона в Дельфах, написали: «Познай самого себя» [1,151].

Мысль о познании себя разъяснял и распространял Сократ.

Mens sana in corpore sano – Здоровый дух в здоровом теле. Выражение это возникло из десятой сатиры древнеримского поэта Ювенала, у которого сказано: *«Надо молить, чтобы ум (дух) был здоровым в теле здоровом»* Употребляется как формула, выражающая гармоническое развитие физических и духовных сил.

De mortuis aut bene aut nihil – О мёртвых или хорошо, или ничего. Это выражение восходит к сочинению Диогена Лаэртского 3 в. н.э. «Жизнь, учение и мнения прославленных философов, в котором приведено изречение одного из семи мудрецов», - Хилона 6 в. до н.э. «Об умерших не злословие».

Aliis inserviendo consumer – Служа другим, сгораю сам (девиз, сопутствующий пламенеющему светильнику или свече как эмблеме врачевания, применявшемуся с древних времён наряду с основой эмблемой – змея с чашей).

«Сардонический смех» - выражение употребляется в значении: *злобный, желчный, едкий, язвительный смех.* Происхождение этого выражения, встречающегося у Гомера («Одиссея» с. 20, 302) комментаторы связывают ещё в древности с островом Сардиния, объясняя, что оно произошло от произраставшего там ядовитого растения (Sardonia herba); люди, употребившие его в пищу, умирали, причём лица их искажались судорогами, похожими на смех [1, 36].

Homo sum: humani nihil a me alienum puto – Я человек и ничто человеческое мне не чуждо. Выражение из комедии римского писателя Теренца (около 185-159 до н. э.) «Самоистязатель», которая является переделкой комедии греческого писателя Менандра (343-291 до н.э.). Смысл этого изречения: на какой бы высокой ступени умственного развития ни стоял

человек, он всё же остаётся человеком, и, следовательно, носит в себе все слабости человеческой природы.

Edimus, ut vivamus sed non vivimus ut edamus. Этот афоризм, принадлежащий Сократу (469-399 до н.э.), часто цитировался писателями древности (Квинтилиан, Авл Гелмий, Диоген Лаэртский и другие) и передан Плутархом в его сочинении *«Как молодой человек должен читать поэтов».* Мольер использовал это изречение в своей комедии «Скупой» (1668). Герой произведения говорит, что нельзя закармливать гостей. *«Надо есть, чтобы жить, а не жить чтобы есть».*

«Ars longa, vita brevis (est) – Жизнь коротка, искусство долговечно» – афоризм греческого мыслителя, врача и естествоиспытателя – Гиппократа (около 460-370 до н.э.). Смысл изречения Гиппократа не в том, что на овладение искусством не хватит человеческой жизни. Отсюда, пояснял Сенека («О краткости жизни»), известное восклицание величайшего из врачей о том, что жизнь коротка, а искусство – вечно.

Quae medicamenta non sanant ferrum sanat; Quae ferrum non sanat idnis sanat; Quae vero ignis non sanat insanabilis reputare opportet – что не излечивает лекарство, излечивает нож, излечивает огонь, что не излечивает даже огонь, то должно стать неизлечимым [5, 18].

Таким образом, афоризмы передаются из века в век, так как они затрагивают те проблемы, которые связаны со всеми сторонами нашей жизни и которые волнуют каждого из нас. Люди использовали крылатые выражения во все времена для толкования круга определенных понятий, относящихся к человеку и его жизни. Афоризмы можно назвать словарем жизни. Жизнь – это самая сложная наука, которую человеку приходится познавать на собственном опыте, передающемся через крылатые выражения.

В особенности это касается афоризмов на латинском языке, так как они несут ещё большую, накопленную с годами и проверенную временем мудрость. Именно поэтому каждому стремящемуся к развитию человеку будет не лишним знать и применять в жизни крылатые выражения на латинском языке.

Использованные источники:

1. Ашукин М.С., Ашукина И. «Крылатые слова»
2. Вартаньян «Крылатые изречения» М.: 1989
3. История греческой литературы. Издательство Академии наук СССР т. 2 М. 1975 стр. 151
4. Насырова Л.В. Крылатые выражении в курсе медицинской латыни. Изд. 5-е, 2013.
5. Овруцкий Н.О. «Крылатые латинские выражения», М.: Просвещение, 1969.
6. Покровская З.А., Кацман Н.Л. «Латинский язык», Москва.: «Высшая школа», 1987.
7. Чернявский М.Н. Учебник латинского языка, М.: 2007.
8. Щульц Ю.Ф. Учебник латинского языка, М.: 1973.

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ЗНАЧЕНИЯ АНТРОПОМЕТРИЧЕСКИХ ПОКАЗАТЕЛЕЙ ДЛИННОТНЫХ И ОБХВАТНЫХ РАЗМЕРОВ ДЕТЕЙ РАННЕГО ВОЗРАСТА

Аннотация. Статья освещает важные вопросы физического развития детей в раннем возрастном периоде, т.к. физическое развитие детей отражает рост и формирование организма ребенка в целом, а и данный возрастной период является самым интенсивным по темпу нарастания антропометрических параметров. Целью данной работы явилось изучение уровня физического развития по основным абсолютным и относительным величинам размеров тела детей в динамике первого года жизни. В группу наблюдаемых включены 106 мальчиков и девочек, рандомизированный отбор позволил использовать случайную выборку детей из общего количества отбираемых. В антропометрических исследованиях изучались размеры тела по длинникам и обхватные размеры тела. По материалам исследования представлены результаты, которые указывают на неоднородность нарастанияабсолютных и относительных величин основных показателей антропометрии, а также показатели зависят от периода постнатальной жизни и пола обследованных детей

Ключевые слова: физическое развитие, антропометрия, дети раннего возраста, длиннотные размеры, обхватные размеры, абсолютная поверхность тела.

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VALUES OF ANTHROPOMETRIC INDICATORS OF LENGTH AND CIRCUMSTANCES OF EARLY CHILDREN

Abstract. The article covers important issues of the physical development of children in an early age period, because The physical development of children reflects the growth and formation of the child's body as a whole, and this age period is the most intense in terms of the rate of increase in anthropometric parameters. The purpose of this work was to study the level of physical development based on the main absolute and relative values of children's body sizes in the dynamics of the

first year of life. The observation group included 106 boys and girls; randomized selection made it possible to use a random sample of children from the total number selected. In anthropometric studies, body dimensions along lengths and girth dimensions of the body were studied. Based on the study materials, results are presented that indicate the heterogeneity of the increase in absolute and relative values of the main anthropometric indicators, and also the indicators depend on the period of postnatal life and the gender of the children examined

Key words: physical development, anthropometry, young children, length dimensions, girth dimensions, absolute body surface.

Актуальность.

Физическое развитие детей – это рост и формирование организма ребенка включая темпы, стадии и критические периоды его созревания, унаследованные особенности, индивидуальную изменчивость, зрелость и связь с факторами внутренней и внешней среды [2; 3; 9]. Показателями физического развития являются антропометрические данные, скорость их изменения в процессе роста, гармоничность развития, соотношение календарного и биологического возраста, конституционные особенности [4; 5]. Оценка физического развития детского населения является важным критерием в медицинском обследовании и имеет значение в первую очередь для врачей–педиатров, во вторую очередь для врачей общей практики и, конечно же, для педагогов [1; 6]. В литературных источниках поднимается вопрос о необходимости разработок региональных стандартов физического развития детей раннего возраста [8; 7]. Характеристика физического развития ребенка на каждом этапе онтогенеза включает три составляющих: уровень физического развития, который устанавливается на основании абсолютных величин размеров тела; соматический тип - соотношение основных размеров тела (развитие сомы - скелета, мускулатуры и жироотложения); интенсивность нарастания тотальных размеров тела.

Цель исследования: исследование уровня физического развития по основным абсолютным и относительным величинам размеров тела детей в динамике первого года жизни.

Материалы и методы исследования. В исследование включены 106 детей раннего возраста, которые проспективно наблюдались течение всего срока наблюдения от 1 месяца до 1 года жизни. Исследования проведены согласно рекомендациям ВОЗ изучения роста и развития детей. [10;11;12]. Обхватные размеры и размеры по длиннику у детей получены с помощью горизонтального ростомера и сантиметровой ленты.Точность измерений для обхватных размеров и длинников составляла ±0,1 см. Во избежании погрешностей в измерении замеры проводились троекратно одним и тем же исследователем. В антропометрических исследованиях изучались размеры тела по длинникам (высота головы, длина туловища, длина тела, плеча, предплечья, кисти, руки, бедра, голени, стопы, ноги) и обхватные размеры

(окружность головы, груди, обхват плечевого пояса, окружность плеча, предплечья, бедра, голени).

Результаты исследования.

В длине тела мальчики (52,43±0,51 см) и девочки (52,28 ± 0,41 см, $p>0,05$) при рождении до 3-го месяца постнатальной жизни по абсолютным величинам статистических различий не имеют ($p>0,05$), а с 4-го месяца абсолютный рост в длине тела у девочек существенно отстает от мальчиков ($p<0,05$-$0,001$).

Общая прибавка в ДТ у мальчиков за 12 мес жизни составила 25,35 см, что различается от данных девочек - за год 22,8 см. Длина тела мальчиков на 1-м квартале увеличивается в 1,17 раз; на II-м - в 1,31; на III-м - в 1,42; наIV-м - в 1,48 раза, что также существенно отличается по таковым у девочек (соответственно 1,15; 1,28; 1,37 и 1,44). Динамика увеличения длины тела мальчиков,зависит от высокого первоначального (в первые месяцы жизни) прироста в длине тела в абсолютных (3,12 - 2,62 см) и относительных величинах (5,95 - 4,99%) по сравнению с девочками (2,72 - 2,34 см и 5,2 - 4,48%). Помимо этого, у девочек на 4-м мес постнатальной жизни выявляется существенное замедление абсолютного (1,8 см) и относительного роста (3,44%) в отличие от мальчиков (2,62 см и 4,99%).

Абсолютное значение высоты головы у девочек и мальчиков в течение 1 - 3 мес жизни статистических различий не имеет ($p>0,05$), а с 4-го мес постнатальной жизни эта величина у девочек отстает ($p<0,05$-$0,001$) по сравнению с данными мальчиков. Отставание в высоте головы девочек связано с низкими ежемесячными абсолютными (0,56 - 0,46 см) и относительными (4,11 - 3,37%) приростами в первом полугодии жизни по сравнению с мальчиками (0,64 - 0,54 см и 4,72 - 3,98%). Соотношение высоты головы к длине тела у мальчиков до 7-го месяца жизни составляет менее *1/4* части длины тела, а с 8-го месяца превышает эту величину. У девочек это соотношение сдвинуто влево (с 6 мес) в связи с низкими абсолютными и относительными приростами высоты головы, чем у мальчиков. У мальчиков общая прибавка в высоте головы до 12 мес жизни составила 5,75 см и увеличивалась в 1,42 раз от первоначального (при рождении). У девочек аналогичные показатели составили 5,02 см и 1,32.

Длина туловища у детей в течение первого года жизни увеличивается на 6,36 и 5,72 см, соответственно у мальчиков и девочек, что составляет в относительных величинах 30,8 и 28,4%. Интенсивность роста длины туловища у мальчиков на I-III кварталах жизни ускоренная, чем у девочек.

У обследованных детей в длине плеча в зависимости от пола, статистические различия отсутствуют ($p>0,05$) в течение всего времени наблюдения. Общая прибавка в длине плеча (4,31см) у мальчиков различается от таковых у девочек (4,01 см). Общая длина плеча у мальчиков зависит от интенсивности прироста на 1-м полугодии жизни (10,88 - 10,57 %), в отличие от девочек (6,11 - 3,57%). В целом длина плеча к концу года у мальчиков увеличивается в 1,44 раза, а у девочек в 1,42 раза.

Длина предплечья у обследованных детей до 10 мес жизни не зависела от пола ($p>0,05$), а с 11 мес жизни длина предплечья у девочек отстает от данных мальчиков ($p>0,05$). Длина предплечья к концу года у девочек увеличивается меньше - 3,99 см (1,46 раз), чем у мальчиков - 4,32 (1,50 раз).

У девочек с момента рождения наблюдалась низкая абсолютная величина длины кисти по сравнению с мальчиками ($p<0,05$) и во все время наблюдения длина кисти у мальчиков превышает таковые девочек ($p<0,05$ - 0,001). Общая прибавка в длине кисти у мальчиков (3,14 см) и девочек (2,9 см) к концу года различается, относительный рост длины кисти у мальчиков (1,46) больше, чем у девочек (1,44). Различие в общей длине кистиу мальчиков к концу года зависело от интенсивности ежемесячной прибавки (0,36 и 0,20 см) на I и IV кварталах жизни, по сравнению с девочками (0,31 и 0,16 см).

Обследованные дети в зависимости от пола по абсолютным размерам длины руки до 9 мес жизни не различались ($p>0,05$), а различие ($p<0,05$) в 10 мес жизни обусловлено общим отставанием интенсивности роста плеча, предплечья девочек по сравнению с мальчиками. Длина руки по кварталам жизни первого года у мальчиков увеличивается в 1,19; 1,32; 1,43 и 1,51 раз по сравнению с данными при рождении, и отличаются от данных девочек - 1,18; 1,31; 1,42 и 1,46.

При одинаковых абсолютных величинах длины бедра, голени у мальчиков и девочек при рождении ($p>0,05$), рост в длине бедра с 3-го мес, голени и общей длины ноги со 2-го мес постнатальной жизни у девочек отстает таковым от мальчиков ($p<0,05$ 0,001). По длине стопы обследованные дети при рождении, а также во все периоды наблюдения статистических различий не имеют ($p>0,05$).

Абсолютный рост длины бедра за 12 мес жизни у мальчиков более высокий (6,52 см), чем у девочек (5,96см) и длина бедра у мальчиков на первом году жизни растет интенсивно: относительный рост его составляет 1,26; 1,43; 1,53 и 1,60, у девочек - 1,24; 1,39; 1,49 и 1,56 по кварталам года.

Длина голени в течение первого года жизниувеличивалась в 1,63 и 1,60 раз соответственно у мальчиков и девочек, и составила в абсолютных цифрах 6,28 и 5,81 см. Высокие значения длины голени у мальчиков за год обусловлены более интенсивными ежеквартальными (2,67 и 1,83 см) и ежемесячными (0,89 и 0,61 см) прибавками на первом полугодии жизни, в отличие от девочек (ежеквартальные - 2,34 и 0,78 см; ежемесячные - 1,66 и 0,55 см).

Увеличение длины стопы за 12 мес жизни составило 4,11 и 4,19 см, соответственно у мальчиков и девочек, и выражалось в относительных величинах к рождению 1,52 и 1,55. Следовательно, абсолютные и относительные размеры длины стопы у девочек к концу 1-го года жизни были выше по сравнению с мальчиками. Это связано с интенсивностью прибавки в длине стопы у девочек на 1-м (1,66 и 0,55см) и 2-м (1,09 и 0,36 см) кварталах жизни, ежеквартальными и ежемесячными прибавками, что отличается таковыми от мальчиков: на 1-м квартале -0,96 и 0,32 см, на 2-м квартале - 0,96

и 0.32 см. Относительный рост в длине ноги у мальчиков по кварталам жизни составил 1,25; 1,40; 1,52 и 1,60 и не отличается от данных девочек.

Из литературных источников, цитированных нами, явствует, что морфофункциональные свойства развивающегося организма по обхватным размерам во многом определяют соотношения периода роста и развития [14]. Показано, что если возрастное увеличение длины тела детей влияет на развитие скелета, то развитие массы тела и некоторые обхватные размеры (окружность груди, обхват плеча, бедра, голени) отражают возрастные изменения мускулатуры и жироотложения, а также характеризуют упитанность детей [14]. Нами представлена динамика массы тела и обхватных размеров обследованных детей. Масса тела детей при рождении зависимости от пола не имеет ($p>0,05$) и, начиная со 2 месяца постнатальной жизни, у девочек интенсивность нарастания массы тела отстает в таковой в отличие от мальчиков ($p<0,05$ - $0,01$). Годовой прирост в массе тела мальчиков (6543,3 г, $p<0,01$) существенно больше, чем у девочек (6092,5 г). Относительный рост массы тела у мальчиков по кварталам жизни увеличивается более интенсивно на I и II кварталах (76,98 и 60,81%), чем у девочек (65,0% и 53,9%), а на III и IV кварталах эта разница сглаживается: у мальчиков - 37,8 и 23,13%, у девочек - 37,4% и 27,9%.

Ежемесячная прибавка в массе тела у мальчиков по кварталам первого года жизни составляет 847,0; 669,0; 416,0 и 261,0 г; у девочек -723,0; 592,0; 410,0 и 306,0 г соответственно. У мальчиков интенсивность прибавки в массе тела увеличена на I и II кварталах, а у девочек на IV квартале. У мальчиков удвоение массы тела происходит раньше (4 мес), чем у девочек (5мес), утроение массы тела наступает у мальчиков к концу года, а у девочек - еще нет, т.к. масса тела у мальчиков к концу года увеличивается в 2,98 раз, а у девочек в 2,85 раз.

По окружности головы, обследованные дети до 3 мес постнатальной жизни, не различаются по полу ($p<0,05$), а в последующих возрастах окружность головы мальчиков опережает таковыми девочек ($p<0,05$ - $0,001$). Данный параметр у мальчиков и девочек к концу года увеличивается в 1,36 и 1,32 раз, соответственно на 12,32 и 11,24 см. Окружность головы интенсивно растет у мальчиков (14,39 и 12,48%) и девочек (12,19 и 11,29%) на I и II кварталах жизни, а в последующем на III (4,67% и 4,24%) и на IV кварталах (4,73 и 4,21%) интенсивность роста увеличения окружности головы резко падает.

По окружности груди мальчикии девочки при рождении и в течение первого месяца жизни статистически не различались ($p>0,05$), а в последующих возрастах (2-12 мес жизни) окружность груди у девочек меньше, чем у мальчиков ($p<0,05$ - $0,001$). Окружность груди мальчиков и девочек к концу года увеличивалась соответственно в 1,47 и 1,46 раз по сравнению с первоначальными показателями и составила за год 15,73 и 14,99 см. Интенсивность увеличения прироста окружности груди у обследованных детей более выражена на I (19,73% и 17,03%) и II кварталах жизни (17,69 и

17,45%), соответственно у мальчиков и девочек. У девочек во втором полугодии жизни интенсивность увеличения относительного роста окружность груди несколько ускорена.

По данным В.В.Бунак (1968) в увеличении обхвата плечевого пояса участвуют не меньше чем три фактора: окружность грудной клетки, плеча и направление роста в длину (прибавка в росте) и ширину (прибавка в массе). В связи с этим, абсолютное (23,95 и 23,34 см) и относительное увеличение (66,1 и 64,9%) обхвата плеча с возрастом связано с более интенсивным ростом окружности плеча, чем окружности груди обследованных детей. Обхват плечевого пояса у девочек в абсолютных величинах с 3 мес жизни отстает таковым от мальчиков ($p<0,05$ - 0,001). Это связано с преимущественным отставанием в окружности груди, т.к. в окружности плеча у детей зависимости от пола статистическое различие отсутствовало. Интенсивность увеличения обхвата плечевого пояса выражена у мальчиков на I квартале жизни (27,1%) по сравнению с девочками (23,89%), на II квартале их различие сглаживается (20,43 и 18 22%); в III (14,63 и 7,26%) и IV (12,75 и 5,85%) кварталах жизни относительный рост этого показателя более выражен у девочек.

Обследованные дети по окружности плеча при рождении в период наблюдения (1-10 мес) статистически не различались между собой ($p>0,05$), а к концу 11-12 мес жизни окружность плеча девочек несколько уменьшалась ($p<0,05$). Окружность плеча за 12 мес жизни увеличивается у мальчиков и девочек соответственно в 1,65 и 1,60 раз, и в абсолютных цифрах составляет 6,44 и 5,94 см. Низкие значения окружности плеча у девочек к концу года обусловлены их низкими ежемесячными абсолютными и относительными приростами на I (0,91 см и 9,16 %) и IV кварталах жизни (0,19 см и 1,89%) по сравнению с данными мальчиков (0,93 см и 9,34%; 0,23 см и 2,29%).

При рождении по окружности предплечья обследованные дети статистически не различались ($p>0,05$) на 1-м ($p<0,05$) и особенно на 5-10 мес жизни; девочки по абсолютным значениям этого показателя существенно опережают данные мальчиков ($p<0,01$ 0,001). За первый год жизни окружность предплечья у девочек увеличивается существенно (в 1,64 раз) и составляет 5,66 см, что выше данных мальчиков (1,54 и 4,92 см). Интенсивность нарастания относительных величин роста окружности предплечья у девочек выражена на I (29,78 %) и II кварталах жизни (18,2%). У мальчиков на I кварталах жизни интенсивность роста окружности предплечья меньше, чем у девочек (23,56%, $p<0,05$) и резко падает ко 2 триместру (12,7%, $p<0,01$)

По обхвату бедер обследованные дети в зависимости от пола во все времена наблюдения статистических различий не имели ($p>0,05$). Однако, абсолютный (10,58 см) и относительный рост обхвата бедер у девочек (66,5%) к концу года выше, чем у мальчиков (9,46 см и 56,9%, $p<0,05$, $p<0,001$). Окружность бедра у мальчиков на I квартале увеличивается в 1,25 раз, на II, III и IV кварталах соответственно в 1,42; 1,51; и 1,57 раз, что существенно различаются таковыми от девочек: 1,3; 1,49; 1,60 и 1,66 раз.

Мальчики при рождении и в течение 1-2 мес жизни по обхвату голени опережают данные девочек ($p<0,05$ - 0,01), на 3-5 мес жизни не различаются между собой ($p>0,05$), а в 6-10 мес окружность голени мальчиков вновь статистически существенно выше, чем у девочек ($p<0,05$ - 0,01), а к концу года (11-12 мес) зависимость окружности голени от пола нивелируется ($p>0,05$). Окружность голени увеличивалась у мальчиков по кварталам в 1,38; 1,65; 1,77 и 1,86 раз, а у девочек в 1,43; 1,69; 1,83 и 1,92 раз соответственно по отношению к размерам при рождении. Самый интенсивный относительный рост окружности голени у мальчиков (38,16 и 26,52%) и девочек (43,17 и 26,39%) отмечался на I и II кварталах жизни. К концу года увеличение абсолютного (9,25 см) и относительного роста (92,22%) окружности голени у девочек более выражено, чем у мальчиков (9,04 см и 85,61%).

Из представленных материалов видно, что у детей в течение первого года жизни в связи с увеличением массы и длины тела интенсивно увеличивается ($p<0,05$ - 0,001) абсолютная поверхность тела (АПТ $см^2$). У мальчиков АПТ к году увеличивалась на 2421,8 $см^2$, что составило 110,2% относительного роста к показателям при рождения, т.е. АПТ увеличилась в 2,10 раз от первоначального показателя. АПТ у мальчиков интенсивно увеличивалась на I (43,48%) и II кварталах жизни (32,99%). АПТ у девочек во все периоды исследования, кроме периода новорожденности, была меньше, чем у мальчиков ($p<0,05$ - 0,001). Значение АПТ у девочек к концу года составило 2239,4 $см^2$, что составило 102,13% относительного роста к первоначальному показателю (увеличилось в 2,02 раза). Интенсивность увеличения относительного роста АПТ у девочек также более выражена на I (41,38%) и II кварталах (25,86%) жизни. Отличительными чертами прибавки АПТ у девочек явились низкий абсолютный (567 $см^2$) и относительный рост (25,86%) на II квартале жизни, что существенно различались от данных мальчиков (725,3 $см^2$ и 32,99%). Эти сдвиги у девочек обусловлены низкой интенсивностью прибавки в массе тела на I (65,9%, $p<0,01$) и II кварталах жизни (53,0%, $p<0,05$), чем у мальчиков (76,9% и 60,8%)

Нами рассчитывалась константа роста обхватных размеров (масса тела, окружность головы и груди) наиболее часто используемые в педиатрической практике для оценки состояния физического развития. Относительная скорость роста массы тела детей, соответственно у мальчиков 22,2% и девочек 21,3%, в первый месяц жизни (KW=6,66 и 6,24) на 50% снижается к 5 месяцу жизни (KW=2,85 и 2,87) и к концу года существенно ослабевает относительный рост 2,05 и 2,95 (KW=0,61 и 0,88). Динамика константы роста массы тела у мальчиков до 7 месяца постнатальной жизни увеличена по сравнению с девочками, а с 8 месяца темп роста массы мальчиков отстает от девочек.

Динамика темпа роста окружности головы у детей в первом месяце жизни наиболее интенсивна у мальчиков (CW=5,53% и CW =1,66) и девочек (CW=5,16% и CW =1,55); к 5-6 месяцу жизни интенсивность и темп роста уменьшались на 50%. К концу года она составила у мальчиков и девочек

соответственно CW=1,11 и 1,08 и CW=0,33 и 0,32. Интенсивность увеличения головы у мальчиков в период 1-6 месяц более высокая, чем у девочек, к 7-8 месяцу, а у последних несколько усилена, а затем с 9 месяца не различалась в зависимости от пола обследованных.

Интенсивность нарастания окружности груди по сравнению с окружностью головы, более высокая, что способствует более быстрому росту периметра груди, чем головы на первом году жизни детей. Это видно по данным интенсивности относительного роста (6,33% и 6,91%) и константы роста (1,90 и 2,07). При изучении динамики темпа роста окружности груди выявляется существенное снижение интенсивности (1,91 и 2,3%) и константы роста (0,57 и 0,69) на 7 месяце по сравнению с данными первого месяца жизни. Отличительной особенностью темпа роста окружности груди от головы у детей явилось увеличение интенсивности роста у девочек начиная с 5 месяца и продолжавшегося увеличения его до 12 месяцев постнатальной жизни, что не наблюдалось у детей по окружности головы.

Выводы: 1) на основании исследований выявлена неоднородность увеличения абсолютных и относительных величин основных показателей антропометрии; 2) абсолютные и относительные величины антропометрии выраженно зависят от периода постнатальной жизни и пола обследованных детей; 3) представленные исследования рекомендованы учитывать при трактовке динамики антропометрических показателей физического развития детей в динамике первого года жизни.

Использованные источники:

1. Гелашвили О.А., Хисамов Р.Р., Шальнева И.Р. Физическое развитие детей и подростков // Современные проблемы науки и образования. – 2018. – № 3.
2. Баранов А.А Физическое развитие детей и подростков на рубеже тысячелетий. – М.: Научный центр здоровья РАМН, 2008. – 215 с.
3. Вельтищев Ю.Е. Объективные показатели нормального развития и состояния здоровья ребенка (нормативы детского возраста). – М.,2002.–163 с.
4. Величковский Б.Т. Рост и развитие детей и подростков в России / Б.Т. Величковский, А.А. Баранов, В.Р. Кучма // Вестник РАМН. – 2004. - № 1. – С. 43-45.
5. Вельтищев Ю.Е. Рост ребенка: закономерности, нормальные вариации, соматотипы, нарушения и их коррекция: лекция от врачей // Российский вестник перинатологии и педиатрии. Приложение. – 2000. – С. 97.
6. Никитюк Д.Б. Роль антропометрического метода в оценке физического развития детей и подростков в норме и патологии / Д.Б. Никитюк и др. // Журнал анатомии и гистопатологии. - 2014. – Т. 3 (3). - С. 9-14.
7. Буракова Е.Н. Динамика изменений антропометрических показателей у детей Самарского региона в постнатальном периоде онтогенеза: автореф. дис. … канд. мед. наук. – Оренбург, 2016. – 21 с.
8. Зрячкин Н.И. О необходимости региональных стандартов физического развития детей раннего возраста / Н.И. Зрячкин, Т.В. Елизарова // Астраханский медицинский журнал. – 2013. – № 8 (3). – С. 117-121

9. .Физическое развитие детей: фундаментальные и прикладные аспекты / Н.А. Скоблина, О.Ю. Милушкина и др. – М.: Союз гигиенистов, 2018 – 179 с.
10. WHO/ Child growth standards. Growth refferens 0-60 months. 2017. http://www.who.int./childgrowth/standards/en.
11. De Onis M., Garza C., Victora C.G., Bhan M.K., Norum K.R., editors. WHO Multicentre Growth Reference Study (MGRS): Rationale, Planning and Implementation. Food Nutr Bull 2004;25 (Suppl 1): S1–89
12. http://www.who.int

УДК 616.1 (075.8).

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ВОПРОСЫ ТЕЧЕНИЯ, ДИАГНОСТИКИ И ЛЕЧЕНИЯ ЗАБОЛЕВАНИЯ У ПАЦИЕНТОВ С ХРОНИЧЕСКОЙ СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТЬЮ

Резюме. Хроническая сердечная недостаточность (ХСН) – клинический синдром с типичными жалобами (одышка, утомляемость, отеки ног) и проявлениями (высокое давление в яремных венах, отеки ног, хрипы в легких), вызванный структурными и/или функциональными изменениями сердца, которые привели к сниженному сердечному выбросу и/или повышенному внутрисердечному давлению в покое или при нагрузке.

Ключевые слова: сердечная недостаточность, диагностика, лечения.

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ISSUES OF THE COURSE, DIAGNOSIS AND TREATMENT OF THE DISEASE IN PATIENTS WITH CHRONIC HEART FAILURE

Resume. Chronic heart failure (CHF) is a clinical syndrome with typical complaints (shortness of breath, fatigue, leg edema) and manifestations (high pressure in the jugular veins, leg edema, wheezing in the lungs) caused by structural and / or functional changes in the heart, which led to a decreased cardiac output and / or increased intracardiac pressure at rest or during exercise.

Key words: heart failure, diagnosis, treatment.

Введение. Сердечная недостаточность характеризуется изменением структуры или функции сердца, ведущим к его неспособности доставлять кислород в соответствии с потребностью тканей, несмотря на нормальное давление наполнения [2,5].

В соответствии с современными международными рекомендациями хроническая сердечная недостаточность (ХСН) определяется как синдром, при котором у пациента имеются типичные жалобы (одышка, отеки ног, утомляемость) и симптомы (повышенное венозное югулярное давление,

хрипы в легких, смещенный верхушечный толчок) в результате изменения структуры или функции сердца [1,6].

Сердечная недостаточность может проявляться как при сниженной, так и нормальной фракции выброса левого желудочка (ФВ ЛЖ) [3]. Здесь и далее рассматривается ХСН только со сниженной ФВ ЛЖ как наиболее часто встречающийся вариант у больных после инфаркта миокарда [4].

Цель исследования: Изучить возможности дифференциальной диагностики и оптимального лечения хронической сердечной недостаточности в условиях городской поликлиники.

Материал и методы исследования: Проведено проспективное наблюдательное исследование пациентов, обратившихся в течение года к терапевту в клиники АГМИ г.Андижана.

Результаты исследования: «Мягкие» критерии диагноза хронической сердечной недостаточности (ХСН) имели 29,8% пациентов от всего годичного приема кардиолога поликлиники. В результате обследования диагноз ХСН подтвержден в 50,3% случаев. У остальных пациентов, в том числе у 33,3% мужчин и 59,5% женщин, выявлены альтернативные причины жалоб: ХОБЛ (10,8%), гипотиреоз (9,2%), преходящая ишемия миокарда (9,2%), ожирение (10,3%), психогенные причины (4,3%), анемия (3,2%), аритмии (2,2%).

В 90,8% случаев дифференциальный диагноз ХСН завершен в условиях поликлиники и окружного диагностического клинического центра, и лишь 9,2% больных потребовалось дополнительное обследование в специализированном кардиологическом учреждении. Отсутствие возможности исследования мозгового натрийуретического пептида для скрининга, территориальная отдаленность и ожидание исследований в окружном клиническом центре способствовали увеличению сроков (в среднем до 101,8±88дней) и стоимости обследования (8,03±2,1 услуг диагностики на человека), а также выбыванию из исследования 36,1% пациентов с подозрением на ХСН.

Пациенты с верифицированной ХСН соответствовали по полу (равное число мужчин и женщин), этиологии, среднему функциональному классу NYHA (2,1±0,7) и доле лиц с низкой фракцией выброса левого желудочка (44,1%) контингенту европейского регистра EuroHeart Failure survey, но отличались более молодым возрастом (64,8±10,6лет) и более высокой распространенностью артериальной гипертонии (74,2%), аналогично пациентам российского регистра ЭПОХА-О-ХСН.

Ингибиторы АПФ либо антагонисты рецепторов к ангиотензину II назначены 95%, рекомендованные р-адреноблокаторы — 91%, спиронолактон — 71%, диуретики - 90%, дигоксин - 27%, статины - 61% пациентов с ХСН. При ХСН с низкой ФВ ЛЖ целевые дозы иАПФ/АРАП и Р-адреноблокаторов

достигнуты соответственно в 51% и 44%, не менее 50% от целевых доз - в 68%, целевая ЧСС - в 83% случаев, что потребовало добавления ивабрадина у 23% больных с синусовым ритмом. Осталось недостаточным применение

пероральных антикоагулянтов, которые удалось назначить лишь 43,2% пациентов, имевших соответствующие показания.

Вывод: Достижению целевых доз основных рекомендованных препаратов препятствовали артериальная гипотония (39%), брадиаритмии (17%), бронхообструкция (12%), гиперкалиемия (5%), облитерирующий атеросклероз артерий нижних конечностей (5%) и снижение скорости клубочковой фильтрации (2%). В среднем артериальное давление, калий и креатинин плазмы крови оставались в пределах нормы.

Использованные источники:

1.Атроценко Е.С. Пациент с хронической сердечной недостаточностью и сохраненной систолической функцией левого желудочка // Сердечная недостаточность. 2007. - Т. 8, № 6 (44). - С. 297-300.

2.Кириченко А.А., Сметник В.П., Никулина Ж. С. Влияние заместительной гормонотерапии на артериальное давление и гемодинамику у больных с климактерическим синдромом. // Климактерий и постменопауза. 1998. №1. С. 12—15.

3.Подзолкова Н. М., Подзолков В. И., Можарова Л. Г., Хомицкая Ю. В. Гормональный континуум женского здоровья: эволюция сердечнососудистого риска от менархе до менопаузы // Журнал Сердце. 2004. -Т.3. -№ 6. - с. 276-279.

4.Cleland JG, Swedberg K, Follath F et al. The Euro Heart Failure survey programme a survey on the quality of care among patients with heart failure in Europe. Part 1: patient characteristics and diagnosis. // Eur Heart J.2003;24 (5):442-463.

5.Marsh M.S., Crook D., Whitecroft S. et al Effect of continuous combined estrogen and desogestrel hormone replacement therapy on serum lipids and lipoproteins. // Obstet. Gynecol. 1994. V. 83. P. 19-23.

6.Wiiting Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women.// JAMA 2002; 288(3): 321-3.

УДК 004.81

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О РОЛИ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ ПРИ ОБУЧЕНИИ ИНОСТРАННОМУ ЯЗЫКУ

Аннотация. Использование информационных технологий позволяет реализовать целый ряд дидактических свойств и функций в образовательном процессе, таких как многоуровневость, мультимедийность, гипертекстовая структура, разнообразие функциональных типов ресурсов, возможность автоматизации процессов информационно-методического обеспечения, а также развитие умений самостоятельной учебной деятельности.

Ключевые слова: информационные технологии, коммуникационные технологии, речевая компетенция, познавательная деятельность.

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THE ROLE OF INFORMATION TECHNOLOGY IN FOREIGN LANGUAGE TEACHING

Annotation: the use of information technologies allows to implement a number of didactic properties and functions in the educational process, such as multilayer, multimedia, hypertext structure, variety of functional types of resources, possibility of automation of information and methodical support processes, as well as development of skills of independent educational activity.

Keywords: information technologies, communication technologies, speech competence, cognitive activity.

Информационные технологии – это система методов и способов сбора, передачи, накопления, обработки, хранения и использования информации на основе применения современных компьютерных и других технических средств [1]. Выделяют следующие цели применения информационных технологий на занятиях английского языка: повышение мотивации к изучению языка; развитие речевой компетенции; увеличение объема лингвистических знаний; расширение объема знаний о социокультурной специфике страны изучаемого языка; развитие способности и готовности к самостоятельному изучению английского языка [2].

В ходе занятий по иностранному языку средства информационных технологий позволяют эффективно выполнять обширный ряд дидактических задач. Например, компьютер и другие средства ИТ помогают преподавателю при формировании навыков и умений чтения, письменной речи, позволяют более плодотворно пополнять словарный запас учащихся, положительно влияют на формирование устойчивой мотивации к изучению иностранного языка. Вместе с тем, важной задачей преподавателя является создание благоприятных условий практического овладения языком для каждого учащегося, отбор таких методов обучения, которые дадут возможность каждому студенту проявить своё творчество и активность, а также позволят активизировать познавательную деятельность учащегося в процессе обучения иностранным языкам.

Современные информационные и коммуникационные технологии обладают множеством дидактических свойств и функций. Дидактические свойства современных ИКТ – основные характеристики, признаки конкретных технологий, отличающие одни от других, существенные для дидактики (включая лингводидактику) как в плане теории, так и в плане практики. Под дидактическими функциями современных ИКТ поднимаются внешние проявления средств ИКТ, используемые в учебно-воспитательном процессе для реализации поставленных целей [3].

Современные средства ИТ позволяют частично или полностью автоматизировать учебную деятельность и ее контроль [4].

Современные информационные и коммуникационные технологии обладают дополнительными дидактическими функциями, позволяющим изрядно интенсифицировать процесс обучения иностранным языкам. К таким дидактическим функциям, относят: выстраивание индивидуальной образовательной траектории; реализацию педагогической технологии обучения в сотрудничестве; развитие умений самостоятельной учебной деятельности [4].

К наиболее часто используемым в учебном процессе средствам ИТ относят электронные учебники и пособия, демонстрируемые с помощью компьютера и мультимедийного проектора, образовательные ресурсы Интернета, видео- и аудио технику, электронные энциклопедии и справочники, DVD и CD диски с картинами и иллюстрациями, тренажеры и программы тестирования, научно-исследовательские работы и проекты. Также к эффективным средствам развития умений письменной речи можно отнести различные онлайн-тренажеры. Их использование позволяет реализовать целый ряд дидактических свойств и функций ИТ, таких как многоуровневость, мультимедийность, гипертекстовая структура, разнообразие функциональных типов ресурсов, возможность автоматизации процессов информационно-методического обеспечения и организации управления учебной деятельностью обучающихся и ее контроль, выстраивание индивидуальной образовательной траектории, а также развитие умений самостоятельной учебной деятельности.

Среди интерактивных заданий с использованием информационно-коммуникационных технологий следует отметить следующие: обмен электронными письмами с преподавателями, другими студентами; создание вики-страниц; ведение блогов и создание комментариев; создание интерактивных опросов; создание интерактивных заданий для формирования орфографических навыков в ходе взаимообучения (например, на сайте LearningApps.org) и др.

Использование различных заданий помогает реализовать весь спектр дидактических свойств и функций ИТ, что в значительной мере поможет интенсифицировать процесс обучения иноязычной письменной речи, так как средства ИТ предоставляют реальную возможность общения студентов с преподавателем, с одногруппниками, а также с носителями языка. Так, например, сервис Twitter удобен для размещения кратких сообщений, с целью информирования других пользователей о произошедших в жизни автора событиях в настоящий момент. Всевозможные мессенджеры, такие как ICQ, Viber, WhatsApp, позволяют моментально обмениваться текстовыми сообщениями с другими. Ведение блогов является эффективным при размещении личной информации для общественного доступа (например, ведение дневника). Форум – это своеобразная виртуальная площадка для обсуждения тех или иных вопросов, а также для ведения аргументированных споров на различные темы.

Немаловажным является тот факт, что современные средства ИТ позволяют пользователям использовать сетевые базы данных, различные поисковые системы, библиотечные каталоги и т. п., помогающие преподавателю и его учащимся приобщиться к мировым информационным ресурсам. Как следствие, учебная деятельность как на занятиях, так и во внеурочное время выходит на принципиально более высокий и эффективный уровень.

Так, еще одним преимуществом использования ИТ при обучении письму является тот факт, что сам процесс обучения приобретает больший динамизм. Учащиеся самостоятельно набирают и правят тексты своих сообщений и сочинений, учатся эффективно работать с текстовыми редакторами, совершенствуют навыки работы на компьютере, работают с электронными версиями различных словарей. Студенты получают возможность использовать знания и навыки, полученные на занятиях и осознать практическую значимость приобретенных знаний, чему активно способствует переписка со сверстниками из других стран, отправление своих сочинений и творческих работ преподавателю, принятие участия в различных проектах.

Необходимо подчеркнуть, что активное включение в образовательный процесс средств ИТ вовсе не исключает традиционные методы обучения, а гармонично сочетается с ними на всех этапах обучения. В то же время использование компьютерных технологий позволяет не только многократно

повысить эффективность обучения, но и мотивировать учащихся на дальнейшее изучение английского языка.

Использованные источники:

1. Писаренко В.И. Новые информационные технологии обучения иностранным языкам / В.И. Писаренко // Открытое образование. – 2010. –№4. – С. 54–63

2. Журавлева Н.В. Использование ИКТ на уроках английского языка /Н.В. Журавлева. – (https://nsportal.ru/shkola/inostrannye-yazyki/angliiskiyyazyk/library/2013/02/08/ispolzovanie-ikt-na-urokakh).

3. Полат Е.С., Бухаркина М.Ю., Моисеева М.В. Теория и практика дистанционного обучения: учебно-методическое пособие / Е.С. Полат, М.Ю.Бухаркина, М.В. Моисеева. – М.: Академия, 2004. – 416 с.

4. Сысоев П. В. Современные информационные и коммуникационные технологии: дидактические свойства и функции / П.В. Сысоев //Язык и культура. – 2012. – № 1. – С. 120–133. (https://elibrary.ru/item.asp?id=17698017HYPERLINK "https://elibrary.ru/item.asp?id=17698017&"&)

УДК 687.81

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О ВОЗМОЖНОСТИ ИСПОЛЬЗОВАНИЯ ИГРОВЫХ ТЕХНОЛОГИЙ ПРИ ИЗУЧЕНИИ ИНОСТРАННОГО ЯЗЫКА

Аннотация. Понятие игровые педагогические технологии включает в себя группу методов и приёмов организации педагогического процесса в форме различных педагогических игр

Ключевые слова: учебные игры, геймификация, правила игры, игровые задания.

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ON THE POSSIBILITY OF USING GAME TECHNOLOGIES WHEN LEARNING A FOREIGN LANGUAGE

Annotation: the concept of game pedagogical technologies includes a group of methods and techniques of organization of the pedagogical process in the form of various pedagogical games

Keywords: training games, gameplay, rules of the game, game assignments.

В настоящее время в методической литературе существует достаточно большое количество классификаций, систематизирующих виды учебных игр в соответствии с различными критериями.

По целям и задачам обучения учебные игры, используемые на занятиях по иностранному языку, можно разделить на языковые (аспектные) и на речевые. Языковые игры, помогают усвоить различные аспекты языка (фонетику, лексику, грамматику, синтаксис, стилистику), они делятся на фонетические, лексические, грамматические, синтаксические, стилистические.

Речевые игры нацелены на формирование умения в определённых видах речевой деятельности. Каждому виду речевой деятельности соответствует определённый вид учебной игры, нацеленной на обучение аудированию, обучение монологической идиалогической речи, обучение чтению и обучение письму.

По форме проведения выделяют игры предметные, подвижные с вербальным компонентом, сюжетные или ситуационные, ролевые, игры-

соревнования, интеллектуальные игры (ребусы, кроссворды, викторины и т. д.), игры-взаимодействия (коммуникативные, интерактивные). По способу организации игры бывают компьютерные и некомпьютерные, письменные и устные, с опорами и без опор, имитационно-моделирующие, креативныеи т. д. По степени сложности выполняемых действий все учебные игры подразделяются на простые (моноситуационные) и сложные (полиситуационнные), а по длительности проведения они делятся на продолжительные и непродолжительные. По количественному составу участников игры подразделяются на индивидуальные, парные, групповые, командные и коллективные [1, с. 114].

Наряду с игровыми технологиями, все чаще в литературе можно встретить термин геймификация (игрофикация). Это понятие можно определить следующим образом - применение игровых методов для достижения целей, не связанных с содержанием игры, таких как повышение мотивации, улучшение производительности труда, отработка навыков. Методы геймификации используются в разных областях, таких как занятия спортом, поддержание корпоративной культуры. Все более популярной становится геймификация образовательного процесса [2].

В литературе выделяются следующие аспекты геймификации: механика, динамика и компоненты. Вместе они составляют так называемую пирамиду геймификации. У подножия пирамиды располагаются компоненты геймификации. Их довольно много, это подсчёт очков, уровни, рейтинговые таблицы, виртуальные награды и т. п. При геймификации образования чаще всего используются очки, значки и рейтинговые таблицы. Учащиеся за свои достижения на занятиях зарабатывают очки и в зависимости от их количества занимают место в рейтинговой таблице. В чем же принципиальное отличие этой рейтинговой таблицы от традиционных балов?

Дело в том, что в геймификации всегда присутствует определённая игровая динамика, которая превращает процесс обучения в нечто более интересное.

Динамика – это использование сценариев, требующих внимания пользователя и реакции в режиме реального времени.

Механика в геймификации – это использование элементов, характерных для игрового процесса, таких как статусы, награды, виртуальные ресурсы, шанс [3].

Геймификация в образовании может выполнять несколько функций, основной из которых можно назвать повышение мотивации учащихся. Геймификация также помогает вовлечь учащихся в процесс усвоения материала, стимулировать к дальнейшему обучению и развитию. Геймификация оказывает серьёзное влияние на поведение учащихся через использование определённых стратегий, правил, ролей. Дж. Ли и Дж. Хаммер рассматривают три области поведения учащихся в игре [3].

Первая область – когнитивная. В процессе игры человек проходит через сложную систему правил и уровней и добивается победы путём экспериментирования и повышения мастерства.

Игра обеспечивает приобретение игроком конкретных умений. Содержание игры обеспечивает несколько маршрутов достижения цели. Вышеописанные техники, должны быть применимы следующим образом: учащиеся должны получать чёткие задания, за выполнением которых следует определённая награда.

Вторая область – эмоциональная. Дж. Ли считает, что игра позволяет испытать целый спектр эмоций, от радости до разочарования. Успехи в игре вызывают оптимизм и гордость, но даже неудачи и связанные с ними отрицательные эмоции являются необходимой частью обучения. Дело в том, что зачастую для приобретения необходимого опыта и новых знаний в игре приходится терпеть неудачу. Однако игра, в отличие от реальной жизни, предоставляет неограниченное количество попыток для решения поставленной задачи. Таким образом, учащиеся учатся справляться с трудностями, ожидающими их в реальности, в безопасной игровой среде.

И наконец третья область – социальная. Содержание и реализация игры позволяют учащимся играть роли и принимать решения, основываясь на различных точках зрения. Будучи членами команды или играя индивидуально, они получают возможность общаться и исследовать различные грани своей личности [3].

Использование игровых технологий в образовательном процессе позволяет сделать занятие более увлекательным и познавательным.

Использованные источники:

1. Комарова Ю.А. Использование учебных игр в процессе обучения иностранным языкам. – СПб.: Каро, 2001.
2. Пахомова Т.Е. Геймификация как средство подготовки студентов педагогического колледжа к решению профессиональных задач // Учёныезаписки Забайкальского государственного университета. №6 (65). – ULR: http://cyberleninka.ru/article/n/geymifikatsiya-kak-sredstvo-podgotovkistudentov-pedagogicheskogo-kolledzha-k-resheniyu-professionalnyhzadach#ixzz4XnQPYO9l (дата обращения: 28.01.2018)
3. Joey J. Lee Gamifi cation in Education: What, How, Why Bother? //Academia.edu.2015. URL: http://www.academia.edu/570970/Gamifi cation_in_Education_What_How_Why_Bother (дата обращения: 28.01.2018).

УДК 004.415

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ТЕСТИРОВАНИЕ ПО ИНОСТРАННОМУ ЯЗЫКУ КАК ФОРМА КОНТРОЛЯ ЗНАНИЙ СТУДЕНТОВ

Аннотация. Тестирование является одной из наиболее технологичных форм проведения автоматизированного контроля с управляемыми параметрами качества. В этом смысле ни одна из известных форм контроля знаний учащихся с тестированием сравниться не может

Ключевые слова: тест достижение; диагностирующий тест; обучающий тест; тест прогнозирования.

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FOREIGN LANGUAGE TESTING AS A FORM OF CONTROL OF STUDENTS' KNOWLEDGE

Annotation: testing is one of the most technological forms of automated control with controllable quality parameters. In this sense, none of the known forms of control of students' knowledge compared to testing

Keywords: achievement test; diagnostic test; training test; forecasting test.

Контроль знаний студентов является одним из основных элементов оценки качества образования. В учебном процессе, можно выделить три основных его вида: 1) предварительный; 2) текущий; 3) итоговый рассматриваемые как средство контроля за уровнем усвоения материала. Назначение предварительного контроля состоит в установлении исходного уровня знаний учащегося. Текущий контроль позволяет преподавателю получать сведения о ходе процесса усвоения материала каждым учащимся. Обычно текущий контроль осуществляется посредством устного опроса.

Итоговый контроль осуществляется в процессе экзаменов (зачетов). Здесь с высокой эффективностью могут быть применены соответствующим образом составленные тесты. Главное требование к итоговым тестовым заданиям – они должны соответствовать уровню стандарта образования, с применением компьютеров и специализированных программ.

Тестирование является одной из наиболее технологичных форм проведения автоматизированного контроля с управляемыми параметрами

качества. В этом смысле ни одна из известных форм контроля знаний учащихся с тестированием сравниться не может. При подготовке материалов для тестирования необходимо придерживаться следующих основных правил:

- нельзя включать ответы, неправильность которых на момент тестирования не может быть обоснована учащимися;
- неправильные ответы должны конструироваться на основе типичных ошибок и должны быть правдоподобными;
- правильные ответы среди всех предлагаемых ответов должны размещаться в случайном порядке;
- ответы на одни вопросы не должны быть подсказками для ответов на другие и не должны содержать «ловушек».

Тесты применяются на всех этапах дидактического процесса. С их помощью эффективно обеспечиваются предварительный, текущий и итоговый контроль знаний, умений, учет успеваемости, академических достижений. Преимущество такой проверки в том, что одновременно занята и продуктивно работает вся группа и за несколько минут можно получить оценку знаний каждого учащегося.

Тестирование выполняет три основные взаимосвязанные функции: диагностическую, обучающую и воспитательную.

Диагностическая функция заключается в выявлении уровня знаний, умений, навыков студента. Это основная, и самая очевидная функция тестирования. По объективности, широте и скорости диагностирования, тестирование превосходит все остальные формы педагогического контроля.

Обучающая функция тестирования состоит в мотивировании студента к активизации работы по усвоению учебного материала. Для усиления обучающей функции тестирования, могут быть использованы дополнительные меры стимулирования студентов, такие, как раздача преподавателем примерного перечня вопросов для самостоятельной подготовки, наличие в самом тесте наводящих вопросов и подсказок, совместный разбор результатов теста.

Воспитательная функция проявляется в периодичности и неизбежности тестового контроля. Это дисциплинирует, организует и направляет деятельность студентов, помогает выявить и устранить проблемы в знаниях, формирует стремление развить свои способности.

Основой следующей классификации являются цели тестов и характер деятельности испытуемых.

- Тест достижение используется как средство оценки результатов учения.
- Диагностирующий тест.
- Обучающий тест.
- Тест прогнозирования результатов обучении по выбранной технологии обучения.

Тесты предоставляют учащимся возможность проявить самостоятельность, индивидуальность, способствуют обучению студентов

процессуальному самоконтролю. Достоинство этого метода проверки качества образования в том, что он является доступным, точным и имеет возможность автоматизации.

Использованные источники:

1. Чурина К.В. Тестирование как форма контроля результатов обучения//Молодой ученый. – 2015. – №9(89). – С.1214-1217.
2. Электронный ресурс:http://mir-nauki.com/PDF/14DMN217.pdf
3.Фоменко Т.М. Тесты как форма контроля. М.,2008. С.115.

УДК 618.177-07

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СОВРЕМЕННЫЕ СПОСОБЫ КОНТРОЛЯ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ ДЕВОЧЕК-ПОДРОСТКОВ

Резюме. Проблема репродуктивного здоровья девушек стала центром внимания педагогики, физиологии, здравоохранения, в этом возрасте завершается физическое и психическое развитие, половое созревание, формируется репродуктивный потенциал. Прямое влияние на демографические процессы оказывает состояние репродуктивного здоровья девушек, вступающих в фертильный возраст.

Ключевые слова: репродуктивное здоровье девушек подростков, репродуктивный потенциал, медикодемографическая ситуация.

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MODERN WAYS TO CONTROL THE REPRODUCTIVE HEALTH OF ADOLESCENT GIRLS

Resume. The problem of girls' reproductive health has become the focus of pedagogy, physiology, and healthcare, at this age physical and mental development, puberty, and reproductive potential are completed. The state of reproductive health of girls entering the fertile age has a direct impact on demographic processes.

Keywords: reproductive health of adolescent girls, reproductive potential, medical and demographic situation.

Актуальность. Актуальной задачей является выявление и анализ основных закономерностей репродуктивного здоровья молодежи, на которую возлагаются особые надежды общества [2,7]. В структуре молодого поколения студенты представляют особую социальную группу, которая характеризуется определенными специфическими условиями труда и жизни, а также напряжением компенсаторно-приспособительных систем организма. Охрана репродуктивного здоровья молодежи в настоящее время приобретает особую ценность [4,5]. Время полового созревания исследователи называют критическим периодом постнатального развития женского и мужского организмов [1, 2, 5]. Особую остроту и актуальность вызывает состояние репродуктивного здоровья подростков, которых можно назвать поколением

надежды на оздоровление нации. Значимая доля расстройств репродуктивного здоровья возникает как результат заболеваний органов репродуктивной системы, начавшихся в детском и подростковом возрасте [3, 4].

Цель исследования. Целью исследования являлась оценка репродуктивного состояния у девочек- подростков в возрасте 14–17 лет.

Материалы и методы исследования. В ретроспективное исследование было включено 39 пациенток, проходивших обследование и лечение клинике АГМИ в период с 2022 по 2023гг.

Результаты исследования. Данные, полученные в ходе настоящего исследования, свидетельствуют о том, что современные подростки обоего пола из обеих групп имеют недостаточный, не соответствующий требованиям современности, уровень репродуктивного образования. Большинство опрошенных подростков из обеих групп без достоверных различий (85,0 и 79,7 % соответственно) считают, что репродуктивное образование должно быть частью образовательного процесса, аналогичное мнение высказывают 90,2 и 80,0 % матерей, воспитывающих детей подросткового возраста. Анализ состояния репродуктивного здоровья у девочек-подростков проводился по степени выраженности вторичных половых признаков, возрасту наступления менархе, частоте встречаемости нарушений овариально-менструального цикла и гинекологической заболеваемости. У большинства девочек обеих групп (75,1 и 91,0 % соответственно, $p > 0,05$) половая формула соответствовала возрастным стандартам.

Достоверно чаще у девушек-подростков 1-й группы наблюдалось отставание полового развития (24,9 и 9,0 % соответственно, $p < 0,05$): недоразвитие или слабое развитие молочных желез, задержка оволосения лобка и подмышечных впадин, возраста появления менархе. Анализ становления месячных также показал различия по группам: у девочек основной группы в большем проценте наблюдений начало месячных зарегистрировано в 11–12 лет, а в группе сравнения — 13–14 лет. Начало менархе в 15–16 лет в основной группе отмечено в 2 раза чаще (6,3 и 3,0 % соответственно, $p < 0,05$) на фоне дефицита массы тела. Отсутствие месячных на момент обследования было у 3-х девочек основной группы.

Среди обследованных девушек-подростков 1-й и 2-й групп менструации установились сразу — у 39,8 и 52,0 % соответственно. Анализ показал, что у девочек с повышенной умственной нагрузкой в 2 раза чаще, по сравнению с группой с обычной умственной нагрузкой, месячные установились более чем через год. Наиболее характерными были 28—32-дневные циклы продолжительностью от 3-х до 6-ти дней. У девочек 1-й группы длительность кровотечения во время месячных более 6–7-ми дней отмечалась чаще, чем во 2-й группе (30,9 и 8,6 % соответственно, $p < 0,05$). Нарушения менструальной функции в виде дисменореи наблюдались у девочек из обеих групп у 27,5 и у 14,0 % соответственно без достоверных различий, ювенильные маточные кровотечения наблюдались только у 3,0 % девочек основной группы.

Частота предменструального синдрома у подростков обеих групп составила 19,9 и 17,0 % соответственно без достоверных различий. У 6,5 % девочек основной группы клинически выявлена фиброзно-кистозная мастопатия, которая сочеталась с нарушениями менструально-овариального цикла. Проведенное исследование позволило установить, что среди современных девушек-подростков 29,3 % 1-й группы и 59,9 % 2-й группы ($p < 0,05$) сексуально активны. Девушки начинают половую жизнь до совершеннолетия, в том числе 10,7 % — в возрасте моложе 15 лет. Средний возраст их сексуального дебюта составляет 16,7 ± 0,06 и 15,7 ± 0,03 года соответственно. С целью контрацепции в обеих группах девушки подросткового возраста в основном использовали барьерные методы — 65,0 %, гормональные — 18,0 %, прерванный половой акт — 11 %, 6 % девушек не использовали никаких методов контрацепции. Во 2-й группе 4,3 % девушек в анамнезе имели беременность, прерванную медицинским абортом. Более чем у половины (54,5 %) девочек подросткового возраста с повышенной умственной нагрузкой при ультразвуковом исследовании выявлены разнообразные изменения: у 17,0 % выявлена гипоплазия матки, которая наблюдалась чаще у подростков с дефицитом массы тела, у 15,0 % — ретродевиация матки, у 5,0 % — седловидная матка, у 4,0 % — двурогая матка, у 26,0 % — мультифолликулярные изменения яичников, в группе сравнения — у 7,0 %. Ретенционные образования яичников встречались одинаково часто в обеих группах (6,6 и 8,8 % соответственно, $p > 0,05$).

Хронические воспалительные заболевания органов малого таза выявлены в обеих группах (32,2 и 35,9 % соответственно, $p > 0,05$). При бактериологическом и ПЦР исследованиях содержимого цервикального канала и заднего свода влагалища выделены различные типы бактериально-вирусных ассоциаций: E. coli, Enterococcus faecalis, Klebsiella pneumoniae — 25,8 %, Trichomonas vaginalis — 6 %, Candida albicans — 16 %, Ureaplasma species — 33,3 %, Chlamidia trachomatis — 16,7 %, Human Papillomavirus (16,18 тип) — 6,7 %, Herpes simplex virus (1, 2 тип) — 3,3 %. Оценка полового развития юношей показала, что у 19,0 % юношей 1-й группы и у 67,7 % 2-й группы половое развитие соответствовало возрасту ($p < 0,05$).

Вывод. Данные, полученные в ходе настоящего исследования, свидетельствуют о том, что современные подростки из обеих групп имеют низкий, не соответствующий требованиям современности, уровень репродуктивного образования и неадекватное половое воспитание в семье.

В план диспансерного наблюдения за детьми подросткового возраста необходимо включать гинеколога, андролога, так как раннее выявление нарушений репродуктивного здоровья, проведение оздоровительных мероприятий является профилактикой патологии половых функций.

Использованные источники:

1. Баранов А. А. Репродуктивное здоровье детей Российской Федерации: проблемы и пути их решения / А. А. Баранов, С. М. Шарков, С. П. Яцык // Рос. педиатр. журн. — 2010. — № 1. — С. 4–7.
2. Коколина В. Ф. Детская и подростковая гинекология: руководство для врачей / В. Ф. Коколина. — М.: ИД «МЕДПРАКТИКА-М», 2012. — 680 с.
3. Кучма В. Р. Стратегия «Здоровье и развитие подростков России» как инструмент охраны и укрепления здоровья подростков / В. Р. Кучма, И. К. Рапопорт // Репродуктивное здоровье детей и подростков. — 2011. — № 2. — С. 11–21.
4. Лещенко О. Я. Образовательные программы профилактики нарушений репродуктивного здоровья и формирования репродуктивной и сексуальной культуры современной молодежи (обзор литературы) / О. Я. Лещенко // Бюл. ВСНЦ СО РАМН. — 2012. — № 2, ч. 2. — С. 168–172.
5. Уварова Е. В. Проблемы репродуктивного здоровья девочек России / Е. В. Уварова // Справ. фельдшера и акушерки. — 2009. — № 1. — С. 7–14.
6. Образовательные медико-просветительские программы в России / Е. В. Уварова, Н. Д. Ходжемирова, Н. К. Громова [и др.] // Репродуктивное здоровье детей и подростков. — 2007. — № 5. — С. 70–72.

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МЕЖДУНАРОДНАЯ КОНКУРЕНТОСПОСОБНОСТЬ И МЕТОДЫ ЕЕ ОЦЕНКИ

Аннотация. Международная конкурентоспособность играет ключевую роль в современной экономике, поскольку она определяет способность страны конкурировать на мировом рынке. Оценка конкурентоспособности является важным инструментом для стран, поскольку позволяет им определить свои сильные и слабые стороны, а также разработать стратегии для улучшения своего положения на мировой арене.

Ключевые слова: конкурентоспособность, конкурентные преимущества, факторы производства, инфраструктура, денежные ресурсы, конкуренция.

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INTERNATIONAL COMPETITIVENESS AND METHODS FOR ITS ASSESSMENT

Abstract. International competitiveness plays a key role in the modern economy, as it determines a country's ability to compete in the global market. Competitiveness assessment is an important tool for countries as it allows them to identify their strengths and weaknesses and develop strategies to improve their position on the global stage

Key words: competitiveness, competitive advantages, factors of production, infrastructure, financial resources, competition.

Конкурентоспособность страны – способность страны в условиях свободной, добросовестной конкуренции производить товары и услуги, удовлетворяющие требованиям мирового рынка, реализация которых увеличивает благосостояние страны и отдельных ее граждан. Это синтетический показатель, характеризующий положение страны на мировом рынке и отражающий конкурентоспособность товара, товаропроизводителя. отраслевую конкурентоспособность. Роль правительства, случай и научно-технический прогресс играют роль катализаторов, побуждающие компании к изменениям в уровне конкурентоспособности стран (усиление или утрата). Могут возникнуть ситуации, такие как результаты технологических сдвигов,

изменения цен на ресурсы, валютных курсов, всплески мирового спроса, а также политические решения зарубежных стран и войны, которые избежать невозможно. Важное значение также имеет конкуренция на внутреннем рынке, которая обеспечивает фирме, а в последующем и стране, конкурентное преимущество на внешних рынках.

Развитие международного разделения труда привело к определенной специализации стран на мировой арене в зависимости от степени конкурентоспособности той или иной отрасли. В частности, в США наиболее конкурентоспособными отраслями являются авиационная и аэрокосмическая, уникальное машиностроение, автомобилестроение, производство суперкомпьютеров и разработка программного обеспечения. Синтетическим показателем, который объединяет конкурентоспособность товара, товаропроизводителя, отраслевую конкурентоспособность и характеризует положение страны на мировом рынке, является показатель конкурентоспособности стран.

В самом общем виде страновую конкурентоспособность можно определить, как способность страны в условиях свободной конкуренции производить товары и услуги, соответствующие требованиям мирового рынка, реализация которых увеличивает благосостояние страны по сравнению с другими странами.

Существует несколько методов оценки международной конкурентоспособности. Один из них - это использование индексов конкурентоспособности, таких как Global Competitiveness Index (Глобальный индекс конкурентоспособности) от Всемирного экономического форума. Этот индекс оценивает конкурентоспособность более 140 стран по ряду критериев, включая инфраструктуру, здравоохранение, образование, инновации и др. Другим методом является использование эконометрических моделей для анализа влияния различных факторов на конкурентоспособность страны. Методика оценки конкурентоспособности ВЭФ строится на анализе 249 основных показателей, которые включают как статистические данные, так и результаты опроса менеджеров из различных стран (до 2/3 оценок показателей). Число опрашиваемых менеджеров постоянно растет: в 2005 г. — 8,7 тыс., в 2006 г. более 11 тыс. Эти показатели затем сводятся в индексы. В 2006 г. измерялись девять факторных индексов («Государство», «Институты», «Конкурентоспособность бизнеса», «Инфраструктура», «Инновационный 161 потенциал», «Открытость», «Технологии», «Эффективность рынков», «Здравоохранение и школьное образование»), а затем определялся сводный индекс конкурентоспособности, в соответствии со значениями которого проводилось ранжирование стран.

Международный институт менеджмента и развития — МИРМ публикует свои ежегодные доклады начиная с 1989 г. Известно, что МИРМ стоял у истоков работы по конкурентоспособности для ВЭФ и продолжает ежегодно публиковать собственный доклад «World Competitiveness

Yearbook». Оценки строятся на основе обратного соотношения по сравнению с ВЭФ: примерно 1/3 — оценки экспертов и 2/3 — официальная статистика.

Важно отметить, что оценка конкурентоспособности должна быть комплексной и учитывать различные аспекты экономики, такие как инфраструктура, образование, инновации, правительственная политика и др. Также необходимо учитывать специфические особенности каждой страны и их влияние на конкурентоспособность.

Улучшение международной конкурентоспособности является приоритетной задачей для многих стран, поскольку это способствует экономическому росту, созданию рабочих мест и повышению уровня жизни населения. Для достижения этой цели необходимо разработать комплексные стратегии, включающие в себя улучшение инфраструктуры, развитие образования и науки, стимулирование инноваций и создание благоприятного инвестиционного климата.

Таким образом, оценка и улучшение международной конкурентоспособности являются важными задачами для стран, стремящихся укрепить свое положение на мировом рынке. Использование различных методов оценки позволяет странам получить объективную картину своего положения и разработать эффективные стратегии для достижения конкурентных преимуществ.

Использованные источники:

1. Трифонова, И. В. Роль транснациональных корпораций в глобализации мировой экономики / И. В. Трифонова. — Текст: непосредственный // Молодой ученый. — 2013. — № 9 (56). — С. 243-245

2. Худайбергенова А. Н. & Акбарова М. Ф. (2023). ПЕРСПЕКТИВЫ ИННОВАЦИОННОГО РАЗВИТИЯ НАЦИОНАЛЬНОЙ СИСТЕМЫ КОРПОРАТИВНОГО УПРАВЛЕНИЯ НА ОСНОВЕ МЕЖДУНАРОДНЫХ СТАНДАРТОВ И ЛУЧШИХ СОВРЕМЕННЫХ ПРАКТИК. Educational Research in Universal Sciences, 2(14), 401–404. Retrieved from http://erus.uz/index.php/er/article/view/4457

3. Akbarova, M. F. qizi. (2023). POST-INDUSTRIALIZATION AS THE MOST IMPORTANT TREND OF MODERN PROCESSES IN THE WORLD ECONOMY. Educational Research in Universal Sciences, 2(16), 110–112. Retrieved from http://erus.uz/index.php/er/article/view/4931

4. Акбарова, М. Ф. к., & Худайбергенова, А. (2024). ОБЩАЯ ХАРАКТЕРИСТИКА ТЕНЕВОЙ ЭКОНОМИКИ МИРА. Educational Research in Universal Sciences, 3(1), 99–102. Retrieved from http://erus.uz/index.php/er/article/view/5558

УДК: 616.149-008.341.1-053.3/.5-089.81

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ЛЕЧЕНИЕ КРОВОТЕЧЕНИЙ ИЗ ВАРИКОЗНО РАСШИРЕННЫХ ВЕН ПИЩЕВОДА И ЖЕЛУДКА У ДЕТЕЙ С ПОРТАЛЬНОЙ ГИПЕРТЕНЗИЕЙ

Резюме. Эффективность оказания квалифицированной медицинской помощи при синдроме портальной гипертензии и пищеводно-желудочных кровотечениях у детей зависит от своевременной диагностики, вовремя выполненной, при необходимости, остановки кровотечения и адекватного хирургического лечения. Однако при госпитализации позднее 1–2-х суток от начала первых признаков кровотечения исход во многом определяется используемыми методиками остановки кровотечения, их патогенетическими соответствиями закономерностям развития печеночной и полиорганной недостаточности. Лечение синдрома портальной гипертензии и кровотечений из варикозно расширенных вен пищевода и желудка включает в себя лечебно-профилактический комплекс мер: медикаментозную терапию, постановку зонда Блэкмора, эндоскопическое лигирование и склерозирование, а при крайней необходимости — и хирургическое лечение. Своевременная диагностика позволяет выявить заболевание в компенсированной и субкомпенсированной стадии, что значительно облегчает лечение и снижает летальность.

Ключевые слова: детской возраст, пищевод, желудка, кровотечения, портальная гипертензия.

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TREATMENT OF BLEEDING FROM VARICOSE VEINS OF THE ESOPHAGUS AND STOMACH IN CHILDREN WITH PORTAL HYPERTENSION

Resume. The effectiveness of providing qualified medical care for portal hypertension syndrome and esophageal-gastric bleeding in children depends on timely diagnosis, timely completion, if necessary, of stopping bleeding and adequate surgical treatment. However, with hospitalization later than 1-2 days from the onset of the first signs of bleeding, the outcome is largely determined by the methods used to stop bleeding, their pathogenetic correspondence to the patterns of development of liver and multiple organ failure. Treatment of the syndrome of portal hypertension and bleeding from varicose veins of the esophagus and stomach

includes a therapeutic and preventive package of measures: drug therapy, setting up a Blackmore probe, endoscopic ligation and sclerotherapy, and, if absolutely necessary, surgical treatment. Timely diagnosis allows you to identify the disease in a compensated and subcompensated stage, which greatly facilitates treatment and reduces mortality.

Key words: childhood, esophagus, stomach, bleeding, portal hypertension.

Актуальность. В настоящее время диагностика и лечение кровотечений из варикозно расширенных вен желудка и пищевода остается одной из актуальных проблем неотложной детской хирургии [2,7]. Это связано с тем, что современные тенденции в лечении таких пациентов основаны на топографо-анатомической специфике венозных коллатералей желудка и пищевода. По данным авторов в литературе, кровотечения из варикозно расширенных вен желудка и пищевода у детей возникают в 95% – 98% случаев в результате синдрома портальной гипертензии.

Сегодня усилия врачей направлены на поиск терапевтических и хирургических методов, позволяющих предотвратить последовательное развитие портальной гипертензии у детей и радикально снизить давление в портальной сосудистой системе, тем самым предотвратив риск кровотечения из варикозно расширенных вен пищевода и желудка [1,5]. Другим подходом, направленным на предотвращение гастроэзофагеального кровотечения портального генеза, является применение местной эндоскопической терапии для предотвращения разрыва варикозно расширенных вен.

Группа авторов проанализировала отечественные и зарубежные работы с целью разработки общих подходов к лечению кровотечений из варикозно расширенных вен пищевода и желудка у детей с этим заболеванием. Рекомендации были сосредоточены на нерешенных проблемах и перспективах на будущее, открывшихся благодаря новым данным исследований [3].

При постановке диагноза варикозное расширение вен пищевода выявляется у 30-40% детей с компенсацией и у 60% детей с декомпенсацией заболевания. У детей частота кровотечений из варикозно расширенных вен пищевода составляет в среднем 4% в год. У пациентов со средними и крупными сосудами риск возрастает до 15% [6,8].

Несмотря на прогресс, достигнутый за последние десятилетия, кровотечение из пищевода и желудка сопровождается летальным исходом в 10-20% случаев в течение 6 недель.

Рекомендации по диагностике и лечению пациентов с кровотечениями из варикозно расширенных вен пищевода и желудка содержат практические инструкции по лечению таких пациентов в больницах разного уровня. Эти рекомендации следует регулярно пересматривать в соответствии с новой информацией в этой области [7,9].

На почве синдрома портальной гипертензии наблюдалось повышение артериального давления в привратниковой вене (до 200 мм водяного столба в

норме), развитие синдрома портальной гипертензии, отток артериальной крови к органам малого таза брюшной полости и привратниковой si (v. portae) в зависимости о нарушении соотношения между выделениями. Барьеры адекватного сопротивления кровотоку (блокады) бывают 3 типов, которые включают внепеченочные, внутрипеченочные и смешанные барьеры. В свою очередь, внепеченочные барьеры делятся на 2 различных: предпеченочные (подпеченочные) и постпеченочные (надпеченочные) блоки.

В случае развития портальной гипертензии непеченочные виды обструкции могут быть вызваны дефектами развития воротной вены (венозная атрезия, облитерация) или ее гнойным процессом в брюшной полости - пупочным сепсисом, сдавлением опухолью близлежащих органов. Как правило, внутрипеченочный тип портальной гипертензии встречается чаще (до 80-90%) и связан с циррозом печени. Образование блока в результате тромбофлебита печеночных вен (синдром Киари), окклюзии нижней пупочной вены на уровне инвазии печеночных вен (синдром Бадда-Киари) или дефектов развития нижней суставной вены приводит к блокадам надпочечников [4,6].

Смешанная блокада – у пациентов с циррозом печени, кроме того, учитывается развитие тромбоза привратниковой вены. Повышенное давление в воротной вене может возникнуть при портальной гипертензии, которая называется идиопатической, из-за быстрого притока крови через артериовенозный свищ в саму воротную вену.

Таким образом, образование барьера из нечетных отделов брюшной полости для притока крови в воротную венозную систему вплоть до сброса крови в нижнюю подвздошную вену - к портальной гипертензии, состоянию, которое, в свою очередь, приводит к высокому развитию естественных портоковальных анастомозов (варикозного расширения вен)., через который кровь поступает в кавальную венозную систему [5].

Методы обследования при диагностике портальной гипертензии с помощью оборудования для определения наличия варикозного расширения вен пищевода и желудка, их размеров и распределения (эзофагогастродуодено-фиброскопия) пациенту необходимо пройти рентгенологическое исследование путем приема внутрь контрастного вещества (Vaso4), чтобы определить характер нарушения кровоснабжения в печени, причиной и степенью закупорки которых является.

Портал неразрывно связан с лечением артериальной гипертензии, типом блокады, стадией заболевания и уровнем компенсации, и основное внимание в лечении уделяется устранению причин блокады, восстановлению функции печени и профилактике возможных осложнений [3,6].

Цель исследования. Повышение эффективности лечения кровотечений из варикозно расширенных вен желудка и пищевода у детей.

Материалы и методы исследования. С целью изучения тактики лечения при кровотечениях из варикозно расширенных вен желудка и пищевода у детей обследовано 45 пациентов, проходивших лечение в

отделении педиатрической помощи РЦЭМПАФ, на основании оценки результатов лечения детей в возрасте от 1 до 18 лет, из которых 15 (33,3%) имеют внешний тип портальной гипертензии, у 30 (66,7%)

Результаты исследования. Все пациенты были госпитализированы во время или после вспышки кровотечения с применением мощной гемостатической терапии, полагаясь на консервативные методы лечения таких пациентов. Роль эндоскопии в диагностике и лечении этих пациентов была велика: в 14 (31,1%) случаях все пациенты были подключены с помощью эндоскопии одновременно с проведением эндоскопической диагностики. После традиционной гемостатической терапии в 20 (44.4%), 7 (15.5%) у детей старшего возраста был введен зонд Блэкмора и остановлена кровь кетайогана из вен пищевода, в то время как у 4 (8,8%) пациентов с внешним типом портальной гипертензии со стороны печени Пасиора-Петрова выполнила перевязку пищевода и подкожной вены пищевода операция с неповрежденной селезенкой.

Во время лечения пациентов с внутрипеченочным типом синдрома портальной гипертензии у 2 кровотечение возобновилось, и у этих пациентов желудочные вены были ушиты по методу Таннера-Баировой.

Среди множества операций, предложенных для диагностики и лечения гастроэзофагеальных кровотечений у детей с портальной гипертензией, был использован метод операций, направленный на изоляцию портальной системы непосредственно через варикозно расширенные вены пищевода и желудка, в дополнение к портокавальным анастомозам, с неразделенным и полуоткрытым бассейном сосудов.

Наиболее эффективной оперой зарубежных ученых является М. Сигиура и С. - Опера, предложенная Футагавой в 1973 году. Его выполнение требует как трансторакального, так и трансабдоминального метода и включает обширную деваскуляризацию пищевода с последующим его пересечением и нижней третью, спленэктомию и пилоропластику.

Способ ушивания варикозно расширенных вен желудка и пищевода (пациенты M.D. opera).

Была выполнена верхнесрединная лапаротомия. На переднюю стенку желудка ближе к КАРДИИ накладывают капроновый шов, посередине которого стенку желудка рассекают на 10 ÷ 12 см, линию разреза протягивают из-под желудка в направлении малой кривизны. После вскрытия пищевода и осмотра его в пищевод было вставлено окошко, которое подняло верхнюю часть передней стенки пищевода. Затем пальцами левой руки небольшой кривизной желудка раздвигают слизистую оболочку ближе к пищеводному отверстию. Обычно с помощью этого метода становилось возможным лучше визуализировать варикозное расширение вен кардиальной части, оставляя несколько (обычно 3-5) трубок в пищеводе. Зашивание варикозных вен, как правило, начинали с малого искривления живота, наиболее выраженного органа с помощью индивидуально разрезанных швов.

В этом исследовании 45 пациентов в возрасте от 1 года до 18 лет были обследованы по результатам обследования и лечения с портальной гипертензией. Кавернозная конверсия у 38 пациентов, атрезия у 5, тромбоз селезеночной вены у 3, аномалии пупочной вены и брюшной аорты у 2. До лечения во 2 и в послеоперационном периоде при ФГДС оценивали уровень варикозного расширения вен и его локализацию согласно модифицированной классификации SK sarin (2001), согласно которой выделялся тип 1 - гастроэзофагеальные вены, рассеянные по малой кривизне, тип 2 - гастроэзофагеальные вены, распространяющиеся по большой кривизне к низу из желудка. Желудочные вены 3-го типа - это изолированные варикозные вены желудка, а 4-й тип - внематочные варикозные вены желудка и двенадцатиперстной кишки.

Мы провели эндоскопическую ультразвуковую сонографию с использованием эндоскопа "Olympus UM 160" в соответствии со стандартными принципами этого метода. Мы установили мини-ультразвуковой радиальный сканирующий зонд под визуальным контролем в зоне варикозного расширения вен пищевода. Исследование проводилось через шланг, который опускался в полость пищевода, заполненную безводной водой и заполненный очищенной водой датчик крышки. Мы определяем, что риска кровотечения нет, если в эпителиальном слое нет слегка увеличенной пищеводной вены и толщина слизистой оболочки не превышает 0,9 мм. При расширении сосудов, когда варикозные узлы не сужают просвет пищевода, а толщина слизистой оболочки составляет 0,5-0,7 мм, мы ставим диагноз с высоким риском кровотечения. Если исследуется варикозное расширение вен в просвете пищевода и его сужение, толщина слизистой оболочки составляет менее 0,5 мм, и проводится ангиэктомия, у нас высокий риск кровотечения.

Мы разработали новый неинвазивный метод определения давления в сосудах пищевода с использованием эндоскопической ультразвуковой сонографии (ЭУС) для определения течения синдрома портальной гипертензии.

Предлагаемый способ заключался в измерении давления с использованием эндоскопического ультразвукового датчика и аппарата Вальдмана.

Методика измерения артериального давления в сосудах пищевода заключается в следующем: первоначально выполняется ЭФГДС. Выявляются расширенные сосуды пищевода, проводится анализ качества которых, измеряется расстояние от отверстий разреза до наиболее расширенных венозных узлов. Далее устанавливают зонд с резиновой сферой на конце, проводят ультразвуковое исследование полости последней на том же расстоянии и качественно и количественно оценивают состояние вен и венозной стенки (диаметр вен, толщину стенки сосуда и стенки пищевода). Жидкость переливают в банку. Повышенное давление возникает под влиянием сдавления сосудов пищевода и остановки тока крови по ним, что было визуально обнаружено на экране монитора при ультразвуковом

исследовании и допплерометрии. В настоящее время с помощью аппарата Вальдмана, который соединен баллоном с Т-образным адаптером, мы определяем давление, соответствующее венозному давлению в сосудах пищевода.

При обследовании 20 пациентов с ПГ варикозное расширение вен III степени и специфические изменения слизистой оболочки пищевода и желудка указывают на то, что портальная гастропатия является стабильным признаком повышения давления воды более чем на 200 мм рт.ст.Мной были проверены диаметр сосуда и индикатор давления воды, превышающий 300 мм.

Арт, при которой кровотечение повторяется как во время склеротерапии, так и после операции. Эти показатели позволили объективно решить вопросы выбора терапевтической тактики, выбора размера и метода эндоскопического и хирургического вмешательства для предотвращения кровотечения. Эндосклероз (24) и эндоскопическое перевязывание (7) были использованы при выявлении гастроэзофагеальных сосудов 1-й категории. В 4 случаях у пациентов 2-го типа использовалась комбинация эндосклероза и перевязки.

Повторная профилактика кровотечения была необходима следующим 30 пациентам. 41 пациент был прооперирован. После ревизии воротного отдела печени двум пациентам было выполнено мезентерикортальное шунтирование, 13 - Н - образный спленоренальный анастомоз, 7 - дистальный спленоренальный анастомоз, 2-мезентерикокавальный анастомоз и операция Сигиуры.

Вывод. В заключение можно сказать, что в диагностике и лечении ПГ у детей эндоскопическая диагностика и лечение варикозного расширения вен желудка и пищевода остается на переднем крае, принимая во внимание комфортное состояние пациента, принимая во внимание тот факт, что данный метод лечения останавливает кровотечение из желудка, можно сказать, что зона Блэкмора.

Использованные источники:

1.Жерлов Г.К., Гибадулин Н.В., Гибадулина И.О., Кошевой А.П. //Совершенствование способов лечения больных со стенозирующими гастро-дуоденальными язвами (дистальная, проксимальная резекции желудка, селективная проксимальная ваготомия) Сиб. журн. гастроэнтерол. и гепатол. - 2010. - № 11. - С. 149-150.

2.Зурбаев, Н. Т. Сравнительный анализ результатов разных вариантов спленоренального шунтирования у детей с внутрипеченочной портальной гипертензией / Н. Т. Зурбаев, В. М. Сенякович // Детская хирургия. 2005. № 5. С. 18–24. Леонтьев, А. Ф. Генез внепеченочной портальной гипертензии у детей / А. Ф. Леонтьев, В. И. Шелкович // Детская хирургия. 2005. № 4. С. 39–42.

3 Разумовский, А. Ю. Хирургическое лечение портальной гипертензии у детей: автореф. дис. … д-ра мед. наук / А. Ю. Разумовский. М., 1995.

4. Разумовский, А. Ю. Операция Sugiura у детей с портальной гипертензией / А. Ю. Разумовский, В. Е. Рачков // Хирургия. 1996. № 10. С. 47–50.
5.Botha J. F. [et al.] Portosystemic shunts in children: a 15-year experience. Am. Coll. Surg. 2004. Vol. 199, N 2. P. 179–185.
6.Wolff, M. Current state of portosystemic shunt surgery / M. Wolff, A. Hirner // Langenbecks Arch. Surg. 2003. Vol. 388, N 3. P. 141–149.
7.Картун В. М. [и др.] Сравнительная оценка применения склерозирующих препаратов тромбовар и фибровейн в лечении варикозно расширенных вен пищевода у детей с портальной гипертензией Детская хирургия. 2003. № 1. С. 15–17.
8.Zargar S.A. [et al.]. Fifteen-year follow up of endoscopic injection sclerotherapy in children with extrahepatic portal venous obstruction. Gastroenterol. Hepatol. 2004. Vol. 19, N 2. P. 139–145.
9.D. Celinska-Cedro [et al.] Endoscopic ligation of esophageal varices for prophylaxis of first bleeding in children and adolescents with portal hypertension: preliminary results of a prospective study. Pediatr. Surg. 2003. Vol. 38, N 7. P. 1008–1111.

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ВОПРОСЫ ЭФФЕКТИВНОГО ИСПОЛЬЗОВАНИЯ ВОДНЫХ РЕСУРСОВ В ЗАСУШЛИВЫХ РЕГИОНАХ И РАЗВИТИЯ САДОВОДСТВА (НА ПРИМЕРЕ СУРХАНДАРЬИНСКОЙ ОБЛАСТИ)

Аннотация. В данной статье освещены вопросы географического места Сурхандарьинской области, расположенной в аридном регионе, эффективного использования водных ресурсов в условиях потепления климата, развития садоводства и субтропического плодоводства путём капельного орошения и районирования таких посевных видов растений как олива, топинамбур, стивея, а также переработки и реализации на внешнем рынке выращенного урожая.

Ключевые слова. Аридный регион, водные ресурсы, капельное орошение, садоводство, субтропическое плодоводство, сельское хозяйство, переработка.

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PROBLEMS OF EFFICIENT USE OF WATER RESOURCES AND DEVELOPMENT OF HORTICULTURE IN ARID REGIONS (EXAMPLE OF SURKHANDARYO REGION)

Abstract. In this article, the geographic location of Surkhondarya region, which is located in an arid climate region, the efficient use of water resources in conditions of climate warming, the development of horticulture and subtropical fruit

growing by drip irrigation, the zoning of non-traditional crops such as olives, artichokes, stevia, and the processing of grown fruits and their export to the foreign market. issues are covered.

Keywords. arid region, water resources, drip irrigation, gardening, subtropical fruit growing, agriculture, processing.

Введение. Сурхандарьинская область, расположенная в засушливом климатическом регионе, является самой южной административно-территориальной единицей Узбекистана, и ее южное географическое положение в нашей стране, сложные орографические особенности, засушливые климатические условия, недостаток водных ресурсов,и тот факт, что ее население и его естественный прирост выше средних показателей по нашей республике, приоритет устойчивого сельского хозяйства в производстве сделали актуальлным эффективное использование водных ресурсов и посев засухоустойчивых, маловодотребовательных сельскохозяйственных культур в современных климатических условиях.

Природно-климатические условия Сурхандарьинской области очень благоприятны для выращивания разнообразной плодоовощной продукции. Плоды Сурхана, известные в регионе, особенно Ширабадские гранаты, сладкие персики, инжир, айва и др., требуют очень мало воды и являются культурами, устойчивыми к жаркому климату [1].

Цели и задачи. Считаем, что для дальнейшего развития садоводства в Сурхандарьинской области, расположенной в засушливом регионе в условиях потепления климата необходимо провести следующие работы. В настоящее время в северных и северо-западных районах области выращивают и реализуют за границу гранаты и виноград «Тайфи». Стоит отметить, что в этой сфере существуют огромные неиспользованные возможности. 3700 гектаров земель, которые можно вновь освоить в Байсунском районе, могут быть переданы в долгосрочное пользование на основе тендера фермерским специализированным хозяйствам для закладки виноградников и гранатовых садов.Аналогичные возможности имеются в Узунском и Сариасийском районах. Это позволяет повысить объемы выращивания граната и винограда в регионе, улучшить их качество и увеличить экспорт [2].

Развитие садоводства террасным методом в горных и холмистых местностях области, особенно в Байсунском, Сариасийском, Узунском районах, является одной из малоиспользуемых в этой сфере. Системы капельного орошения могут быть установлены в новых садах в тех районах, где водоснабжение относительно проблематично.

Помимо экспорта винограда, который в больших количествах выращивается в Байсунском и Алтынсайском районах, существует также возможность его переработки. Мощности ранее действовавшего виноделия в Буйсуне простаивают. Раньше здесь каждый год предварительно перерабатывалось 3000 тонн винограда, а затем передавалось на переработку

вино - водочному заводу «Денау». Теперь на этом предприятии можно начать переработку части выращенного в регионе винограда [3].

В Сариасийском, Узунском, Термезском и Ширабадском районах с учетом навыков и умений населения в области садоводства целесообразно закладывать с использованием капельного орошения фруктовые сады яблонь, груш, айвы, граната, инжира, грецких орехов вместо традиционных культур, дающих низкую урожайность.

Несмотря на то, что выращенные в регионе фрукты, вкусны и экологически чисты, значительная часть ценного продукта остается непереработанной. Из-за ограниченных возможностей хранения и упаковки в сезон сбора урожая большое количество продукции реализуется на внутренний рынок.

По подсчетам специалистов, более четверти выращенной продукции выбрасывается впустую из-за избытка продукции на рынке, плохого хранения и упаковки [6].

Для создания высокоурожайных садов необходимо подобрать сорта, подходящие к местным условиям. Необходимо учитывать не только биологические особенности сортов, но и их экономическую эффективность. Особое внимание следует уделить размещению низкорослых плодовых кустарников (например, сорта пальмета). В Сурхандарьинской области температура и состав почвы достаточны для выращивания субтропических культур. Накопленный в регионе большой положительный опыт по выращиванию таких культур может принести свои плоды.

Вода, используемая в сельском хозяйстве в нашей страны, составляет 92% от общего объема водных ресурсов. В настоящее время основная задача – выращивать культуры, требующие меньше воды и экономить воду. По информации Госкомприроды, в результате потепления воздуха в нашей стране в ближайшие годы нормы полива посевов увеличатся примерно на 10%. Из-за изменения климата в республике испарение на орошаемых землях увеличится на 10-15% или столько же воды будет потрачено впустую. Истощение запасов пресной воды приводит к сокращению орошаемых площадей, засолению и деградации почв [4]. Учитывая, что субтропические растения требуют меньше воды, чем большинство однолетних растений, их можно выращивать на малоплодородных, солено-песчаных почвах, распространенных в Сурхандарьинской области. Примерами таких культур являются фисташки, миндаль, грецкие орехи, оливки и т. д. По биологии эти растения вообще не выбирают почву, через 5-6 лет рассада требует очень мало воды. Это растение можно сажать на малоплодородных, каменистых участках, а также в горных районах и на холмистых местах. Расчеты показывают, что экономическая эффективность увеличения садов в регионе высока. Если субтропические фрукты экспортировать, сумма прибыли может увеличиться вдвое.

Культивируя субтропическое растение оливы, можно улучшить снабжение населения страны экологически чистым, качественным

растительным маслом. В 2006 году оливковые деревья впервые дали плоды в фермерском хозяйстве «Джавли» Алтынсайского района. На холмах Шурчинского района в 4 гектарах земли методом капельного орошения посажены оливковые рощи. С одного взрослого оливкового дерева собирают 25-30 кг плодов. Если во дворе, прикрепленном к семье, вырастить 6 оливковых деревьев, то в общей сложности можно собрать 180 кг плодов и получить в результате их переработки 60 кг экологически чистого оливкового масла [2]. Используя такие возможности, можно обеспечить потребность населения в экологически чистых маслопродуктах.

К культурам, которые не являются традиционными для региона, но которые можно выращивать, относятся топинамбур и стевия. Топинамбур, произрастающий в Северной Америке, высокоуражайный и используется в целлюлозно-бумажной и фармацевтической промышленности. В 2012 году это растение было посажено на опытном участке площадью 1 га в Байсуне. Выращивание топинамбура в больших количествах позволяет ограничить импорт бумажного сырья и сэкономить затрачиваемые на эти цели валютные ресурсы, улучшить здоровье населения, повысить уровень занятости. Эта возможность в настоящий момент не используется [5].

Имеются возможности районирования (выращивания) растения стивеи, привезенного из Южной и Центральной Америки, в центральных и северо-восточных районах области. Это растение также приспособлено к росту в засушливых регионах. В этом растении содержится большое количество сахара, которого можно использовать в кондитерских изделиях. В будущем, выращивая и перерабатывая это растение, можно будет удовлетворить потребность населения в сахарной продукции [5].

Заключение. В заключении можно сказать, что сельское хозяйство является ведущей отраслью народного хозяйства региона, причем в горных и предгорных районах высоко развита отрасль плодоводства, особенно субтропического. Научно-практическое развитие этой отрасли послужит удовлетворению потребностей населения региона и промышленности в сырье. Исходя из потенциала развития данной отрасли в регионе, а также спроса населения на данную продукцию, перспектив экспорта её на внешний рынок, необходимо определить приоритетные направления развития данной отрасли в каждом районе и применять современные методы эффективного использования воды в сельскохозяйственном производстве с учетом изменения климата.

Использованные источники:

1. Мирзиёев Ш.М. Эркин ва фаровон, демократик Ўзбекистон давлатини биргаликда барпо этамиз. – Тошкент, “Ўзбекистон”, 2016,54 б.
2. Содиқов А.М. Илмий раҳбарлигида. Сурхондарё вилоятини ижтимоий-иқтисодий ривожлантириш стратегияси. – Тошкент, 2013,244 б.
3. Рўзиев А., Мирзаев Ш., Бароталиев У. Сурхондарё сув омборлари ва агросаноат мажмуини ривожлантириш масалалари. - Тошкент, 1997, 113 б.

4. Проблемы охраны водных ресурсов и окружающей среды. Сборник докладов. – Ташкент, «Фан», 2000, 192 ст.
5. Қаюмов А, Пардаев Ғ, Исломов И. Иқтисодий ва ижтимоий география. (Ўрта Осиё иқтисодий ва ижтимоий географияси). – Тошкент, 2007, 180 б.
6. Абдуназаров Ҳ.,Умарова М. Сурхондарё географияси. – Термиз, 2023, 175 б.

DOI 10.5281/zenodo.10720663
УДК 35.07

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ЖИЛИЩНАЯ ПОЛИТИКА В ХАНТЫ-МАНСИЙСКОМ АВТОНОМНОМ ОКРУГЕ: ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ

Аннотация. Жилищная политика является одной из важнейших составляющих социально-экономического развития региона. В данной научной статье рассматривается жилищная политика в Ханты-Мансийском автономном округе, который является одним из ключевых регионов Российской Федерации по добыче и экспорту нефти и газа. В статье анализируются основные проблемы, с которыми сталкиваются жители региона в сфере жилищного обеспечения, а также предлагаются перспективные направления развития жилищной политики для улучшения жизненных условий населения.

Ключевые слова: жилищная политика, Ханты-Мансийский автономный округ, качество жилья, дефицит жилья, сфера жилищного обеспечения, Россия, низкая доступность жилья для молодых семей.

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HOUSING POLICY IN THE KHANTY-MANSY AUTONOMOUS DISTRICT: PROBLEMS AND PROSPECTS

Abstract. Housing policy is one of the most important components of the socio-economic development of the region. This scientific article examines housing policy in the Khanty-Mansi Autonomous Okrug, which is one of the key regions of the Russian Federation for the production and export of oil and gas. The article analyzes the main problems faced by residents of the region in the field of housing provision, and also proposes promising directions for the development of housing policy to improve the living conditions of the population

Keywords: housing policy, Khanty-Mansiysk Autonomous Okrug, housing quality, housing shortage, housing sector, Russia, low housing affordability for young families.

Актуальность темы обусловлена тем, что основной проблемой России всегда было и остается неравномерное экономическое развитие огромной территории, что является одной из причин переселения граждан РФ из одного региона в другой.

Ханты-Мансийский автономный округ (далее – ХМАО) является одним из самых богатых регионов России благодаря своим природным ресурсам. Однако, несмотря на высокий уровень экономического развития, в регионе существуют проблемы в сфере жилищного обеспечения. Недостаток доступного и качественного жилья, высокие цены на аренду и покупку жилья, а также неравномерное распределение жилищных ресурсов - все это создает неравенство и социальные проблемы среди населения. В связи с этим, жилищная политика в регионе имеет особое значение, поскольку обеспечение населения комфортным и доступным жильем является одной из приоритетных задач властей.

К основным проблемам жилищной политики в Ханты-Мансийском автономном округе относятся такие, как:

1. Дефицит жилья. Одной из основных проблем жилищной политики Ханты-Мансийского автономного округа является дефицит жилья. Рост численности населения и миграционные процессы приводят к увеличению спроса на жилье, однако, предложение не соответствует этому спросу. Особенно данный факт заметен в городах, где концентрируется основная часть населения. Это приводит к росту цен на жилье и недоступности его для значительной части населения (многих малоимущих семей и молодых специалистов).

2. Низкая доступность жилья для молодых семей. Молодые семьи сталкиваются с трудностями при покупке или аренде жилья из-за высоких цен и недостаточного количества доступного жилья. Это приводит к задержке формирования семей и негативно влияет на демографическую ситуацию в регионе.

3. Неразвитая инфраструктура. Недостаточное развитие инфраструктуры, такой как дороги, коммуникации и социальные объекты, также является проблемой жилищной политики Ханты-Мансийского автономного округа. Отсутствие необходимой инфраструктуры делает некоторые районы региона менее привлекательными для проживания, что усиливает дефицит жилья в более развитых районах.

4. Неравномерное распределение жилищных ресурсов: В регионе существует неравномерное распределение жилищных ресурсов между городами и сельскими районами. Города, такие как Ханты-Мансийск и Нижневартовск, имеют более развитую инфраструктуру и доступ к качественному жилью, в то время как сельские районы остаются отсталыми и лишены необходимых жилищных условий.

5. Качество жилья: В регионе существует проблема низкого качества жилья, особенно в сельских районах. Многие жилые дома нуждаются в

капитальном ремонте, а инфраструктура, такая как водоснабжение и канализация, не соответствует современным стандартам.

Согласно обозначенных проблем, государственными органами власти, в целях экономического развития в жилищной политике определены следующие направления:

Одним из ключевых направлений жилищной политики ХМАО является строительство и модернизация жилья. В последние годы в регионе активно ведется строительство новых многоквартирных домов, а также реконструкция и ремонт существующего жилья. Это позволяет улучшить жилищные условия для населения и увеличить доступность жилья.

Одним из успешных проектов в области жилищной политики ХМАО является программа "Жилье для молодых". В рамках этой программы молодые семьи могут получить субсидии и льготные кредиты на приобретение жилья. Такая поддержка помогает молодым семьям осуществить свою мечту о собственном жилье и обеспечить стабильное будущее для своих детей.

Еще одной важной инициативой в области жилищной политики ХМАО является программа "Комфортная городская среда". Целью этой программы является создание благоприятных условий для проживания горожан, включая развитие инфраструктуры, благоустройство территории и создание комфортных общественных пространств. Благодаря этой программе, жители ХМАО могут наслаждаться удобствами современных городов и иметь доступ к различным услугам и удобствам.

Также стоит отметить, что в последние годы в ХМАО наблюдается рост цен на жилье, что делает его менее доступным для некоторых категорий населения. Власти региона предпринимают меры для стабилизации цен на жилье и предоставления льготных условий для приобретения жилья.

В целом, жилищная политика Ханты-Мансийского автономного округа направлена на обеспечение населения комфортным и доступным жильем. Благодаря программам поддержки, строительству нового жилья и модернизации существующего, жители региона имеют возможность улучшить свои жилищные условия и обеспечить стабильное будущее для себя и своих семей. Однако, проблемы, такие как дефицит жилья и рост цен, все еще требуют дальнейшего внимания и усилий со стороны властей.

Перспективы развития жилищной политики в Ханты-Мансийском автономном округе:

1. Развитие жилищного строительства: Необходимо активизировать жилищное строительство в регионе, особенно в сельских районах, чтобы удовлетворить потребности населения в доступном и качественном жилье. При этом следует учитывать специфику региона и его экологические особенности.

2. Повышение доступности жилья: Для решения проблемы доступности жилья необходимо разработать программы поддержки малоимущих семей и молодых специалистов при покупке или аренде жилья. Также следует

развивать систему социального жилищного обеспечения для нуждающихся граждан.

3. Развитие инфраструктуры: Для улучшения качества жизни населения необходимо развивать инфраструктуру в сельских районах, включая водоснабжение, канализацию, электроснабжение и дорожную сеть. Это позволит создать комфортные жилищные условия и привлечь инвестиции в развитие региона.

4. Увеличение внимания к социальному жилью. Для обеспечения жильем нуждающихся граждан необходимо увеличить финансирование и поддержку социального жилья. Разработка программ социального жилищного строительства и предоставление субсидий на его приобретение поможет улучшить жилищные условия для наиболее уязвимых групп населения.

В заключении мы можем сделать выводы, что жилищная политика в Ханты-Мансийском автономном округе хоть и сталкивается с рядом проблем, таких как дефицит жилья, недоступность жилья для молодых семей, все же является актуальной и важной задачей для обеспечения жизненных условий населения.

Для решения проблем недостатка доступного жилья, неравномерного распределения жилищных ресурсов и низкого качества жилья необходимо разработать и реализовать комплексные программы развития жилищной политики, учитывая специфику региона и потребности населения. Это позволит создать комфортные жилищные условия и повысить качество жизни жителей Ханты-Мансийского автономного округа.

Использованные источники:

1. Федеральная служба государственной статистики. Росстат: [Электронный ресурс]: URL https://www.gks.ru/folder/12781 (дата обращения: 25.11.2023)
2. Оценка состояния жилищного фонда города Якутск: [Электронный ресурс]: URL https://yakutia.info/article/193348.2 (дата обращения: 25.11.2023)
3. Национальный проект «Жилье и городская среда»: [Электронный ресурс]: URL https://strategy24.ru/rf/citybuilding-and-jkh/projects/natsiona-nyy-proyekt-zhil-ye-i-gorodskaya-sreda. (дата обращения: 25.11.2023)
4. Федеральный проект «Формирование комфортной городской среды»: [Электронный ресурс]: URL http://gorodsreda.ru/upload/files/Паспорт%20ФКГС.pdf. (дата обращения: 25.11.2023)
5. Федеральный проект «Обеспечение устойчивого сокращения непригодного для проживания жилищного фонда»: [Электронный ресурс]: URL https://www.minstroyrf.ru/upload/iblock/9fc/Pasport.pdf. (дата обращения: 25.11.2023)
7. О реновации в России / ТАСС: [Электронный ресурс]: URL https://tass.ru/nedvizhimost/5746037. (дата обращения: 25.11.2023)

УДК 616.37-008.64(075.9)

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УСТРАНЕНИЕ ПРОБЛЕМ С ДВЕНАДЦАТИПЕРСТНОЙ КИШКОЙ У ПАЦИЕНТОВ С ХРОНИЧЕСКИМ ПАНКРЕАТИТОМ

Резюме. В статье изложена физиология экзокринной функции поджелудочной железы. Описаны состав панкреатического сока, стадии секреторного цикла ацинарных клеток, фазы панкреатической секреции.

Представлены методы исследования внешнесекреторной функции поджелудочной железы.

Ключевые слова: поджелудочная железа, экзокринная секреция, хронический панкреатит, дуоденальная дистрофия.

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ELIMINATION OF DUODENAL PROBLEMS IN PATIENTS WITH CHRONIC PANCREATITIS

Resume. The article describes the physiology of the exocrine function of the pancreas. The composition of pancreatic juice, stages of the secretory cycle of acinar cells, and phases of pancreatic secretion are described.

Methods for studying exocrine pancreatic function are presented.

Key words: pancreas, exocrine secretion, chronic pancreatitis, duodenal dystrophy.

Введение. В кишечную фазу секреции поджелудочной железы (ПЖ) выделяется 70–80% объема постпрандиального сока, ферментный состав которого адаптирован к содержанию нутриентов в дуоденальном химусе [2,6,8].

Данная срочная адаптированность ферментного спектра секрета обеспечивается рецепцией нутриентов с последующими рефлекторными и гуморальными воздействиями специфических возбудителей секреции преимущественно тех или иных гидролаз: м-холинергические лиганды усиливают экзосекрецию протеиназ; химотрипсиногена – химоденин; α-амилазы – NO-эргические влияния, липазы – нейротензин; возбуждение

разных дуоденальных рецепторов холецистокинина в неодинаковой мере усиливает секрецию разных панкреатических ферментов [1,5,10].

Адрено- и холинореактивные центральные стволовые структуры также принимают участие в корригирующих дуодено-панкреатических субстрат-ферментных адаптациях секреции [1,4,7,9]

Цель исследования. Улучшение результатов лечения острого тяжелого и средней тяжести некротического билиарного панкреатита путем применения активной дуоденальной декомпрессии.

Материалы и методы исследования. В Институте АГМИ им. Ю. Атабекова в 2022-2023 гг. были оперированы 51 пациентов с Х.П. Диагноз Х.П. устанавливали на основании клинических признаков болезни (боль в животе) и при обязательном наличии следующих критериев, выявляемых методами лучевой диагностики:

1) увеличения размера ПЖ по данным компьютерной томографии (основной критерий - увеличение головки более 30 мм) или ее атрофии (головка менее 23 мм, тело менее 20 мм и хвост менее 15 мм);

2) вирсунголитиаза и/или кальцинатов паренхимы;

3) панкреатической гипертензии (расширение панкреатического протока 5 мм и более);

4) постнекротических интрапанкреатических кист.

Дуоденальная дистрофия ДД диагностирована у 79 (15,3%) больных, которые обследованы в связи с жалобами, характерными для Х.П. Критериями лучевой диагностики ДД были утолщение более 8 мм стенки ДПК за счет воспалительной инфильтрации, а также наличие кист в толще стенки ДПК.

Проявления ДД имелись у 74 мужчин и 5 женщин. Возраст больных колебался от 29 до 73 лет, составляя в среднем 46,8±9,2 года (здесь и далее представлено среднее значение с указанием стандартного отклонения).

Результаты исследования. Хронология развития заболевания показала, что у 43 (54,4%) пациентов из 79 болезнь началась с острого панкреатита, сопряженного с приемом алкоголя, что потребовало стационарного лечения в 38 наблюдениях. В последующем у этих людей периодически возникала боль в верхних отделах живота различной интенсивности, соответствующая Х.П. Болезнь развивалась постепенно у 33 (41,8%) пациентов, у которых первым симптомом явилась незначительная боль в верхних отделах живота с последующим нарастанием их интенсивности и частоты возникновения. Механическая желтуха без предшествующего болевого синдрома послужила первым клиническим проявлением болезни у 2 (2,5%) больных, умеренная боль в животе у них появилась позже. Нарушение пассажа содержимого по ДПК в качестве первого симптома отмечено лишь у 1 (1,3%) пациента. Длительность заболевания от момента регистрации первых симптомов до установления диагноза ДД колебалась от 2 мес до 14 лет и в среднем составила 32 мес.

Боль в животе явилась основным симптомом болезни, присутствовавшим у 78 (98,7%) больных. Один раз в 2 нед боль в животе возникала у 40 больных. Боль чаще 1 раза в неделю отмечалась у 38 человек, из которых у 24 интенсивность болевого синдрома превышала 6 баллов по визуально-аналоговой шкале. Полностью безболевой вариант болезни был у 1 (1,3%) больного Х.П. Заболевание проявлялось декомпенсированным стенозом ДПК и билиарной гипертензией.

Частым симптомом заболевания явилась потеря в массе тела, зарегистрированная у 46 (58,2%) больных и достигавшая 18,8% за 2 мес.

Билиарная гипертензия обнаружена у 30 (38,0%) больных, из которых у 9 имелась и механическая желтуха. Клинические признаки нарушения проходимости ДПК выявлены у 28 (35,5%) больных, из которых у 13 (16,5%) при рентгенологическом исследовании выявлено нарушение эвакуации контрастного препарата из желудка. Повышенный уровень онкомаркера СА19−9 констатирован у 15 (19,0%) больных.

При трансабдоминальном УЗИ брюшной полости типичные изменения в виде утолщения стенки нисходящего отдела ДПК с наличием в ее толще анэхогенных структур, имеющих округлые формы и четкие контуры, выявлены у 40 (50,6%) пациентов. В остальных наблюдениях ультразвуковая картина соответствовала ХП

На сегодняшний день морфологи не могут дать однозначного ответа на вопрос, являются ли ДД и бороздчатый панкреатит различными заболеваниями, несмотря на то, что их морфологические проявления очень близки. Следствием этого явилось предложение N. Adsay и G. Zamboni [4] использовать собирательный термин «парадуоденальный панкреатит».

По результатам нашего исследования, бороздчатый панкреатит был у 69,6% больных ДД, гетеротопия ткани ПЖ - у 30,4%. Поскольку эти морфологические изменения характеризовались идентичной клинической картиной, требовали одинакового лечения и верифицировались лишь при морфологическом исследовании, мы не считали необходимым рассматривать их как отдельные заболевания. В качестве обобщенного названия кистозно-воспалительной трансформации стенки ДПК мы использовали принятый в нашей стране термин «дуоденальная дистрофия».

Кроме того, остается открытым вопрос, правомочно ли считать ДД самостоятельным заболеванием или она является осложнением Х.П. Наиболее значимыми исследованиями связи ДД и ХП явились работы, в которых анализу были подвергнуты данные большого числа больных с четко определенными диагностическими критериями ДД и ХП и морфологической верификацией диагноза. Этим требованиям отвечали публикации V. Rebours и соавт. (*n*=105), M. Wagner и соавт. (*n*=76), M. Arvanitakis и соавт. (*n*=51), A. Arora и соавт. (*n*=33) [5, 6, 21, 25]. По данным методов лучевой диагностики, приведенным в перечисленных публикациях, у 20-30% больных с верифицированным диагнозом ДД отсутствовали лучевые признаки Х.П. По данным нашего исследования, при наличии ДД

лучевые признаки ХП отсутствовали у 12,7%, морфологические - у 6,2% больных.

Таким образом, исходя из накопленного коллективного опыта, можно утверждать, что у больных ХП может возникать кистозно-воспалительная трансформация стенки ДПК, что усугубляет тяжесть течения заболевания. В то же время существует небольшая группа больных, составляющая около 6-20% популяции, у которых поражение стенки ДПК возникает первично, приводит к панкреатической гипертензии и вторичному развитию ХП.

Вывод. Таким образом, кистозно-воспалительная трансформация стенки двенадцатиперстной кишки является объективной реальностью. Эти изменения стенки кишки, именуемые дуоденальной дистрофией (ДД), чаще являются осложнением хронического панкреатита (ХП), но возможно и первичное их возникновение с последующим присоединением изменений ткани поджелудочной железы, соответствующих Х.П. Клинические проявления ДД не зависят от причины ее возникновения и сводятся к симптоматике, не отличимой от симптомокомплекса Х.П.

Лечение больных, страдающих ХП и ДД, вначале должно быть консервативным, при необходимости следует производить паллиативные эндоскопические вмешательства, направленные на устранение билиарной и панкреатической гипертензии. Хирургическое лечение показано при сохраняющейся боли и наличии осложнений ХП, нарушения проходимости двенадцатиперстной кишки.

Использованные источники:

1. Багненко С.Ф., Курыгин А.А., Синенченко Г.И. Хирургическая. СПб.: Речь, 2009. 608 с.
2. Затевахин И.И., Цициашвили М.Ш., Будурова М.Д., Алтунин А.И. Панкреонекроз. М.: 2007. 223 с.
3. Калинин А.В., Логинов А.Ф., Хазанов А.И. Гастроэнтерология и гепатология: диагностика и лечение. 3-е изд., перераб. и доп. М.: МЕДпресс-информ, 2013. 848 с.
4. Мирзаев А.П. Дуоденальный стаз. Л.: Медицина, 1976. 176 с.
5. Острый панкреатит. Российские клинические рекомендации. М, 2015. 38 с.
6. Савельев В.С., Филимонов М.И., Бурневич С.З. Острый панкреатит. Национальное руководство по хирургии. М., 2009, т.2. С.196–229.
7. Шабунин А.В., Лукин А.Ю., Шиков Д.В. Оптимальное лечение острого панкреатита в зависимости от «модели» панкреонекроза // Анналы хирургической гепатологии. 2013. Т.18. № 3. С.70-78.
8. Beger H.G., Rau B.M. Severe acute pancreatitis: Clinical course and management. World J. Gastroenterol. 2007. vol. 13. no. 38. P. 5043-5051.
9. Dellinger E.P., Forsmark C.E., Layer P., Levy P., Maravi-Poma E., Petrov M.S., Shimosegawa T., Siriwardena A.K., Uomo G.,Whitcomb D.C., Windsor J.A. Determinant_based classification of acute pancreatitis severity: an international multidisciplinary consultation. Ann. Surg. 2012. vol. 256. no. 6. P. 875–880.

10. Werge M., Novovic S., Schmidt P.N., Gluud L.L. Infection increases mortality in necrotizing pancreatitis: A systematic review and meta-analysis. Pancreatology. 2016. vol. 16. no. 5. P. 698-707.

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О ПРЕПОДАВАНИИ ДИФФЕРЕНЦИРУЕМОСТИ ФУНКЦИИ МНОГИХ ПЕРЕМЕННЫХ

Аннотация. В настоящей статье приведен краткий обзор об истории возникновения и основных теоретических сведений о частных производных функции многих переменных. Также, дано определения частной производной и дифференцируемости функции. Приведены примеры для вычисления частной производной с помощью калькулятора и по формуле, а также контрольные вопросы и задания. Целью настоящей статьи является развитию навыков самостоятельного обучения студентами.

Ключевые слова: функции нескольких переменных, дифференциальные уравнения в частных производных, линейное программирование, приращения, производная по времени, частная производная, внутренняя точка, полное приращение, касательная плоскость, граничная точка, аргумент, фиксированное значение.

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ABOUT TEACHING THE DIFFERENTIABILITY OF A FUNCTION OF MULTIPLE VARIABLES

Annotation. This article provides a brief overview of the history of becoming and basic theoretical information about partial derivatives of a function of many variables. Also, there are given definitions of partial derivative and differentiability of a function. Examples are given for calculating the partial derivative using a calculator and using a formula, as well as control questions and tasks. The purpose of this article is to develop students' independent learning skills.

Keywords: functions of multiple variables, partial differential equations, linear programming, increments, time derivative, partial derivative, internal point, total increment, tangent plane, boundary point, argument, fixed value.

Многие явления, происходящие в природе, физике, технике, экономике, общественной жизни нельзя описать с помощью функции одной переменной.

Например, рентабельность предприятия зависит от прибыли, основных и оборотных фондов. Для изучения такого рода зависимостей и вводится понятие функции нескольких переменных.

Известно, что функции нескольких переменных как естественное обобщение функций одной переменной выделились в самостоятельный раздел математики достаточно давно и являются инструментом, позволяющим описать многие закономерности, существующие в природе (физике, технике, экономике и др.). В настоящее время понятия и математический аппарат функций, зависящих от нескольких переменных, лежит в основе многих дисциплин (например, дифференциальные уравнения в частных производных, линейное программирование и др.) и является необходимым набором знаний современного инженера.

Практика показывают, что не все студенты понимают те теоретические и логические основы, без которых нельзя правильно вычислить частной производной и частные дифференциалы функций многих переменных. Это и проявляется на экзаменах и тестах. Некоторые знают теоретические основы положения, но знают их формально. При вычислении частной производной, каждый должен владеть тем минимумом теоретических знаний, который необходим для конкретной функции.

Сначала дадим краткие исторические сведения о частной производной функции многих переменных, определение частного производного и дифференцируемости функции.

Известно, что, производная функции в точке является основным понятием дифференциального исчисления. Она характеризует скорость изменения функции в указанной точке (а частная производная характеризует изменения функции в указанной точке по отдельным переменным). Производная широко используется при решении целого ряда задач математики, физики, других наук, в особенности при изучении скорости различного рода процессов.

Обозначение приращения (аргумента/функции) греческой буквой Δ (дельта) впервые употребил швейцарский математик и механик Иоганн Бернулли (1667 - 1748). Обозначение дифференциала, производной dx принадлежит немецкому математику Г.В. Лейбницу (1646 - 1716). Манера обозначать производную по времени точкой над буквой - $\dot{x}$ - идёт от английского математика, механика и физика Исаака Ньютона (1642 - 1727). Краткое обозначение производной штрихом - $f'(x)$ - принадлежит французскому математику, астроному и механику Ж.Л. Лагранжу (1736 - 1813), которое он ввел в 1797 году. Символ частной производной $\partial/\partial x$ активно применял в своих работах немецкий математик Г.Я. Карл, Якоби (1805 - 1051), а затем выдающийся немецкий математик Г. Карл и Вейерштрасс (1815 - 1897), хотя это обозначение уже встречалось ранее в одной из работ французского математика А.М. Лежандра (1752 - 1833). Символ дифференциального оператора ∇ придумал выдающийся ирландский математик, механик и физик У.Р. Гамильтон (1805 - 1865) в 1853 году, а

название «набла» предложил английский ученый-самоучка, инженер, математик и физик Оливер Хевисайд (1850 - 1925) в 1892 году.

Русский термин «производная функции» впервые употребил русский математик В.И. Висковатов (1780 - 1812).

В математическом анализе частная производная (первая производная) - одно из обобщений понятия производной на случай функции нескольких переменных. Частная производная - это предел отношения приращения функции по выбранной переменной к приращению этой переменной, при стремлении этого приращения к нулю.

Дадим определение частной производной. Пусть $M(x_1, \dots, x_m)$ – внутренняя точка области определения функции $u = f(x_{1,} \dots, x_m)$. Рассмотрим частное приращение этой функции в точке $M(x_{1,,} x_m)$, соответствующее приращению Δx_k аргумента x_k $u = f(x_1, \dots, x_{k-1}, x_k + \Delta x_k, x_{k+1},, x_m) - f(x_{1,} \dots, x_{k-1}, x_k, x_{k+1}, \dots x_m)$.

Отношение $\frac{\Delta_{x_k} u}{\Delta x_k}$ является функцией одного аргумента Δx_k (при фиксированной точке $\mathrm{M}(x_1, \dots, x_m)$.

Определение. Частной производной функцией $u = f(x_1, \dots, x_m)$ по аргументу x_k в точке M называется

$$\lim_{\Delta x_{k \to 0}} \frac{\Delta_{x_k} u}{\Delta x_k}$$

(если он существует).

Эта частная производная обозначается любым из следующих символов $\frac{du}{dx_k}(\mathrm{M})$ или $\frac{df}{dx_k}(\mathrm{M})$ или $u_{x_k}(\mathrm{M})$ или $f_{x_k}(\mathrm{M})$ [1].

Отметим, что при фиксированных значениях всех аргументов, кроме x_k, функция $u = f(x_1, \dots, x_m)$ становится функцией одной переменной. Производная этой функции одной переменной и есть частная производная функции $u = f(x_1, \dots, x_m)$ по аргументу x_k. Поэтому вычисления частных производных производится по тем же правилам что и вычисление производных функций одной переменной.

Физически смысл частной производной $\frac{du}{dx_k}(\mathrm{M})$ – это скорость изменения функции в точке M в направлении оси Ox_k.

Замечание. Если M - граничная точка области определения функции, то для такой точки введенное определение частной производной может быть непригодным.

Например, если функция $u = f(x, y)$ определена в треугольнике G (рис.1), то для граничной точки $M_0(x_0, y_0)$ не определено частное приращение $\Delta_x u$, так как при любом $\Delta x \neq 0$ точка $\mathrm{M}(x_0 + \Delta x, y_0)$ лежит вне области G. Поэтому нельзя определить $\frac{du}{dx}(M_0)$, пользуясь данным выше определением частной производной.

В таком случае, если существует частная производная $\frac{du}{dx}$ во внутренних точках M области G, то по определению полагают

$$\frac{du}{dx}(M_0) = \lim_{\text{м}\to\text{м}_0} \frac{du}{dx}(\text{M}),$$

(если этот предел существует).

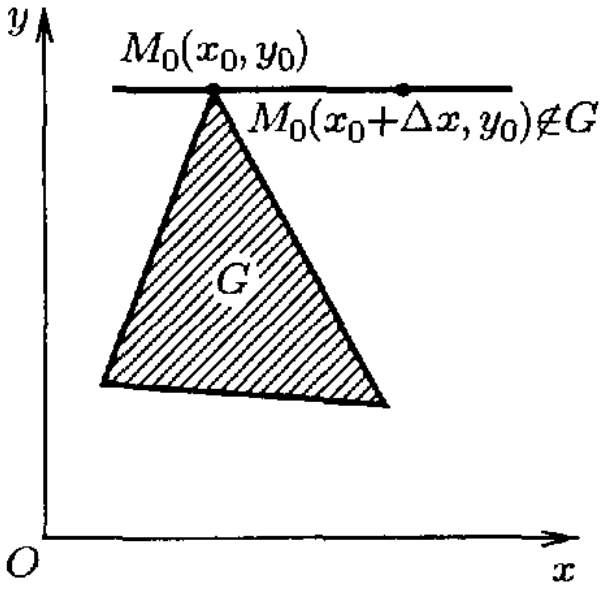

Рис.1

Частные производные функции имеют следующие свойства. Пусть функции $f(x)=f(x_1,x_2,...,x_m)$, $g(x)=g(x_1,x_2,...,x_m)$ определены в $E\subset R^m$ и имеют частные производные в точке $x\in E$. Тогда:

1) $\forall c\in R$: $\frac{\partial(cf(x))}{\partial x_k}=c\frac{\partial f(x)}{\partial x_k}$;

2) $\frac{\partial(f(x)+g(x))}{\partial x_k}=\frac{\partial f(x)}{\partial x_k}+\frac{\partial g(x)}{\partial x_k}$;

3) $\frac{\partial(f(x)\cdot g(x))}{\partial x_k}=\frac{\partial f(x)}{\partial x_k}g(x)+f(x)\frac{\partial g(x)}{\partial x_k}$;

4) $\frac{\partial\left(\frac{f(x)}{g(x)}\right)}{\partial x_k}=g^{-2}(x)\left(\frac{\partial f(x)}{\partial x_k}g(x)-f(x)\frac{\partial g(x)}{\partial x_k}\right)$ $(g(x)\neq 0)$, $k=1,2,...,m$.

Теперь, сформулируем определение дифференцируемости функции. Рассмотрим полное приращение функции $u = f(x_1, \dots, x_m)$ во внутренней точке $\text{M}(x_1, \dots, x_m)$ области определения функции

$\Delta u = f(x_1 + \Delta x_1, \dots, x_m + \Delta x_m) - f(x_1, \dots, x_m)$.

Оно является функцией аргументов $\Delta x_1, \dots, \Delta x_m$.

Определение. Функция $u = f(x_1, \dots, x_m)$ называется дифференцируемой в точке $\text{M}(x_1, \dots, x_m)$, если ее полное приращение в этой точке можно представить в виде

$$\Delta u = A_1\Delta x_1 + \ldots + A_m\Delta x_m + a_1\Delta x_1 + \ldots + a_m\Delta x_m, (1)$$

где $A_i -$ некоторые числа, $a_i (i = 1, \ldots, m) -$ функции аргументов $\Delta x_1, \ldots, \Delta x_m$, бесконечно малые при $\Delta x_1 \to 0, \ldots, \Delta x_m \to 0$ и равные нулю при $\Delta x_1 = \ldots \approx \Delta x_m = 0$.

Условие дифференцируемости (1) можно записать в другой, эквивалентной форме

$$\Delta u = A_1\Delta x_1 + \ldots + A_m\Delta x_m + a(\rho), (2)$$

где $\rho = \sqrt{(\Delta x_1)^2 + \ldots + (\Delta x_m)^2} -$ расстояние между точками $M(x_1, \ldots, x_m)$ и $M'(x_1 + \Delta x_1, \ldots, x_m + \Delta x_m), a(\rho) = o(\rho)$ при $\rho \to 0$.

Объясняем геометрический смысл дифференцируемости функции. Напомним, что для функции одной переменной $y = f(x)$ из дифференцируемости функции в точке x_0 следует существование касательной к графику функции в точке $M(x_0, f(x_0))$.

Рассмотрим непрерывную функцию двух переменных $u = f(x, y), (x, y) \in G$.

График этой функции, т.е. множество точек $S = \{(x, y, f(x, y)), (x, y) \in G\}$, представляет собой поверхность в пространстве E^3.

Пусть плоскость P приходит через точку $N_0(x_0, y_0, f(x_0, y_0))$ поверхности S; $N(x, y, f(x, y)) -$ произвольная точка на поверхности S; N_1-основание перпендикуляра, проведенного из точки N к плоскости P (рис. 2).

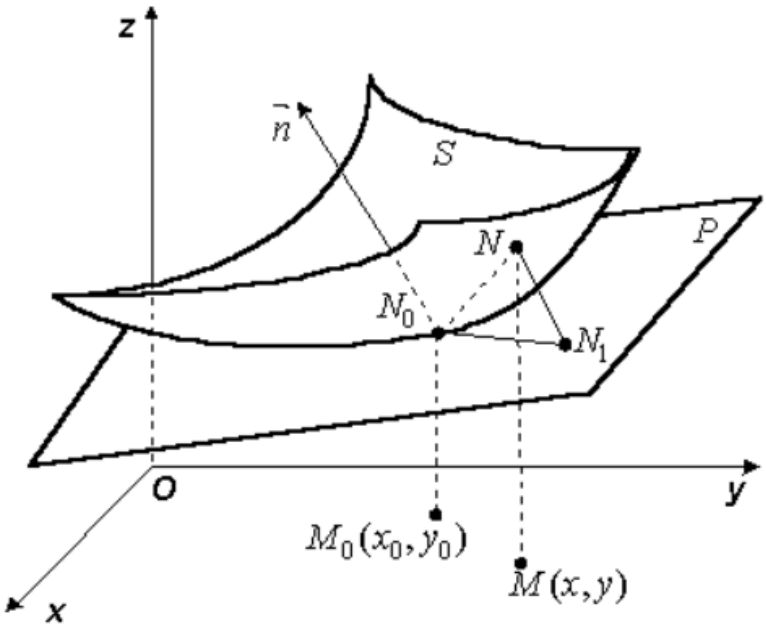

Рис. 2

Приведем другой пример. Пусть, графиком функции $z = f(x, y)$ является некоторая поверхность.

График функции есть $z = f(x_0, y_0)$ линия пересечения этой поверхности с плоскостью $y = y_0$. Исходя из геометрического смысла производной для функции одной переменной заключаем, что $f_x(x_0, y_0) = tg\alpha$

угол между осью Ox и касательной, проведенной к кривой $z = f(x_0, y_0)$ в точке $M_0\big(x_0, y_0, f(x_0, y_0)\big)$ (рис. 3).

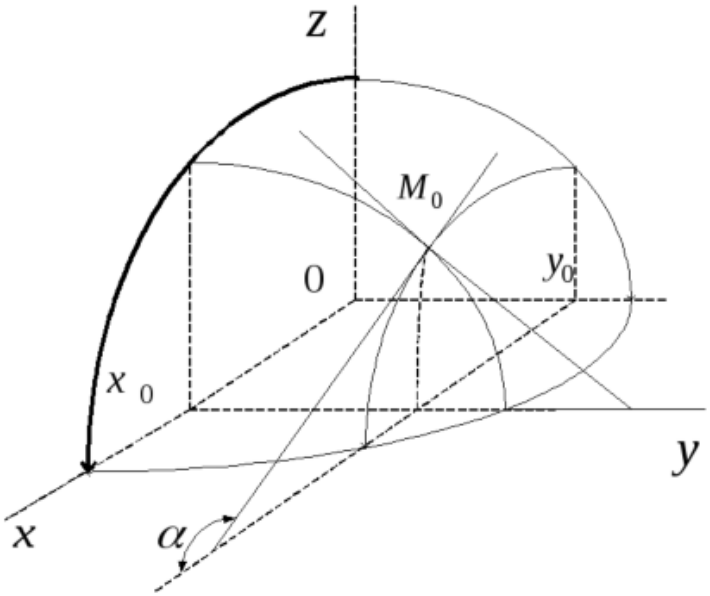

Рис. 3

Определение. Плоскость P, проходящая через точку N_0 поверхности S, называется касательной плоскостью к поверхности S в этой точке, если при $N \to N_0 (N \in S)$ величина $\rho(N, N_1)$ является бесконечно малой более высокого порядка, чем $p(N, N_0)$, т.е.

$$\lim_{\substack{N \to N_0 \\ N \in S}} \frac{\rho(N, N_1)}{\rho(N, N_0)} = 0.$$

Рассмотрим касательной к графику функции в другом примере. Например, график функции $z = x^2 + xy + y^2$. Частная производная в точке (1,1,3) при постоянном y соответствует углу наклона касательной прямой, параллельной плоскости xz (рис.4).

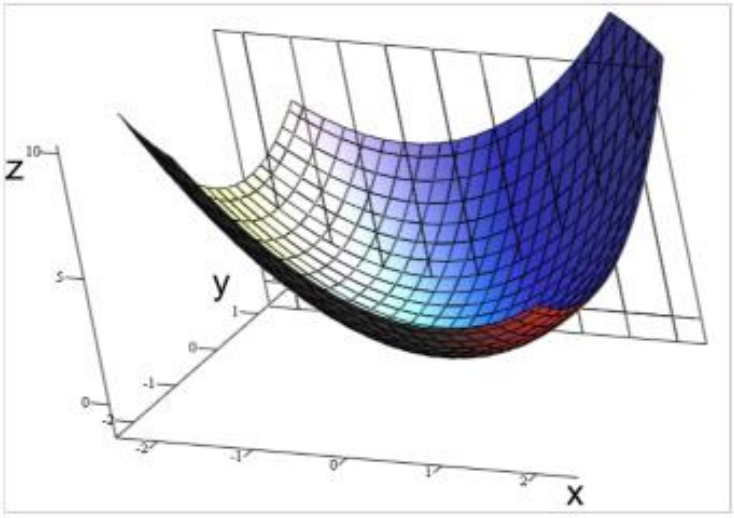

Рис.4

Практика показывает, что приведение определение дифференциала в следующей схеме, более понятно для студентов. Эти положительные отзывы были получены при опросе студентов 2-курса математического направления университета.

Пусть функция $u = f(x_1, \dots, x_m)$ дифференцируема в точке $M(x_1, \dots, x_m)$, т.е. ее приращение в этой точке можно представить в виде:

$$\Delta u = \frac{\partial u}{\partial x_1}(M)\Delta x_1 + \dots + \frac{\partial u}{\partial x_m}(M)\Delta x_m] + (a_1\Delta x_1 + \dots + a_m\Delta x_m).$$

Выражение в квадратных скобках является линейной относительно $\Delta x_1 + \dots + \Delta x_m$ частью приращения функции, а выражение в круглых скобках - бесконечно малой функцией при $\Delta x_1 \to 0, \dots, \Delta x_m \to 0$ более высокого порядка, чем $\rho = \sqrt{(\Delta x_1)^2 + \dots + (\Delta x_m)^2}$.

Дифференциалом (или первым дифференциалом) функции $u = f(x_1, \dots, x_m)$ в точке M называется линейная функция аргументов $\Delta x_1 + \dots + \Delta x_m$:

$$du = \frac{\partial u}{\partial x_1}(M)dx_1 + \dots + \frac{\partial u}{\partial x_m}(M)dx_m \,. (3)$$

Если аргументы дифференцируемой в точке $M(b_1, \dots, b_m)$ функции $u = f(x_1, \dots, x_m)$ являются не независимыми переменными, а дифференцируемы функциями каких-либо независимых переменных $t_1, \dots t_k$:

$$x_1 = \varphi_1(t_1, \dots, t_k), \dots, x_m = \varphi_m(t_1, \dots t_k),$$

причем $b_1 = \varphi_1(a_1, \dots, a_k), \dots, b_m = \varphi_m(t_1, \dots, t_k))$ то дифференциал сложной функции $u = f(\varphi_1(a_1, \dots, a_k), \dots \varphi_m(t_1, \dots, t_k))$ в точке $A(a_1, \dots, a_k)$ по-прежнему имеет вид (3), но $dx_1, \dots, dx_m$ являются не приращениями переменных $x_1, \dots, x_m$ (как в случае, когда $x_1, \dots, x_m$ - независимые переменные).

Это свойство называется инвариантностью формы первого дифференциала.

Для укрепления темы предлагаем следующие вопросы и задачи. Задачи составлены в порядке от простого к сложному. Эти вопросы засталяют студентов самостоятельно изучить темы, а также искать другие источники информации.

ПРИМЕРЫ РЕШЕНИЯ ЗАДАЧ

1. Найти частные производные функции:

а) $u = x^y$ $(x > 0)$;

б) $u = \sqrt{x^2 + y^2 + z^2}$.

Решение. а) При вычислении частной производной функции $u = x^y$ по аргументу x рассматриваем функцию u как функцию только одной переменной x, т.е. считаем, что y имеет фиксированное значение. При фиксированном y функция $u = x^y$ является степенной функцией аргумента x.

По формуле дифференцирования степенной функции получаем $\frac{\partial u}{\partial x} = yx^{y-1}$.

Аналогично, при вычислении частной производной $\frac{\partial u}{\partial y}$ считаем, что фиксировано значение x, и рассматриваем функцию $u = x^y$ как показательную функцию аргумента y. Получаем $\frac{\partial u}{\partial y} = x^y \ln x$.

б) При фиксированных значениях y и z функция $u = \sqrt{x^2 + y^2 + z^2}$ являются сложной функцией аргумента x. Вычисляя производную этой функции аргумента x, получаем

$$\frac{\partial u}{\partial x} = \frac{1}{2\sqrt{x^2 + y^2 + z^2}} 2x = \frac{x}{\sqrt{x^2 + y^2 + z^2}}.$$

Аналогично,

$$\frac{\partial u}{\partial y} = \frac{y}{\sqrt{x^2 + y^2 + z^2}},$$
$$\frac{\partial u}{\partial z} = \frac{z}{\sqrt{x^2 + y^2 + z^2}}.$$

Отметим, что полученные формулы теряют смысл в точке O(0,0,0).

Замечание. Функция $u = \sqrt{x^2 + y^2 + z^2}$, очевидно, непрерывна в точке O(0,0,0), но не дифференцируема в этой точке (поскольку не имеет частных производных в точке O(0,0,0). Это доказывает, что непрерывность является только необходимым, но не достаточным условием дифференцируемости функции.

2. Найти частные производные $\frac{\partial z}{\partial x}, \frac{\partial z}{\partial y}, \frac{\partial y}{\partial x}$, если переменные x, y, и z связаны равенством $4x^2y\,e^z - cos(x^3 - z) + 2y^2 + 3x = 0$.

Решение находим с помощью калькулятора.

Для $F(x, y, z) = 4x^2y\,e^z - cos(x^3 - z) + 2y^2 + 3x$ получаем:

$Fx = (4x^2\,ye^z - cos(x^3 - z) + 2y^2 + 3x)_x =$

[считаем y и z постоянными] =

$= 8x\,y\,e^z + sin(x^3 - z)3x^2 + 3 = 8x\,y\,e^z + 3x^2\,sin(x^3 - z) + 3;$

$F_y = (4x^2\,y\,e^z - cos(x^3 - z) + 2y^2 + 3x)_y =$

[считаем x и z постоянными] $= 4x^2\,e^z + 4y;$

$F_z = (4x^2\,y\,e^z - cos(x^3 - z) + 2y^2 + 3x)_z =$ [считаем x и y постоянными] $= 4x^2\,y\,e^z - sin\,(x^3 - z).$

По формулам находим частные производные:

$$\frac{\partial z}{\partial x} = -\frac{F_x'}{F_z'} = -\frac{8xye^z + 3x^2\sin(x^3 - z) + 3}{4x^2ye^z - \sin(x^3 - z)}; \quad \frac{\partial z}{\partial y} = -\frac{F_y'}{F_z'} = -\frac{4x^2e^z + 4y}{4x^2ye^z - \sin(x^3 - z)}$$

$$\frac{\partial y}{\partial x} = -\frac{F_x'}{F_y'} = -\frac{8xye^z + 3x^2\sin(x^3 - z) + 3}{4x^2e^z + 4y}$$

и получаем:

$$\frac{\partial z}{\partial x} = -\frac{8xye^z + 3x^2\sin(x^3 - z) + 3}{4x^2ye^z - \sin(x^3 - z)}; \quad \frac{\partial z}{\partial y} = -\frac{4x^2e^z + 4y}{4x^2ye^z - \sin(x^3 - z)}$$

$$\frac{\partial y}{\partial x} = -\frac{8xye^z + 3x^2\sin(x^3 - z) + 3}{4x^2e^z + 4y}.$$

Известно, что теория функций многих переменных, особенно частные производные и дифференциалы функций многих переменных в m – мерном пространстве, широко используется практически во всех областях математики и механики. Следует отметить, что применение при преподавании темы по функциям многих переменных современных интерактивных методов являются эффективными. Примерами этого являются [2-5] исследования по этим темам, основанные на передовых педагогических технологиях и научные статьи, посвященные [6-9] к многомерным функциям и ее применениям.

Использованные источники:

1. Бутузов В.П. Математический анализ в вопросах и задачах, Москва, Физматлит, 2001 г., 479 с.
2. Расулов Х.Р. О некоторых символах математического анализа // Science and Education, scientific journal, 2:11 (2021), p.66-77.
3. Расулов Х.Р. О понятие асимптотического разложения и ее некоторые применения // Science and Education, scientific journal, 2:11 (2021), pp.77-88.
4. Расулов Х.Р., Рашидов А.Ш. Организация практического занятия на основе инновационных технологий на уроках математики // Наука, техника и образование, 72:8 (2020) с.29-32.
5. Расулов Х.Р., Собиров С.Ж. Модуль қатнашган баъзи тенглама, тенгсизлик ва тенгламалар системаларини ечиш йўллари // Science and Education, scientific journal, 2:9 (2021), p.7-20.
6. Расулов Х.Р., Раупова М.Х. Роль математики в биологических науках // Проблемы педагогики, № 53:2 (2021), с. 7-10.
7. Расулов Х.Р., Раупова М.Х. Математические модели и законы в биологии // Scientific progress, 2:2 (2021), p.870-879.
8. Расулов Х.Р., Собиров С.Ж. Айрим рационал тенгламаларни ечишда интерфаол усулларни қўлланилиши ҳақида // Science and Education, scientific journal, 2:10 (2021), p. 586-595.
9. Расулов Х.Р., Собиров С.Ж. Айрим иррационал тенгламаларни ечишда интерфаол усулларни қўлланилиши // Science and Education, scientific journal, 2:10 (2021), p.596-607.
10. Xaydar R. Rasulov. On the solvability of a boundary value problem for a quasilinear equation of mixed type with two degeneration lines // Journal of Physics: Conference Series 2070 012002 (2021), pp.1–11.

УДК 612.345

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ПАТОМОРФОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА ЭКЗОКРИННОЙ ЧАСТИ ПОДЖЕЛУДОЧНОЙ ЖЕЛЕЗЫ

Резюме. Вирусные гепатиты у беременных являются наиболее часто встречающейся инфекционной патологией региона Центральной Азии. Особенности климатических, экологических факторов, высокая рождаемость обуславливают широкое распространение инфекции в регионах с жарким климатом, что делает эту проблему чрезвычайно актуальной для Узбекистана.

Среди возбудителей вирусного гепатита у беременных наиболее распространенным является вирус гепатита В - 92%. Эта патология занимает ведущее место среди причин материнской (4-23%) и перинатальной (20-25%) смертности, невынашивания беременности (21-47%), кровотечений в родах.

Ключевые слова: иммунный статус, вирусный гепатит В, беременная женщина, противовирусная терапия.

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PATHOMORPHOLOGICAL CHARACTERISTICS OF THE EXOCRINE PART OF THE PANCREAS

Resume. Viral hepatitis in pregnant women is the most common infectious pathology in the Central Asian region. The peculiarities of climatic and environmental factors, high birth rate cause the widespread spread of infection in regions with a hot climate, which makes this problem extremely relevant for Uzbekistan.

Among the pathogens of viral hepatitis in pregnant women, the hepatitis B virus is the most common - 92%. This pathology occupies a leading place among the causes of maternal (4-23%) and perinatal (20-25%) mortality, miscarriage (21-47%), bleeding during childbirth.

Keywords: immune status, viral hepatitis B, pregnant woman, antiviral therapy.

Актуальность. Поджелудочная железа (ПЖ) относится к железам смешанной секреции и выполняет одновременно и эндо-, и экзокринную функцию. Между экзокринной и эндокринной «частями» ПЖ существует

тесное анатомо-физиологическое взаимодействие, поэтому, нарушение одной из функций всегда будут отражаться и на другой. Однако, при сахарном диабете (СД) большинство исследований посвящены только эндокринному компоненту. Работы, посвященные проблеме внешнесекре-торной функции разнонаправлены и противоречивы. Все еще не до конца определены критерии оценки структурных и функциональных изменений экзокринной части ПЖ [3,6].

По данным ряда исследований, ПЖ уменьшается примерно на треть при сахарном диабете 1 типа (СД1). Поскольку островки Лангерганса составляют только 1-2% от всей ПЖ, снижение объема ПЖ (ОПЖ) происходит, вероятно, из-за значительного уменьшения именно экзокринной ткани [18,60,102], при этом ассоциации объема и внешнесекреторной и эндокринной функции как при СД1, так и при сахарном диабете 2 типа (СД2) все еще не до конца изучены [2,5].

По большей части, обследование пациентов с СД ограничивается определением нескольких, практически неинформативных, ферментов ПЖ и проведением УЗИ. При этом, клиническая симптоматика развивается лишь при снижении экзокринной функции более, чем на 90%. Зачастую, недостаточное усвоение питательных веществ, вызванное снижением функции ПЖ, может быть причиной нарушений углеводного обмена, а именно, развития эпизодов гипогликемии. Большинство пациентов с СД не обследуются с целью оценки экзокринной функции ПЖ (в том числе, не определяется панкреатическая эластаза-1 (ПЭ-1) и, возможно, количество больных СД, имеющих экзокринную недостаточность намного больше, особенно в когорте пациентов с длительным анамнезом СД [1,4,7].

Известно, что при СД1 происходит селективная деструкция инсулинпроду-цирующих в-клеток островков Лангерганса. Во многих случаях при морфологиче-

ских исследованиях срезов ПЖ описывается лимфоцитарная инфильтрация панкреатических островков (инсулит), при этом количество исследований аутопсий-ного материала ПЖ, описывающих изменения экзокринной ткани единичны [8]. Между тем, исследования ацинарных клеток могут прояснить изменения внешнесекреторной функции.

Таким образом, изучение структурно-функциональных, иммунологических и морфологических особенностей ПЖ у пациентов с СД1 и СД2 является актуальным.

Цель исследования. Изучение экзокринной функции и особенностей строения поджелудочной железы.

Материалы и методы исследования. Чтобы выполнить поставленную перед нами задачу, мы изучили материалы в общей сложности из 65 обследований, в которых наблюдалась патология экзокринной функции поджелудочной железы

Результаты исследования. В своих исследованиях нам удалось подтвердить морфологическую гетерогенность пери- и телеинсулярных

ацинусов поджелудочной железы как при функциональных, так и различных экспериментальных воздействиях.

Выявлено, что в процессе пищеварения отмечаются ритмические колебания секреторной активности поджелудочной железы. Так, через 15 мин после кормления обнаруживается частичное выделение ранее накопленного секрета из зимогенной зоны панкреатоцитов. Через 2 часа после кормления большая часть клеток поджелудочной железы максимально выделяет секрет и вступает в фазу синтеза. Апикальные отделы их в этот период содержат малочисленные гранулы зимогена. Поскольку деятельность ациноцитов связана с определенными затратами энергии и структурных белков, они должны быть восстановлены, после чего клетки вновь включаются в секреторный цикл. Между тем было замечено, что участки железистой паренхимы, расположенной вокруг островков Лангерганса, не вступают в циклические изменения наравне с остальной экзокринной тканью. В этой зоне обнаруживается разной ширины пояс ацинусов, постоянно нагруженных большим числом крупных гранул зимогена. Гистохимически выявляется метаболическая неравнозначность клеток пери- и телеинсулярных аци-нусов. Экзокринные панкреатоциты периинсулярных ацинусов характеризуются особо высокой активностью окислительных энзимов цикла Кребса - сукцинатдегид-рогеназы, НАДН-дегидрогеназы, высокими показателями энергетического и белкового обмена. При экспериментальных воздействиях физиологических доз гидрокортизона отмечен стимулирующий эффект гормона на секреторную деятельность как периинсулярных, так и теле-инсулярных ацинусов поджелудочной железы [6]. Однако и в этих условиях пояс более крупных периинсуляр-ных ацинусов с более многочисленными гранулами и большей ферментативной активностью сохраняется. При введении больших доз гидрокортизона размеры ацину-сов вокруг островков уменьшаются, но при этом полностью от гранул зимогена они не освобождаются. В условиях дефицита глюкокортикоидов, создаваемом адрена-лэктомией и совместной адренал- и овариэктомией, пе-риинсулярные ацинусы утрачивают характерную способность к повышенному накоплению зимогена и содержание в них секреторных гранул уменьшается до уровня остальных ацинусов. Наблюдается параллельное снижение показателей белково-нуклеинового обмена, фосфолипидов, общей активности ферментов цикла Кребса. На экспериментальных моделях с полным наружным отведением желчи до 3-х суток было установлено, что на фоне дистрофических процессов, развивающихся в остальной экзокринной паренхиме, периинсулярные аци-нусы продолжают сохранять размеры, объемы зимогенной и гомогенной зон, ядер и метаболическую активность панкреатоцитов, соответствующую контрольным животным и только при отведении желчи более 3-х суток наблюдается исчезновение отличий между периинсуляр-ными и телеинсулярными ацинусами. Не исключено, что участки экзокринной паренхимы вокруг эндокринных островков, так называемые периинсулярные ацину-сы, являются одним из физиологических

резервов железы и только повышенная функциональная нагрузка органа вызывает включение их в общий ритм работы. Исчезновение же этой резервной зоны может свидетельствовать о дизадаптации и новых качественных состояниях и процессах, определяющих морфогенез общепатологических изменений.

Вывод. Исходя из изложенного, мы находим перспективным продолжение детального изучения вопроса о гетерогенности экзокринной части поджелудочной железы, что будет содействовать решению проблем секреции органа, имеющих не только теоретическое, но и прикладное значение.

Использованные источники:

1. Коротько, Г.Ф. Регуляция и саморегуляция секреции поджелудочной железы / Г.Ф. Коротько, С.Э. Восканян // Успехи физи-ол. наук. - 2001. - Т. 32, № 4. - С. 36-59.
2. Можейко, Л.А. Гистохимическое изучение активности ферментов экзокринной и эндокринной части поджелудочной железы при различном уровне глюкокортикоидов в организме / Л.А. Можейко // Пробл. эндокринол. - 1986. - Т. 32, № 6. - С. 5962.
3. Пермяков, Н.К. К вопросу о тонкой структуре поджелудочной железы / Н.К. Пермяков, А.Е. Подольский // Электронно-микроскопические исследования клеток и тканей. - Л., 1968. -110 с.
4. Фомина, Л.С. Секреция поджелудочной железы и ее адаптация к характеру питания / Л.С. Фомина; редкол: А.В. Соловьев [и др.] // Физиология пищеварения: серия Руководство по физиологии. - Л.: Наука, 1974. - С. 360-369.
5. Хирш, Г. О принципах конвейера в выработке ферментов экзокринными клетками поджелудочной железы / Г. Хирш // Функциональная морфология клетки. - М.: Иностранная литература, 1963. - С. 167-185.
6. Шубникова, Е.А. Секреция желез / Е.А. Шубникова, Г.Ф. Коротько. - М.: Московский университет, 1986. - 130 с.
7. Adelson, J.W. Heterogeneity of the exocrine pancreas / J.W. Adelson, P.E. Miller // Am. J. Physiol. - 1989. - Vol. 256, № 5. - P. 817-825.
8. Hellman, B. Cytological characteristic of the exocrine pancreatic cells with regard to their position in relation to the islet of Langergans // B. Hellman, A. Walgren, B. Petersson // Acta endocrinologica. - 1962. - Vol. 39. - P. 465-473.

УДК 32

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ХАРАКТЕРИСТИКА АППАРАТА ИСПОЛНИТЕЛЬНЫХ ОРГАНОВ ГОСУДАРСТВЕННОЙ ВЛАСТИ РЕСПУБЛИКИ БАШКОРТОСТАН

Аннотация. В статье дается характеристика аппарата исполнительных органов власти Республики Башкортостан на примере Аппарата Правительства Республики Башкортостан, нормативно-правовые основы, динамика численности в 2018-2021 гг, организационная структура.

Ключевые слова: органы исполнительной власти, аппарат Правительства, кадры, структура.

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CHARACTERISTICS OF THE APPARATUS OF EXECUTIVE BODIES OF STATE POWER OF THE REPUBLIC OF BASHKORTOSTAN

Abstract. The article provides a description of the apparatus of the executive authorities of the Republic of Bashkortostan using the example of the Government Apparatus of the Republic of Bashkortostan, legal framework, population dynamics in 2018-2021, organizational structure.

Key words: executive authorities, Government apparatus, personnel, structure.

Основным нормативно-правовым актом, регулирующим деятельность Аппарата Правительства Республики Башкортостан является постановление Правительства Республики Башкортостан от 13 мая 2003 года № 116 Об утверждении Положения об Аппарате Правительства Республики Башкортостан (с изменениями на 26 января 2022 года). В соответствии с вышеуказанным нормативно-правовым актом, Аппарат Правительства Республики Башкортостан является государственным органом, образованным для обеспечения деятельности Правительства Республики Башкортостан, а также организации контроля за выполнением органами исполнительной власти Республики Башкортостан принятых Правительством решений.

В документе указывается, что в своей деятельности Аппарат Правительства руководствуется Конституцией Российской Федерации, федеральными законами и иными нормативными правовыми актами Российской Федерации, Конституцией Республики Башкортостан, Законом Республики Башкортостан «О Правительстве Республики Башкортостан», Регламентом Правительства, настоящим Положением и иными нормативными правовыми актами Республики Башкортостан, в которых обозначены полномочия и функции Аппарата Правительства Республики Башкортостан.

В своей деятельности Аппарат Правительства придерживается положений Кодекса этики и служебного поведения государственных гражданских служащих Республики Башкортостан (с изменениями на 30 декабря 2020 года), принятого указом Главы Республики Башкортостан от 08 августа 2011 г. № УП-428.

Аппарат Правительства осуществляет деятельность под общим руководством Главы Республики Башкортостан, непосредственным руководством Премьер-министра Правительства и возглавляется Руководителем Аппарата Правительства - министром Республики Башкортостан (Руководитель Аппарата Правительства). С 29 ноября 2021 г. руководителем Аппарата Правительства Республики Башкортостан - Абдрахманов Азамат Фаритович.

Структурными подразделениями Аппарата Правительства являются департаменты (18), отделы (39), секторы (структурные подразделения (3).

Заместители Руководителя Аппарата Правительства Республики Башкортостан:

1 Первый заместитель Руководителя Аппарата Правительства Республики Башкортостан - Гагин Александр Валерьевич.

2 Первый заместитель Руководителя Аппарата Правительства Республики Башкортостан – Долич Марина Сергеевна.

3 Заместитель Руководителя Аппарата Правительства Республики Башкортостан - руководитель Регионального проектного офиса – Батыргареев Айдар Флюрович.

4 Заместитель Руководителя Аппарата Правительства Республики Башкортостан - Койда Михаил Николаевич.

5 Заместитель Руководителя Аппарата Правительства Республики Башкортостан - Фролов Александр Валерьевич.

Полномочный представитель Правительства Республики Башкортостан в Государственном Собрании - Курултае Республики Башкортостан - Лихачев Александр Владимирович.

Фактическая численность работников Аппарата Правительства Республики Башкортостан на 1 января 2021 года составляла 196 человек, тогда как по штатному расписанию – 209 человек (рисунок 1).

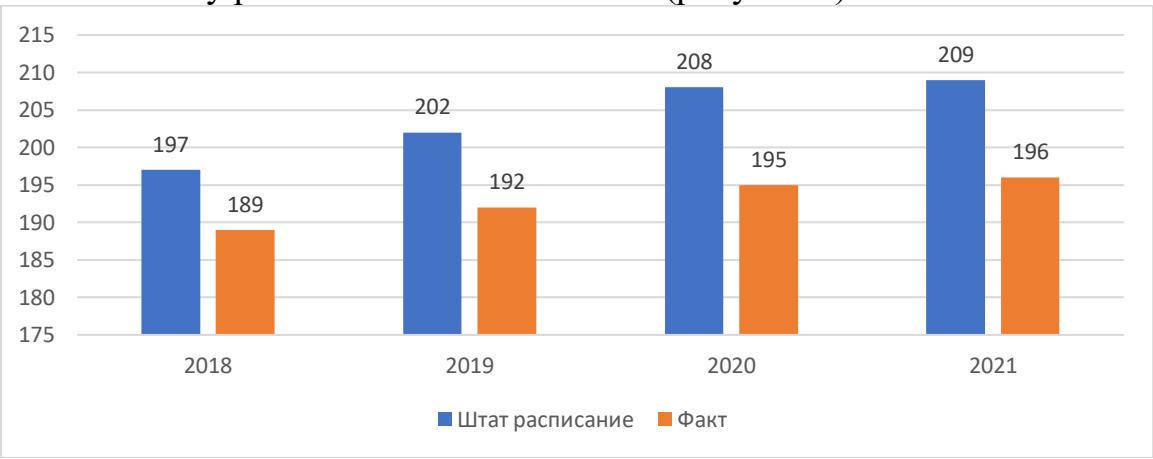

Рисунок 1 – Динамика численности работников Аппарата Правительства Республики Башкортостан в 2018-2022 гг

Таким образом, не смотря на декларируемое ежегодное снижение численности аппарата государственной службы на 5%, фактически наблюдается ежегодный рост должностей по штатному расписанию. В 2018 году по штатному расписанию – 197 (факт 189), 2020 – 208 (195), 2019 – 202 (192). Также наблюдается разница между штатным и фактическим составом Аппарата Правительства Республики Башкортостан.

По должностям: руководителей -85 чел (43,3%); помощников (советников) – 9 чел (4,5%); специалистов – 84 чел (42,8%); обеспечивающих специалистов - 18 чел. (9,1%) (таблица 1).

Таблица 1 - Сведения о должностях и численности работников Аппарата Правительства Республики Башкортостан на 1 января 2021 года

Наименование показателя	ВСЕГО		
	утверждено должностей в штатном расписании на 01.01.2021	фактически замещено должностей на 01.01.2021	среднесписочная численность работников за январь-декабрь 2020 года
1	2	3	5
Должности государственной гражданской службы	209	196	197
в том числе по категориям:			
руководители	92	85	86
помощники (советники)	11	9	10
специалисты	85	84	82

обеспечивающие специалисты	21	18	19

Итак, по данным таблицы руководителей в составе Аппарата Правительства Республики Башкортостан – 43,3%, помощников – 4,5%, специалистов и обеспечивающих специалистов – 51,2%, штат укомплектован на 93,7%.

По словам премьер-министра А. Назарова [7]: «некоторые подразделения аппарата правительства сокращаются, некоторые реформируются, а какие-то — усиливаются», оптимизация численности проводится за счет неиспользуемых вакансий с сохранением фонда заработной платы. В настоящее время идет сокращение и оптимизация аппарата правительства Республики Башкортостан, в России в результате реформы управления к 1 апреля 2021 года численность госаппарата уменьшилась почти на десять процентов. Хотя по данным анализа сведений о должностях и численности работников Аппарата Правительства Республики Башкортостан мы наблюдаем обратный процесс. Штатное расписание увеличивается, численность сотрудников тоже не сокращается, а увеличивается. Также наблюдается высокое соотношение должностей руководителей к специалистам: 43,3% на 51,2%, т.е почти на каждого работника полагается руководитель.

Необходимо эффективно проводить заявленные реформы оптимизации структуры Аппарата Правительства Республики Башкортостан.

Использованные источники:

1. Конституция Республики Башкортостан от 24 декабря 1993 года № ВС-22/15 (с изменениями на 1 октября 2021 года) // Ведомости Государственного Собрания, Президента и Кабинета Министров Республики Башкортостан - 2003, - №1(157), - ст. 3
2. Закон Республики Башкортостан «О Правительстве Республики Башкортостан» от 14 марта 2003 года N 474-з (с изменениями на 28 апреля 2020 года) // Ведомости Государственного Собрания - Курултая, Президента и Правительства Республики Башкортостан", 2003, N 7(163), ст. 349
3. Указ Главы Республики Башкортостан от 08 августа 2011 г. № УП-428 О Кодексе этики и служебного поведения государственных гражданских служащих Республики Башкортостан (с изменениями на 30 декабря 2020 года) // Ведомости Государственного Собрания - Курултая, Президента и Правительства Республики Башкортостан", 03.10.2011, N 19(361), ст. 1422.
4. Постановление Правительства Республики Башкортостан от 13 мая 2003 года № 116 Об утверждении Положения об Аппарате Правительства Республики Башкортостан (с изменениями на 26 января 2022 года) // Ведомости Государственного Собрания - Курултая, Президента и Правительства Республики Башкортостан - 2003 - №11 (167), - Ст. 705
5. Сведения о должностях и численности работников Аппарата Правительства Республики Башкортостан на 1 января 2021 года // https://www.pravitelstvorb.ru/activity/488/

6. Борисюк В.А., Бурангулов Б.В. Нормативная база документирования деятельности государственных служащих (на примере Аппарата Правительства Республики Башкортостан) // Вестник науки, - 2022 – том 4, - № 2 (47), - С. 91-99.
7. В Башкирии сокращают аппарат правительства // Республика Башкортостан - 2021 – 1 апреля. https://resbash.ru/news/politika/2021-04-01/v-bashkirii-sokraschayut-apparat-pravitelstva-2310384

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УЛЬТРАЗВУКОВАЯ ЭЛАСТОГРАФИЯ ПРИ СТЕТОЗЕ И ФИБРОЗЕ

Введение. Актуальные клинические рекомендации по диагностике и лечению неалкогольной жировой болезни печени (НАЖБП), определяют последнюю как хроническое заболевание печени, объединяющее комплекс её клинических и морфологических изменений и включающее в себя такие нарушения, как стеатоз, стеатогепатит, фиброз и цирроз печени у пациентов, не злоупотребляющих алкоголем [1]. Наличие характерных ультразвуковых признаков стеатоза печени (диффузного усиления эхогенности – «белой печени», снижения проводимости ультразвуковых волн в задних сегментах, обеднение сосудистого рисунка) позволяет качественно заподозрить наличие НАЖБП даже при отсутствии лабораторных изменений [2]. НАЖБП является одной из наиболее распространённых гепатопатий на сегодняшний день.

Ключевые слова: ультразвуковая эластография, эхогенность, внешние факторы, стеатоз, фиброз, печень.

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ULTRASONIC ELASTOGRAPHY FOR STETOSIS AND FIBROSIS

Introduction. Current clinical guidelines for the diagnosis and treatment of non-alcoholic fatty liver disease (NAFLD) define the latter as a chronic liver disease that combines a complex of its clinical and morphological changes and includes disorders such as steatosis, steatohepatitis, fibrosis and cirrhosis of the liver in patients who do not abuse alcohol [1]. The presence of characteristic ultrasound signs of liver steatosis (diffuse increased echogenicity - "white liver", decreased conductivity of ultrasound waves in the posterior segments, depletion of the vascular pattern) allows one to qualitatively suspect the presence of NAFLD even in the absence of laboratory changes [2]. NAFLD is one of the most common hepatopathies today.

Keywords: ultrasound elastography, echogenicity, external factors, steatosis, fibrosis, liver.

По официальным данным, более чем каждый третий житель Узбекистана имеет жировые изменения печени, не связанные со злоупотреблением алкоголя, различных степеней выраженности [3]. Отметим также, что НАЖБП – компонент метаболического синдрома, а, соответственно, следует обратить внимание на высокую вероятность коморбидности подобного больного [4]. Схематично современный алгоритм диагностического поиска при печёночной патологии выглядит следующим образом. На первом этапе происходит сбор жалоб пациента, анамнеза заболевания, жизни, объективный осмотр и проведение неспецифичных лабораторных тестов «первой линии», назначение которых связано с предъявляемыми пациентом жалобами. Следовательно, необходимы новые неинвазивные методы диагностики фиброза печени с высокими показателями чувствительности и специфичности, пригодные для ранней диагностики пациентов с подозрением на НАЖБП. Одним из таких методов является эластография: имеются данные о сопоставимости результатов морфологического исследования и ультразвуковой одномерной эластометрии печени в оценке прогноза прогрессирования и степени развития печёночного фиброза [5]. В основу технологии ультразвуковой эластографии сдвиговой волной (ЭСВ) положено следующее. Патологические изменения в структурах паренхиматозных органов приводят к изменению сдвиговой упругости, в результате чего появляется возможность выявления самых ранних признаков заболевания органа при визуализации распределения сдвигового модуля [5]. Благодаря продолжающимся исследованиям на сегодняшний день установлена высокая воспризводимость технологии двухмерной ЭСВ с возможностью количественной характеристики жесткости эхоструктур различных исследуемых органов и тканей [7]. С появлением нового направления ультразвуковой диагностики – ультразвуковой эластографии с возможностью эластометрии – появились дополнительные возможности для диагностики заболеваний печени пациентов всех возрастных категорий [7]. Среди публикаций имеются работы, посвященные возможностям ультразвуковой эластографии не только при диффузных заболеваниях печени, но и при различных очаговых поражениях. По данным З. А. Агаевой и соавт. (2014), достоверно бóльшие значения модуля Юнга (Emean > 56,9 кПа) характерны для метастатических новообразований печени по сравнению с таковыми при здоровой паренхиме или доброкачественных опухолях печени [6]

Методы

В исследование вошли 84 пациента: 60 больных НАЖБП и 24 относительно здоровых наблюдаемых. По гендерному признаку исследуемые были распределены в равных процентных долях, возраст пациентов – от 19 до 61 года (средний показатель – 41,7±11,3 года). Пациенты были разбиты на пять групп. В 1-ю группу были включены пациенты с функциональными нарушениями эвакуации желчи (n = 72); во 2-ю–со стеатозом печени без проявлений фиброза печени (n = 28); в 3-ю – с циррозом печени (n = 25); в 4-

ю – с хроническим вирусным гепатитом В и С (n = 44). Пятая группа (n = 25) рассматривалась как группа контроля (эталонная группа). Всем исследуемым была проведена ультразвуковая ЭСВ с эластометрией с использованием технологий одномерного (ТЕ) (FibroScan 502 TOUCH, Франция) и двухмерного (2DSWE) режимов (Aixplorer, Supersonic Imagine, Франция). На аппарате «FibroScan 502 TOUCH» с помощью двух датчиков, работающих на разных частотах (M+ и XL+), единовременно в одном объеме исследуемой ткани печени производили эластометрию и стеатометрию с оценкой количественных значений параметров F (жесткости печени с определением стадии фиброза) и S (стеатоза печени с определением стадии процесса) методом КПЗУ, выраженные, соответственно – килопаскалях (кПа) и децибелах/метр (дБ/м). Статистическая обработка проведена с помощью программы IBM SPSS Statistics 10.0. Результаты исследования представлены абсолютными (количество случаев) и относительными (%) величинами, отражены в виде медианы (Me), минимальных (min), максимальных (max) и средних (Emean) значений, стандартного отклонения (SD) модуля упругости Юнга.

Результаты и обсуждение

Последовательное комплексное исследование пациентов основной группы и здоровых лиц с помощью технологий КПЗУ и ТЭ с единовременным определением значений F и S в заданном объеме печени в зависимости от их количественных показателей позволили установить степень выраженности стеатоза печени у пациентов с НАЖБП. Оценка согласованности количественных показателей, полученных разными способами эластографии сдвиговой волной–одномерной (ТЕ) и двухмерной (2DSWE) – в зависимости от значений степени выраженности стеатоза (установленных с помощью метода КПЗУ), показала более высокую степень корреляции между ними при I степени стеатоза печени (r = 0,98) по сравнению с II и III (r = 0,84 и r = 0,83, соответственно). При этом показатели коэффициента корреляции при использовании как описательного метода Блэнда – Алтмана, так и корреляционного анализа по Спирмену практически были аналогичными по основным значениям

Заключение

Результаты исследования позволяют рекомендовать ультразвуковую эластографию с технологией контролируемого параметра затухания ультразвука (КПЗУ) с целью установления степени выраженности стеатоза печени как для первичной диагностики, так и для динамического мониторинга состояния печени у страдающих НАЖБП.

Использованные источники:

1.Лазебник Л.Б., Радченко В. Г., Голованова Е. В. и др. Неалкогольная жировая болезнь печени: клиника, диагностика, лечение (рекомендации для терапевтов, 2-я версия). Терапия 2017; 3(13): 6–23

2.Диагностика и лечение неалкогольной жировой болезни печени: методические рекомендации для врачей (под ред. академика РАН, проф. В. Т. Ивашкина). М.; 2015.
3.Вовк Е. И. Неалкогольная жировая болезнь печени как проатерогенное заболевание: диагностика и лечение в общей практике. РМЖ 2017; 1 (2): 68–79.
4.Кролевец Т.С., Ливзан М. А., Чебаненко Е. В., Мазур И. И., Повжик А. А., Николаев Н. А. Прогно сти ческая модель неинвазивной оценки формирования и прогрессирования фиброза печени у пациентов с неалкогольной жировой болезнью печени. Современные проблемы науки и образования 2018; 3. URL: http://science-education.ru/ru/article/ ew?id=27713.
5.Черкашина Е. А. Актуальные вопросы диагностики и лечения неалкогольной жировой болезни печени. Медицинский совет 2015; 34: 67–71.
6.Бабенко А.Ю., Лаевская М. Ю. Неалкогольная жировая болезнь печени–взаимосвязи с метаболическим синдромом. РМЖ 2018; 1 (I): 34–40.
7.Маршалко Д.В., Пчелин И. Ю., Шишкин А. Н. Неалкогольная жировая болезнь печени: коморбитность, клиническое значение и методы диагностики фиброза печени. Juvenis Scientia 2018; 2: 14–17.

УДК 618.2-07+618.4-089]:618.14-089(075.9)

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АКУШЕРСКИЕ И ПЕРИНАТАЛЬНЫЕ ИСХОДЫ У ЖЕНЩИН С РУБЦОМ НА МАТКЕ В ЗАВИСИМОСТИ ОТ СПОСОБА РОДОРАЗРЕШЕНИЯ

Резюме. Основной задачей акушерства является снижение материнской и детской заболеваемости и смертности. Большая роль в решении этой задачи отводится своевременному и оптимальному родоразрешению.

В современном акушерстве только наличие рубца на матке не может являться абсолютным показанием к повторному абдоминальному родоразрешению. Роды через естественные половые пути при тщательном отборе пациенток допустимы лишь при состоятельности рубца, удовлетворительном состоянии матери и плода в крупных специализированных центрах.

При этом рекомендуется пристальное наблюдение как за роженицей, так и за плодом для своевременного выявления возможных осложнений и быстрого оказания высококвалифицированной помощи.

В работе представлены современные данные о методах родоразрешения у женщин с рубцом на матке – после кесарева сечения.

Ключевая слова: кесарево сечение. рубец на матке абдоминальное родоразрешение.

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OBSTETRIC AND PERINATAL OUTCOMES IN WOMEN WITH UTERINE SCAR, DEPENDING ON THE METHOD OF DELIVERY

Resume. The main task of obstetrics is to reduce maternal and child morbidity and mortality. Timely and optimal delivery plays a major role in solving this problem.

In modern obstetrics, the presence of a scar on the uterus alone cannot be an absolute indication for repeated abdominal delivery. Childbirth through the natural genital tract with careful selection of patients is permissible only if the scar is consistent, the mother and fetus are in satisfactory condition in large specialized centers.

At the same time, close monitoring of both the woman in labor and the fetus is recommended for timely detection of possible complications and rapid provision of highly qualified care.

The paper presents current data on methods of delivery in women with a scar on the uterus – after cesarean section.

Key words: caesarean section. scar on the uterus abdominal delivery.

Актуальность. В современном акушерстве отмечается неуклонный рост частоты кесарева сечения, в среднем составляет по России 17%, и достигает 40-50% в крупных перинатальных центрах [2]. Расширение показаний к абдоминальному родоразрешению ведет к увеличению числа женщин, имеющих рубец на матке [1]. В последнее десятилетие наметилась тенденция к увеличению числа повторнородящих, в том числе и с рубцом на матке. У каждой четвертой беременной, родоразрешенной путем операции кесарево сечение, имеется рубец на матке после предыдущих оперативных родов [3].

Повторное кесарево сечение является технически более сложной операцией [6]. Материнская заболеваемость при повторной операции в 3-4 раза выше, чем при родах через естественные родовые пути. Это ставит перед современным акушерством новую проблему - ведение беременности и родов у женщин с рубцом на матке [8].

Результаты многочисленных исследований свидетельствуют о том, что абдоминальное родоразрешение и в настоящее время является фактором высокого риска как для матери, так и для новорожденного. В частности, при кесаревом сечении остается высокой частота асфиксии новорожденных, а перинатальная смертность в несколько раз выше, чем при рождении через естественные родовые пути, и достигает 11% [5].

Несмотря на совершенствование техники операции, методик ушивания разреза на матке, использование современного шовного материала, профилактическое назначение антибиотиков широкого спектра действия, частота гнойно-септических осложнений как в раннем послеоперационном периоде, так и в отдаленные сроки после операции остается достаточно высокой. Одним из основных резервов снижения частоты повторного кесарева сечения является консервативное родоразрешение строго отобранной группы женщин с рубцом на матке. По данным разных авторов, у 30-80% беременных с рубцом на матке возможны роды через естественные родовые пути [4].

Таким образом, значение кесарева сечения в современном акушерстве продолжает возрастать, и оно по праву занимает ведущее место среди всех родоразрешающих операций для обеспечения благоприятных исходов для матери и плода при ряде тяжелых акушерских осложнений и экстрагенитальных заболеваний [3]. Однако, данный метод родоразрешения нужно применять строго по показаниям, своевременно, с обязательным

учетом всех противопоказаний и соблюдения условий, необходимых для его выполнения.

Цель исследования. Изучить особенности течения послеродового периода и ранней адаптации новорожденных у женщин с рубцом на матке в зависимости от способа родоразрешения.

Материалы и методы исследования. Чтобы выполнить поставленную перед нами задачу, мы отобрали для обследования в общей сложности 60 женщин в послеродовом периоде, проживающих в нашем регионе, и изучили особенности протекания у них беременности и родов

Результаты исследования. Частота кесарева сечения по данным родильного отделения АОПЦ в среднем составляет 27,6%. Высокий уровень абдоминального родоразрешения обусловлен ростом экстрагенитальной (с 43,0% до 70,0%) и гинекологической патологии (с 55,0% - до 70,0%), увеличением пациенток с рубцом на матке (с 14,2% - до 20,5%), аномалиями родовой деятельности (с 18,3% до 28,2%), развитием ЭКО (2,3%). В структуре интра- и послеоперационных осложнений преобладают кровотечения (10,0%), анемия (от 45,9% до 54,4%), субинволюция матки (от 10,6% до 17,5%), эндометрит (от 2,4% до 4,7%).

В структуре послеродовых осложнений у женщин с рубцом на матке преобладают гематометра, субинволюция матки, анемия, эндометрит, частота которого после повторного кесарева сечения в 3 раза выше, чем после самопроизвольных родов.

После повторного абдоминального родоразрешения неблагоприятное становление лактации развивается в 3,5 раза, а гипогалактия в 6 раз чаще, чем после самопроизвольных родов.

Период ранней адаптации протекает более напряженно у новорожденных, родившихся путем операции кесарево сечение в плановом порядке до начала родовой деятельности у матери. У этих детей наиболее часто выявляются признаки незрелости органов и систем, что осложняет их адаптацию к условиям внеутробной жизни.

Родоразрешение женщин с рубцом на матке через естественные родовые пути позволяет экономить лечебному учреждению значительные средства и использовать их для нужд стационара.

У 78,0% пациенток с рубцом на матке, родоразрешенных через естественные родовые пути, отмечается моральное удовлетворение методом родоразрешения, высокая самооценка, готовность иметь детей в будущем и отсутствие нарушений во взаимоотношениях с новорожденным. После повторного кесарева сечения количество таких женщин не превышает 30,0%.

Вывод. Показано, что ведение родов через естественные родовые пути у женщин с рубцом на матке, уменьшает частоту послеродовых осложнений, нарушений лактации по сравнению с повторной операцией кесарево сечение, что позволяет считать самопроизвольные роды оптимальным способом родоразрешения у данного контингента пациенток.

Проведенный анализ перинатальных исходов в зависимости от способа родоразрешения пациенток с рубцом на матке позволяет оптимизировать сроки выполнения повторной операции кесарева сечения.

Психологический статус у родильниц после повторной операции кесарево сечение проявляется развитием повышенного беспокойства, посттравматического стрессового расстройства, моральной неудовлетворенностью и нарушениями в эмоциональной сфере, что оказывает влияние на взаимоотношения с новорожденным, качество жизни женщины в будущем.

Родоразрешение беременных с рубцом на матке через естественные родовые пути позволяет экономить лечебному учреждению денежные средства и использовать их для нужд стационара.

Использованные источники:

1. Анохова Л.И., Загородняя Э.Д., Дашкевич О.Ю. Профилактика эндометрита после кесарева сечения методом эндоваскулярного лазерного облучения // Материалы VII Российского форума «Мать и дитя»,-М.,2005.17-18.
2. Байматова З.К., Менгниязова З.Г., Якубов И.И. Особенности пренатального развития плода у беременных с рубцом на матке после кесарева сечения // Материалы VII Российского форума «Мать и дитя». М., 2005. – 22-23.
3. Василенко Л.В., Змеева М.А. Индукция родовой деятельности при перенашивании беременности // Индукция сократительной деятельности матки: Сб. науч. тр. Саратов: Изд-во СМУ, 2000. - С. 35-37.
4. Подтетенев А.Д. Прогнозирование, профилактика и лечение слабости идискоординации родовой деятельности): Автореф. дис.. док. мед. наук. -М., 2003. – 44 с.
5. Радзинский В.Е., Костин И.Н. Акушерская агрессия как причина снижения качества родовспоможения // Вестник РУДН. 2005. - №4 (32). -С.9 -12.
6. Baskett T.F., Allen V.M., O'Connell C.M. et al. Predictors of respiratory depression at birth in the term infant // BJOG. 2006. - V.l 13, №7. - P.769-774.
7. Urban L., Lemancewicz A. The Doppler cerebroplacental rations and perinatal outcome in post-term pregnancy // Gynecol. Pol. 2000. - V.71, №4. -P.317-321.
8. Yazicioglu F., Gokdogan A., Kelekci S and al. Incomplete healing of the uterine incision section: Is it preventable? Eur J Obstet Gynecol Reprod Biol. 2006 Jan (1): 32-6.

УДК 35

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СОВЕРШЕНСТВОВАНИЕ ГОСУДАРСТВЕННОЙ МИГРАЦИОННОЙ ПОЛИТИКИ ЧЕЛЯБИНСКОЙ ОБЛАСТИ

Аннотация. В данной статье рассматривается одна из самых актуальных в настоящее время тем – миграционные процессы в стране, а также анализируется миграционная политика.

Ключевые слова: миграция; миграционная политика; государственные органы.

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IMPROVING THE STATE MIGRATION POLICY OF THE CHELYABINSK REGION

Abstract. This article examines one of the most relevant topics at present – migration processes in the country, and also analyzes migration policy.

Keywords: migration; migration policy; government agencies.

Изменчивая ситуация в мире, отражающаяся на внутриполитической обстановке российского государства, требует постоянного мониторинга миграционного движения, анализа его тенденций и выработки на этой основе определенной государственной политики в сфере миграции. Выработка и модернизация миграционной политики в соответствии с современными реалиями являются одними из приоритетных направлений деятельности нашего государства.

При этом формирование и реализация миграционной политики на государственном уровне, создание эффективного правового механизма ее претворения в жизнь должно происходить не только на основе, общих принципов и норм международного права, но и с учетом действующих в нашей стране социально-экономических и правовых тенденций.

Однако необходимо отметить, что в настоящее время в области государственного регулирования миграции в России имеются определенные сложности, обусловленные изменениями в социально-экономической сфере. Неслучайно Президентом Российской Федерации подписана в 2019 году Концепции государственной миграционной политики России до 2025 года [1], которая заменила собой аналогичный документ 2012 года.

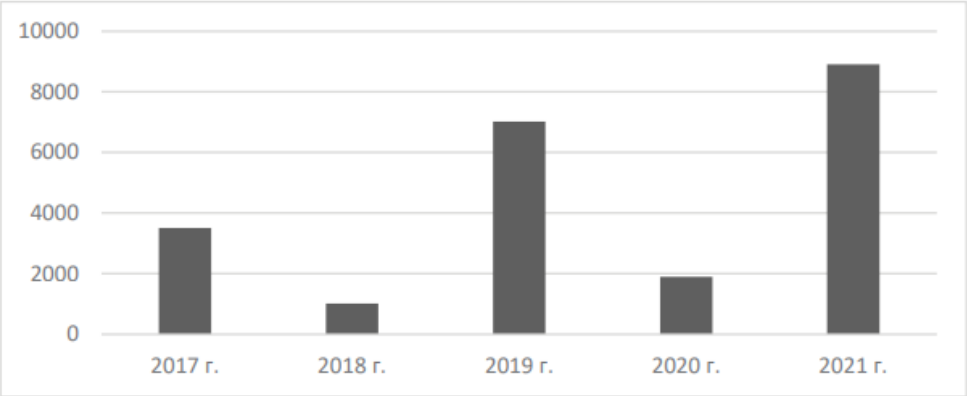
Актуальность исследования обусловлена постоянно меняющейся ситуацией на международной арене в настоящее время, которая отражается на внутриполитической обстановке РФ, и как вследствие, требует постоянного мониторинга миграционного движения, анализа его тенденций и динамики, выработки на этой основе государственной миграционной политики, её составление, корректирование и применение. Также основными аргументами в пользу изучения миграционной политики являются масштабы рассматриваемого явления, так как миграция влияет на экономическое, социальное, демографическое и культурное развитие государства и его отдельных регионов.

В настоящее время в РФ происходят значительные изменения во внутренней и внешней политике, которые затрагивают большинство сфер общественных отношений граждан, что приводит к возникновению новых взаимоотношений между гражданами и государством и к необходимости их изучения.

В данном исследовании предлагаем рассмотреть проблемы миграционной политики в настоящее время, основные направления для их решения, что в результате приведет к совершенствованию самой миграционной политики государства.

Так, Васильева Л.Н. отмечает, что «принятое количество правовых актов, регулирующих данную сферу правоотношений, в течение двадцати пяти лет не позволяло адаптировать имеющуюся структуру и качественный состав миграционных потоков к стратегическим государственным потребностям. Сохранялся спонтанный, во многом неуправляемый характер миграции, которая оказывала негативное влияние на экономические, социальные, демографические, этнокультурные и другие процессы как в Российской Федерации в целом, так и в отдельных ее регионах» [2].

Первой проблемой, которую мы хотим отметить, является большой приток мигрантов в регион.



Механический прирост международной миграции в Челябинской области

Почему же это, по нашему мнению, является проблемой? С одной стороны, привлечение и прибытие в область мигрантов (именно иностранных граждан) является вспомогательным средством для решения демографических проблем и связанных с ними экономических проблем, поскольку источником увеличения численности населения было переселение мигрантов и привлечение иностранных работников по приоритетным профессионально-квалификационным группам, что являлось необходимостью для дальнейшего поступательного развития экономики нашей области.

Прирост миграции населения приводит к росту населения региона. Для региона важным становится привлечь в свои регионы соотечественников, владеющих русским языком, знающих законы Российской Федерации, не нарушающие уголовный и административный кодекс. В большинстве регионов именно на эту группу населения ориентированы большинство реализуемых инструментов в области миграционной и демографической политики.

Вместе с тем, увеличение трудовых ресурсов за счет мигрантов не должно осложнять ситуацию на рынке труда по отношению к постоянно проживающим гражданам. Также негативным последствием мобильности рабочей силы является сокращение уровня средней заработной платы в регионе. Это связано как с низкой производительностью труда, так и с отсутствием у работодателей необходимости ее повышения. Ведь, как правило, мигранты согласны выполнять работу за более низкую заработную плату, следовательно, нет необходимости повышать ее и местным работникам. В этой связи велик риск роста безработицы среди местного населения.

То есть здесь наряду с въездом работников низкой квалификации регион имеет возможность лишиться собственных высококвалифицированных кадров за счет их миграции. Чтобы этого не допустить, необходимо совершенствовать не только социальную и экономическую политику внутри государства, но и миграционную политику, так как от нее в немалой степени

зависит уровень заработной платы по отраслям, количество рабочих мест, а, следовательно, и качество жизни. Полагаем, что необходимо создавать комфортную среду для той категории мигрантов, которая может принести пользу не в качестве дешевой рабочей силы, а в качестве инвестиций, своего рода интеллектуального ресурса для дальнейшего развития страны. Необходимо улучшать условия труда для высококвалифицированных работников своей страны, дабы у них не возникало намерения трудиться на благо иных государств.

Считаем, что решение вопросов с трудоустройством для приехавшим мигрантов должно осуществляться на конкурсной основе с учетом знания языка, норм и правил проживания, основ права и трудовой квалификации. При этом основной аспект должен быть смещен на процесс подготовки будущих мигрантов в стране их проживания.

Нелегальная миграция оказывает негативное воздействие на рынок труда региона, вызывая проблемы в сфере занятости. Из-за неконтролируемой иммиграции происходит наполнение ряда районов неквалифицированной, с криминальными тенденциями рабочей силой из бывших республик СССР. В Челябинской области находится от 17 до 85 тысяч нелегальных мигрантов. Указанные верхняя и нижняя границы отличаются в 5 раз. Это показывает, что ситуация не контролируется государством. Эта проблема актуальна не только для Челябинской области, но и для всей страны, в которой, по разным оценкам, находится до 3,5 миллионов нелегальных иммигрантов.

Неформальная занятость и нелегальное привлечение иностранной рабочей силы в Челябинской области приводит к увеличению уровня безработицы, вызывает увеличение напряженности на рынке труда. Она ведет к недополучению налоговых поступлений в бюджет.

Отсюда следует, что надо выводить из тени нелегальный импорт иностранной рабочей силы, расширять возможности государства эффективно управлять миграционными процессами.

Также, например, согласно данным представленным Законодательным Собрание Челябинской области [3] на территорию Челябинской области с начала 2022 года прибыло более 1000 вынужденных переселенцев. Им оказывается социальная поддержка (получение единовременного денежного пособия на каждого члена семьи, проживание в центре временного размещения вынужденных переселенцев, получение питания, пользование коммунальными услугами и др.), многие встают в очередь на получения жилья. Полагаем, что большой приток населения в определенный субъект РФ приводит к тому, что из бюджета субъекта выделяются денежные средства, необходимые для оказания социальной, жилищной помощи, помощи в адаптации. Избыточное количество прибывших лиц в один регион не позволит государству в полной мере осуществить функции по социальной защите как граждан страны, так и беженцев, и переселенцев и создаст предпосылки к возникновению социальной напряженности. Миграция непосредственно влияет на социально-экономическое положение регионов и

является доминирующим фактором при формировании рынка труда и жилья [4].

С учетом изложенного, приходим к выводу, что приток мигрантов способствовал росту цен на недвижимость, обострению конкуренции на рынке труда, снижению уровня жизни населения, обострению других социальных проблем, прежде всего в области образования и здравоохранения, криминализации обстановки в России. Во всей совокупности миграционных проблем ключевыми являются проблемы интеграции мигрантов в принимающее общество и проблемы адаптации принимающего общества к новым условиям, прежде всего к изменению этнического состава населения и следствиям этого процесса. Вопросы миграционной политики входят в число наиболее значимых для обеспечения национальной безопасности, поддержания оптимального баланса трудовых ресурсов, сохранения устойчивого экономического роста.

Таким образом, положительное влияние внешней миграции на социально-экономическое развитие Челябинской области проявляется в том, что она способна смягчить демографический кризис и естественную убыль населения, является источником пополнения недостающих трудовых ресурсов, имеющих необходимый уровень образования и квалификации, способна сгладить диспропорции в половозрастной структуре. Миграция воздействует и на расселение и распределение населения области. Кроме того, она способствует развитию некоторых отраслей, таких как строительство, сельское хозяйство, транспорт и связь, сглаживая тем самым отраслевые диспропорции.

Негативный характер воздействия, как правило, связан с нелегальной миграцией, потоки которой все возрастают. Она осложняет ситуацию на рынке труда Челябинской области, является одним из факторов ухудшения криминальной обстановки в области и нарастания социальной напряженности.

Для дальнейшего развития области необходимо устранить влияние негативных факторов и способствовать развитию позитивных. Этому должна способствовать миграционная политика, проводимая в области.

Использованные источники:

1) Указ Президента РФ от 31 октября 2018 г. № 622 «О Концепции государственной миграционной политики РФ на 2019 - 2025 годы» // Собрание законодательства РФ. 2018. № 45. Ст. 6917.

2) Андриченко Л.В., Васильева Л.Н. Законодательство в сфере миграции: проблемы и перспективы // Российское законодательство: состояние и проблемы. 2021. № 5. С. 6.

3) Законодательное собрание Челябинской области // - URL: https://zs74.ru

4) Савчук С.В. Миграционный фактор в государственной политике по противодействию экстремизму на примере Челябинской области // Novelty. Experiment. Traditions (N.Ex.T). 2022. № 8. С. 55.

УДК 57

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ФАУНА И ФЛОРА РЕСПУБЛИКИ КАРАКАЛПАКСТАНА

Аннотация. В статье рассматриваются особенности флоры и фауны Республики Каракалпакстан. На территории Республики в настоящее время произрастают около 1000 видов высших растений и обитают498 видов позвоночных животных, 1392 вида насекомых.

Ключевые слова: Кызылкум, Низовья Амударьи, Устюрт, МСОП, Красная книга, регион, охрана.

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FAUNA AND FLORA OF THE REPUBLIC OF KARAKALPAKSTAN

Annotation. The article discusses the features of the flora and fauna of the Republic of Karakalpakstan. About 1,000 species of higher plants currently grow on the territory of the Republic and are home to 498 species of vertebrates and 1,392 species of insects.

Key words: Kyzylkum, Lower Amu Darya, Ustyurt, IUCN, Red Book, region, protection.

Республика Каракалпакстан, расположен в пустынной зоне цетрально-азиатского региона, определяется резко континентальным пустынным климатом с крайне малым количеством осадков при большой испаряемости. Большая часть территории занята пустынями плато Устюрт и Кызылкумы. Между ними расположено осушающееся Аральское море и дельта реки Амударьи, которых, в свою очередь, разделяет еще одна пустыня (новая) Аралкумы.

Территорию Каракалпакстана можно поделить на 4 ботанико-географических района: Устюрт, Кызылкумы, низовья Амударьи и высохшая часть Аральского моря, на которых в настоящее время произрастают около 1000 видов высших растений. Многих из этих растений обладают полезными свойствами, например, они широко использовались в медицине с древних времен по настоящее время.

Растительный покров пустынь резко изменяется в зависимости от субстрата: на песках господствует псаммофитная растительность, на каменистом субстрате — гипсофитная, на солончаках — галофитная, на суглинистых почвах — полынная и полынно-солянковая и эфемеровая растительность.

На Устюрте широко распространены кормовые растения, что позволяет здесь круглогодично пастись скоту. Среди них — биюргунники, полынники, саксаульники, кереушники, эфемеры и эфемероиды.

В песках Кызылкумов произрастают белые саксаульники, джузгунники, полынники, черкезники, биюргунники, злаковые, илаковые, эфемеры и эфемероиды: эфедра, полыни, се лин и др. Многие из этих растений являются кормом для рогатого скота, а также используются в медицине (ферула, эфедра, полынь).

Низовья Амударьи — представляет собой однообразную равнину со слабым уклоном к Аральскому морю. Он характерен большой концентрацией тугайных древостоев, произрастающих в районе современной и древней дельты Амударьи, и считается основным районом распространения тугаев в Центральной Азии. Другая растительность Низовья Амударьи представлена тростниковыми, кормовыми, лекарственными, красильными и эфиромасличными растениями.

Растительность высохшего дна Аральского моря или пустыня, Аралкум которую вновь начали осваивать в недавнем времени, немногочисленна. В основном она представлена галофитами: видами гребенщика, джузгуна, солянок, селина и др. Одними из важнейших древовидных растений являются виды саксаула — черного и белого.

В животном мире пустынь выявляется их приспособление к довольно неблагоприятным условиям среды. Животные в пустыне также приспосабливаются к чрезмерной жаре и недостатку влаги разными путями.

Часть из них переходит на ночной образ жизни, а от дневной жары прячутся в норах или зарываются в песок или отсиживаются на ветках кустарников. Недостаток воды в пустыне привел к тому, что некоторые пустынные животные вообще не пьют воду и даже не умеют пить (желтый суслик). Они получают необходимую влагу из растений, хищники же — из крови своих жертв. Животные эфемеровых пустынь, ведущие деятельный образ жизни весной, в жаркий летний период уходят в спячку.

На территории Республики Каракалпакстан зарегистрировано 498 видов позвоночных животных, в том числе млекопитающих – 68, птиц — 307 (из них гнездящихся – 141, зимующих -20, пролетных — 146),

пресмыкающихся — 33, земноводных — 2, рыб – 49 видов. Беспозвоночных животных ориентировочно больше в 7 раз, однако они очень слабо исследованы. Наибольшее разнообразие приходится на насекомых — 1392 вида, относящихся к 23 отрядам.

Наиболее полно исследованы беспозвоночные — паразиты рыб, птиц, ракообразных и моллюсков. Так, у рыб известны 436 видов паразитов, у птиц – только гельминтов 133 вида. На грызунах обнаружены 45 видов блох и 16 видов клещей.

В тугайном биоценозе зарегистрировано 420 видов беспозвоночных, в гипсовой пустыне – 264, в песчаной пустыне – 180.

Видовой состав позвоночных животных Каракалпакстана в течение последних десятилетий претерпел заметные изменения. Значительная часть видов наземных сильно сократилась в численности, вошла в разряд уязвимых, редких или исчезающих.

В списки Красной книги Узбекистана (2006) внесены 10 видов млекопитающих, 37 – птиц, 12 – рыб, 4 – пресмыкающихся. В Красный список Международного союза охраны природы (МСОП) из млекопитающих Каракалпакстанавнесены 2 исчезнувших (азиатский гепард и туранский тигр) и 4 находящихся на грани полного исчезновения вида (индийский медоед, туркменский каракал, туркменский кулан, устюртский баран); из птиц — 5 исчезающих и находящихся на грани полного исчезновения видов (мраморный чирок, савка, стерх, дрофа, тонкоклювый кроншнеп), из рыб — 5 видов (аральский шип, большой и малый амударьинские лжелопатоносы, аральская щиповка и аральская кумжа). Из бывших объектов охоты и промысла — 24 вида млекопитающих, 60 видов птиц и 14 видов рыб Каракалпакстана, многие исчезли или сократились в численности и утеряли промысловое значение.

В то же время в результате акклиматизационных мероприятий и путем саморасселения в водоемах Каракалпакстана появилось 14 видов рыб. Однако из них только 4 вида имеют промысловое значение даже занимают ведущие места в рыбном промысле.

В Бадатугайский заповедник, который расположен на территории Республики Каракалпакстан были завезены в 1976 году 12 особей оленей, которых поселили в специально построенные сетчатые вольеры. Бухарский олень как животное, имеющий большое значение для глобального биоразнообразия, находящийся в катастрофическом состоянии и под реальной угрозой исчезновения включен в списки приоритетных таксонов копытных животных Международного союза охраны природы, занесен в Красную Книгу МСОП (2006), а также в списки Красной книги Республики Узбекистан (2006). В настоящее время на территории Амударьинского государственного биосферного резервата (ранее Бадатугайский заповедник) число Бухарских оленей достигло более 1200 особей.

Фауна Каракалпакстана имеет свои особенности. Так, пустынные обитатели считаются самыми лучшими бегунами. Например, ежи, которые

являются относительно медленно передвигающимися животными, здесь представлены ушастым и длинноиглым видами, имеющими конечности заметно длиннее, чем у европейского ежа.

Среди млекопитающих наиболее распространенными считаются тонколапый суслик, тушканчик, волк, кабан, лисица и заяц; из птиц — саксаульная сойка, пустынный воробей, сорока; из пресмыкающихся — ящерки, песчаный удавчик, из рыб — белый амур, амударьинская форель, сазан, судак, змееголов, обыкновенный толстолобик и др. Из беспозвоночных видов распространены фаланги, скорпионы, песчаный тарантул, жуки.

Таким образомфлора и фауна Республики Каракалпакстан разнообразен, но последнее десятилетие видовой состав многих животных претерпел изменения и из-за сокращения численности занесены в списки Красной книги МСОП и Республики Узбекистан.

Использованные источники:

1. Бердамбетова Б.П., Бахиева Л.А. Животный мир Республики Каракалпакстан// "Экономика и социум" №4(71) 2020. – www.iupr.ru. – С.184-186.
2. Бердамбетова Б. П. Охраняемые виды животных Республики Каракалпакстан// "Мировая наука" №6(51) 2021. - science-j.com. - С. 113-115.
3. Музей экологии на берегу Аральского моря// https://agroturizm.uz/
4. Флора и фауна Каракалпакстана своеобразие природы Каракалпакстана// https://fayllar.org/
5. Республика Каракалпакстан// https://invest.gov.uz/
6. Фауна// karakalpakstan.travel/f
7. Флора//https://karakalpakstan.travel/f

УДК 548.4

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ДЕФЕКТЫ В РЕАЛЬНЫХ КРИСТАЛЛАХ

Аннотация. Одной из причин, по которой полупроводники так широко используются в производстве электронных устройств, является способность существенно изменять их электрические свойства путем введения небольших количеств других типов примесей или дефектов. Но хотя один тип дефектов может быть полезен при изготовлении электронных устройств, другой тип может иметь побочные эффекты, которые делают устройство неполноценным. А количество дефектов, необходимых для изменения свойств полупроводников, часто намного меньше одного дефекта на миллион отдельных атомов.

Ключевые слова: кремний, компенсация, диффузия, дефекты, примесей, атомов, нанокластер, соединение сера, диффузия.

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DEFECTS IN REAL CRYSTALS

Abstract. One of the reasons why semiconductors are so widely used in the manufacture of electronic devices is the ability to significantly change their electrical properties by introducing small amounts of other types of impurities or defects. But while one type of defect may be useful in the manufacture of electronic devices, another type may have side effects that make the device defective. And the number of defects required to change the properties of semiconductors is often much less than one defect per million individual atoms.

Keywords: silicon, compensation, diffusion, defects, impurities, atoms, nanocluster, sulfur compound, diffusion.

Реальные кристаллы имеют различные дефекты по ряду причин. Дефекты означают смещение атомов из их нормального положения в кристаллической решетке или проникновение в кристаллическую решетку

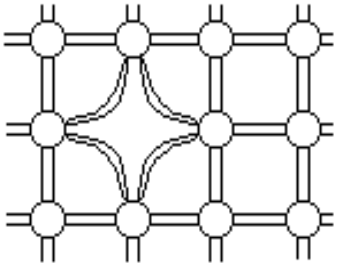


Рисунок 1. Вакансия или число Шоттки в кристаллическойрешетке.

инородных атомов [1,2]. Такие дефекты возникают при особых внешних воздействиях на кристалл или вследствие неконтролируемых случайных факторов. Полупроводниковые кристаллы особенно подвержены большинству дефектов. Ряд явлений, происходящих в полупроводниках (электропроводность, диффузия, рост кристаллов, проявление оптических и других свойств и др.), можно объяснить влиянием дефектов кристаллической решетки [3,4].

Рисунок 2. Межузловой атом в кристаллической решетке

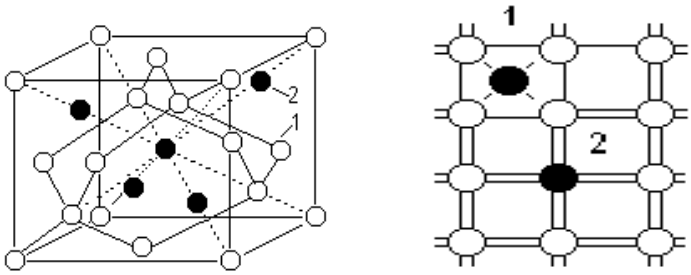
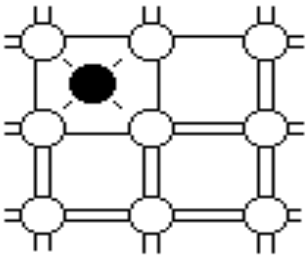


Рисунок 3. Точечный дефект кристаллической решетки:



1-междоузловой входной атом; Входной атом в узле 2

Дефекты кристаллов можно разделить на четыре группы. Это точечные, линейные, поверхностные и объемные дефекты. Точечные дефекты возникают в результате отсутствия собственных атомов решетки или наличия в некоторых точках кристаллической решетки одного лишнего атома [5,6]. На рис. 1, 2, 3 показаны наиболее распространенные точечные дефекты. Если в узле кристаллической решетки отсутствует определенный атом (рис. 1), то такой дефект называется вакансией или дефектом Шоттки. В кристаллах иногда имеется пара вакансий. Такие дефекты называются дивакансиями. Если между узлами имеется лишний атом, такой дефект называется

индуктивным дефектом (рис. 2). Прерывистые атомы, расположенные в узлах или между узлами кристаллической решетки, еще называют точечными дефектами (рис. 3) [7,8].

Пара частных атомов, выходящая из вакансии и узла, также считается точечным дефектом и называется парой Френкеля (рис. 4).

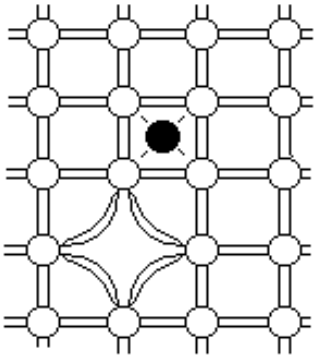


Рисунок 4. Частная пара атомов из вакансии и узла**.**

Основная причина, по которой мы хоть и кратко затронули эту тему, заключается в том, что любой дефект очень сильно влияет на свойства полупроводника и электрофизические параметры различных полупроводниковых приборов на его основе [9,10]. Поэтому проблема получения чистых структурно безупречных полупроводниковых материалов всегда занимает особое место в технике [11,12].

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.

7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
14. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
15. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

УДК 338.2

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ДЕБИТОРСКАЯ И КРЕДИТОРСКАЯ ЗАДОЛЖЕННОСТЬ В ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЯ

Аннотация. В работе рассмотрены теоретические аспекты, возникновения кредиторской и дебиторской задолженности в организации. Обозначена взаимозависимость этих задолженностей и их влияние на хозяйственную деятельность организации. Определена важность ее документирования.

Ключевые слова. Дебиторская и кредиторская задолженность, управление задолженностью, автоматизированный учет задолженности.

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ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE IN THE COMPANY'S ACTIVITIES

Annotation. The paper considers the theoretical aspects of the occurrence of accounts payable and receivables in an organization. The interdependence of these debts and their impact on the economic activity of the organization is indicated. The importance of documenting it has been determined.

Keywords. Accounts receivable and payable, debt management, automated debt accounting.

Актуальность изучения темы дебиторской и кредиторской задолженности предприятия заключается в том, что в условиях рыночной экономики все хозяйствующие субъекты тесно связаны между собой экономическими связями, по средствам постоянных расчетных операций. В результате проводимых расчетов появляются обязательства, подлежащие обязательному исполнению, выраженные в денежной форме. В соответствии с принципами единства экономического пространства и взаимодействия и его взаимозависимости, возникают также обязательства третьих лиц перед

фирмой. Реализацию всех этих взаимоотношений обеспечивают наличные и безналичные расчеты.

Нестабильность экономики, как из-за внутренней политики и положения в стране, так и мировых экономических, политических и социальных событий, присутствующий экономический кризис, сложности международных и валютных расчетов, множество финансовых ограничений приводит к тому, что риск неоплаты или несвоевременной оплаты счетов увеличивается. Осуществляя предпринимательскую деятельность, участники имущественного оборота получают доход, который, однако, не всегда поступает на счета организации или же сама организация задерживает платежи в части другого контрагента, что приводит к образованию задолженностей (обязательства). Взыскание задолженности не всегда происходит вовремя и в полном объеме. Такая ситуация естественна для бизнеса и рассматривать ее только с негативной стороны неправильно. Периодически возникающие задолженности в небольшой денежной сумме — это нормальное условие функционирования предприятия, она просто должна находится в допустимых значениях и вовремя погашаться за счет правильного управления ею и своевременного контроля за ее возникновением и погашением.

В организации выделяют два вида задолженности: дебиторская задолженность и кредиторская задолженность, в зависимости от того, чьи обязательства не выполняются относительно предприятия. Рост задолженностей ухудшает финансовое состояние предприятия и может даже привести к несостоятельности. Отслеживание состояния задолженности по ряду критериев не только работу управленческого состава организации, но и специалистов, отвечающих за расчетные операции, юристов, реализующих договорную работу.

Современная система управления дебиторской и кредиторской задолженностями должна включать всю совокупность методов анализа, контроля и оценки за ними. Вместе с тем управление дебиторской и кредиторской задолженностями — это работа с источниками их возникновения, формирование политики предприятия и организация договорной работы, а также управление долговыми обязательствами. Предприятия постоянно ведут расчеты с разными дебиторами и кредиторами, которые обеспечивают деятельность предприятия и его существование. От состояния расчетов на предприятии во многом зависит платежеспособность предприятия, его финансовое положение и инвестиционная привлекательность.

Постоянная экономическая активность предприятия рождает наличие этих задолженностей, но важен срок их погашения и остаток, который может переходить из одного отчетного периода в другой.

К сожалению, такой фактор, как рост дебиторской и кредиторской задолженности у предприятий, особенно в прогрессии, вполне может привести к ухудшению финансового состояния и даже его банкротству. Для

предотвращения этой ситуации необходимо проводить их анализ, выявлять причины возникновения и своевременно принимать меры по управлению ими. Поэтому анализ состава, движения, качества задолженности имеет в настоящее время первостепенное значение и должен быть постоянным и непрерывным [1].

Компании и индивидуальные предприниматели, в условиях современной автоматизации и цифровизации, использования сети Интернет, программных продуктов по автоматизации бухгалтерского учета, организуют систему расчетов с дебиторами и кредиторами автоматизированным способом. Наиболее распространенной в настоящее время на территории РФ автоматизированной программы учета является «1С: Бухгалтерия». Но даже если организация использует другой программный продукт, в целом алгоритм учета, оценки, оформления дебиторской и кредиторской задолженности идентичен.

Для применения специализированной учетной программы изначально в ее базу необходимо внести исходную информацию о контрагентах. Для этого:

- в справочник «Контрагенты» ввести начальные данные (наименование и ИНН);

- информацию в справочнике можно систематизировать с применением отдельных групп («Поставщики», «Покупатели», «Заказчики» и др.);

- в справочник «Договоры контрагентов» (подчиненный справочнику «Контрагенты») заносятся реквизиты договора и основные его условия (сроки действия, цены, валюта и др.).

Так, на примере 1С, корректно заполненные исходные данные о контрагентах помогают в дальнейшем учетном процессе, а именно:

- программа «1С» подставляет необходимые счета расчетов с дебиторами и кредиторами при осуществлении проводок на основании данных регистра «Счета учета расчетов с контрагентами», заполняемых на каждого контрагента;

- корректировка задолженности дебиторов и кредиторов происходит с помощью вкладки «Корректировка долга» (взаимозачет, перенос долга или его списание);

- для сверки расчетов с дебиторами и кредиторами предназначен документ «Акт сверки взаиморасчетов» — сверка проводится по конкретному договору или по контрагенту в целом;

- инвентаризировать расчеты с дебиторами и кредиторами помогает оформление документа «Инвентаризация расчетов с контрагентами» — его можно заполнить автоматически информацией о дебиторах и кредиторах нажатием кнопки «Заполнить».

Таким образом, деятельность организации связана с контрагентами, которые могут являться как дебиторами, так и кредиторами в разных ситуациях. Результативность расчетов с ними приводит к возникновению и разному состоянию дебиторской и кредиторской задолженности в

организации. Своевременность, полнота и достоверность этих расчетов влияет на финансовый результат компании.

Независимо от источника возникновения, все обязательства должны быть правильно, своевременно и в полном объеме учтены. Из всего спектра обязательств, в которых организация выступает в качестве активного и (или) пассивного субъекта в учете показываются те обязательства, которые входят в категории активов и пассивов, т.е. составляют дебиторскую (актив) и кредиторскую (пассив) задолженности [3, 175]. Обе задолженности между собой взаимосвязаны. Зачастую одна связана с появлением другой или погашение одной позволяет погасить другую.

Организация для успешной деятельности нуждается в постоянной актуальной и правдивой информации по состоянию расчетов с контрагентами. Поэтому очень важен полный и своевременный контроль за данными расчетами [2].

Поскольку каждая организация отражает суммы дебиторской и кредиторской задолженности самостоятельно на основании имеющихся документов, возможно возникновение расхождений в данных о взаимной задолженности, отраженных в бухгалтерском учете организаций-партнеров. Для выявления таких расхождений и выяснения их причин производиться сверка взаимной задолженности, которая оформляется соответствующим актом. В обязательном порядке сверки с контрагентами производятся по окончании отчетного года. Наряду с регистрами учета и другими документами, обосновывающими суммы задолженности, акты сверки с контрагентами являются основанием для составления Акта инвентаризации расчетов с покупателями, поставщиками и прочими дебиторами, и кредиторами (форма № ИНВ-17).

Оценивая расчеты с дебиторами и кредиторами в организации необходимо уделять внимание не только ее размеру, динамике, графику погашения, но и документальному оформлению сделок по расчетам и всем документам, так или иначе содержащим информацию об этих экономических элементах.

В первую очередь надо обязательно учитывать, что заключаемые договора должны быть не только юридически грамотно составлены, но и проверены экономистами и финансовыми менеджерами, для дачи экономической оценки обязательств по ним, последствий в случае их неисполнения или наступления форс-мажорных обстоятельств. Таким образом, во многом успешность работы с задолженностями зависит от правильности оформления договоров с контрагентами, организации взаимодействия финансового менеджера с другими подразделениями аппарата управления и информированности высшего руководства о текущем состоянии финансовых ресурсов организации. При изучении вопроса документального управления задолженностями можно обозначить следующие направления:

- договорная работа;

- документальное сопровождение осуществляемых хозяйственных операций по сделкам;

- документальное оформление аналитических и контрольных действий за операциями по расчетам;

- мероприятия по разрешению спорных вопросов или факта непогашения задолженностей.

Таким образом, наличие дебиторской и кредиторской задолженности у предприятия естественный результат хозяйственной деятельности, которые может иметь как положительные, так и отрицательные стороны. Для уменьшения негативности последствий наличия данных задолженностей в организации должен быть правильно организован учет, контроль, анализ ее и обязательно юридически грамотно проведена договорная работа с контрагентами и соблюдены все нормы документооборота.

Использованные источники:

1. Попова, Ю. А. Теоретические аспекты учета дебиторской и кредиторской задолженности // Скиф. 2020. №4 (44). – С. 605-608.

2. Храмцова, Д.А. Управление дебиторской и кредиторской задолженностью в коммерческой организации // Экономика и бизнес: теория и практика. 2021. №3-2. – С. 213-216

3. Шлапакова, Н.А., Артамонова Ю.С., Тусков А.А. Сущность дебиторской и кредиторской задолженностей и тенденции их изменения на строительных предприятиях // InternationalAgriculturalJournal. 2019-. Выпуск 3,- С.174-178.

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СПОРТ – ЭТО СОЦИАЛЬНАЯ ДЕЯТЕЛЬНОСТЬ

Аннотация. Молодежный спорт является ключевой возможностью физической активности для детей и подростков. На участие молодежи в спорте влияют несколько факторов, в том числе социальные, но на сегодняшний день это четко не определено. В результате наших исследований мы проводим обзор литературы о влиянии семьи и сверстников на участие молодежи в спорте.

Ключевые слова: дети, подростки, сверстники, друзья, родители, братья и сестры, профилактика.

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SPORT IS SOCIAL ACTIVITY

Annotation. Youth sport is a key physical activity opportunity for children and adolescents. Several factors influence youth sport participation, including social factors, but this has not to date been clearly delineated. As the result of our studies we are scoping review to survey the literature on the influence of family and peers on youth sports participation.

Keywords: children, adolescents, peers, friends, parents, siblings, prevention.

В современном обществе спорт играет главную роль. Это главный ключ к представлению нации миру. Мы сгруппировали их по 8 исследовательским темам: (1) причины участия, (2) социальные нормы, (3) теория достижения цели, 4) структура семьи, (5) участие членов семьи в спорте, (6) родительская поддержка и препятствия., (7) ценность дружбы и (8) влияние товарищей по команде. Дружба была ключом как к инициированию, так и к поддержанию участия, родители способствовали участию, а дети более активных родителей с большей вероятностью участвовали в занятиях спортом. Меньше известно о том, как структура семьи, участие братьев и сестер, расширенная семья и

другие теоретические основы могут влиять на молодежный спорт. Обзор показывает, что социальные влияния являются важными факторами для обеспечения участия, максимизации качества опыта и использования преимуществ молодежного спорта.

Спорт был определен как одна из 7 лучших инвестиций для содействия физической активности, что особенно актуально для молодежи. Исследование, проведенное во многих странах мира, показало, что примерно половина детей занимается организованным юношеским спортом; однако это варьируется от страны к стране. По оценкам, индустрия молодежного спорта в Узбекистане оценивается в 15 миллиардов сумов, что еще раз подчеркивает ее высокий авторитет в обществе. Что важно для здоровья, молодежный спорт является одной из ключевых возможностей физической активности для молодежи и составляет значительную часть их общей физической активности. В целом дети, занимающиеся юношеским спортом, получают множество преимуществ, в том числе физических и психосоциальных, многие из которых связаны с участием в физической активности во время занятий спортом. К ним относятся снижение риска ожирения, улучшение метаболических профилей, увеличение мышечной силы, повышение самооценки, снижение риска депрессии и общее позитивное развитие молодежи, что является просоциальным подходом к достижению положительных результатов для молодежи. Однако, как физические, так и психологические преимущества спорта во многом зависят от качества конкретного спортивного опыта. Интересно, что некоторые преимущества могут быть связаны не только с увеличением физической активности или расхода энергии, и есть некоторые свидетельства того, что занятия спортом могут вносить больший вклад в психическое здоровье, чем общая физическая активность. Дети, занимающиеся юношеским спортом, также сообщают о ряде других положительных изменений в отношении здоровья, таких как улучшение питания, более безопасные сексуальные отношения и снижение злоупотребления психоактивными веществами.

Поскольку развитие положительных привычек (например, физической активности) в детстве может отразиться и во взрослой жизни, можно утверждать, что следует делать акцент на приятных занятиях на протяжении всей жизни, в которых дети могут участвовать. Участие молодежи в спорте можно рассматривать как физическую активность на протяжении всей жизни, которая может быть безопасными и эффективными для обеспечения множества физических и психосоциальных преимуществ для детей, если они реализуются при квалифицированном обучении и соответствующем надзоре. К сожалению, не все дети участвуют в юношеских видах спорта, и многие из тех, кто участвует, имеют негативный спортивный опыт, который может привести к прекращению занятий из-за травм, необоснованных ожиданий и требований и/или выгорания.

По данным Ассоциации индустрии спорта и фитнеса, последние данные из Узбекистана свидетельствуют о том, что общее участие в молодежном

спорте снижается. Исследователи обнаружили, что дети начинают бросать занятия детско-юношеским спортом в возрасте 8 лет, что аналогично возрасту снижения физической активности, недавно зарегистрированному у узбекских детей. Лучшее понимание этого спортивного опыта (или отсутствия спортивного опыта) поможет повысить участие, качество и преимущества, которые дети получают от юношеского спорта.

На участие молодежи в спорте влияют несколько факторов. Используя социально-экологическую основу, предполагается, что факторы разных уровней влияют на доступ, качество и результаты. Исторически исследования корреляций между спортом и физической активностью в целом как у взрослых, так и у детей были сосредоточены на внутриличностных факторах, включая демографические и биологические, психосоциальные и поведенческие переменные. Однако юношеский спорт — это социальный опыт, и вполне вероятно, что большую роль играют межличностные факторы, которые на протяжении всей статьи мы будем называть социальными факторами. К этим социальным факторам относятся семья, друзья, учителя или любые другие люди, которые могут повлиять на человека. Одним из наиболее очевидных социальных агентов является тренер. Все больше исследований изучают факторы, связанные с тренерами, которые влияют на спортивный опыт молодежи. Но есть несколько других социальных агентов, которые влияют на спортивный опыт молодежи, включая сверстников и семьи. Меньше известно о том, как эти внешние социальные агенты влияют на спортивный опыт молодежи в плане доступа, качества опыта и результатов участия. Необходимо понимать эти социальные влияния, чтобы увеличить участие молодежи в спорте и получить высококачественный спортивный опыт для детей, чтобы в конечном итоге максимально увеличить число детей, получающих физические и психологические преимущества от положительного, научно обоснованного спортивного опыта.

Вместо заключения мы могли бы сказать, что целью данного обзора было изучение социальных влияний на участие молодежи в спорте. В частности, изучалось, как социальные агенты, включая сверстников, родителей, братьев и сестер, влияют на участие молодежи в спорте.

Использованные источники:

1. Закон «Об образовании» Республики Узбекистан «п. 20-29» В кн.: Гармонично развитое поколение – основа развития Узбекистана. Ташкент, Шарк, 1998.
2. Г.Т. Кодирова. Лингвистико-коммуникативная компетентность в изучении языка. Международная конференция., 2016, с.441.
3. Л.Т.Тошонов, Х.Т. Гофурова. «Образование отрицания с помощью приставок» Вопросы науки и образования-2020, 32-36
4. Л.Т.Тошханов «Развитие полиязычной компетентности студентов вузов» - Академическая публицистика, 2019, 260-262
5. Л.Т.Тошханов «Риторик аргументатив нуткнинг Б.Рассел асарларида ифодаланиши» Экономика и социум-2022, 408-412

6. Л.Т.Тошханов. «Бадиий матнда инкорни ифодалашнинг лингвистических воситалари». Экономика и социум-2021, 275-278.

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СОДЕРЖАНИЕ ЭКОНОМИЧЕСКОГО АНАЛИЗА, ЕГО МЕСТО В УПРАВЛЕНИИ ОРГАНИЗАЦИЕЙ

Аннотация. В данной статье автором рассматривается содержание экономического анализа и его место в управлении организацией. Раскрывается понятие экономического анализа, его объект, предмет, цель и его функции. Выделяются задачи экономического анализа, дается их характеристика. Определяется роль экономического анализа в системе управления организацией.

Ключевые слова: экономический анализ, функции экономического анализа, задачи экономического анализа, роль экономического анализа, содержание экономического анализа.

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THE CONTENT OF ECONOMIC ANALYSIS, ITS PLACE IN THE MANAGEMENT OF THE ORGANIZATION

Annotation. In this article, the author examines the content of economic analysis and its place in the management of the organization. The concept of economic analysis, its object, subject, purpose and its functions are revealed. The tasks of economic analysis are highlighted, their characteristics are given. The role of economic analysis in the organization's management system is determined.

Keywords: economic analysis, functions of economic analysis, tasks of economic analysis, the role of economic analysis, the content of economic analysis.

Эффективность функционирования организаций в значительной степени зависит от обоснованности и качества принимаемых решений. Научной основой принятия таких решений, важнейшим элементом системы управления, является экономический анализ деятельности организации.

В условиях динамичных изменений рыночной ситуации знание современных приемов и методов комплексного экономического анализа хозяйственной деятельности позволяет разрабатывать эффективную стратегию и тактику функционирования организации, выявлять неиспользованные резервы повышения эффективности производства и реализовывать их в практической деятельности. С помощью анализа изучаются тенденции развития, глубоко исследуются факторы изменения результатов деятельности, обосновываются бизнес-планы, выявляются резервы повышения эффективности производства.

В условиях неопределенности тенденций развития рынка умение использовать анализ для принятия оптимальных управленческих решений является необходимой предпосылкой успешной работы организаций. Для их обоснования следует выявлять и прогнозировать существующие проблемы, производственные и финансовые риски, определять действие принимаемых решений на достижение целей предприятия.

Термин «анализ» происходит от греческого слова analyzis – разделяю, расчленяю, в узком плане – это разложение объекта на составные части с целью изучения их самостоятельного функционирования, а в широком плане представляет собой способ познания предметов и явлений окружающей среды, основанный на расчленении целого на составные части и изучении их во всем многообразии связей и зависимостей. В свою очередь экономический анализ представляет собой выявление экономических закономерностей из фактов экономической действительности и предполагает разложение экономики на отдельные части, именуемые экономическими категориями, и их исследование.

По мнению, А.Д. Шеремета экономический анализ – это средство получения цельного знания о хозяйственной деятельности, знаний о бизнесе, понимания деятельности экономического субъекта; его методологическую основу составляют принципы материалистической диалектики и современного системного анализа, который в последние годы получил широкое распространение и в экономическом анализе.

Анализ (гр. analysis – разложение, разделение) в узком плане – это разложение объекта на составные части с целью изучения их самостоятельного функционирования, а в широком – метод научного исследования, способ познания предметов и явлений окружающей среды, основанный на расчленении целого на составные части и изучении их во всем многообразии связей и зависимостей.

С точки зрения Е.Р. Синянской и О.В. Баженова экономический анализ представляет собой объективно необходимый элемент управления хозяйственной деятельностью, при помощи которого познается сущность хозяйственных процессов, оценивается хозяйственная ситуация, выявляются резервы производства и подготавливаются научно обоснованные решения для планирования и управления.

Л.Е. Красильникова, Э.Г. Сысуева, М.С. Фаренюк предлагают понимать

под экономическим анализом научный способ познания сущности экономических явлений и процессов, основанный на расчленении их на составные части и изучении во всем многообразии связей и зависимостей.

По мнению авторского коллектива А.И. Короткевич, К.Л. Куриленок, Б.В. Лапко, Д.В. Шпарун, экономический анализ – это систематизированная совокупность аналитических процедур, имеющих целью получение заключений, выводов и рекомендаций экономического характера в отношении изучаемого объекта (страны, отрасли, региона, предприятия).

На основе исследования ряда понятий разработано личное авторское определение относительно трактовки экономического анализа. Экономический анализ – это важнейшая функция управления, являющийся эффективным средством выявления внутрифирменных резервов и основой разработки научно обоснованных планов и оптимальных управленческих решений.

Экономический анализ – это особая система знаний, имеющая свой собственный объект, предмет, цель, функции и задачи.

Объектом экономического анализа являются результаты хозяйственной деятельности организаций, которые характеризуются системой взаимосвязанных показателей, отражающих отдельные ее стороны и сегменты. Например, на промышленном предприятии к объектам анализа относятся показатели производства и реализации продукции, ее себестоимости, использования материальных, трудовых и финансовых ресурсов, финансовых результатов деятельности, финансового состояния организации и т.д.

Предметом экономического анализа являются причинно-следственные связи экономических явлений и процессов, и прежде всего, хозяйственные процессы, протекающие в организации, их социально-экономическая эффективность, конечные производственные и финансовые результаты деятельности, складывающиеся под воздействием объективных и субъективных факторов и получающие отражение в отчетности субъекта хозяйствования.

Познание причинно-следственных связей в хозяйственной деятельности организаций позволяет раскрыть сущность происходящих в ней процессов и на этой основе дать правильную оценку достигнутым результатам в сложившейся ситуации, выявить резервы повышения эффективности работы, обосновать планы и управленческие решения, направленные на достижение поставленных целей.

Причинно-следственная связь – это устойчивая связь, которая остается относительно неизменной, закономерной. На выявлении, измерении и понимании этих связей основано эффективное управление организацией.

Можно сказать, что анализируемые показатели представляют собой элементы, составляющие предмет анализа, который, в свою очередь, характеризует определенные стороны объекта анализа.

Основной целью экономического анализа является подготовка

информации для принятия оптимальных управленческих решений и для обоснования текущих и перспективных планов, направленных на достижение краткосрочных и стратегических целей организации.

Реализация данной цели экономического анализа предполагает оценку сложившейся ситуации, диагностику и прогнозирование ее развития, и поиск путей достижения желаемых результатов наиболее эффективными способами.

В соответствии с этим выделяют три функции анализа, представленных в таблице 1.

Таблица 1 – Функции экономического анализа

Функция	Содержание
Оценочная	Определение соответствия состояния экономики организации ее целевым параметрам и потенциальным возможностям
Диагностическая	Исследование причин отклонений от целевых параметров и прогнозировании дальнейшего развития ситуации
Поисковая	Выявление потенциальных возможностей достижения поставленных целей

Исходя из целей и основных функций анализа формируются задачи экономического анализа, которые можно сформулировать следующим образом:

- изучение состояния и тенденций экономического развития организации за прошлые периоды;
- прогнозирование результатов деятельности на основе сложившихся тенденций развития и предполагаемых изменений в перспективе;
- научное обоснование текущих и перспективных планов (целевой программы организации);
- контроль выполнения планов и управленческих решений, эффективности использованием экономического потенциала организации с целью выявления недостатков, ошибок и оперативного воздействия на экономические процессы;
- изучение влияния объективных и субъективных, внешних и внутренних факторов на результаты хозяйственной деятельности, что позволяет объективно оценивать работу организации, делать правильную диагностику ее состояния и прогноз развития на перспективу, выявлять основные пути повышения эффективности ее деятельности;
- поиск резервов повышения эффективности производства на основе изучения передового опыта и достижений науки и практики;
- оценка результатов деятельности организации по достижению поставленных целей – выполнению планов, уровню результативности и эффективности бизнеса, использованию имеющихся возможностей, положению на рынке товаров и услуг;
- оценка степени финансовых и операционных рисков и выработка внутренних механизмов управления ими с целью укрепления рыночных позиций организации и повышения доходности бизнеса;

- обоснование мероприятий по устранению выявленных недостатков и освоению резервов повышения эффективности функционирования организации с целью повышения ее конкурентных преимуществ.

В решении этих задач и проявляются роль и значение аналитической работы в организации. Непосредственно на основе анализа деятельности организации разрабатываются мероприятия, направленные на дальнейшее развитие производства и повышение его эффективности. В условиях рыночной экономики только таким образом можно установить оптимальный вариант решения поставленных перед организацией задач на всех этапах планирования и реализации его деятельности, причем не только за отчетный, но и за ряд других периодов, то есть определить тенденции его развития. Это позволит наиболее полно изучить и выявить резервы повышения эффективности не только текущей работы организации, но и его дальнейшего развития.

Деятельность организаций отражается в бухгалтерском, статистическом и оперативно-техническом учетах и отчетности. Но сами по себе учет и отчетность не раскрывают в достаточной мере взаимосвязь и взаимозависимость хозяйственных процессов, осуществляемых в организации. Например, в отчетности имеется показатель производительности труда. Но ни в учете, ни в отчетности не раскрывается влияние производительности труда на изменение выпуска продукции, снижение ее себестоимости, уменьшение потребности в рабочей силе и т.д. Поэтому те стороны деятельности организации, которые не могут быть отражены в учете и отчетности, подвергаются анализу.

Содержание экономического анализа вытекает из его роли и функций, которые он выполняет в системе управления организацией, где занимает одно из центральных мест. Роль экономического анализа в системе управления организацией отражена на рисунке 1.

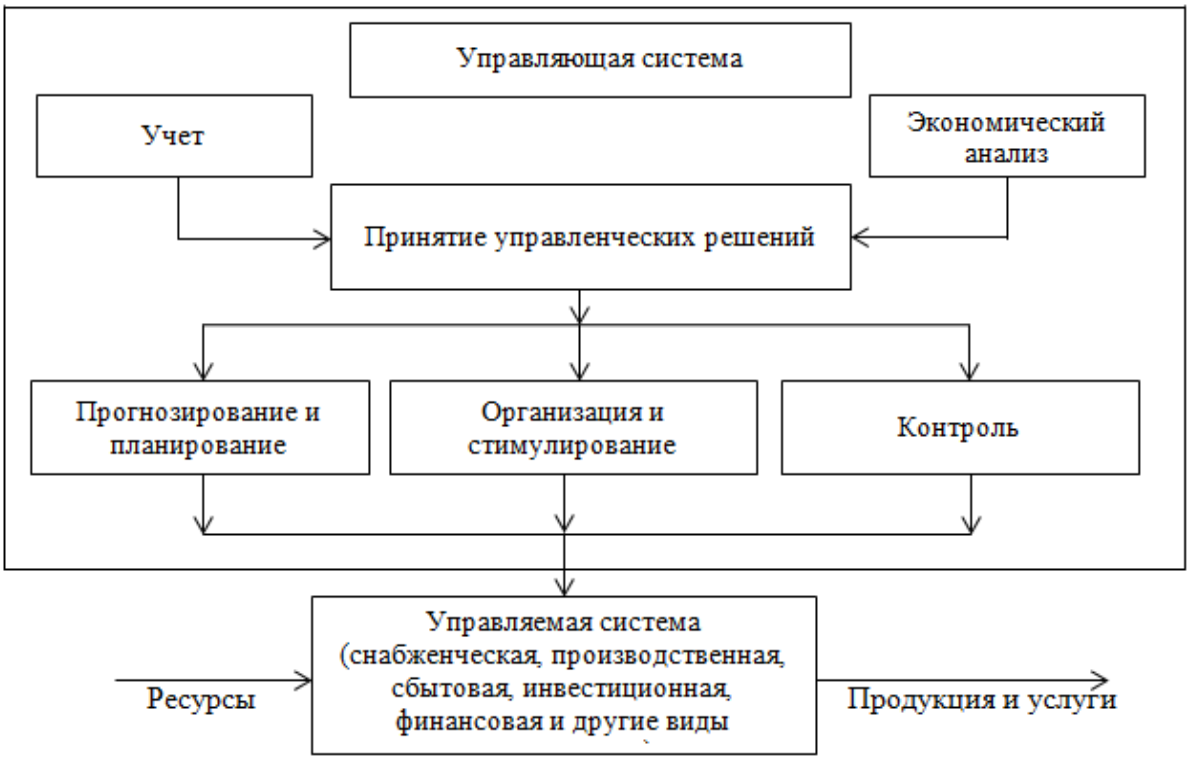

Рисунок 1 – Роль экономического анализа в системе управления организацией

Как видно из рисунка 1, экономический анализ и учет предшествуют принятию управленческих решений. Система управления состоит из следующих взаимосвязанных функций: планирования, учета и контроля, анализа хозяйственной деятельности и принятия управленческих решений.

Анализ, как функция управления, тесно связан с планированием. С помощью планирования определяются основные направления и содержание деятельности организации, его структурных подразделений и отдельных работников. Его главной задачей является обеспечение планомерности развития организации и деятельности каждого ее члена, определение путей достижения лучших конечных результатов производства. Анализ завершает выполнение планов, а также проводится в ходе его оперативного осуществления. Функция планирования включает долгосрочное, текущее и оперативное планирование.

Для управления производством нужно иметь полную и правдивую информацию о ходе производственного процесса и выполнения планов. Поэтому одной из функций управления организацией является учет, обеспечивающий сбор, систематизацию и обеспечение информации, необходимой для управления производством и контроля за ходом выполнения планов производственных процессов.

Экономический анализ является связующим звеном между учетом и принятием управленческих решений. В процессе его учетная информация проходит аналитическую обработку: проводится сравнение достигнутых

результатов деятельности с данными за прошлые периоды времени, с показателями других организаций и среднеотраслевыми; определяется влияние разнообразных факторов на результаты хозяйственной деятельности: выявляются недостатки, ошибки, неиспользованные возможности, перспективы и др.

Экономический анализ предшествует решениям и действиям, обосновывает их и является основой научного управления организацией, повышает его эффективность.

Контроль осуществляется путем сравнения учетной информации с нормативной, предполагает ревизию, административные санкции. Контроль устанавливает факт самого отклонения. Задача анализа состоит в использовании данных, накопленных учетом и контролем, для изучения:

- закономерностей отклонений и их стабильности;
- факторов, вызвавших конкретные причины отклонений;
- размера резервов при устранении отрицательных воздействий.

Функция контроля в рыночной экономике усиливается, так как в условиях неопределенности внешней среды требуется систематическая оперативная их корректировка.

Значительна роль анализа в определении и использовании резервов повышения эффективности производства. Процесс образования резервов непрерывен, так как связан с научно-техническим прогрессом, совершенствованием организации труда и управления.

С помощью анализа осуществляется поиск путей более экономного использования ресурсов, роста прибыли.

Основные функции финансового менеджмента обеспечиваются анализом финансовых результатов деятельности организации, анализом финансового состояния организации, анализом эффективности финансово-хозяйственной деятельности организации.

Важным элементом управления деятельностью организации является аудит, в котором используются методы экономического анализа для определения финансовой устойчивости, деловой активности, выявления зон преднамеренных и непреднамеренных ошибок во внешней отчетности организации. В процессе аудита широко используются аналитические процедуры для доказательства достоверности учета и отчетности, диагностики финансовых результатов и финансового состояния организации. Экономический анализ является частью внутреннего и внешнего аудита, а также одним из видов аудиторских услуг.

Таким образом, экономический анализ можно рассматривать как деятельность по подготовке данных, необходимых для научного обоснования и оптимизации управленческих решений.

Как функция управления экономический анализ тесно связан с планированием и прогнозированием производства, поскольку без глубокого анализа невозможно осуществление этих функций. Важная роль принадлежит экономическому анализу в подготовке информации для планирования, оценки

качества и обоснованности плановых показателей, в проверке и объективной оценке выполнения планов. Утверждение планов для организации, по существу, также представляет собой принятие решений, которые обеспечивают развитие производства в будущем планируемом отрезке времени. При этом учитываются результаты выполнения предыдущих планов, изучаются тенденции развития предприятия, изыскиваются и учитываются дополнительные резервы производства.

Экономический анализ является средством не только обоснования планов, но и контроля за их выполнением. Планирование начинается и завершается анализом результатов деятельности организации, что позволяет повысить уровень планирования, сделать его научно обоснованным. Эта функция – контроль за выполнение планов и подготовка информации для их обоснования – не ослабевает, а усиливается в рыночной экономике, поскольку в условиях неопределенности и изменчивости внешней среды требуется оперативная корректировка текущих и перспективных планов.

Большая роль отводится анализу в определении и использовании повышения эффективности производства. Он содействует активизации инновационной деятельности, направленной на экономное использование ресурсов, выявление и внедрение передового опыта, научной организации труда, новой техники и технологии производства, предупреждение излишних затрат, недостатков в работе и т.д. В результате этого укрепляется экономика организации, повышается эффективность ее деятельности.

Роль анализа как средства управления производством на современном этапе возрастает. Это обусловлено необходимостью неуклонного повышения эффективности производства в связи с ростом дефицита и стоимости сырья, повышением наукоемкости и капиталоемкости производства, обострением внутренней и внешней конкуренции, повышающейся ответственностью за последствия принимаемых управленческих решений и др.

В этих условиях руководитель организации не может рассчитывать только на свою интуицию и примерные прикидки в уме. Управленческие решения и действия должны быть основаны на точных расчетах, глубоком и всестороннем экономическом анализе.

Подводя итоги, можно констатировать, для управления организацией нужно иметь представление не только о ходе выполнения плана, результатах хозяйственной деятельности, но и о тенденциях и характере происходящих изменений в экономике организации. Осмысление, понимание информации достигаются с помощью экономического анализа. Экономический анализ является важным элементом в системе управления производством, действенным средством выявления внутрихозяйственных резервов, основой разработки научно обоснованных планов и управленческих решений. В процессе анализа первичная информация проходит аналитическую обработку: проводится сравнение достигнутых результатов производства с данными за предыдущие моменты времени, с показателями других предприятий и среднеотраслевыми; определяется влияние разных факторов

на величину результативных показателей; выявляются недостатки, ошибки, неиспользованные возможности, перспективы и т.д.

На основе результатов анализа разрабатываются и обосновываются управленческие решения. Экономический анализ предшествует решениям и действиям, обосновывает его объективность и эффективность. Экономический анализ деятельности организации является продолжением учета и отчетности. Он играет важную роль в обобщении и распространении передового опыта, укреплении конкурентоспособности организации.

Использованные источники:

1. Российская Федерация. Законы. О бухгалтерском учете. Федеральный закон № 402-ФЗ: [принят Государственной Думой 22 нояб. 2011 г.: одобрен Советом Федерации 29 нояб. 2011 г]. – Москва: Проспект; Санкт-Петербург: Кодекс, 2022.
2. Захаров, И.В. Бухгалтерский учет и анализ: учебник для академического бакалавриата по экономическим направлениям и специальностям [Гриф УМО] / И.В. Захаров, О.Н. Калачева; под ред. И.М. Дмитриевой; Рос. экон. ун-т им. Г.В. Плеханова. – Москва: Юрайт, 2018. – 422 с.
3. Красильникова, Л.Е. Экономический анализ: учебное пособие / Л.Е. Красильникова, Э.Г. Сысуева, М.С. Фаренюк. – Пермь: ИПЦ «Прокростъ», 2016. – 257 с.
4. Короткевич, А.И. Экономический анализ деятельности организации (предприятия): учебно-методический комплекс / А.И. Короткевич, К.Л. Куриленок, Б.В. Лапко, Д.В. Шпарун. – Минск: БГУ, 2018. – 313 с.
5. Синянская, Е.Р. Основы бухгалтерского учета и анализа: учебное пособие / Е.Р. Синянская, О.В. Баженов; М-во образования и науки Рос. Федерации, Урал. федерал. ун-т. – Екатеринбург: Изд-во Урал. ун-та, 2014. – 267 с. ISBN 978-5-7996-1141-5.
6. Шеремет, А.Д. Теория экономического анализа / А.Д. Шеремет. – Москва: Инфра-М, 2013. – 365 с.

УДК 336.71

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ОЦЕНКА ЭФФЕКТИВНОСТИ РОЗНИЧНОЙ КЛИЕНТСКОЙ ПОЛИТИКИ ПАО «СБЕРБАНК»

Аннотация. В статье описывается сущность клиентской политики, рассматривается и даётся оценка эффективности розничной клиентской политики ПАО «Сбербанк», так как клиент является основным источником дохода банка, а кокуренция в банковской сфере достигла огромных масштабов.

Ключевые слова: банк, клиент, клиентская политика, показатели эффективности клиентской политики.

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EVALUATION OF THE EFFECTIVENESS OF SBERBANK'S RETAIL CUSTOMER POLICY

Abstract. The article describes the essence of the customer policy, examines and evaluates the effectiveness of the retail customer policy of Sberbank PJSC, since the customer is the main source of income for the bank, and the corruption in the banking sector has reached huge proportions.

Keywords: bank, client, client policy, performance indicators of client policy.

В современных рыночных условиях во сферах деятельности наблюдается конкуренция. Банковская сфера не исключение. Банки, находясь в центре экономической жизни, призваны содействовать интересам своих клиентов [4]. Рост конкуренции в данной сфере приводит к тому, что банкам приходится развивать не только услуги, но и повышать качество предоставляемого сервиса. Таким образом, внимание банков сосредоточено на сохранении и расширении клиентской базы [5]. Организационной основой

данных процессов выступает клиентская политика, к проработке элементов которой кредитные организации проявляют в настоящее время повышенный интерес. Поэтому в связи с востребованностью клиентской лояльности клиентская политика становится одним из важнейших инструментов конкуренции.

В широком смысле клиентская политика – это совокупность принципов и стратегий, определяющих отношения между юридическим лицом и его клиентами [1, с. 78]. В контексте финансовых учреждений, а именно банков, клиентская политика является совокупностью правил и процедур в области обслуживания клиентов и предоставления финансовых услуг. Также клиентская политика включает в себя критерии отбора клиентов, процедуры проверки клиентов и проведения предварительного анализа, установление стандартов обслуживания клиентов, принципы конфиденциальности и защиты данных клиентов, правила и положения относительно предоставления кредитов и других финансовых услуг, стратегии по удержанию клиентов, росту портфеля клиентов, а также средства для анализа и изучения потребностей клиентов с целью улучшения предложения финансовых услуг и удовлетворения клиентов.

На сегодняшний день Сбербанк является ведущим банком, опорой финансовой системы страны, основой ее роста и благополучия, активным участником экономического и социального развития каждого региона и города. Своей миссией Сбербанк считает давать людям уверенность, делать их жизнь лучше, помогая реализовывать устремления и мечты, поэтому лозунг Сбера звучит так «Наши клиенты, их потребности, мечты и цели есть основа всей деятельности банка как организации». Ориентиры Сбербанка — это «Всё — для клиента», «Вся наша деятельность построена вокруг и ради интересов клиентов», «Мы хотим удивлять и радовать клиентов качеством услуг и отношением», «Мы превосходим ожидания клиентов» [3]. На протяжении долгого времени Сбербанк работал над своим имиджем, и смог создать образ банка, которому ценен каждый клиент, которому можно доверять, ведь он финансово устойчив, в нем не обманут, в нем справедливые условия, в нем быстро и удобно обслужат, он поможет выбрать и принять оптимальное финансовое решение, исходя из интересов клиента, банк, который постоянно работает и совершенствуется, чтобы радовать своих клиентов и улучшать свою работу. Такая работа над собой делает банк привлекательным для клиентов и лежит в основе клиентской политики.

Далее, для оценки эффективности розничной клиентской политики можно использовать следующие параметры: количество новых клиентов, количество удовлетворенных клиентов, объём средств на счетах клиентов, объём кредитования клиентов, рентабельность клиентов. На основе данных параметров будет проводиться анализ эффективности розничной клиентской политики Сбербанка.

Итак, первый показатель – это количество новых клиентов. Данный параметр позволяет оценить привлекательность продуктов и услуг банка для потенциальных клиентов.

Таблица 1

Основные показатели активности клиентов

Показатель	На 31.12.2022, млн. чел.	На 30.09.2023, млн. чел.	Абсолютное изменение, млн. чел.
Количество активных клиентов физических лиц	106,4	107,6	1,2
Количество активных корпоративных клиентов	3,0	3,1	0,1

Данная таблица составлена за 3 квартала 2023 года, но даже за такой период уже виден положительный результат, а именно количество активных физических лиц увеличилось больше чем на 1 миллион и составило 107, 6 миллионов человек, прирост количества активных корпоративных клиентов составил 100 тысяч человек, в результате общее количество активных корпоративных клиентов на 31.12.2022 составило 3,1 миллионов человек. Стоит добавить, что количество участников программы лояльности СберСпасибо выросло на 7,5 миллионов человек до 73,7 миллионов клиентов. Количество пользователей подписок СберПрайм выросло на 500 тысяч человек, общая численность пользователей составила 6,2 миллионов человек [2].

Таким образом, можно сделать вывод, что клиентская политика Сбербанка эффективна, т.к. рост количества новых клиентов свидетельствует об успешной стратегии привлечения и удержания клиентов. Продукты банка интересны людям и пользуются спросом, что говорит о клиентоориентированности Сбербанка.

По мнению Brand Finance (крупная международная консалтинговая компания) «Сбер демонстрирует высокие финансовые результаты, разрабатывает инновационные продукты и сервисы, сохраняет доверие более 110 миллионов корпоративных и частных клиентов».

Обратим внимание на второй показатель – количество удовлетворённых клиентов. Здесь используются такие параметры, как уровень удовлетворенности клиентов, который может быть определен через проведение опросов или анализ обратной связи от клиентов.

Каждому клиенту, посетившему офис Сбербанка, приходит сообщение с просьбой оценить качество обслуживания.

Таблица 2

Коэффициент удовлетворённости клиентов за 2023 год

Месяц	Коэффициент удовлетворённости клиентов, %	Клиент недоволен, оценок	Клиент не полностью доволен, оценок	Клиент доволен, оценок
1 квартал	92,9	44 853	46 754	1 856 343
2 квартал	95,3	48 758	44 184	1 904 262
3 квартал	95,3	49 359	42 534	1 886 546
4 квартал	95,8	45 671	39 729	1 973 879
Год	95,4	188 641	173 201	7 621 030

За 2023 год коэффициент удовлетворённости клиентов достигает 95,4 %. Высокий уровень удовлетворенности клиентов говорит об успешной клиентской политике банка.

Третий показатель – это объём средств на счетах клиентов, он отражает активность и доверие клиентов к банку.

Таблица 3

Объём средств на счетах клиентов

Показатель	31.12.2022, млрд. руб.	30.09.2023, млрд. руб.	Относительное изменение, %
Средства клиентов	29 876	34 841	16,6
- средства физических лиц	18 499	21 409	15,7
- средства юридических лиц	11 377	13 432	18,1

Средства на счетах клиентов за 3 квартала 2023 года выросли на 16,6 % до суммы в 34 481 млрд. руб. на 30.09.2023. Параметр средства физических лиц показал прирост на 15,7% и достиг суммы в 21 409 млрд. руб., а параметр средства юридических лиц показал прирост на 18,1% и достиг суммы в 13 432 млрд. руб. за 3 квартала 2023 года. Такой приток денежных средств обусловлен ростом ключевой ставки, и как следствие появлением у Сбербанка выгодных предложений по вкладам, а также ростом ипотечного спроса, что повлияло на увеличение денежных средств на счетах эскроу. В результате доля Сбера на рынке средств физических лиц выросла до 44,7% на конец 3 квартала 2023 года. Что касается клиентской политики Сбербанка, то рост объема средств на счетах клиентов говорит о том, что клиенты доверяют банку и активно используют его услуги.

Четвёртый показатель – объём кредитования клиентов.

Таблица 4

Объёмы кредитования

Показатель	31.12.2022, млрд. руб.	30.09.2023, млрд. руб.	Относительное изменение, %
Кредиты	31 038	37 855	22
- кредиты физическим лицам	12 430	15 179	22,1
- кредиты юридических лиц	18 608	22 676	21,9

Объёмы кредитования за 3 квартала 2023 года выросли на 22 % до суммы в 37 855 млрд. руб. Параметр кредиты физическим лицам показал прирост на 22,1% и достиг суммы в 15 179 млрд. руб., а параметр кредиты юридическим лицам показал прирост на 18,1% и достиг суммы в 13 432 млрд. руб. за 3 квартала 2023 года. Стоит упомянуть, что на 2023 год 15 млн. россиян имеют кредитную карту Сбербанка, и доля Сбера на рынке кредитных карт достигла 50%. Увеличение объёма кредитования говорит о том, что клиентская политика банка привлекательна для клиентов и успешно соответствует их потребностям.

Четвёртый показатель – рентабельность клиентов. Этот параметр позволяет определить, насколько клиенты приносят прибыль банку. Банк может использовать различные метрики, такие как средняя прибыль на клиента. Сбербанк совершает продажи каждому четвёртому клиенту, средний чек на одного клиента 1450 рублей, через Сбербанк в месяц в среднем проходит около 600 тысяч клиентов, таким образом доход составляет 217 500 тысяч рублей. Такая доходность отражает эффективность использования клиентской базы.

Таким образом, можно сделать вывод о том, что клиентская политика Сбербанка эффективна. Об этом говорят и миссия, и ценности банка, а также огромная клиентская база, и показатели деятельности. Продолжая ориентироваться на потребности клиента и разрабатывать продукты опираясь на потребности Сбербанк сможет привлечь ещё больше активных клиентов.

Использованные источники:

1. Банковское дело: учебник / Н. Н. Наточеева, Ю. А. Ровенский, Ю. Ю. Русанов [и др.]; под ред. Н. Н. Наточеевой. – 3-е изд., перераб. и доп. – Москва: Дашков и К°, 2020. – 270 с.
2. Пресс-релиз сокращённые результаты МСФО 9 месяцев 2023 года URL:https://www.sberbank.com/common/img/uploaded/files/info/2023__q3__ifrs__.pdf

3. Миссия банка – информация для акционеров и инвесторов банка URL: https://www.sberbank.com/ru/about/mission
4. Маниракиза Э., Индутенко А.Н. Клиентская политика коммерческого банка и система управления взаимоотношениями с клиентами // Экономика и социум. 2018. №5 (48).
5. Карпова Анна Сергеевна Исследование факторов, влияющих на клиентскую политику АО "Альфа-Банк" // Вопросы науки и образования. 2019. №1 (42).

УДК 377.5

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ПОВЫШЕНИЕ МОТИВАЦИИ СТУДЕНТОВ К УЧЕБНОЙ ДЕЯТЕЛЬНОСТИ В ЧЕЧЕНСКОМ ГОСУДАРСТВЕННОМ СТРОИТЕЛЬНОМ КОЛЛЕДЖЕ

Аннотация. В статье представлены причины низкой мотивации студентов СПО к изучению общеобразовательных дисциплин, проанализированы некоторые способы, позволяющие повысить мотивацию.

Ключевые слова: мотивация, общеобразовательные дисциплины, концепция, способы решения проблем, студенты.

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INCREASING THE MOTIVATION OF STUDENTS TO STUDY AT THE CHECHEN STATE CONSTRUCTION COLLEGE

Annotation. The article presents the reasons for the low motivation of secondary school students to study general education subjects, analyzes some ways to increase motivation.

Keywords: motivation, general education disciplines, concept, ways of solving problems, students.

Ключевой задачей является создание стимулирующей и поддерживающей образовательной среды. Ведь именно от этого зависит не только академический успех студентов, но и их общая мотивация к обучению. В колледже должны быть созданы условия, которые позволят студентам чувствовать себя важными и ценными членами образовательного сообщества. Важно, чтобы они видели свои достижения и получали признание за свой труд. Также необходимо обеспечить студентам доступ к различным ресурсам и возможностям для развития и самореализации. Это может быть организация дополнительных образовательных мероприятий, включение студентов в проекты и исследования, а также создание комфортной и дружественной атмосферы в колледже. Все это поможет студентам чувствовать себя вдохновленными и заинтересованными в обучении, что в конечном итоге приведет к их успеху и достижению поставленных целей.

Повышение мотивации студентов к учебной деятельности является одной из ключевых задач в Чеченском государственном строительном колледже. Для этого необходимо создать условия, которые будут стимулировать интерес и активное участие студентов в учебном процессе. Во-первых, важно обеспечить качественную и доступную образовательную программу, которая будет соответствовать современным требованиям и потребностям рынка труда. Это позволит студентам видеть практическую ценность получаемых знаний и навыков, что в свою очередь будет мотивировать их к учебе. Во-вторых, необходимо создать комфортные условия для обучения. Это включает в себя оборудованные учебные аудитории, доступ к современным технологиям и оборудованию, а также наличие библиотеки и других ресурсов, способствующих самостоятельному изучению материала. 49

Кроме того, важно организовывать различные мероприятия и конкурсы, 50которые будут способствовать активному взаимодействию студентов и развитию их творческих и профессиональных способностей. 51

Также важно обратить внимание на мотивацию преподавателей, так как их энтузиазм и профессионализм являются ключевыми факторами, влияющими на мотивацию студентов. Поддержка и поощрение преподавателей, создание условий для их профессионального роста и развития, а также организация системы обратной связи помогут создать благоприятную атмосферу в колледже и повысить мотивацию студентов. В целом, повышение мотивации студентов к учебной деятельности в Чеченском государственном строительном колледже требует комплексного подхода и участия всех заинтересованных сторон. Только совместными усилиями администрации, преподавателей и студентов можно создать благоприятную образовательную среду, которая будет стимулировать интерес и активное участие студентов в учебном процессе.

В Чеченском государственном строительном колледже особое внимание уделяется повышению мотивации студентов к учебной деятельности. Колледж стремится создать условия, которые будут стимулировать студентов к активному участию в учебном процессе и развитию их профессиональных навыков. Одним из способов повышения мотивации является создание интересных и практически значимых задач для студентов. В рамках учебных предметов преподаватели стараются подобрать задания, которые будут вызывать у студентов желание разобраться в материале и применить полученные знания на практике. Также проводятся

Мешков Н. И. Мотивация учебной деятельности студентов: Учебн. пособ. — Саранск: Изд-во Мордов. ун-та, 2020. — 184 с.

Зимняя, И. А. Педагогическая психология. учебник для вузов – М.: Университетская книга. Логос. 2019. - 384с.

Фоминова, А. Н., Шабанова, Т. Н. Педагогическая психология: учеб. пособие М.: ФЛИНТА: НАУКА. 2020. - 320с.

Реан А. А. Психология изучения личности. СПб.: Изд-во Михайлова В. А., 2020. 288 с.

внеклассные мероприятия, где студенты могут продемонстрировать свои навыки и получить обратную связь от преподавателей и своих коллег. Важным аспектом повышения мотивации является индивидуальный подход к каждому студенту. Преподаватели стремятся узнать интересы и цели каждого студента и адаптировать учебный процесс под их потребности. Это может включать дополнительные консультации, индивидуальные задания или дополнительные материалы для изучения. Также в колледже активно применяются современные методы обучения, такие как использование интерактивных технологий и онлайн-ресурсов.

Это позволяет студентам получать доступ к актуальной информации и развивать свои навыки в удобной для них форме. Кроме того, в колледже проводятся различные мероприятия и конкурсы, которые способствуют формированию командного духа и развитию лидерских качеств студентов. Это помогает студентам чувствовать себя частью коллектива и дает им возможность проявить свои таланты и способности. Все эти меры направлены на то, чтобы студенты Чеченского государственного строительного колледжа были мотивированы и заинтересованы в учебной деятельности. Колледж стремится создать условия, которые будут способствовать их профессиональному росту и успешной карьере в будущем.

Использованные источники:

1. Мешков Н. И. Мотивация учебной деятельности студентов: Учебн. пособ. — Саранск: Изд-во Мордов. ун-та, 2020. — 184 с.
2. Зимняя, И. А. Педагогическая психология. учебник для вузов – М.: Университетская книга. Логос. 2019. - 384с.
3. Фоминова, А. Н., Шабанова, Т. Н. Педагогическая психология: учеб. пособие М.: ФЛИНТА: НАУКА. 2020. - 320с.
4. Реан А. А. Психология изучения личности. СПб.: Изд-во Михайлова В. А., 2020. 288 с.

УДК 618.3:616-009.12-084-07

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ФАРМАКОЭПИДЕМИОЛОГИЯ И ПРОФИЛАКТИКА ГИПЕРТОНИЧЕСКИХ ЗАБОЛЕВАНИЙ У БЕРЕМЕННЫХ ЖЕНЩИН

Резюме. В статьи рассмотрены вопросы классификации, диагностики, клинического течения различных вариантов артериальной гипертензии во время беременности. Изложена тактика ведения беременных с хронической и гестационной артериальной гипертензией, преэклампсией.

Представлены современные подходы к антигипертензивной терапии пациентов с гипертензивными расстройствами во время беременности и в послеродовом периоде. Обращено внимание на реабилитацию женщин с артериальной гипертензией и профилактику преэклампсии.

Ключевые слова: фармакоэпидемиология, гипертензиные расстройства, профилактика, беременная женщина.

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PHARMACOEPIDEMIOLOGY AND PREVENTION OF HYPERTENSIVE DISEASES IN PREGNANT WOMEN

Resume. The article deals with the classification, diagnosis, clinical course of various types of arterial hypertension during pregnancy. The tactics of management of pregnant women with chronic and gestational arterial hypertension, preeclampsia are described.

Modern approaches to antihypertensive therapy of patients with hypertensive disorders during pregnancy and in the postpartum period are presented. Attention is drawn to the rehabilitation of women with arterial hypertension and the prevention of preeclampsia.

Key words: pharmacoepidemiology, hypertensive disorders, prevention, pregnant woman.

Актуальность. Гипертензивные расстройства во время беременности встречаются с частотой около 10% беременностей; частота преэклампсии составляет 2-8% [3,7]. Ежегодно во всем мире более 50000 женщин погибает в период беременности из-за осложнений, связанных с АГ [1,6].

В развитых странах в 12- 18% они являются второй непосредственной причиной анте- и постнатальной смертности, влияя на перинатальную смертность в 20-25% случаях [4,8].

Вместе с тем, при надлежащем междисциплинарном менеджменте большинство случаев неблагоприятных исходов являются предотвратимыми. Поскольку последствия тяжелых гипертензивных расстройств снижают качество последующей жизни женщины (высокая частота атеросклероза, сахарного диабета, сердечно-сосудистых заболеваний), а частота нарушения физического, психосоматического развития преждевременно рожденных детей достаточно высока, так же, как и риск развития в будущем у них соматических заболеваний, то эта проблема является значимой в социальном и медицинском плане [2,5].

Цель исследования. выявить влияние модифицируемых факторов образа жизни, способствующих развитию несостоятельности мышц тазового дна (на примере запирательной мышцы нижней трети влагалища).

Материалы и методы исследования. Под наблюдением находились 104 первобере-менных. Основную группу составили 64 женщины с наличием влияния модифицируемых факторов риска. В контрольную группу вошли 40 беременных, у которых влияние факторов риска отсутствовало.

Результаты исследования. Исследование сократительной способности мышц малого таза проводилась по разработанной нами методике с помощью специального устройства (патент на полезную модель № 78415 RU) и методом компьютерного вагинотензометрического исследования (КВТИ) (патент на изобретение № 2364336 RU).

Оценивались сила тонического, максимального, волевого сокращений и их продолжительность. Оценка степени недостаточности силы сокращений проводилась по классификации, где нормальной силой тонического сокращения считали более 15,00 гс, максимального - более 70,00 гс, волевого - более 55,00 гс, нормальной продолжительностью - более 5 с. Как недостаточность первой степени квалифицировали силу тонического сокращения от 14,00 до 10,00 гс, максимального - от 69,00 до 50,00 гс, волевого - от 54,00 до 40,00 гс, продолжительность от 4,00 до 2,00 с. Как недостаточность второй степени рассматривали силу тонического сокращения от 9,00 до 6,00 гс, максимального - от 49,00 до 21,00 гс, волевого -от 39,00 до 16,00 гс, продолжительность - от 2,0 до 1,0 с. Недостаточность третьей степени устанавливали при силе тонического сокращения менее 5,0 гс, максимального - менее 20,00 гс, волевого - менее 15,00 гс, продолжительности -менее 1 с.

Возраст женщин в обеих группах колебался от 18 до 36 лет, составляя в среднем 25,6 ± 0,26 года. Основным фактором, оказывающим воздействие на организм, явилась хроническая интоксикация, которая выявлена у 33 (51,5%) женщин основной и у 5 (12,5%) - контрольной групп. При КВТИ установлено, что минимальная сила тонического сокращения наблюдалась у курящих в основной группе - 12,34 ± 0,61 гс, а максимальная - у женщин контрольной группы с отсутствием факторов риска - с продолжительностью более 6,02 ± 0,3 с.

Нормальная масса тела наблюдалась у 42 (65,6%) женщин основной и у 32 (80%) контрольной групп. Минимальная сила тонического сокращения наблюдалась у женщин основной группы с дефицитом массы тела - 13,62 ± 0,68 гс, а максимальная способность к волевому сокращению -60,36 ± 0,60 гс - у женщин контрольной группы

Вывод. Результаты промежуточного анализа продемонстрировали позитивное влияние ЗГТ комбинированным препаратом анжелик на уровень АД, степень висцерального ожирения, метаболический статус и клинические проявления климактерического синдрома у женщин в ранние сроки постменопаузы факторы риска развития гипертензивных нарушении у беременных

В последние годы многими исследованиями доказано, что развитие артериальной гипертонии (АГ) у беременных обусловлено влиянием факторов риска. Но до настоящего времени нет убедительных данных о распространенности этих факторов в популяции и не выявлены наиболее значимые из них для прогноза развития данного осложнения беременности.

Использованные источники:

1.Верткин А.JL, Мурашко JI.E., Ткачева О.Н. и соавт. Артериальная гипертония беременных: механизмы формирования, профилактика, подходы к лечению // Рос. кард. журн. - 2003. - № 6. - С. 59-65.

2.Волкова Е.В., Лысюк Е.Ю., Джохадзе Л.С. Роль сосудистых факторов роста в диагностике различных форм артериальной гипертонии у беременных // Проблемы репродукции. - 2012. - № 5. -С. 102-106.

3.Макаров О.В., Николаев Н.Н., Волкова Е.В., Корниенко Г.А., Баиров С.С. Дифференцированный подход к ведению беременных с артериальной гипертензией // Акушерство и гинекология. - 2008. - № 1. – С. 9-15.

4.Капустина А.В., Баланова Ю.А., Лельчук И.Н., Деев А.Д. Распространенность факторов, влияющих на прогноз больных артериальной гипертонией и оценка общего сердечно-сосудистого риска. ФГУ «Государственный научно-исследовательский центр профилактической медицины» Федерального агентства по здравоохранению и социальному развитию. Москва. Журнал Кардиоваскулярная терапия и профилактика. - 2005. - часть 1. - №6. –

5.Chaiworapongsa T, Romero R, Gotsch F, Espinoza J, Nien JK, Goncalves L, Edwin S, Kim YM, Erez O, Kusanovic JP, Pineles BL, Papp Z, Hassan S. Low maternal concentrations of soluble vascular endothelial growth factor receptor-2 in preeclampsia and small for gestational age. J Matern Fetal Neonatal Med. - 2008. - V. 21. - P. 41-52.

6.Maynard SE, Min JY, Merchan J, Lim KH, Li J, Mondai S, Libermann TA, Morgan JP, Sellke FW, Stillman IE, Epstein FH, Sukhatme VP, Karumanchi SA. Excess placental soluble fms-like tyrosine kinase 1 (sFltl) may contribute to endothelial dysfunction, hypertension, and proteinuria in preeclampsia. J Clin Invest. - 2003. - V. 111. - P. 649-658.

7.Tuffneil DJ, Shennan AH, Waugh JJ, Walker JJ. The management of severe pre-eclampsia/eclampsia. London (UK): Royal College of Obstetricians and Gynaecologists. - 2006 Mar. 11 p.
8.Zhou CC, Ahmad S, Mi T, Abbasi S, Xia L, Day MC, Ramin SM, Ahmed A, Kellems RE, Xia Y. Autoantibody from women with preeclampsia induces soluble Fms-like tyrosine kinase-1 production via angiotensin type 1 receptor and calcineurin/nuclear factor of activated T-cells signaling. Hypertension. - 2008. - V. 51. - P. 1010-1019.

УДК 608.2

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ПОСТРОЕНИЕ ФУНКЦИОНАЛЬНОЙ МОДЕЛИ ИДЕНТИФИКАЦИИ ЖИВОТНЫХ

Аннотация. В данной статье авторами проектируется функциональная модель процесса идентификации, выявляются основные достоинства и недостатки данного процесса.

Ключевые слова: модель, проектирование, идентификация.

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BUILDING A FUNCTIONAL MODEL OF ANIMALS IDENTIFICATION

Abstract. In this article, the authors design a functional model of the identification process and identify the main advantages and disadvantages of this process.

Key words: model, design, identification.

В настоящее время снижение угрозы продовольственной безопасности страны невозможно без расширения и обеспечения эффективного функционирования сети животноводческих комплексов, в частности, комплексов полного цикла по масштабному производству мяса свинины, где наиболее затратным и проблемным в трехфазном процессе содержания и выращивания животных является этап откорма, на который приходится около 60 % всего срока выращивания и который сопровождается до 7,5 % падежа.

Одной из важнейших задач в целях повышения эффективности управления животноводством является постоянный онлайн мониторинг поведения животных в группе, актуализация эффективного информационного обеспечения для интеллектуальной поддержки управления и принятия решений.

Для полноценного анализа функций системы, идентифицирующей животных, возникла необходимость в проектировании модели процесса идентификации. В ходе проектирования был сделан вывод, что при помощи модели, соответствующего программного обеспечения и инструментария, а также методов идентификации из источника изображения или видео посредством множества разнообразных процессов формируются показатели и идентифицированный образ животного. Также все подпроцессы, включенные в идентификацию животных, должны учитывать регламенты и нормативные акты. Ниже представлена контекстная диаграмма процесса идентификации животных (Рис. 1.).

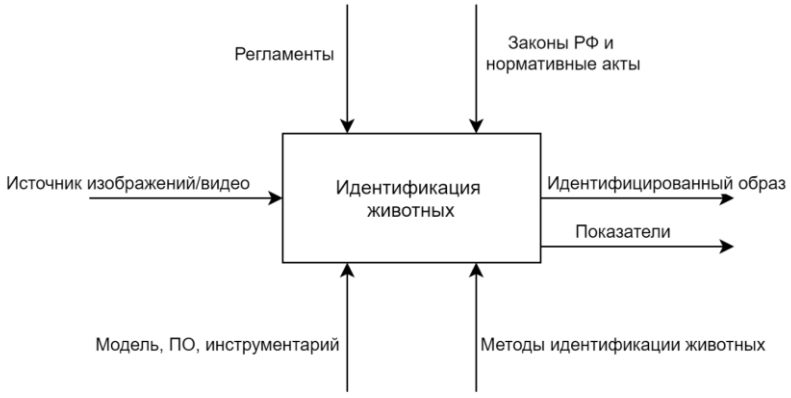

Рис. 1. Контекстная диаграмма процесса идентификации животных

С учетом сложности процесса идентификации животных возникло решение о проектировании диаграммы декомпозиции для отражения более подробной структуры подпроцессов, протекающих в ходе решаемой задачи.

Диаграмма декомпозиции процесса идентификации животных представлена ниже (Рис. 2.).

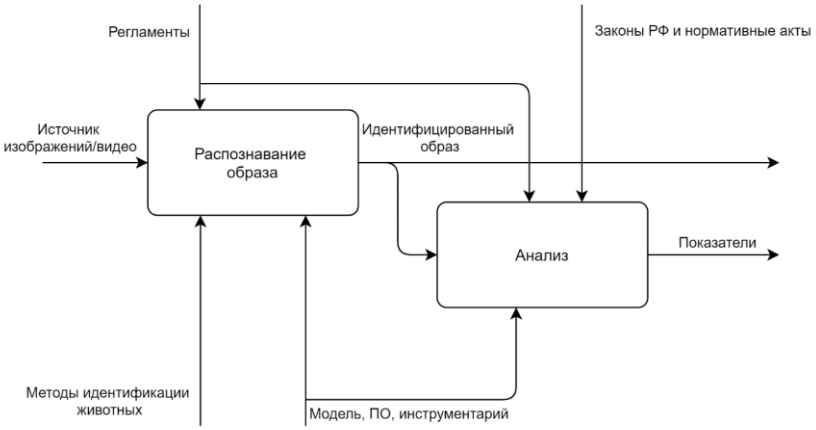

Рис. 2. Декомпозиция контекстной диаграммы

Задача распознавания образов является одной из наиболее обширных и сложных с точки зрения большого количества действий для получения идентифицированного образа. Для того, чтобы отразить процесс распознавания образов животных более подробно, была спроектирована диаграмма декомпозиции описанного процесса.

В ходе распознавания образа необходимо решить ряд задач, одной из которых является нормализация образа. Процесс нормализации представляет собой автоматическое вычисление неизвестных ранее параметров преобразований, которым подвергнуты входные данные, впоследствии приводимым к эталонному виду. В результате нормализации будет получен нормализованный образ, который, в свою очередь, впоследствии подлежит обнаружению. В результате из «обнаруженного» изображения необходимо извлечь признаки, важные с точки зрения решения конкретной задачи. В рамках текущей предметной области, важными являются те параметры, которые напрямую влияют на эффективность этапа откорма.

В результате извлеченные признаки проходят этап сопоставления характеристик, что приводит к конечному идентифицированному образу, который можно использовать при решении задачи анализа. Декомпозиция процесса распознавания образов животных представлена ниже (Рис. 3.).

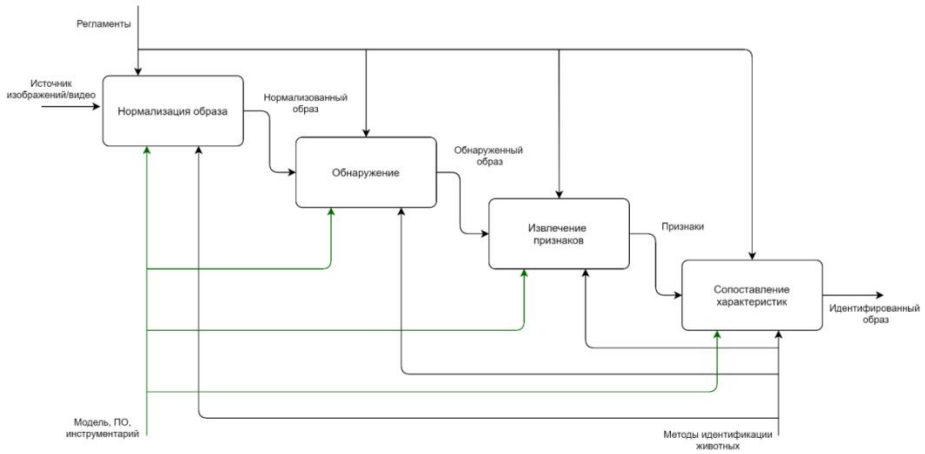

Рис. 3. Декомпозиция процесса «Распознавание образа»

При помощи нотации моделирования IDEF3 было решение о декомпозиции процесса анализа идентификации животных. Для того чтобы из идентифицированного образа прийти к конкретным показателям, необходимо произвести ряд этапов: расчет интегрального показателя активности, расчет изменения объема тела, расчет температуры тела, число посещений кормления.

В результате изучения процесса анализа идентифицированного образа животных, была спроектирована диаграмма декомпозиции, представленная ниже (Рис. 4.).

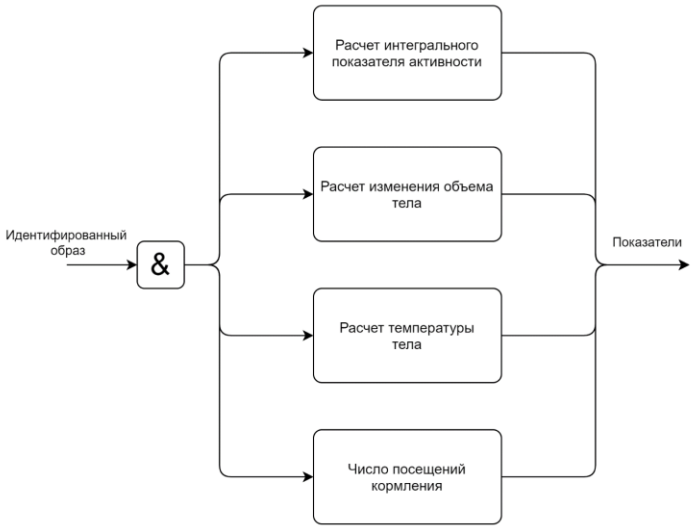

Рис. 4. Декомпозиция процесса «Анализ»

После проведения анализа образа животного система выдает показатели, которые передаются в различные подсистемы автоматизированной системы мониторинга состояния животных на свинокомплексе. Эти показатели будут использоваться при распознавании поз и анализе паттернов поведения животных для дальнейшего определения и анализа рисков. После чего данные будут передаваться в систему оповещений и рекомендаций для контролера.

Сегодня для контроля и управления состоянием поголовья на животноводческих комплексах действуют различные системы мониторинга и учета. Однако они в значительной мере зависят от человеческого фактора, не позволяют осуществлять объективную оценку ситуации и оперативно принимать управленческие решения в целях снижения процента падежа и брака. Необходимые для постоянного контроля тонкие изменения в поведении групп животных, характеризующихся высоким коэффициентом плотности содержания и динамики поведения, трудно подвергнуть объективному измерению, они требуют от персонала длительного и постоянного наблюдения, что провоцирует серьезные ошибки.

Использованные источники:

1. Гутгарц, Р. Д. Проектирование автоматизированных систем обработки информации и управления: учебное пособие для вузов / Р. Д. Гутгарц. — Москва: Издательство Юрайт, 2021. — 304 с. — (Высшее образование). — ISBN 978-5-534-07961-6. — Текст: электронный // ЭБС Юрайт [сайт]. — URL: https://urait.ru/bcode/474654.
2. Конюхов, В. Ю. Методы исследования материалов и процессов: учебное пособие для вузов / В. Ю. Конюхов, И. А. Гоголадзе, З. В. Мурга. — 2-е изд., испр. и доп. — Москва: Издательство Юрайт, 2021. — 179 с. — (Университеты России). — ISBN 978-5-534-13938-9. — Текст: электронный // ЭБС Юрайт [сайт]. — URL: https://urait.ru/bcode/467320.
3. Кравченко, Т. К. Системы поддержки принятия решений: учебник и практикум для вузов / Т. К. Кравченко, Д. В. Исаев. — Москва: Издательство Юрайт, 2021. — 292 с. — (Высшее образование). — ISBN 978-5-9916-8563-4. — Текст: электронный // ЭБС Юрайт [сайт]. — URL: https://urait.ru/bcode/46958.

УДК 336.719

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ИСЛОМ БАНК ХИЗМАТЛАРИНИ ТАКОМИЛЛАШТИРИШ: ТИЖОРАТ БАНКЛАРИ УЧУН МУАММОЛАР ВА ИМКОНИЯТЛАР

Аннотация. Мақолада ислом молия хизматлари моҳияти ва улардан Ўзбекистон банк тизимида фойдаланиш истиқболлари ва имкониятлари тўғрисида мулоҳаза юритилган. Ислом банк хизматларининг тижорат банкларида ривожлантириш бўйича таклифлар берилган.

Калит сўзлар: Ислом молияси, шариат, ислом дарчаси, ҳалол, муробаҳа, закот, вақф, садақа, қонунчилик.

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IMPROVING ISLAMIC BANKING SERVICES: CHALLENGES AND OPPORTUNITIES FOR COMMERCIAL BANKS

Abstract. The article examines the essence of Islamic financial services, as well as the prospects and possibilities of their use in the banking system of Uzbekistan. Proposals are given for the development of Islamic banking services in commercial banks.

Key words: Islamic finance, Sharia, Islamic window, halal, murabaha, zakat, waqf, charity, legislation.

Кириш. Исломий банкинг дунё бўйлаб мусулмон жамоалари орасида тобора оммалашиб бормоқда ва талабга эга бўлиб бормоқда. Ушбу турдаги молиявий хизмат Қуръон томонидан тақиқланган фоиз ставкаларидан қочади ва муқобил сармоя ва молиялаштириш усулларини таклиф этади [3]. Исломий банк хизматларига талаб ортиб бораётганлиги сабабли кўплаб тижорат банклари мижозлар эҳтиёжларини қондириш мақсадида ўз таклифларини кенгайтиришга интилмоқда. Бироқ, ислом банки хизматларини такомиллаштириш банклардан ушбу фаолият турининг хусусиятларини тушунишни ва ўз маҳсулоти ва жараёнларини мослаштиришга тайёр бўлишни талаб қилади.

Таҳлил ва натижалар. Ислом банк фаолиятини такомиллаштиришда тижорат банклари олдида бугунги кунда қатор муаммолар мавжуд бўлиб, улар қуйидагилардир:

1. Ислом банк хизматларининг ўзига хос хусусиятларини тушуниш. Тижорат банклари ислом банкининг анъанавий банк фаолиятидан ажралиб турадиган ўзига хос хусусиятларига эга бўлишига ҳисобга олишлари ва бунга тайёр бўлишлари керак. Бу, масалан, фоиз ставкаларининг йўқлиги ва муайян молиявий воситаларнинг мавжудлигини назарда тутади. Банклар ўз ходимларини ўқитишлари, уларга ислом банки маҳсулотлари билан ишлаш бўйича зарур билим ва кўникмалар беришлари керак.

2. Янги маҳсулот ва хизматларни ишлаб чиқиш. Ислом банк фаолиятини такомиллаштириш шариат талабларига жавоб берадиган янги маҳсулотларни яратишни назарда тутади. Банклар ўз мижозларининг эҳтиёжларини ҳисобга олишлари ва уларга энг мос ечимларни таклиф қилишлари керак.

3. Бошқа молия институтлари билан ҳамкорлик қилиш. Ислом банкининг муваффақиятли ривожланиши учун тижорат банклари бошқа молия институтлари, масалан, ислом молия институтлари ёки валюта хизматларини кўрсатувчи компаниялар билан ҳамкорлик қилишлари керак. Бундай ҳамкорлик таклиф этилаётган хизматлар доирасини кенгайтириш ва мижозларга хизмат кўрсатиш сифатини оширишга ёрдам беради.

4. Янги мижозларни жалб қилиш. Ислом банки маҳсулотлари таклифини кенгайтириш аввал банк хизматларидан фойдаланмаган янги мижозларни жалб қилиши мумкин

5. Шариат талабларига риоя қилиш. Муҳим жиҳат – исломий банк хизматларини кўрсатишда шариат талабларига риоя қилишдир. Тижорат банклари ўз фаолиятида мунтазам аудит ўтказиши, кўрсатилаётган хизматларнинг ислом нормаларига мувофиқлигини назорат қилиши шарт.

Ислом банкининг асосий тамойиллари:

1. Фоиз ставкалари йўқлиги: Исломий банк иши берилган кредитлар бўйича фоиз ундиришни ўз ичига олмайди, чунки бу Ислом тамойилларига зиддир. Бунинг ўрнига банклар фойда олиш учун бошқа усуллардан фойдаланадилар, масалан, хизмат ҳақи ёки фойдада шерикчилик.

2. Чайқовчилик операцияларини тақиқлаш: Ислом банклари валюта ёки қимматли қоғозлар билан савдо қилиш каби операцияларни амалга оширмайдилар, чунки улар спекулятив ҳисобланиб, шариат тамойилларига зиддир.

3. Адолатлилик ва ошкоралик: Ислом банклари транзакциянинг барча томонлари ўртасида хатар ва фойданинг адолатли тақсимланишига интилади. Шунингдек, улар ўз операцияларида шаффофликни таъминлайдилар, шунда мижозлар ўз маблағлари қандай фойдаланилаётгани ва банк фойдаси қандай яратилганини кўришлари мумкин.

4. Ижтимоий йўналтирилган инвестициялар: Ислом банклари таълим, соғлиқни сақлаш ва инфратузилмани ривожлантириш каби ижтимоий аҳамиятга эга лойиҳаларга сармоя киритишга катта эътибор беради.

5. Хайрия ва закот: Ислом банклари ўз мижозларини хайрия лойиҳаларида иштирок этишга ва закот (даромаднинг бир қисмини хайрия мақсадларига мажбурий тўлаш) тўлашга ундайди [4].

6. Айрим фаолиятни молиялаштиришни чеклаш: Ислом банклари одатда алкогол, чўчқа гўшти, қимор ўйинлари ва Исломга зид деб ҳисобланган бошқа айрим фаолият турларини ишлаб чиқариш ва сотишни молиялаштирмайди.

Mordor Intelligence маълумотларига кўра, сўнгги йилларда исломий молия хизматлари ривожланиб, шариатга мувофиқ молиявий институтлар томонидан бошқариладиган активлар 2022 йилда 4,2 триллион доллардан ошган (2015 йилга нисбатан 93 фоизга кўп). S & P Global Ratings 2023 йилда тахминан 10 фоиз ўсишни прогноз қилган, активлар 2026 йилга келиб 6 триллион АҚШ долларига етиши кутилмоқда [1].

Ўзбекистонда исломий молияга талаб катта. БМТТД томонидан 2020-йилда ўтказилган тадқиқот шуни кўрсатдики, Ўзбекистонда сўровда қатнашган жисмоний шахсларнинг 56 фоизи ва тадбиркорлик субъектларининг 38 фоизи диний эътиқодлари туфайли кредит олмайдилар. Бироқ, худди шу сўров натижаларига кўра, жисмоний шахслар ва корхоналарнинг 60 фоиздан ортиғи исломий молия маҳсулотлари қандай ишлаши ҳақида тўлиқ тушунчага эга эмаслиги аниқланган [1].

Ислом молиясини ривожлантириш мақсадида “Ипак Йўли Банк”, “Алоқабанк”, “Трастбанк”, “Инвест Финанс Банк”, “Капиталбанк”, “Асакабанк”, “Туронбанк”, “Ўзсаноатқурилишбанк”, “Ҳамкорбанк” ва “Азия Аллианс банк” Хусусий секторни ривожлантириш Ислом корпорацияси билан ҳамкорлик шартномасини имзолади.

Молиялаштириш асосан банкларга мурабаҳа тамойиллари бўйича кафолатлар бериш шаклида амалга оширилади. Мурабаҳа, харажат-плюс молиялаштириш деб аталади, бу исломий молиявий тузилма бўлиб, унда сотувчи ва харидор активнинг қиймати бўйича келишиб оладилар. Исломий банкинг фаолиятидаги ижобий ўзгаришлардан бири камида учта тижорат банкида исломий молиялаштириш мезонлари ва тартибларини жорий этишни назарда тутувчи “Ўзбекистон -2030” стратегияси қабул қилинишидир.

Бироқ, Исломий молиявий маҳсулотлар ва хизматларни тартибга солувчи қонунчиликнинг йўқлиги ҳозирги кундаги катта тўсиқдир.

Шуни таъкидлаш керакки, Исломий молия бухгалтерия ҳисобига анъанавий банк амалиётидан алоҳида ёндашувни талаб қилади. Ислом молиясига асосланган кредитлардан фойдаланиш учун шариат тамойилларига мувофиқ тақдим этиладиган ресурсларни жалб қилиш керак; депозитлар бўйича фоизли кредитлар ушбу тамойилларга мос келмайди [2].

Исломий молия тизими фойдага асосланган маҳсулотлардан ташқари, қашшоқлик ва ташқи қарзни камайтириш учун садақа (ихтиёрий хайрия), закот (мусулмонлардан олинадиган мажбурий солиқ) ва вақф (эҳсон) каби хизматларни ҳам таклиф қилиши мумкин.

Хулоса. Жаҳон иқтисодиётининг ўсиб бораётган беқарорлиги ва молиявий ресурслар учун рақобат кучайиб бораётган шроитларда, ислом молияси инвестицияларни жалб қилиш, ишбилармонлик фаоллигини рағбатлантириш, халқаро савдони осонлаштириш ва қашшоқлик муаммосини

ҳал қилиш учун зарур имконият ҳисобланади. Бироқ, Ўзбекистон ислом молиясининг имкониятларидан тўлиқ фойдаланиши учун уни амалга оширишга кўмаклашувчи қонунчиликка ўзгартиришлар киритиш зарур. Шу билан бирга, ушбу соҳани чуқур ўрганишни назарда тутувчи таълим дастурларини жорий қилиш муҳимдир.

Адабиётлар:

1. Шохруххуджа Фахриддинхуджаев Могут ли исламские финансы стимулировать развитие банковского сектора в Узбекистане? https/thediplomat.com/2023/08/can-islamic-finance-drive-banking-sector-development-in-Uzbekistan/
2. Иброхимова, Нодира Перспективы внедрения исламского банкинга в финансовую систему Узбекистана // ORIENSS. 2021. №7. URL: https://cyberleninka.ru/article/n/perspektivy-vnedreniya-islamskogo-bankinga-v-finansovuyu-sistemu-uzbekistana.
3. Турсунов А.С. Тижорат банкларида исломий банк хизматларини ривожлантириш йўналишлари. Иқтисодиёт фанлари бўйича фалсафа доктори (PhD) диссертацияси, Тошкент, 2021 йил
4. Sattarova Maftuna Khakimzhanovna. Prospects for islamic banking products in commercial banks of Uzbekistan. Journal of innovations in economy. 2022. Vol. 5, Issue 6. pp.61-67

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ТЕХНОЛОГИЯ СТРОИТЕЛЬСТВА БЕТОННЫХ КОРАБЛЕЙ С ИСПОЛЬЗОВАНИЕМ 3D ТЕХНОЛОГИИ (ТЕХНОЛОГИЯ АДДИТИВНОГО ПРОИЗВОДСТВА БЕТОННЫХ КОРАБЛЕЙ

Аннотация. Данная Статья рассматривает инновационные технологии строительства бетонных кораблей с использованием 3D-печати. Проанализированы ключевые преимущества такого подхода, такие как эффективное использование материалов, снижение веса конструкции и повышение общей производительности судна. Представлены практические примеры успешной реализации 3D-печати в судостроении, а также освещены перспективы данной технологии в создании более экологически устойчивых морских судов.

Ключевые слова. 3D-печать, судостроение, бетонные корабли, аддитивное производство, инновации, эффективное использование материалов, экологическая устойчивость.

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TECHNOLOGY FOR CONSTRUCTION OF CONCRETE SHIPS USING 3D TECHNOLOGY (TECHNOLOGY OF ADDITIVE MANUFACTURING OF CONCRETE SHIPS

Abstract. The article explores innovative technologies in the construction of concrete ships using 3D printing. Key advantages of this approach, such as efficient material utilization, weight reduction, and enhanced overall vessel performance, are analyzed. Practical examples of successful implementation of 3D printing in shipbuilding are presented, along with insights into the prospects of this technology in creating more environmentally sustainable maritime vessels.

Keywords. 3D printing, shipbuilding, concrete ships, additive manufacturing, innovations, efficient material utilization, environmental sustainability.

Технология 3D-печати, или аддитивного производства, продолжает революционизировать различные отрасли, внося инновации в процессы производства и стимулируя создание уникальных продуктов. В этот ряд инноваций внедряется и строительная индустрия, претворяя в жизнь идею 3D-печати бетонных кораблей, данный футуристический подход к судостроению не только изменяет традиционные методы создания судов, но и открывает новые горизонты в области дизайна, эффективности и экологической устойчивости. В

данной статье мы рассмотрим ключевые аспекты технологии 3D-печати бетонных кораблей, выявим ее преимущества и познакомимся с инновационными решениями, которые перекрывают границы традиционного судостроения.

Материалы на основе цемента включают традиционные компоненты, такие как цемент, мелкий и крупный заполнители, и воду, которые составляют основу традиционных бетонных материалов, такие материалы широко применяются в промышленном и коммерческом строительстве, но благодаря технологии 3D-печати, их структуру можно оптимизировать для более эффективного использования и повышения качества бетона. Полимерные материалы представляют собой новый тип бетонных материалов, обладающих способностью снижения плотности, увеличения гибкости и долговечности бетона, что в конечном итоге приносит лучшие характеристики, они представляют перспективное направление для улучшения производства бетонных кораблей. Исследования также ведутся с использованием биоматериалов и целлюлозных материалов для 3D-печати бетона, такие инновационные подходы направлены на улучшение экологических свойств бетонных конструкций, сокращение зависимости от традиционных ресурсов и создание устойчивых и эффективных материалов для кораблей. Прогресс в технологии 3D-печати бетонных кораблей включает оптимизацию формы и структуры. Использование 3D-печати позволяет создавать сложные формы и структуры, улучшая гидродинамические характеристики бетонных кораблей, повышая их эффективность и устойчивость. Технология также способствует экономии ресурсов через более точное расходование материалов и возможность использования инновационных композитных материалов, к тому же она ускоряет процесс строительства бетонных кораблей, снижая временные и финансовые затраты.

С развитием технологии 3D-печати бетона наблюдается постепенное расширение масштабов строительства. В 2018 году бельгийская строительная компания Kamp C успешно применила 3D-печать для возведения дома площадью 127 квадратных метров. Последующие проекты французской компании XtreeE и австрийской компании LEGO Team включали в себя печать строений высотой 18 и 31 метр соответственно. Расширение области применения 3D-печати бетона не ограничивается только общественными строениями, ее использование постоянно расширяется на строительство домов, мостов и других объектов. Примечательным примером стал завершенный в 2019 году в Китае проект по строительству 38-этажного здания с использованием 3D-печатных бетонных панелей, что привлекло внимание мировых СМИ. В области строительства бетонных кораблей с применением 3D-печати отмечается прогресс в нескольких направлениях. Использование этой технологии позволяет достигать высокой точности и сложности форм, что влияет на эстетические качества кораблей и оптимизирует их гидродинамические характеристики. Применение 3D-печати также способствует повышению эффективности производства, сокращению времени на возведение корпуса и уменьшению

трудозатрат. Важным аспектом также является развитие экологически устойчивых кораблей, благодаря использованию инновационных материалов и сокращению отходов.

Технология строительства бетонных кораблей с использованием 3D технологии представляет собой инновационный подход к производству судов, который основан на принципах аддитивного производства, данная технология, также известная как 3D-печать, выделяется в области быстрого изготовления и настройки специальных деталей, что приобретает особенное значение в контексте судостроительной промышленности. В 2015 году Американское бюро судостроения (ABS) опубликовало обширное руководство под названием "ABS Руководство по применению 3D-печати в судостроении и морской индустрии", раскрывающее огромные перспективы и потенциал развития 3D-печати в судостроительной области. В настоящее время ведущие судостроительные компании, такие как Hyundai Heavy Industries и Hyundai Mipo Dockyard, активно сотрудничают с различными партнерами для ускоренного внедрения технологии 3D-печати. В феврале 2022 года Hyundai Heavy Industries подписала соглашение о разработке и внедрении технологии 3D-печати в судостроении с Усанским институтом по развитию информационной индустрии, Корейским институтом производственных технологий, Корейской ассоциацией по интеграции 3D-печати и Корейским обществом по судостроительным стандартам. В мае 2022 года Daewoo Shipbuilding & Marine Engineering (DSME) совместно с американским поставщиком услуг 3D-печати Ingenuity 3D "напечатали" модель экспериментального корабля с двойным корпусом длиной 10 метров. Что такое 3D-печать? 3D-печать представляет собой метод быстрого формирования, также известный как аддитивное производство, данная технология использует цифровые модели файлов в качестве основы и применяет материалы, такие как порошковый металл или пластик, которые способны склеиваться. Объект создается путем слоевого нанесения материала. В отличие от обычных принтеров, где используются чернила и бумага, 3D-принтеры оснащены различными "печатающими материалами" - металлом, керамикой, пластиком, песком и другими, данная технология предоставляет возможность быстрого и точного производства сложных форм, что является основным преимуществом в создании индивидуальных деталей для судостроения. Возможность быстро изменять параметры и изготавливать детали малыми партиями или даже единичными экземплярами делает 3D-печать идеальным выбором для судостроительной промышленности, особенно при строительстве бетонных кораблей.

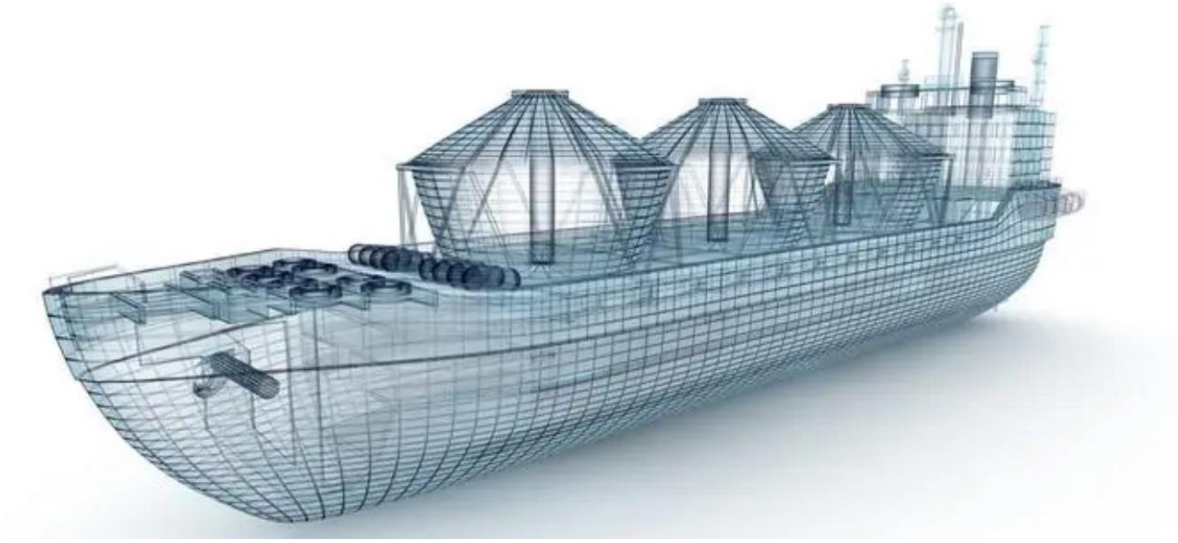

Рисунок 1. Модель нефтяного танкера

Преимущества 3D-печати в судостроении: Ускорение разработки новых продуктов Технология 3D-печати значительно ускоряет процесс разработки новых продуктов в судостроительной отрасли, снижая при этом затраты на исследования и разработки. Благодаря удобству формирования, данная технология позволяет более эффективно проверять и улучшать параметры и концепции дизайна, повышая уровень дизайнерской компетентности и общую эффективность процесса, к примеру, при проектировании новой детали конструкции, инженеры могут одновременно представить 10 вариантов и быстро проверить их разумность с использованием 3D-печати. Даже для крупных корпусных проектов возможно быстрое создание моделей, что существенно снижает расходы на исследования и разработки. Экономичное производство вспомогательных продуктов так как продукция, дополняющая корабли, часто производится в небольших сериях и подлежит индивидуальному заказу, 3D-печать позволяет гибко настраивать параметры, снижая затраты на производство даже при небольших партиях или изготовлении единичных экземпляров, к тому же эта технология обеспечивает значительное упрощение процесса обслуживания вспомогательных компонентов. Благодаря 3D-печати можно быстро провести ремонт и замену частей корпуса, что существенно снижает затраты по сравнению с традиционными методами ремонта. Производство сложных деталей с высокой точностью Технология 3D-печати предоставляет возможность производить продукцию, сложность изготовления которой выходит за рамки традиционных методов. В отличие от традиционных методов, таких как обработка по отрезанию, где для создания сложных конструкций необходимо удалить материал, 3D-печать позволяет быстро и точно создавать детали любой формы с повышенной точностью и гладкостью, что решает проблемы производства сложных структурных элементов, повышает точность обработки и, следовательно, улучшает характеристики продукции.

Следуя принципам, рассмотрим, как эта технология может быть успешно применена в строительстве бетонных кораблей. Преимущества 3D технологии в строительстве бетонных кораблей:

1. Эффективное использование материалов и снижение веса конструкции Технология 3D-печати обеспечивает более эффективное использование строительных материалов и позволяет создавать конструкции с минимальным расходом ресурсов, что особенно актуально в строительстве бетонных кораблей, где уменьшение веса корпуса может значительно повысить скорость и улучшить управляемость. Сравнительно с традиционными методами, 3D-печать создает более легкие детали, что способствует оптимизации баланса корабля и уменьшению потенциальных рисков, связанных с уменьшением веса.

2. Снижение потребности в последующей обработке продукции 3D-печать создает изделия с минимальным количеством дополнительной обработки, что позволяет сэкономить материалы и снизить объем складирования, ко всему прочему этот метод уменьшает необходимость передачи данных и количество поставщиков компонентов, что является важным аспектом для обеспечения конфиденциальности, особенно для предприятий, в том числе и оборонных.

3. Улучшение общей производительности корабля Применение 3D технологии в судостроении позволяет создавать сложные геометрические формы, оптимизируя структуру корабля и обеспечивая повышение производительности и легкость. В 2021 году итальянская компания Moi Composites представила 3D-напечатанную яхту MAMBO из стекловолокна, используя технологию непрерывного волокна (CFM), данная яхта демонстрирует новую, уникальную форму, которую невозможно было достичь традиционными методами. Материал из стекловолокна, созданный с использованием 3D-печати, делает корпус прочным, долговечным и легким, а роботизированный процесс обеспечивает масштабируемость размеров и экономическую эффективность. Практические примеры применения 3D технологии в судостроении - 3D-печать полного корпуса В мае 2021 года итальянская компания Moi Composites представила яхту MAMBO, которая была 3D-напечатана с использованием технологии CFM, данный инновационный процесс начинается с цифровой трехмерной модели и заканчивается машинной "печатью" корпуса. Яхта длиной 6,5 метра и шириной 2,5 метра продемонстрировала уникальную форму, которая стала возможной благодаря технологии 3D-печати. Материал из стекловолокна, созданный с использованием этой технологии, обеспечивает прочность, долговечность и легкость корпуса.

Современные методы аддитивного производства бетонных конструкций позволяют не только повысить эффективность и скорость строительства, но и создавать индивидуальные корпусы с высокой точностью и экологической устойчивостью. В результате применения технологии 3D-печати в судостроении, бетонные корабли становятся не только символом передовых технологий, но и уникальным сочетанием функциональности, легкости и экологической эффективности, данный инновационный подход обещает

перерисовать горизонты судостроения, создавая мост между традицией и будущим.

Использованные источники:

1. Авренюк, Андрей Восстановление бетонных и железобетонных конструкций / Андрей Авренюк. - Москва: Гостехиздат, 2011. - 184 с.
2. Ахвердов, И. Н. Акустическая технология бетонов / И.Н. Ахвердов. - М.: Стройиздат, 2012. - 144 с.
3. Белявский, Л.А. Бетонные дороги / Л.А. Белявский. - Л.: Гострансиздат, 2014. - 240 с.
4. Берг, О. Я. Высокопрочный бетон / О.Я. Берг. - М.: ЁЁ Медиа, 2015. - 50 с.

УДК 616.379-008.64 -06:616-008.9

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КЛИНИЧЕСКИЕ ХАРАКТЕРИСТИКИ АНДРОГЕННОГО ДЕФИЦИТА У БОЛЬНЫХ САХАРНЫМ ДИАБЕТОМ 2-ГО ТИПА

Резюме. Сахарный диабет (СД) представляет собой значимую медико–социальную проблему. В 2010 году, согласно прогнозам, на нашей планете будут жить около 215 млн человек с СД 2 типа. СД 2 типа является гетерогенным заболеванием, развивающимся в результате сочетания врожденных и приобретенных факторов, в механизме своего развития характеризующимся сочетанием двух фундаментальных патофизиологических дефектов: инсулинорезистентностью и нарушением функции b–клеток поджелудочной железы.

Развитие СД 2 типа начинается в основном после 40 лет. Известно, что у мужчин с возрастом происходит постепенное снижение уровня тестостерона, что приводит к возрастному гипогонадизму. Одновременное развитие сахарного диабета и возрастного гипогонадизма, сопровождающегося снижением секреции как общего, так и свободного тестостерона, отмечено в многочисленных исследованиях [5]. При этом многими исследователями обнаружена связь между уровнем общего тестостерона в плазме и развитием СД 2 типа.

Ключевые слова: сахарный диабет, андрогенный дефицит, метаболическая характеристика.

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CLINICAL CHARACTERISTICS OF ANDROGEN DEFICIENCY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Resume. Diabetes mellitus (DM) is a significant medical and social problem. In 2010, according to forecasts, about 215 million people with type 2 diabetes will live on our planet. Type 2 diabetes is a heterogeneous disease that develops as a result of a combination of congenital and acquired factors, in the mechanism of its development characterized by a combination of two fundamental

pathophysiological defects: insulin resistance and dysfunction of b-cells of the pancreas.

The development of type 2 diabetes begins mainly after 40 years. It is known that men experience a gradual decrease in testosterone levels with age, which leads to age-related hypogonadism. The simultaneous development of diabetes mellitus and age-related hypogonadism, accompanied by a decrease in the secretion of both total and free testosterone, has been noted in numerous studies [5]. At the same time, many researchers have found a relationship between the level of total testosterone in plasma and the development of type 2 diabetes.

Key words: diabetes mellitus, androgen deficiency, metabolic characteristics.

Актуальность. Сахарный диабет (СД) является острой медико-социальной проблемой современности и относится к приоритетным национальным программам здравоохранения практически всех стран мира, защищенным нормативными документами Всемирной организации здравоохранения (ВОЗ) [1,4].

По данным экспертов ВОЗ в 1989 году во всем мире насчитывалось 98,9 млн больных, страдающих СД, в 2000 году - 157,3 млн пациентов, в 2003 - 194 млн, а в 2011 году эта цифра достигла 366 млн (ВОЗ, 2011). По данным Международной диабетической федерации - IDF (The International Diabetes Federation) - к 2030 году число больных СД достигнет 552 мл, в основном за счет больных СД 2 типа (The International Diabetes Federation, 2012).

Основной причиной высокой инвалидизации и смертности больных СД 2 типа является поражение сердечно-сосудистой системы. В рекомендациях Европейского общества кардиологов и Европейской ассоциации по изучению сахарного диабета отмечено, что сахарный диабет и сердечно-сосудистые заболевания подобны двум сторонам одной монеты [6]. Смертность больных сахарным диабетом 2 типа от инфаркта миокарда и сердечной недостаточности составляет около 60% [2,5]. У больных СД повышен риск возникновения всех форм ИБС, в том числе стенокардии, безболевой ишемии миокарда, внезапной сердечной смерти. Ишемическая болезнь сердца (ИБС) у пациентов СД представляет собой особую проблему здравоохранения, в странах, достигших значительных успехов в борьбе с ней, смертность от данной патологии при СД снижается незначительно. При этом отмечается неуклонный рост заболеваемости ИБС у больных СД [7].

Известно, что ИБС в 3 раза чаще встречается у мужчин, чем у женщин, а заболеваемость ИБС в мужской популяции с возрастом увеличивается, при этом наблюдается параллельное снижение секреции тестостерона. Аналогичная ситуация прослеживается и в отношении СД 2 типа. Для данного заболевания характерна манифестация в пожилом возрасте, а учитывая тот факт, что со старением у мужчин происходят функциональные изменения всей эндокринной системы, то в большинстве случаев развитие диабета происходит одновременно со снижением секреции общего и свободного тестостерона [3].

Взаимосвязь дефицита андрогенов и инсулинорезистентности показана в ряде исследований. Тем не менее, данный вопрос на сегодняшний день до конца не изучен. Кроме того, некоторыми авторами наличие данных связей подвергается сомнению. Таким образом, становится необходимым дальнейшее исследование этих вопросов [2].

В последнее время активно изучается влияние гормонов жировой ткани (лептина, адипонектина, резистина и других) на гормонально-метаболические показатели, в том числе и на уровень тестостерона. Однако данные исследований по этому вопросу имеют неоднозначные результаты. Кроме того, в современной научной литературе о взаимосвязях дефицита тестостерона и резистина у человека в настоящее время и вовсе отсутствуют какие-либо сведения [3].

В связи с этим актуальным является изучение влияния дефицита тестостерона на развитие инсулинорезистентности и метаболизм адипокинов при СД 2 типа и ИБС, что необходимо для оптимизации диагностики и лечения данных заболеваний.

Цель исследования. Оценить роль дефицита тестостерона в развитии инсулинорезистентности и его взаимосвязь с адипокинами у мужчин с сочетанием сахарного диабета 2 типа и ишемической болезни сердца.

Материалы и методы исследования. В сплошное одномоментное исследование с формированием группы контроля было включено 82 мужчины с СД второго типа (основная группа), и 56 мужчин без сахарного диабета (контрольная группа). В процессе формирования выборки, было проведено сплошное анкетирование больных СД второго типа, находящихся на обследовании и лечении в клинике АГМИ с целью выявления нарушений половой функции.

Результаты исследования. Распространенность андрогенного дефицита у больных сахарным диабетом второго типа, по комплексной оценке, составляет 76,8%, при этом концентрация общего и свободного тестостерона крови ниже нормальных значений выявляется в 68,3% и 83% случаев, соответственно. Диссоциация темпов снижения общего и свободного тестостерона, наиболее вероятно, обусловлена возрастным увеличением уровней ГСПС, что влечет еще большее снижение уровней свободного тестостерона. Распространенность и степень андрогенного дефицита увеличивается с возрастом.

Распространенность андрогенного дефицита у больных сахарным диабетом 2 типа превышает таковую у мужчин того же возраста без сахарного диабета более чем в 2 раза.

Снижение концентрации тестостерона у обследуемых мужчин с сахарным диабетом не сопровождается повышением уровня гонадотропинов, что свидетельствует о дисфункции репродуктивной системы по типу гипогонадо-тропного гпогонадизма.

Андрогенный дефицит у мужчин с сахарным диабетом играет важную роль в снижении качества жизни и способствует прогрессированию болезни,

вследствие ухудшения компенсации углеводного обмена, прогрессированию дислипидемии, расстройств психо - эмоционального статуса.

Опросники ASA и AMS по Heinemann для скрининга андрогенного дефицита на начальном этапе диагностического поиска в совокупности с клиникой андрогенного дефицита и данными лабораторно - инструментальных методов, являются важным источником информации и могут быть рекомендованы в клинической практике.

Вывод. Установлена роль гипотестостеронемии у больных с сочетанием сахарного диабета 2 типа и ишемической болезнью сердца в развитии атерогенной дислипидемии и инсулинорезистентности. На основании проведенных исследований показана необходимость определения содержания общего и свободного тестостерона у пациентов с СД 2 типа и ИБС.

Выявленные гормонально-метаболические нарушения у мужчин с сахарным диабетом 2 типа и ишемической болезнью сердца позволяют наметить пути патогенетически обоснованной терапии.

Использованные источники:

1.Аметов, А.С. Достижение двух целей терапии: контроль гликемии и снижение массы тела / А.С. Аметов // РМЖ. Эндокринология. - 2009. - № 24. - С. 1596-1598.

2.Башнина, Е.Б Показатели жирового обмена у больных с сахарным диабетом 1 типа на фоне лечения аналогами инсулина / Е.Б. Башнина, Н.В. Ворохобина, М.М. Шарипова // Российский семейный врач: медицинский научно-практический журнал. - 2006. - Том 10, № 1. - С. 23.

3.Калинченко, С.Ю. Практическая андрология / С.Ю.Калинченко, И.А. Тюзиков - М.: Практическая медицина, 2009. - 399 с.

4.Осина, А.С. Оценка взаимосвязи инсулинорезистентности и эндотелиальной дисфункции у больных СД 2 типа: дисс.... канд. мед. наук: 14.01.02 / Осина Анна Сергеевна. - Самара, 2010. – 107 с.

5.Cattabiani, C. Relationship between testosterone deficiency and cardiovascular risk and mortality in adult men / C. Cattabiani, S. Basaria, G.P. Ceda et al. // J. Endocrinol. Invest. -2012. - Vol. 35, №1. - P. 104-120.

6.Grossmann, M. Low testosterone in men with type 2 diabetes: significance and treatment / M. Grossmann // J. Clin. Endocrinol. Metab. - 2011. - Vol. 96, №8. - P.2341-2353.

7.Praveen E.P. Plasma testosterone in adult normoglycaemic men: impact of hyperinsulinaemia / E.P. Praveen, M.L. Khurana, B. Kulshreshtha et al. // Andrologia. -2012. - Vol. 44, №5. - P. 293-298.

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РОЛЬ ХУДОЖЕСТВЕННОЙ ГИМНАСТИКИ В СПОРТИВНОЙ СИСТЕМЕ

Аннотация. В данной статье рассмотрена история зарождения спортивной гимнастики, этапы ее развития, а также ее значение в повышении знаний о месте гимнастики в системе физического воспитания и ее месте в системе образования.

Ключевые слова: гимнастика, гимназия, обучение, воспитание, гигиена-здоровье, гибкость, ловкость, федерация.

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THE ROLE OF RHYTHMIC GYMNASTICS IN THE SPORTS SYSTEM

Abstract. This article examines the history of the origins of artistic gymnastics, the stages of its development, as well as its importance in increasing knowledge about the place of gymnastics in the system of physical education and its place in the education system.

Key words: Gymnastics, gymnasium, training, education, hygiene-health, flexibility, agility, federation.

В Узбекистане создана единая система средств и методов физического воспитания. Гимнастика, один из самых популярных из этих инструментов, по праву занимает важное место в этой системе. Гимнастическая подготовка помогает решить задачу «обеспечить молодое поколение физически здоровым с детства, гармонично развивать свои физические и духовные силы». Гимнастика издавна считалась одним из всех видов спорта, поскольку вечным оснащением спортивной гимнастики для многих видов спорта являются средства выполнения упражнений, направленных на развитие физических качеств, то есть спортивное оборудование и оборудование в зданиях.

«Гимнастика» происходит от греческого слова «гимнос», что означает «обнаженный». Также греческое слово гимнастике (от слова гуммазс-упражнение) представляет собой совокупность специально подобранных физических упражнений, методических приемов, применяемых для укрепления здоровья человека, всестороннего его воспитания и улучшения двигательных навыков, силы, ловкости, быстроты движений, выносливости и другие характеристики система также означает.

Гимнастика имеет большое гигиеническое и оздоровительное значение. Плутарх, один из знаменитых мыслителей древнего мира, так оценивал значение гимнастики для здоровья: «Гимнастика – целебная часть медицины». Известные деятели мировой науки, российские учёные И.М. Сеченов, И.П. Павлов, И.Н. Мечников, П.Ф. Лесгафт, В.В. Гориневские придают большое значение физическим упражнениям, в том числе гимнастике, и считают эти упражнения лучшим средством повышения жизненного тонуса, активности и работоспособности, а также здоровья и активного отдыха.

Гимнастикой занимаются в дошкольных детских учреждениях, школах, средних и высших учебных заведениях, добровольных спортивных обществах, производственных и лечебных учреждениях, лагерях отдыха и санаториях, а также в Армии и Военно-Морском Флоте Узбекистана. Многие занимались гимнастикой у себя дома после прослушивания ее по радио, просмотра по телевизору, а также в домах, принадлежащих домоуправлениям и т. д. Причина такого распространения гимнастики в том, что ее инструменты понятны и разнообразны каждому, а также имеется прекрасная возможность выбора упражнений для решения различных задач физического воспитания.

Жизненные навыки и навыки приобретаются и совершенствуются во время занятий гимнастикой. Гимнастика также очень важна в воспитании. Условность точного распределения тренировочных задач, широкое использование анализа и синтеза движений, сложность разучиваемой двигательной деятельности в различных вариантах выполнения, неограниченное сочетание движений, разучивание множества разнообразных по форме и координации физических упражнений все это позволяет участникам учатся оценивать собственные двигательные возможности и определять общие закономерности двигательной деятельности.

В заключение можно сказать, что гимнастика является эффективным средством эстетического воспитания человека. Чтобы техника выполнения гимнастических упражнений была настолько совершенной, насколько этого требует характерный для гимнастики стиль, движения должны быть плавными и выразительными, движения исполнительницы – уместными и изящными. В результате занятий гимнастикой приобретается хорошая фигура, исправляются дефекты строения тела, достигается очень хорошая пропорция в развитии некоторых суставов тела, а также в развитии тела в целом. Такая гимнастика является ярким примером единства умственного воспитания и физического воспитания. Методы, используемые в гимнастике, позволяют стимулировать активность участников, учитывая их интеллектуальную активность. Он способствует формированию склонности центральной нервной системы, ее способности адаптироваться к различным состояниям мышечной деятельности.

Использованные источники:

1. Умаров М.Н., Умаров Н.Х. Фетхуллова Теория и методика спортивной гимнастики. Методическое пособие. «Узбекский государственный

университет физического воспитания и спорта»- Учебное пособие - Т.: Изд «Научно-техническая информация-пресс», 2018 г.
2. Иноземцева В.В., Крамида И.Е. Занятия практикума на основе гимнастики цигун как динамичный фактор развития личностных компонентов здорового образа жизни у студентов //Актуальные проблемы авиации и космонавтики. 2015. Т. 2. № 10.
3.Хайтметов И.С. Методика проведения хореографических упражнений «Спортивно-педагогическое мастерство в прессе» (Спортивная гимнастика) Учебное пособие – Т.: «Давр»,2020 г.

УДК 616. 89-008.441.44

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ДИФФЕРЕНЦИРОВАННАЯ ПРОФИЛАКТИКА СУИЦИДАЛЬНОГО ПОВЕДЕНИЯ

Резюме. Многие современные теории суицида рассматривают глобальные перемены в социальном окружении как наиболее значимые в смысле влияния на смертность от самоубийств.

Отношения, которые связывают человека с обществом, являются предельно важными при принятии решения о суициде. Качество этих отношений напрямую связано с состоянием психического здоровья, а значит и с уровнем частоты суицидов.

Ключевые слова: незавершенный суицид, профилактика, поведения.

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DIFFERENTIATED PREVENTION OF SUICIDAL BEHAVIOR

Resume. Many modern theories of suicide consider global changes in the social environment as the most significant in terms of their impact on suicide mortality.

The relationship that binds a person to society is of the utmost importance when deciding whether to commit suicide. The quality of these relationships is directly related to the state of mental health, and therefore to the level of frequency of suicides.

Key words: incomplete suicide, prevention, behavior.

Актуальность. Самоубийства продолжают оставаться одной из наиболее актуальных медико-социальных проблем человечества [2]. Вместе с тем, несмотря на значительное число разработанных в разные годы концепций и моделей суицидального поведения, представления о его причинах, механизмах формирования, клинических проявлениях, связи с состоянием психического и соматического здоровья продолжают оставаться противоречивыми и дискуссионными [4]. Вследствие этого программы профилактики самоубийств характеризуются низкой эффективностью.

Наименее изученным аспектом проблемы суицидального поведения являются незавершенные суициды, то есть те случаи, когда акт аутоагрессии не приводит к летальному исходу. Результаты научных исследований этой формы суицидального поведения наиболее противоречивы и трудно

сопоставимы [1]. Несмотря на социальную и медицинскую важность данной проблемы, последнее крупномасштабное исследование покушений на самоубийство было проведено более 30 лет назад, когда страна имела совершенно иное политическое и социально-экономическое устройство [5]. Особое значение изучения незавершенных самоубийств определяется также и тем, что риск совершения повторного, зачастую уже завершенного, суицида у лиц с суицидальными попытками в 10-15 раз выше, чем в общей популяции [3].

Таким образом, на сегодняшний день предупреждение самоубийств является одной из наименее разработанных проблем психиатрии и суицидологии. Существует высокая потребность в определении клинических, личностно-психологических и социальных детерминантов, типологии и динамики суицидального поведения с целью создания эффективных методов его первичной профилактики и предупреждения повторных суицидальных действий у лиц, совершивших покушение на самоубийство. Все это определяет теоретическую и практическую значимость настоящего исследования [4].

Цель исследования. Разработка системы дифференцированной профилактики суицидального поведения на основе определения клинических, социальных, личностно-психологических детерминант, динамики и типа суицидального процесса.

Материалы и методы исследования. Для решения поставленных задач будут обследованы лица, находившиеся после суицидальной попытки в токсикологическом, нейро-реанимационном и ожоговом отделениях Андижанского филиала РЦЭМ, а также по данным архивные данные судебно-медицинских освидетельствований.

Будут изучены 75 больных в возрасте от 18 до 50 лет (50 основная группа, 25 контрольная группа (здоровые люди - добровольцы, рабочие, служащих, из числа учащихся студентов).

Результаты и обсуждение. Установлено, что около половины всех суицидентов имели среднее профессиональное образование - 47,8% (мужчины - 50,6%, женщины -45,2%о). При этом, одна треть из них были им не довольны и считали выбор профессии ошибочным. Большинство таких лиц работали не по специальности и сообщали о желании работать в других сферах. Однако реальных планов по изменению ситуации у них, как правило, не было. Пациенты объясняли это отсутствием возможности (чаще финансовой) освоить другую профессию. Такая ситуация вызывала неудовлетворенность собственной профессиональной деятельностью и выступала как один из негативных факторов, влияющих на их психический статус. Около одной трети суицидентов имели среднее образование - 26,9%) (мужчины - 26,4%), женщины - 27,1%). Как правило, они занимались неквалифицированным трудом.

Эти пациенты в основном были удовлетворены своей деятельностью, а их основные жалобы были связаны с низким уровнем зарплаты и/или плохими

условиями труда. В 19,8% случаев суициденты имели высшее образование (мужчины - 18,9%, женщины -20,7%). Здесь примерно в равных долях были представлены его гуманитарное, техническое и естественнонаучное направления. У этих пациентов на первый план выступали жалобы, связанные с потерей престижа работы и низким уровнем заработной платы. В 5,5% случаев образование суицидентов ограничивалось начальной школой, либо вообще отсутствовало. У половины из них это было связано с наличием психического расстройства. Остальные были пациентами старшей возрастной группы (70 лет и старше), не получившими должного образования по объективным причинам, связанным с историческими особенностями развития страны. Сопоставление полученных данных со сведениями об образовательном уровне по популяции в целом показало, что значительных отличий в группе суицидентов не выявляется. Так, по данным Федеральной службы государственной статистики (Росстата) за 2009 год, высшее образование в России имеют 21,7%; среднее профессиональное - 44,2%; среднее - 23,5%) и не имеют образования - 2% населения. Учитывая это можно утверждать, что уровень образования среди лиц, совершивших суицидальные попытки, соответствует общему уровню образования в популяции.

Однако оценка социального статуса пациентов позволила выявить особенности, значительно отличающие группу суицидентов от общей популяции (табл. 17). Установлено, что наибольшую долю среди суицидентов составили безработные - 37,2% (мужчины - 50,6%, женщины - 24,1%).

Таким образом, доля безработных среди лиц, совершивших суицидальные попытки, в 5,7 раза выше, чем в общей популяции. В особой степени это касается суицидентов мужчин, среди которых удельный вес безработных превышает 50%.

На безработицу как важный фактор суицидального риска указывали в своих работах многие авторы. I. Waldrom., J. Eyer (1975) отмечали, что рост безработицы на 1% приводит к увеличению числа самоубийств на 4%. S. Weyerer., A. Wiedenmann (1995) исследовали влияние четырех экономических показателей на динамику самоубийств: роста экономики, среднего реального дохода, безработицы и частоты банкротств. Авторы считают, что более всего на рост суицидальной активности оказывали влияние именно уровень безработицы и частота банкротств. В нашем исследовании из 147 безработных суицидентов больше половины (61,6%) не имели постоянного места работы уже длительное время - 3 и более лет.

Из них только 19 человек (12,9% от всего числа неработающих) не могли работать из-за прогрессирующего ухудшения состояния здоровья. Остальные (70 человек, или 47,7% от всего числа неработающих) не имели постоянного места работы по ряду причин, не относящихся к их здоровью. В большинстве случаев пациентов не устраивала заработная плата или необходимость работать не по специальности. Часть пациентов были неудовлетворенны условиями труда (в том числе, отдаленность места работы, что для многих пациенток было неприемлемым, так как нужно было успевать

отводить/забирать детей в детский сад/школу). Многие пациенты также отмечали, что с началом финансового кризиса ситуация с поиском работы

Вывод. Знание клинических, личностно-психологических и социальных детерминант суицидального поведения и внедрение системы его дифференцированной профилактики позволит повысить эффективность профилактической, диагностической и лечебно-реабилитационной суицидологической помощи населению.

Внедрение методов селективной профилактики суицидального поведения даст возможность улучшить уровень распознавания суицидоопасных состояний и начальной стадии суицидального процесса врачами-психиатрами, наркологами, а также специалистами общемедицинской сети и психологических служб.

Внедрение разработанных психотерапевтических программ в комплекс антикризисной профилактики позволит повысить эффективность кризисной интервенции суицидов, а программ индикативной профилактики – будет способствовать снижению частоты рецидивов и повторных суицидальных действий. В целом, внедрение предложенных мер способно внести вклад в улучшение суицидологической ситуации в стране.

Использованные источники:

1.Ассаджиоли Р. Психосинтез. М., Психотерапия. 2008. - 384с.
2.Белоусов П.В. Клинико-социальные особенности суицидентов с психосоматическими расстройствами. 15 съезд психиатров России. 1518 ноября, 2005. Материалы съезда. Москва, 2005. - С.434.
3.Войцех В.Ф. Дезадаптация к социуму и суицидальное поведение. // Научные материалы Второго национального конгресса по социальной психиатрии «Социальные преобразования и психическое здоровье». -М., 2006. С. 100-101.
4.Ляшенко А.И., Шпикалов А.Ю., Аведисова А.С., Чахава В.О., Даровская Н.Д. Терапия и профилактика расстройств адаптации у безработных граждан Москвы. // Российский психиатрический журнал. – 2000. №3,-С. 21-26.
5.Gunnell D., Lewis G. Studying suicide from the life course perspective: implications for prevention // The British Journal of Psychiatry. -2005. – Vol. 187, Sep. – P. 206-208.

УДК 62.3.02

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СИЛОВЫЕ КОНТУРА ИМПУЛЬСНЫХ ИСТОЧНИКОВ ПИТАНИЯ С НЕПОСРЕДСТВЕННОЙ СВЯЗЬЮ

Аннотация. Современные импульсные источники питания являются ключевыми компонентами в электронных устройствах, обеспечивая эффективную и стабильную поставку энергии. Одним из важных аспектов их конструкции являются силовые контуры с непосредственной связью, представляющие собой инновационный подход к обеспечению электропитания.

Ключевые слова: Импульсные источники питания, непосредственная связь, силовые контуры, электроэнергетика, трансформаторы, методы стабилизации напряжения, электромагнитные помехи, переходные процессы.

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POWER CIRCUITS OF PULSE POWER SUPPLIES WITH DIRECT COMMUNICATION

Abstract. Modern switching power supplies are key components in electronic devices, providing an efficient and stable supply of energy. One important aspect of their design is the direct coupled power loops, which represent an innovative approach to power supply.

Key words: Switching power supplies, direct coupling, power circuits, electric power, transformers, voltage stabilization methods, electromagnetic interference, transients.

Импульсные источники питания получили широкое распространение в различных электронных устройствах. В таких преобразователях стабилизация выходного напряжения или тока осуществляется изменением ширины прямоугольных импульсов. Использование полупроводниковых приборов в ключевом режиме позволяет получить высокий коэффициент полезного действия и хорошие массогабаритные показатели. На рис. 1 показаны базовые схемы импульсных регуляторов с непосредственной связью: понижающий, повышающий и инвертирующий [1,2]. Инвертирующий регулятор может работать при входном напряжении как выше, так и ниже входного, поэтому он относится к повышающе-понижающим преобразователям. В отличие от понижающего и повышающего регуляторов, полярность на выходе инвертирующего преобразователя противоположна полярности входного напряжения [3,4].

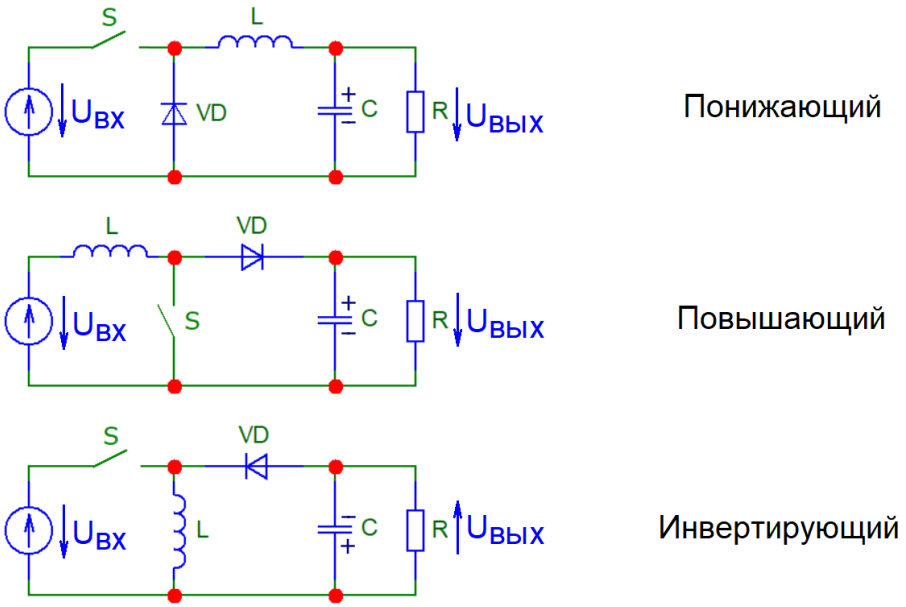

Рисунок 1 – Понижающий, повышающий и инвертирующий регуляторы

Дроссель импульсного преобразователя может работать в различных режимах (рис. 2): режим непрерывного тока (РНТ), режим прерывистого тока (РПТ), граничный режим. В РНТ и граничном режиме период коммутации состоит из двух интервалов – накопления энергии в дросселе и передачи энергии в нагрузку. В РПТ период состоит из трех интервалов – накопления, передачи и отсечки [5,6]. На интервале отсечки ток дросселя не протекает, напряжение на дросселе равно нулю. В РПТ и граничном режиме ток дросселя опускается до нулевого уровня. При этом отпирание ключа происходит при нуле тока, что приводит к отсутствию перекрытия интервалов проводимости «ключ – диод» и уменьшению потерь при коммутации. Токи полупроводниковых элементов в РПТ и граничном режиме имеют треугольную форму, а не трапецеидальную, как в РНТ, что приводит к уменьшению эффективности использования ключевых приборов и увеличению пикового тока ключа/диода/дросселя [7, 8].

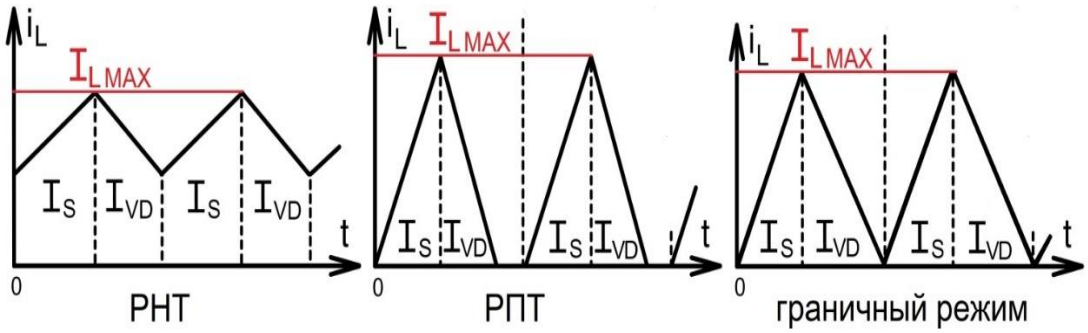

Рисунок 2 – Ток дросселя импульсного преобразователя в различных режимах

Состояния силовых контуров импульсных регуляторов, а также пути протекания токов на интервалах импульса и паузы показаны на рис. 3.

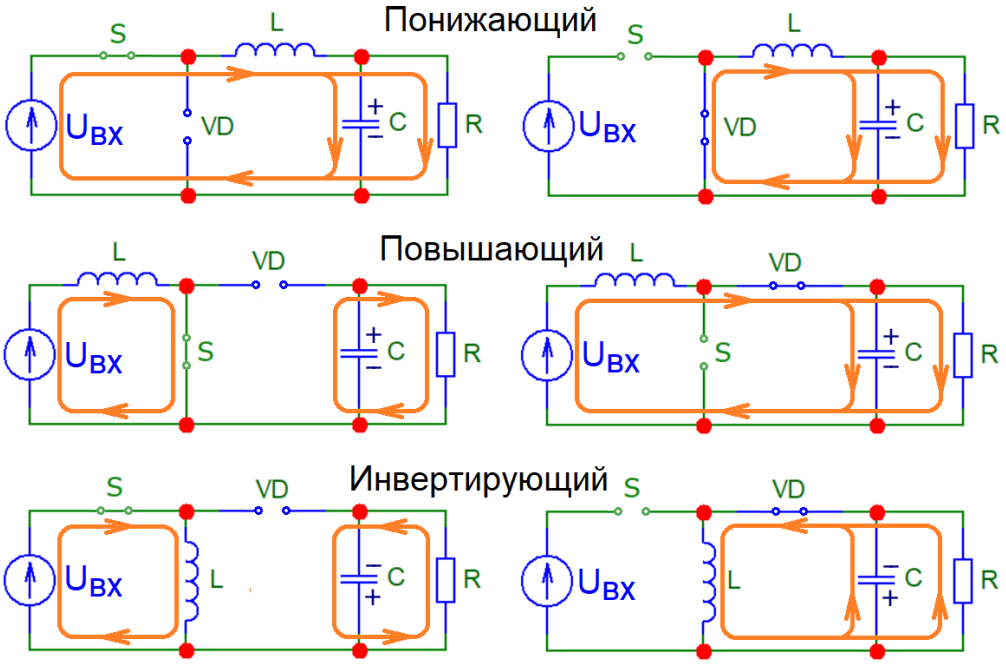

Рисунок 3 – Состояния силовых контуров различных преобразователей на интервалах импульса (слева) и паузы (справа)

Достоинством понижающего регулятора является непрерывность тока, поступающего на выходной LC-фильтр, поэтому параметры реактивных элементов фильтра минимальны. Недостатком преобразователя является прерывистый характер тока, потребляемого от источника питания (ключ на входе) [9,10].

Достоинством повышающего регулятора является непрерывное потребление от источника питания в РНТ, это позволяет уменьшить емкость фильтра на входе регулятора. Из-за непрерывного потребления входного тока данный силовой контур часто используется в качестве корректора коэффициента мощности, когда необходимо обеспечить потребление синусоидального тока от сети с минимальными искажениями [11,12]. Недостатком повышающего регулятора является прерывистый характер тока,

поступающего на выход преобразователя (диод на выходе). В режимах, близких к холостому ходу, повышающий регулятор неработоспособен из-за неограниченного роста выходного напряжения. Использование повышающего преобразователя для значительного увеличения уровня напряжения нецелесообразно, обычно данный регулятор используют для повышения напряжения не более чем в 3-4 раза [13].

Достоинством инвертирующего регулятора является возможность получения выходных напряжений как выше, так и ниже напряжения источника питания. Недостатком инвертирующего преобразователя является прерывистый входного и выходного тока (ключ на входе, диод на выходе). Инвертирующий регулятор в некоторой степени уступает повышающему и понижающему преобразователям по энергетическим и массогабаритным характеристикам [14,15].

Более сложными для анализа силовыми контурами являются последовательно-параллельный преобразователь, конвертеры Кука и Sepic [16, 17]. Схемы преобразователей показаны на рис. 4, все три варианта являются повышающе-понижающими. Последовательно-параллельный преобразователь имеет прерывистое потребление и прерывистую передачу энергии на выход, Sepic-конвертеру свойственно непрерывное потребление энергии по входу и прерывистая передача энергии в нагрузку [18]. Преобразователь Кука, в отличие от последовательно-параллельного преобразователя и Sepic-конвертера, инвертирует полярность входного напряжения. Преобразователи Кука и Sepic содержат только один ключ, который при этом управляется относительно общего провода, что упрощает конструкцию драйвера управления транзистором.

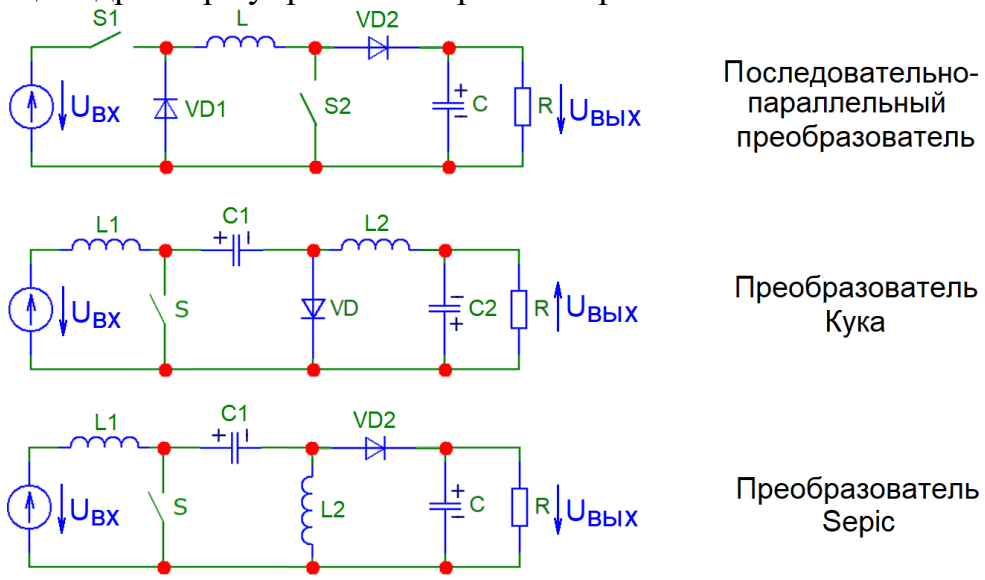

Рисунок 4 – Разновидности повышающе-понижающих преобразователей

Недостатком последовательно-параллельного преобразователя, а также конвертеров Кука и Sepic является более высокая стоимость по сравнению с

базовыми силовыми контурами, обусловленная большим количеством элементов.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).

14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

УДК 378

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ФИНАНСОВАЯ ГРАМОТНОСТЬ СТУДЕНТОВ ЧЕЧЕНСКОГО ГОСУДАРСТВЕННОГО КОЛЛЕДЖА

Аннотация. Статья посвящена проблеме формирования финансовой грамотности у обучающихся студентов в русле их социальной адаптации. Финансовая грамотность рассматривается как один из аспектов экономического сознания; определяется структура финансовой грамотности. Проводимые исследования в стране доказывают, что население страны, в том числе и студенты, имеют недостаточно высокий уровень формирования финансовой грамотности. Результаты исследования свидетельствуют о необходимости усиления внимания к рассматриваемому нами процессу в период профессиональной подготовки студентов и внесения изменений в их основную образовательную программу.

В настоящее время финансовую грамотность определяют, как знание о финансовых институтах и продуктах, и также умение их правильного использования и понимание последствий своих действий. В современной экономике от населения зависит, каким образом можно с выгодой для себя использовать данный продукт.

Ключевые слова: финансовая грамотность, студенты, анализ, анонимное анкетирование, экономическое поведение.

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FINANCIAL LITERACY OF STUDENTS OF THE CHECHEN STATE COLLEGE

Annotation. The article is devoted to the problem of the formation of financial literacy among students in line with their social adaptation. Financial literacy is considered as one of the aspects of economic consciousness; the structure of financial literacy is determined. The research conducted in the country proves that

the population of the country, including students, have an insufficiently high level of financial literacy. The results of the study indicate the need to increase attention to the subject and the process under consideration during the period of professional training of students and making changes to their basic educational program.

Keywords: financial literacy, students, analysis, anonymous survey, economic behavior.

Финансовая грамотность играет важную роль в жизни каждого человека, особенно для студентов, которые только начинают свой путь взрослой жизни. Именно поэтому в Чеченском государственном строительном колледже особое внимание уделяется формированию финансовых навыков и знаний у своих студентов. Здесь студенты имеют возможность не только учиться строительным специальностям, но и развивать свои финансовые навыки, которые пригодятся им в будущем. Колледж предоставляет студентам различные возможности для52 изучения финансовой грамотности, начиная от специальных курсов и тренингов, заканчивая практическими занятиями и проектами. 53

Студенты учатся планировать54 свои финансы, управлять бюджетом, осуществлять рациональные расходы и инвестировать свои средства. Они также знакомятся с основами банковской системы, налогообложения и финансовых инструментов. Все это помогает студентам не только лучше понимать финансовые процессы, но и применять полученные знания на практике. Таким образом, Чеченский государственный строительный колледж делает все возможное, чтобы студенты не только успешно учились, но и готовились к своему финансовому будущему, становясь финансово грамотными и ответственными гражданами.

Финансовая грамотность студентов Чеченского государственного строительного колледжа является одной из важнейших составляющих их успешной адаптации в современном мире. В современной экономической среде, где финансовые решения принимаются каждый день, владение финансовыми навыками становится необходимостью.

Однако, на практике, многие студенты сталкиваются с проблемой отсутствия необходимых знаний в области финансов. Это может привести к неправильным финансовым решениям, долгам и проблемам с управлением личными финансами.

Чтобы решить эту проблему, Чеченский государственный строительный колледж проводит специальные курсы по финансовой грамотности для своих студентов. Эти курсы включают в себя изучение основных понятий и принципов финансов, бюджетирования, управления долгами, инвестирования и планирования будущих финансовых целей.

Вигдорчик Е. А. Финансовая грамотность / Е. А. Вигдорчик – М.: ВИТА ПРЕСС, 2019. – 112 с

Жданова А.О. Финансовая грамотность: материалы для обучающихся. СПО / А.О. Жданова. - М.: ВИТА-ПРЕСС, 2019. - 400 с.

Кроме того, колледж организует различные практические мероприятия, такие как игры, конкурсы и тренинги, которые помогают студентам применить свои знания в реальной жизни. Это позволяет им развить навыки принятия финансовых решений и управления своими финансами.

В результате, студенты Чеченского государственного строительного колледжа становятся более финансово грамотными и уверенными в своих финансовых решениях. Это помогает им успешно вести свои личные финансы, а также готовиться к будущей карьере в сфере строительства и других отраслях экономики.

Таким образом, финансовая грамотность студентов Чеченского государственного строительного колледжа является важным аспектом их образования, который помогает им стать успешными и независимыми в современном мире.

Перед педагогом профессионального обучения ставится принципиально новая общекультурная задача – целенаправленно готовить студентов не только к труду и познанию, но и полноценному вступлению в противоречивые социально-экономические отношения в стране. Подготовка таких конкурентоспособных выпускников возможна только в условиях широкого внедрения экономической составляющей в программы подготовки специалистов среднего звена. Повышение финансово-экономической грамотности возможно через формирование экономических компетенций. Повышение уровня финансовой грамотности студентов обладает реальной возможностью снизить риски банков, связанные с потребительским, ипотечным кредитованием, а также кредитованием малого и среднего бизнеса, т. к. в конечном итоге позволит сократить количество невозвратных кредитов через «воспитание» ответственности и осознанного планирования доходов и расходов с учетом использования финансовых инструментов. 55

Финансовая грамотность способствует не только социально-экономическому развитию страны, но и повышению благосостояния отдельного индивидуума. Грамотный подход к вопросу формирования собственного благосостояния дает человеку чувство стабильности и защищенности. А благосостояние страны в целом складывается из благосостояния ее граждан.

Молодежь — это тот фундамент, без которого невозможно построить новую экономическую систему России.

Систему, в которой финансовый потенциал населения станет финансовой основой развития реальной экономики. Именно это обуславливает огромную значимость экономического образования на базе СПО.

Жданова А.О., Зятьков М.О. Финансовая грамотность: Рабочая тетрадь. Среднее профессиональное образование - М.: ВАКО, 2020. - 48 с.

Форкунова Л.В., Конева Б.Н. Исследование операций в финансовых ситуациях посредством дидактической игры // Ярославский педагогический вестник. 2020. № 1. С. 114-119.

Использованные источники:

1. Вигдорчик Е. А. Финансовая грамотность / Е. А. Вигдорчик – М.: ВИТА ПРЕСС, 2019. – 112 с.
2. Жданова А.О. Финансовая грамотность: материалы для обучающихся. СПО / А.О. Жданова. - М.: ВИТА-ПРЕСС, 2019. - 400 с.
3. Жданова А.О., Зятьков М.О. Финансовая грамотность: Рабочая тетрадь. Среднее профессиональное образование - М.: ВАКО, 2020. - 48 с.
4. Форкунова Л.В., Конева Б.Н. Исследование операций в финансовых ситуациях посредством дидактической игры // Ярославский педагогический вестник. 2020. № 1. С. 114-119.

УДК 33 – 2964

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КАЧЕСТВО АУДИТА: КЛЮЧЕВЫЕ АСПЕКТЫ И ЗНАЧЕНИЕ В СОВРЕМЕННОМ БИЗНЕСЕ

Аудит играет важную роль в современном бизнесе, обеспечивая надежность финансовой отчетности и повышая уровень доверия со стороны заинтересованных сторон. Особое внимание уделяется значению аудита для бизнеса, подчеркивая его влияние на принятие стратегических решений, выявление рисков и соблюдение нормативных требований. Подход к оценке качества аудита рассматривается в контексте современных требований и ожиданий бизнес-сообщества.

Ключевые слова: аудит, качество аудита, стандарты аудита, риски бизнеса, эффективность аудита.

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AUDIT QUALITY: KEY ASPECTS AND IMPORTANCE IN MODERN BUSINESS

Auditing plays an important role in modern business, ensuring the reliability of financial statements and increasing the level of trust on the part of stakeholders. Particular attention is paid to the importance of auditing for business, emphasizing its impact on strategic decision-making, risk identification and compliance with regulatory requirements. The approach to audit quality assessment is considered in the context of modern requirements and expectations of the business community.

Keywords: audit, audit quality, audit standards, business risks, audit effectiveness.

Аудит, как инструмент проверки и подтверждения достоверности финансовой отчетности, играет важную роль в современном бизнесе. Его целью является не только выявление ошибок и несоответствий в бухгалтерской отчетности, но и обеспечение доверия со стороны организации, инвесторов.

Независимость аудитора – фундаментальный принцип, обеспечивающий объективность проверки. Аудитор должен действовать без вмешательства со стороны клиента, что предотвращает конфликт интересов и гарантирует, что результаты аудита не будут искажены в интересах компании.

Примерами могут служить ситуации, когда аудитор подвергается давлению со стороны руководства компании для улаживания определенных вопросов. Нарушение независимости может привести к потере доверия со стороны инвесторов и ослабить ценность аудита.

Ключевым фактором, который определяет эффективность аудита, является его качество.

Высокий уровень профессиональной компетентности является неотъемлемым условием успешного аудита. Аудитор должен обладать глубоким знанием бухгалтерии, налогообложения, финансового управления и особенностей отрасли клиента.

Образование, сертификации и регулярное обновление знаний важны для поддержания высокого уровня компетентности аудиторов. Только тогда они смогут адекватно оценить сложные финансовые операции и специфику деятельности компании.

Соблюдение установленных стандартов аудита является гарантией единообразия и качества аудиторской практики. Международные стандарты аудита предоставляют рамки для проведения аудиторской проверки и устанавливают нормы, которым должны следовать аудиторы.

Нарушение стандартов может привести к неправильной интерпретации фактов, ошибочным выводам и ухудшению качества аудита.

Придерживаться стандартов – это обязанность аудиторов перед своими заказчиками и обществом в целом.

Обоснованные выводы – это результат компетентного анализа аудиторских доказательств. Аудитор должен собрать достаточное количество информации, чтобы сделать обоснованные выводы относительно достоверности финансовой отчетности.

В случае недостаточной обоснованности выводов риск принятия неверных решений организациями увеличивается. Это может повлечь за собой утрату доверия к аудитору и даже правовые последствия.

Высокие этические стандарты неотъемлемы для аудиторской деятельности. Аудитор должен соблюдать принципы честности, конфиденциальности и профессиональной секретности. Нарушение этических норм может существенно повредить репутацию аудитора и привести к потере клиентов.

Примером может служить ситуация, когда аудитор разглашает конфиденциальную информацию о компании без её согласия.

Работа с рисками – неотъемлемая часть качественного аудита. Аудитор должен адекватно оценивать риски, связанные с деятельностью клиента, и разрабатывать стратегии их управления.

Недостаточная работа с рисками может привести к упущению важных аспектов в финансовой отчетности, что, в свою очередь, может повлиять на решения инвесторов и руководителей.

Эффективное взаимодействие с клиентом – это важный элемент обеспечения качества аудита. Аудитор должен уметь объяснить клиенту особенности аудиторской проверки, выявленные проблемы и рекомендации по их устранению.

Открытость в общении и готовность обсуждать результаты аудита способствуют пониманию и доверию со стороны клиента.

Высокое качество аудита имеет стратегическое значение для бизнеса и всех его заинтересованных сторон. Инвесторы основывают свои решения на достоверности финансовой отчетности, и именно аудит обеспечивает эту достоверность.

Для бизнеса качественный аудит является инструментом управления рисками. Он позволяет выявить потенциальные проблемы и недочеты, предостерегая от возможных последствий.

Современная среда предъявляет новые требования к аудиту. Технологические изменения, международная экономическая интеграция и повышенные ожидания сотрудников создают вызовы, требующие от аудиторов постоянного совершенствования.

Для обеспечения качества аудита необходимо следить за новыми тенденциями, адаптироваться к изменяющемуся законодательству и использовать современные технологии в своей практике.

Качество аудита является фундаментальным элементом доверия к финансовой отчетности. Профессиональные аудиторы, соблюдающие высокие стандарты, играют ключевую роль в обеспечении этого доверия.

Перспективы развития аудиторской профессии связаны с усилением контроля, повышением требований к профессиональной подготовке и использованием новых технологий. Роль аудиторов становится все более важной в условиях быстро меняющейся бизнес-среды.

Использованные источники:

1. Стратегия внутреннего аудита и цифровизация Азарова Е.А., Зотова В.В., Чернованова Н.В. В сборнике: Перспективы развития современного общества: социология, экономика, право. Материалы всероссийско научно-практической конференции с международным участием. Отв. редактор А.А. Зарайский. Саратов, 2022. С. 3-6.

2. Использование программных решений цифровой экономики для нужд аудита Юров Д.В., Чернованова Н.В. В сборнике: Внедрение результатов инновационных разработок: проблемы и перспективы. сборник статей Международной научно-практической конференции. Уфа, 2022. С. 151-155.

3. Повышение квалификации специалистов по бухгалтерскому учету в условиях развития цифровой экономики Чекрыгина Т.А., Горбачева А.С., Мелихов В.А., Сувонова Л.С. В сборнике: Инструменты развития кадрового

потенциала АПК. Материалы научно-методической конференции с международным участием. Волгоград, 2023. С. 291-295.
4. Особенности и перспективы применения цифровых технологий в сельском хозяйстве Чернованова Н.В., Ягупова Е.В., Дынникова Е.А. В сборнике: Научное обоснование стратегии цифрового развития АПК и сельских территорий. материалы Национальной научно-практической конференции. Волгоградский государственный аграрный университет. Волгоград, 2023. С. 234-239.

УДК 911.53

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ОЦЕНКА ВЛИЯНИЯ ИЗМЕНЕНИЯ КЛИМАТА НА СЕЛЬСКОЕ ХОЗЯЙСТВО ХОРЕЗМСКОГО ОАЗИСА

Аннотация. Приведены сведения о влиянии деградации земель, вторичного засоления почв, наводнений и загрязнений, сильных ветров, испарения воды с поверхности почвы в результате жары на развитие земледелия в Хорезмском оазисе и мерах по их предотвращению.

Ключевые слова: Деградация, уровень грунтовых вод, загрязнение, эрозия, промышленность, антропогенное опустынивание, бытовые отходы, тайфун, антропогенное воздействие, флора, фауна.

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ASSESSMENT OF THE IMPACT OF CLIMATE CHANGE ON AGRICULTURE OF THE KHOREZM OASIS

Abstract. Information is provided on the impact of land degradation, secondary soil salinization, floods and pollution, strong winds, and the evaporation of water from the soil surface as a result of heat on the development of agriculture in the Khorezm oasis and measures to prevent them.

Key words: chloride, degradation, water table, pollution, erosion, industry, man-made desertification, domestic waste, typhoon, anthropogenic impact, flora, fauna.

Введение. Сегодня отчетливо видна глобальная проблема – негативные последствия изменения климата под антропогенным воздействием на сельское хозяйство, что обуславливает необходимость принятия мер с научным подходом.

Мы знаем, что нехватка воды вызвана такими факторами, как рост населения и изменение климата. В результате изменения климата количество водных ресурсов и процесс их формирования меняются из года в год.

С момента возникновения сельского хозяйства человечество насчитывало 2 млрд. потеряли плодородные земли. По оценкам экспертов, 6-7 миллионов в год только за счет эрозии. га земли выведено из сельскохозяйственного использования. В настоящее время площадь, подверженная опустыниванию в засушливых регионах мира, достигла 9 млн км^2, еще 30 млн км^2 находятся под угрозой опустынивания. Любая оценка изменения климата учитывает показатели природных ресурсов, существования населенных пунктов, сельскохозяйственных и промышленных предприятий и их использования.

Основная часть. Влияние изменения климата на сельское хозяйство заметно и в Хорезмском оазисе, где деградируют земли и расширяется опустынивание. Также много вырубают деревья; вторичное засоление почв, подтопление и загрязнение; воздействие воды на почву и ирригационная эрозия; антропогенное опустынивание при освоении земель сельскохозяйственного, промышленного и других целей; Примеры включают загрязнение почвы и потерю производительности из-за использования агрессивных химикатов в сельском хозяйстве, промышленных и бытовых отходов, а также монополизации сельского хозяйства [2].

Изменение климата в оазисе усилило наличие высоких летних температур и сильных ветров, которые разносят пыльные бури, отравленные токсичными химикатами, вредными для здоровья человека, ускоряют испарение воды с поверхности почвы, отрицательно влияя на развитие и продуктивность сельскохозяйственные культуры.

В результате изучения изменений климата в оазисе специалистами установлено, что в оазисе возникают следующие негативные последствия. То есть максимальное повышение летней температуры увеличилось с 43°C до 53°C, а зимой средняя температура наблюдалась от -27°C до -32°C. Кроме того, увеличивается риск повторных засух из-за снижения влажности почвы, научные наблюдения показали, что периодические засухи происходят каждые три года каждые десять лет [3].

Учитывая изменение климата в оазисе, в целях улучшения мелиоративного состояния орошаемых земель и достижения рационального использования водных ресурсов, повышения продуктивности земель и защиты почв целесообразно осуществить следующие мероприятия:

- предотвращение перезасоления и заболачивания орошаемых земель, т.е. строительство достаточного количества, своевременная очистка и реконструкция коллекторно-канавочных систем;

- соблюдение норм орошения сельскохозяйственных культур и широкое использование новейших современных технологий орошения;

- предотвращение орошения, водной и ветровой эрозии, т.е. расширение площади орошаемых земель, особенно в оазисах, прилегающих к пустыне, оросительных каналах, по краям автомобильных дорог - защитных рощ - живых изгородей;

- с учетом природных условий мест, размещения сельскохозяйственных культур, строгого соблюдения правил севооборота;

- своевременное проведение агротехнических мероприятий, таких как зяблевая вспашка, промывка солью, соблюдение агротехнических правил, большее использование органических удобрений;

- повышение культуры земледелия, широкое использование зарубежного опыта, опора на науку;

- проведение качественной рекультивации земель с поврежденным почвенным покровом;

- охрана полезной почвенной флоры и фауны от загрязнения почв;

На сегодняшний день сохраняется вероятность того, что посевы ранней весной в Хорезмском оазисе пострадают от низкой температуры первых заморозков. Среди последствий изменения климата, которые могут оказать негативное влияние на развитие сельского хозяйства региона, можно указать следующие [2].

1. Повышение температуры воздуха в регионе на 2-3°C приведет к нарушению сроков посадки и режима орошения, в результате чего урожайность сельскохозяйственных культур значительно снизится.

2. В период роста растений (вегетации) наблюдается усиление оросительных процессов в среднем на 10%.

3. В зимне-осенние месяцы из-за увеличения испарения полив увеличивают на 5-10% по сравнению с обычными агротехнологическими мероприятиями по вымыванию солей и удержанию влаги.

4. В условиях многоводности регионов увеличивается миграция солей через воду, что приводит к активизации процессов соленакопления в почве.

5. Из-за эрозии, засоления, миграции песка и соли сокращается площадь обрабатываемых земель.

6. Уменьшение площади водолюбивых растений приводит к потерям питательной базы.

Заключение. Сохранение системы естественных водоемов в оазисе, сохранение биоразнообразия, восстановление биологических ресурсов, сохранение фауны и флоры, развитие рыболовства за счет создания искусственных озер, резкое сокращение хлопковых полей, требующих больше всего воды, сокращение объема водопользования вдвое, меньше воды. Производительность сельского хозяйства можно в определенной степени поддерживать за счет посадки деревьев, которые в ней нуждаются.

Использованные источники:

1. Рахимова Т., Аллабердиев Р. Перспективные засухоустойчивые растения для посева на осущенном дне Арала. Материалы международной конференции. Ташкент, 2018.
2. Набиев Ў., Қаххорова М., Қориева Д. Қишлоқ хўжалиги, экологик муаммолар. Тошкент, 2002.
3. Холмўминов Ж.Т. Иқлим ўзгаришининг қишлоқ хўжалиги ривожланишига таъсири ва унинг оқибатларини юмшатиш, иқлим ўзгариши масалаларини ҳал қилишга замонавий ёндашиш. Тошкент, 2018 й.

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ТРЕБОВАНИЯ К РАЗЛИЧНЫМ ВИДАМ БЕТОНА ДЛЯ СТРОИТЕЛЬСТВА ТРАНСПОРТНЫХ ИСКУССТВЕННЫХ СООРУЖЕНИЙ В УСЛОВИЯХ КНР

Аннотация. Данная статья посвящена анализу требований к бетону при строительстве транспортных искусственных сооружений в условиях КНР. В тексте подробно рассмотрены основные аспекты, такие как выбор цемента, песка и крупного заполнителя, а также использование добавок. Акцент сделан на строгом соответствии материалов стандартам и нормам безопасности, что существенно влияет на качество и долговечность бетонных конструкций.

Ключевые слова. бетон, строительство, транспортные искусственные сооружения, требования, материалы, стандарты, безопасность, долговечность.

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REQUIREMENTS FOR DIFFERENT TYPES OF CONCRETE FOR THE CONSTRUCTION OF TRANSPORT ARTIFICIAL STRUCTURES IN THE PRC CONDITIONS

Abstract. This article is devoted to the analysis of the requirements for concrete during the construction of transport artificial structures in the conditions of the People's Republic of China. The text covers in detail key aspects such as the selection of cement, sand and coarse aggregate, and the use of admixtures. The emphasis is on strict compliance of materials with safety standards and regulations, which significantly affects the quality and durability of concrete structures.

Keywords. concrete, construction, transport artificial structures, requirements, materials, standards, safety, durability.

В свете стремительного развития транспортной инфраструктуры в Китае в настоящее время, содействующего росту социально-экономического строительства, внимание к развитию транспортных инженерных сооружений, тесно связанных с экономическим развитием страны, должно быть повышено со стороны соответствующих ведомств. Независимо от типа транспортного проекта, для его реализации требуется использование бетонных материалов, и технология бетонных работ напрямую влияет на качество всего транспортного проекта. Несмотря на долгую историю развития транспорта в Китае,

исследования в области гражданского строительства транспортных проектов начали проводиться относительно недавно, что приводит к множеству проблем в технологии бетонных работ на практике. Поэтому строительные компании должны уделять большое внимание технологии бетонных работ и точно следить за особенностями конкретных технологических процессов, чтобы повысить качество транспортных инженерных проектов.

Строительство транспортных искусственных сооружений в Китае представляет собой системную и сложную деятельность, включающую множество специализированных аспектов. Основная часть работ проводится под открытым небом, что увеличивает сложность строительства, подвергая его влиянию различных факторов, таких как окружающая среда и климат. Особое внимание уделяется применению технологий бетонирования, при этом каждая технология предъявляет определенные требования к условиям стройплощадки. Эффективное использование технологий бетонирования необходимо для полного раскрытия преимуществ данного процесса в строительстве. Бетон представляет собой композитный материал, основанный на цементе, крупном и мелком заполнителе, воде и других компонентах, он обладает высокой прочностью, водонепроницаемостью и долговечностью. Применение бетона в транспортных инженерных проектах позволяет избежать деформации структур из-за воздействия окружающей среды и повысить его сопротивление давлению и устойчивость к проникновению влаги. Перед началом работ по бетонированию необходимо, чтобы технические специалисты освоили все технические стандарты и требования для этапа строительства, что подразумевает следующие меры: в первую очередь, исходя из требований строительства, провести всестороннюю оценку технологии и процесса строительства, обеспечивая тем самым выполнимость и разумность строительной технологии. Во-вторых, провести управление материалами, уделяя особое внимание качеству и характеристикам сырья для бетона, чтобы обеспечить полное соответствие требованиям по качеству строительства. В-третьих, в соответствии со стандартами строительного качества научно определить пропорции бетонной смеси, обеспечивая тем самым соответствие качества бетонирования ожидаемым целям. В-четвертых, провести своевременные работы по уходу за бетоном, принимая различные методы ухода для различных компонентов бетона, тем самым повышая его устойчивость к давлению и землетрясениям. В процессе строительства бетонных конструкций в транспортных инженерных проектах необходимо обеспечивать непрерывное и продолжительное выполнение работ, но на практике строительство подвергается воздействию множества факторов и динамических переменных, что затрудняет обеспечение непрерывности работ. Прерывание строительного процесса приводит к временным промежуткам при заливке бетона, и неправильное соединение этапов строительства может негативно сказаться на консолидации бетона. В связи с этим строительный персонал должен обладать высокой квалификацией, стратегически резервировать места для строительных швов, точно определять положение стыков по строительной схеме. В местах строительных швов бетон

трудно соединиться с остальной частью, поэтому обычно выбирают места с минимальным воздействием сдвигов, чтобы обеспечить высокое качество бетонирования. После научного определения состава бетонной смеси в рамках строительства транспортных инженерных проектов необходимо приступить к вибрированию и заливке. Для различных предварительно изготовленных бетонных конструкций применяют разные методы вибрирования. Если размеры предварительно изготовленных конструкций невелики, то можно использовать вибрационный стол. Чтобы обеспечить плотность предварительно изготовленных конструкций, необходимо соблюдать установленное время для вибрирования, не допуская его завершения раньше времени. Технология заливки бетона напрямую влияет на степень его затвердевания, поэтому важно обеспечивать непрерывность процесса, хорошо соединяя новый и старый бетон в ходе конкретной операции. Уход за бетоном в рамках строительства транспортных инженерных проектов является заключительным этапом, играющим важную роль в обеспечении его качества. Строительный персонал должен в соответствии с требованиями стройплощадки выбирать правильные методы ухода, постепенно улучшая результаты строительства бетона. Для этого могут использоваться технологии пленочного ухода и ухода с применением увлажнителей. Перед демонтажем формы, особенно важно контролировать температуру внутри и снаружи бетона, а также время ухода, чтобы предотвратить негативное воздействие на строительство бетона. При использовании пленки для ухода необходимо обеспечивать наличие конденсата внутри пленки, чтобы избежать негативного воздействия на строительный процесс. В то же время необходимо назначить квалифицированных специалистов для всестороннего контроля, разумно регулировать время ухода и тщательно фиксировать данные, что позволит полностью повысить качество строительства бетона.

В процессе разработки проекта бетонной конструкции необходимо четко определить параметры, такие как срок службы, уровень безопасности, категорию сейсмической защиты, а также функциональные требования, что подразумевает анализ предельного состояния несущей способности, предельного состояния нормальной эксплуатации и расчета долговечности, соответствуя функциональным и структурным требованиям проекта. При выборе марки конструкционного бетона необходимо учитывать требования несущей способности, жесткости и долговечности инженерной конструкции. Для конструкций с расчетным сроком службы 50 лет минимальная марка прочности конструкционного бетона должна соответствовать определенным стандартам в зависимости от типа конструкции. Стальные стержни, и обычные и предварительно напряженные, должны соответствовать требованиям инженерной конструкции в предельном состоянии несущей способности и предельном состоянии нормальной эксплуатации. Нормативные значения прочности стержней и бетона должны иметь гарантийный показатель не менее 95%, а расчетные значения прочности должны соответствовать установленным стандартам. В железобетонных конструкциях необходимо предпринимать меры

для обеспечения долговечности, учитывая назначение конструкции и условия воздействия окружающей среды. Элементы из железобетона и предварительно напряженного бетона должны взаимодействовать так, чтобы обеспечивать их совместную работу в различных условиях эксплуатации. Проектирование конструкционного бетона должно учитывать пропорции смеси и обеспечивать необходимые эксплуатационные характеристики, механические свойства и долговечность. Необходимо внедрять меры по контролю трещин в бетоне на всех этапах проектирования, материалов, строительства и обслуживания, учитывая категорию компонента и окружающую среду.

Основные контрольные параметры цемента для конструкционного бетона включают время схватывания, стабильность, прочность раствора и содержание хлорид-ионов. Важно, чтобы тип и состав смешивающих материалов в цементе были четко указаны в заводской документации. Песок, применяемый в конструкционном бетоне, также должен соответствовать строгим стандартам. Твердость песка не должна превышать 10%, а для бетона с особыми требованиями, такими как непроницаемость, морозостойкость, коррозионная стойкость или износостойкость, содержание ила в песке не должно превышать 3,0%, а индекс твердости не должен превышать 8%. Морской песок должен быть очищен, а содержание ионов хлорида в песке для железобетона и предварительно напряженного бетона должно быть строго ограничено. Крупный заполнитель, который используется в конструкционных бетонах, также подлежит внимательному контролю. Показатель твердости крупного заполнителя не должен превышать 12%, а для бетона с особыми требованиями, такими как непроницаемость, морозостойкость и др., содержание грязи и глиняных блоков в крупном заполнителе также строго регламентировано. Добавки для конструкционного бетона должны соответствовать определенным правилам. Например, запрещено использование добавок с определенными веществами в проектах питьевого водоснабжения, находящихся в контакте с питьевой водой. Также строго запрещено применение определенных веществ в бетонных конструкциях с использованием оцинкованной стали, алюминия, открытыми стальными стержнями, использующих источники постоянного тока и в пределах 100 м от источника высокого напряжения постоянного тока. Все эти требования направлены на обеспечение высокого качества и долговечности бетонных конструкций, используемых в транспортных искусственных сооружениях в условиях КНР.

В современных условиях строительства транспортных искусственных сооружений в КНР особое внимание уделяется требованиям к бетону. Различные компоненты бетонных конструкций, начиная от цемента и заканчивая добавками, подвергаются строгому контролю, с учетом особенностей конкретных проектов. Важность правильного выбора материалов, их соответствия стандартам и требованиям качества подчеркивается не только с точки зрения безопасности и надежности конструкций, но и с учетом их долговечности и устойчивости к различным воздействиям внешней среды.

Использованные источники:

1. Белоглазова М. С. Анализ и проблемы строительной отрасли // Молодой ученый. - 2018. - №4. - С. 104-107. [Электронный ресурс]. - https://moluch.ru/archive/190/48032/
2. Развитие транспортной инфраструктуры и активное строительство Китая. [Электронный ресурс]. - http://ru.shanghaimetal.com/-index.php?ac=artide&at=read&did=7014
3. Нанотехнологии в строительстве, строительные наноматериалы - опыт Китая. [Электронный ресурс]. http://elport.ru/articles/nano-tehnologii_v_stroitelstve_stroitelnyie_ nammaterialyi_-_opyit_kitaya
4. [Электронный ресурс]. Режим доступа: http://fb.ru/article/220994/telebashnya-guanchjou-kitay/ (дата обращения: 01.12.2017).

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СРАВНЕНИЕ ТРЕБОВАНИЙ К БЕТОНУ ДЛЯ СТРОИТЕЛЬСТВА ТРАНСПОРТНЫХ ИСКУССТВЕННЫХ СООРУЖЕНИЙ В РОССИЙСКИХ И КИТАЙСКИХ УСЛОВИЯХ

Аннотация. Эта статья исследует требования к бетону при строительстве транспортных сооружений в Китае и России. В статье рассматриваются уникальные подходы к контролю качества, технологиям и методам обеспечения долговечности и безопасности бетонных конструкций в обоих странах. Авторы выявляют основные отличия и общие черты в требованиях, подчеркивая уникальные особенности строительных индустрий.

Ключевые слова. бетон, транспортные сооружения, Китай, Россия, контроль качества.

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COMPARISON OF CONCRETE REQUIREMENTS FOR CONSTRUCTION OF TRANSPORT ARTIFICIAL STRUCTURES IN RUSSIAN AND CHINESE CONDITIONS

Abstract. This article explores the requirements for concrete in the construction of transportation structures in China and Russia. The paper examines unique approaches to quality control, construction technologies, and methods to ensure the durability and safety of concrete structures in both countries. The authors identify key differences and commonalities in requirements, highlighting the unique features of the construction industries.

Keywords. Concrete, Transportation structures, China, Russia, Quality control.

Строительство транспортных сооружений в современном мире требует высокотехнологичных и качественных материалов, среди которых бетон занимает центральное положение. В данной статье мы рассмотрим требования к бетону при возведении транспортных сооружений в двух странах – Китае и России. Обе страны, обладая богатым наследием строительных традиций, предъявляют высокие стандарты в области инфраструктурного строительства, но как мы увидим, подходы и акценты в требованиях к бетону в этих двух странах различны, отражая их уникальные строительные практики и индустриальные стандарты.

В 80-е годы XX века в России были разработаны и внедрены стандарты для бетона, используемого в строительстве транспортных сооружений. Одним из таких стандартов был ГОСТ 10178-85*, который регулировал требования к портландцементу для бетона мостов марки 500 Д0-Н, данный цемент не содержал активных минеральных добавок (пуццоланов) и обеспечивал заданные свойства бетона по прочности, морозостойкости и водонепроницаемости. Цемент этой марки предназначался для использования в бетоне, который применяется при строительстве транспортных сооружений, таких как мосты, он обеспечивал хорошую прочность и другие необходимые свойства для того, чтобы бетонные конструкции могли выдерживать нагрузки транспортного движения и воздействие внешних факторов. Для уменьшения термонапряжений в бетоне в процессе твердения, предложено использование микронаполнителей, таких как зола-унос, шлак и тонкомолотый кварцевый песок, данные материалы имеют более высокую удельную поверхность и меньший размер частиц по сравнению с цементом, это позволяет снизить количество выделяющегося тепла при твердении бетона, что может сократить количество и развитие микротрещин в конструкции. Для изготовления транспортных конструкций разрабатываются два технологических направления. Первое связано с производством подвижных бетонных смесей, содержащих микронаполнители и суперпластификаторы, данные добавки способствуют самоуплотнению бетонных смесей без использования вибрации и позволяют достигнуть заданных свойств в железобетонных конструкциях.

Вместе с постоянным совершенствованием состава и технологий бетонирования, акцент в России также делается на учете современных требований к экологической устойчивости и эффективности строительства. Продолжают проводиться исследования с целью улучшения характеристик бетона и разработки инновационных подходов. Важным направлением стало внедрение технологий, способствующих уменьшению термических напряжений в бетоне. Применение микронаполнителей, таких как зола-унос, шлак и тонкомолотый кварцевый песок, не только улучшает свойства бетона, но и способствует снижению негативных воздействий на окружающую среду, так как они могут быть побочными продуктами промышленных процессов. Также наблюдается увеличенный интерес к применению самоуплотняющихся бетонов, данная технология не только обеспечивает легкость заливки, особенно в труднодоступных местах, но и способствует уменьшению затрат времени и ресурсов, так как не требует применения вибрации для удаления воздушных пузырей. Важным аспектом развития бетонных технологий в транспортных сооружениях также является поддержание высокого уровня стандартизации и контроля качества на всех этапах производства и строительства, это способствует уверенности в надежности и долговечности бетонных конструкций, что является ключевым аспектом в обеспечении безопасности и долгосрочной эффективности транспортных сооружений.

В Китае широко используется бетон в крупномасштабных инфраструктурных проектах, включая транспортные сооружения. Главной

задачей бетонных конструкций в таких проектах является выдерживание нагрузок и обеспечение устойчивости, но проблемы с контролем качества могут создавать риски для безопасности транспортных проектов. Основные аспекты включают нестрогий контроль качества сырья и отсутствие системы проверки входящих материалов, это может привести к несоответствию строительных материалов требованиям, что в свою очередь влияет на несущую способность бетонных элементов. Также наблюдаются проблемы с технологией строительства, включая ненаучное соотношение смешивания материалов и недостаточный контроль выдержки и вибрации бетона, данные факторы могут привести к нестабильному качеству бетона. Для улучшения ситуации предлагается усиление контроля качества бетона, включая более точное обнаружение однородности смеси и проверку осадки бетона, также предлагается строже регулировать выбор сырья и технологии строительства, чтобы обеспечить соответствие стандартам и повысить безопасность транспортных сооружений.

В процессе строительства транспортных сооружений в Китае выдвигаются строгие требования к бетону. Важное внимание уделяется контролю качества сырьевых материалов, включая цемент, крупный и мелкий заполнители, добавки и воду. Все материалы должны проходить тщательную проверку и иметь необходимую сертификацию качества. Цементные материалы обязаны предоставить документы о сертификации, выданные соответствующими административными органами. Проводятся частые выборочные проверки и повторные испытания цемента на месте, чтобы удостовериться в соответствии его технических параметров проектным требованиям. Требования также включают точное соотношение компонентов бетонной смеси, определение которого проводится экспериментальным путем, учитывая тип конструкции, условия строительства и характеристики сырьевых материалов. Система строительного надзора должна обеспечивать упорядоченное выполнение всех этапов бетонного строительства, включая комплексные проверки, контроль качества на ключевых участках и эффективные оценки рабочих. Техническое обслуживание включает в себя контроль температуры и влажности в зоне отверждения бетона. Регулирование этих параметров помогает предотвратить структурные трещины. Система строительного надзора также требует эффективных корректирующих мер в случае возникновения проблем с качеством бетонных конструкций. Все эти меры направлены на обеспечение безопасного и качественного строительства транспортных сооружений в Китае.

Требование	Китай	Россия
Компоненты бетона	Цемент, заполнител (крупный, мелкий), добавк вода	Цемент, песок, щебень, вод добавки
Контроль качест сырьевых материалов	Строгая проверка квалификация; документы сертификации	Стандартная проверка сырь требования к сертификации
Цементные материалы	Сертификация качеств проверки на месте	Обязательные документы сертификации качества
Соотношение компонентов бетонно смеси	Определение экспериментальным путе учет условий строительства	Зависит от проекта, опытны расчеты
Техническое обслуживание	Регулирование температур и влажности зон отверждения	Управление температурой влажностью в процес отверждения
Контроль технологических процессов	Строгий контрол регулярные проверки н месте	Важен контроль качества, н менее строгие процедуры
Система строительно надзора	Комплексные проверк оценки, регулярные аудиты	Специализированные руководители, комплексны проверки

Контроль изменений бетонной смеси	Проверка при каждо изменении; рассмотрени замены производителей	Требуется проверк рассмотрение замены п факту
Требования к хранени цемента	Классификация и хранение соответствии с номеро заводской партии	Эффективное управление дл избежания повреждени качества
Требования оборудованию дл бетоносмешения	Гарантировать точност оборудования; регулярны проверки	Точная калибровка пере каждым измерением
Контроль температуры влажности	Регулирование дл предотвращения трещин сохранения тепл гидратации	Влияет на процесс отверждения и структурную устойчивость

Сравнительная таблица требований к бетону при строительстве транспортных сооружений в Китае и России выявляет различия в подходах и акцентах, уделяемых контролю качества и технологическим процессам в двух странах. Обе страны придают высокий приоритет обеспечению прочности, долговечности и безопасности бетонных конструкций, однако способы достижения этого общего цели имеют свои особенности. В Китае внимание уделяется строгому контролю качества сырьевых материалов, начиная от цемента до заполнителей, с особым акцентом на сертификацию и регулярные проверки на месте. Техническое обслуживание бетона тоже стоит на первом плане, включая регулирование температуры и влажности в зоне отверждения. Контроль изменений в бетонной смеси и точность оборудования для бетоносмешения также подчеркиваются как важные аспекты обеспечения высокого качества бетона. В России, наряду с обязательной сертификацией цемента, большее внимание уделяется контролю технологических процессов. Система строительного надзора и комплексные проверки играют важную роль в обеспечении упорядоченного выполнения всех этапов бетонного строительства.

Особое внимание уделяется эффективному управлению, чтобы избежать повреждения качества цементных материалов воздействием факторов окружающей среды. Обе страны подчеркивают необходимость точного контроля и регулирования в различных аспектах производства и применения бетона, что обеспечивает высокий стандарт безопасности и надежности в строительстве транспортных сооружений. Отличительные черты подходов Китая и России к контролю качества бетона в большей степени отражают особенности каждой страны и ее индустриальных стандартов, но в целом свидетельствуют о стремлении обеспечить долговечность и безопасность в сфере инфраструктурного строительства.

В итоге, сравнительный анализ требований к бетону при строительстве транспортных сооружений в Китае и России позволяет выделить основные черты и отличия в подходах к обеспечению качества в строительной индустрии. Обе страны стремятся к высокому стандарту безопасности и надежности в инфраструктурном строительстве, однако методы достижения этой цели могут различаться в соответствии с уникальными требованиями и традициями каждой нации, данный обзор предоставляет понимание подходов к использованию бетона в строительстве транспортных сооружений, что может быть ценным для инженеров, архитекторов и руководителей проектов в обеих странах.

Использованные источники:

1. Авренюк, Андрей Восстановление бетонных и железобетонных конструкций / Андрей Авренюк. - Москва: Гостехиздат, 2011. - 184 с.
2. Ахвердов, И. Н. Акустическая технология бетонов / И.Н. Ахвердов. - М.: Стройиздат, 2012. - 144 с.
3. Белявский, Л.А. Бетонные дороги / Л.А. Белявский. - Л.: Гострансиздат, 2014. - 240 с.
4. Берг, О. Я. Высокопрочный бетон / О.Я. Берг. - М.: ЁЁ Медиа, 2015. - 50 с.
5. Бетонные и железобетонные конструкции. Без предварительного напряжения арматуры. СП 52-101-2003. - М.: ДЕАН, 2012. - 128 с.
6. Бетонные и железобетонные конструкции. Основные положения. СНиП 52-01-2003. - М.: ДЕАН, 2013. - 64 с.
7. Бетоны. Материалы. Технологии. Оборудование. - Москва: Высшая школа, 2014. - 378 с.

УДК 616.12-053.3

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СОСТОЯНИЕ ГЕМОДИНАМИКИ У ДЕТЕЙ ПОСЛЕ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ДЕФЕКТА МЕЖЖЕЛУДОЧКОВОЙ ПЕРЕГОРОДКИ

Аннотация. Наиболее распространенной аномалией сердечных структур у детей является дефект межжелудочковой перегородки (ДМЖП). Характер и степень гемодинамических нарушений при ДМЖП зависят от их величины, количества и расположения дефектов, продолжительности заболевания, сроков хирургической коррекции, а также течения и возможных осложнений раннего и отдаленного послеоперационного периода.

Ключевые слова: гемодинамика, дефект межжелудочковой перегородки, сердечная недостаточность, легочная гипертензия, нарушения ритма сердца, хирургическая коррекция, резидуальные шунты.

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THE STATE OF HEMODYNAMICS IN CHILDREN AFTER SURGICAL TREATMENT OF VENTRICULAR SEPTAL DEFECT

Annotation. The most common abnormality of cardiac structures in children is a ventricular septal defect (VSD). The nature and degree of hemodynamic disturbances in VSD depend on their size, number and location of defects, duration of the disease, timing of surgical correction, as well as the course and possible complications of the early and late postoperative period.

Keywords: Hemodynamics, ventricular septal defect, heart failure, pulmonary hypertension, cardiac arrhythmias, surgical correction, residual shunts.

Актуальность. Изолированный дефект межжелудочковой перегородки (ДМЖП) – это порок перегородки при атриовентрикулярной конкордантности и нормальном взаиморасположении магистральных сосудов при отсутствии других внутрисердечных дефектов (3,6,11). Изолированный дефект межжелудочковой перегородки наблюдается примерно у 2-6 на 1000 живорожденных и в 20% является составной частью комплексного порока сердца. ДМЖП, как и все врожденные пороки сердца (ВПС) имеет мультифакториальное происхождение, вызывающие нарушение эмбриогенеза, преимущественно в I триместре гестации (5,8,13).

Характер и степень гемодинамических нарушений при ДМЖП зависят от их величины, количества и расположения, продолжительности заболевания и степени легочной гипертензии, компенсаторной гипертрофии миокарда правого и левого желудочков сердца, соотношения сосудистых сопротивлений большого и малого кругов кровообращения (4,7,9).

Ежегодно в условиях естественного течения ДМЖП с лево-правым шунтированием в более половине случаев, особенно с большими дефектами, дети находятся в зоне повышенного риска формирования легочной

гипертензии (ЛГ), как наиболее частому осложнению ДМЖП (1,3,10). Нарастающая правожелудочковая недостаточность сопровождается застоем крови в большом круге кровообращения, с широким спектром клинических проявлений. Легочная гипертензия может развиваться на любой стадии течения ДМЖП, и как правило влияет на физическую активность ребенка, а далее и приводит к снижению толерантности к любой физической нагрузке (4,5,12).

Не менее серьезным и жизнеугрожаемым осложнением ДМЖП является возникновение нарушений ритма и проводимости (НРСиП), которые могут формироваться на любом этапе течения порока. Появление аритмии обусловлены самим пороком и связанными с ним анатомическими повреждениями проводящей системы сердца, расположенной в межжелудочковой перегородке, вторичными изменениями миокарда вследствие перегрузки объемом или сопротивлением, а также гипертрофией и дилатацией полостей сердца, вследствие формирования сердечной недостаточности (7,8).

Небольшие дефекты в МЖП могут длительное время протекать без клинических проявлений и иметь тенденцию к спонтанному закрытию, с хорошим последующим прогнозом. У детей с большим дефектом консервативное лечение не всегда может предотвратить развитие осложнений, и только своевременная коррекция порока позволит предотвратить необратимые изменения, как со стороны отделов сердца, так и со стороны легочных сосудов (2,10,12).

Однако, как показывают результаты исследований последних лет, даже своевременно проведенная коррекция ДМЖП в 15-28% случаев в послеоперационном периоде может сопровождаться такими осложнениями, как нарушения ритма сердца, в частности связанные с проведением импульса, частота которых в отдаленном катамнезе возрастает 2,5 раза. Кроме того, появление резидуальных шунтов в местах коррекции, требует повторного оперативного вмешательства (1,2,10).

Таким образом, всё выше изложенное легло в основу нашего научного исследования. Существует еще много нерешенных вопросов, и остается надеяться, что проводимые в этом направлении научно-клинические исследования смогут дать ответ на большинство из них.

Материалы и методы исследования. Нами обследованы дети с коррегированным ДМЖП, получавшие лечение в кардиоревматологическом отделении. При отборе детей нами было получено согласие на участие в клиническом исследовании со стороны родителей. В программу исследования не были включены дети, у которых ДМЖП являлся частью сложных многокомпонентных пороков, сочетанных и не входил в состав генетических синдромов. Объём наших исследований включал 45 детей, получивших одноэтапную хирургическую коррекцию в разные возрастные периоды: в группу детей с ранним послеоперционным периодом, вошло 32 ребенка и с поздними сроками хирургической коррекции – 13 детей. Информация о

состоянии здоровья детей до поступления в стационар была получена во время беседы с родителями.

Клиническое обследование всех детей проводилась по общепринятым стандартам, а инструментальное исследование включало: ЭКГ в 12 стандартных отведениях и ЭХОКГ с оценкой внутрисердечной гемодинамики.

Результаты.Возраст детей после хирургической коррекции ДМЖП представлен широким возрастным диапазоном от 1 года до 16 лет. Наиболее многочисленными были группы детей от 4 до 6 лет (32%),11-16 лет (32%) и от 1 года до 3 лет (18%). При анализе гендерной принадлежности мальчиков было несколько больше (54%), чем девочек (46%).

Согласно полученным нами результатам основную группу составили дети, получившие радикальную хирургическую коррекцию в периоде раннего (29%) и дошкольного возраста (24,4%). К наиболее неблагоприятному сроку получения хирургического лечения мы отнесли детей, коррекция дефекта которых пришлась на старшую возрастную группу (46,6%).

Нами проведена оценка состояния сердечного ритма, по данным ЭКГ и характер полостных нарушений камер сердца по ЭхоКГ исследованию, у детей в ранние и отдаленные сроки после хирургического лечения. В группу детей с ранним послеоперационным периодом мы включили 32 ребенка, со сроками хирургической коррекции 1-3 года.

Таблица 1. Изменения ЭКГ у детей с ранним послеоперационным периодом (n-32)

ЭКГ симптомы	Абс	%
Синусовый ритм	32	100%
Синусовая тахикардия	23	71,8%
Синусовая брадикардия	9	28,2%
Нормальное положение ЭОС	3	9,4%
Отклонение ЭОС влево	11	34,4%
Отклонение ЭОС вправо	18	56,2%
Гипертрофия левого желудочка: 1) с АВ блокадой 1 степени с ПБПНПГ 2) с НБПНПГ 3) с АВ блокадой 1 степени	 1 7 3	 3,1% 22% 9,4%
Гипертрофия правого желудочка: 1) с НБПНПГ 2) с ПБПНПГ	 16 2	 50% 6,2%
Гипертрофия правого и левого желудочка: 1) с ПБПНПГ 2) с АВ блокадой 1 степени	 2 1	 6,2% 3,1%

Согласно полученным результатам, преобладание синусовой тахикардии свидетельствует о влиянии симпатического отдела вегетативной нервной системы, учитывая, что она оказывает непосредственное влияние на адаптивные способности сердечно- сосудистой системы у детей в ранний

послеоперационный период. Несмотря на проведенную коррекцию дефекта у 2/3 детей сохранились ЭКГ признаки гипертрофии правого желудочка. У 16% детей зафиксирована полная блокада правой ножки пучка Гисса по причине травматического воздействия в области МЖП, а наличие АВ блокады связано с хирургической манипуляцией вокруг атриовентрикулярного узла.

По данным ЭХОКГ у 3 детей (9,4%) выявлена дилатация правых отделов, что по-видимому связано с наличием у них резидуального шунта, размером 2-3 мм.

В группу детей с отдаленными результатами мы включили 13 больных с послеоперационными сроками более 5 лет. Результаты инструментальной оценки состояния сердечно – сосудистой системы представлены в таблице 2.

Таблица 2. Изменения ЭКГ у детей с отдаленным послеоперационным периодом (n-13)

ЭКГ симптомы	Абс	%
Синусовый ритм	13	100%
Синусовая тахикардия	6	46%
Синусовая брадикардия	2	15,3%
Возрастная ЧСС	5	38,7%
Вертикальное положение ЭОС	3	23%
Отклонение ЭОС вправо	10	77%
Гипертрофия правого желудочка: 1) с НБПНПГ 2) с ПБПНПГ	 9 4	 69,4% 30,6%

Преобладание нарушений автоматизма в виде тахи – и брадикардии в этой группе детей, мы связали с расстройствами вегетативной регуляции сердечного ритма. Озабоченность вызывают осложнения в отдаленные сроки после проведенного хирургического лечения, в виде сохранившейся гипертрофии правого желудочка, с нарушением проведения импульса в виде неполной и полной блокады правой ножки пучка Гисса на ЭКГ и разную степень дилатации правого желудочка у всех детей. Негативным осложнением отдаленного результата хирургической коррекции явилось визуализация у 2 детей большого резидуального шунта, размером 3 мм, требующего повторного хирургического вмешательства.

Таким образом, гемодинамические расстройства у детей, получивших хирургическое лечение, связаны со стойкими нарушениями сердечного ритма, вследствие травматизации проводящей системы. Неблагоприятным осложнением послеоперационного периода, независимо от сроков проведения хирургической коррекции, явилось появление резидуальных шунтов, требующих дополнительного оперативного вмешательства.

Использованные источники:

1. Абзалиев К.Б., Сагаттов И.Е. и др. Оценка послеоперационного периода у детей с легочной гипертензией. Вестник АГИУВ, №4, 2015, С.65-70

2. Бокерия Л.А., Милевская Е.Б., Крупянко С.М. и др. Качество жизни детей и подростков после хирургического лечения врожденных пороков сердца. //Педиатрия, 2015, том 94. №2- с.31-37.
3. Ефименко О.В., Хайдарова Л.Р. и др. Клинико-гемодинамическая оценка течения врожденного дефекта межжелудочковой перегородки у детей. //Проблемы биологии и медицины. Самарканд- №5 (139)-2022-с.60-64.
4. Каладзе Н.Н., Ющенко А.Ю. Особенности качества жизни детей с дефектом межжелудочковой перегородки. //Таврический медико-биологический вестник. – 2020, том 23, №1, с.111-116.
5. Калашникова Е.А., Никитина Н.А. Дефект межжелудочковой перегородки: особенности ранней неонатальной и постнатальной диагностики, клинической манифестации, лечение и прогноза на современнос этапе// Здоровье ребенка, 2016,№ 4(72),с. 71-75.
6. Макарова, В. И. Врождённые пороки сердца у детей: диагностика, наблюдение / В. И. Макарова // Врожденые и приобретенные пороки сердца: Материалы III Всероссийского семинара памяти проф. Н. А. Белоконь - Архангельск. -2018. - С. 10-22.
7. Марцинкевич Д.Н. Характеристика топографических и морфометрических показателей дефекта межжелудочковой перегородки у детей и у новорожденных. // Вестник совета молодых ученых №4(15),Т.3, 2016, с. 8-9
8. Марцинкевич Д.Н. Ультразвуковой метод исследования для выявления дефекта межжелудочковой перегородки у детей и у новорожденных. // Вестник совета молодых ученых №2 (17), Т.2, 2017, с. 78-80
9. Спайсер Д. и др. Дефект межжелудочковой перегородки. Журнал редких болезней Орфонета (2014), 9: 144.
10. Трунина, И. И., Школьникова М.А., Шарыкин А.С. Резидуальная легочная артериальная гипертензия у детей после радикальной коррекции врожденных пороков сердца. Педиатрия. Журнал им. Г.Н. Сперанского. - 2017. - Т. 96, № 3. - С. 166-172.
11. Miller A, Riehle-Colarusso T, Alverson CJ, et al. Congenital heart defects and major structural noncardiac anomalies, Atlanta, Georgia, 1968 to 2005. J Pediatr. 2016;159(1):70–78.
12. Van Gelder MHJ, Roeleveld N, Nordeng H. Exposure to nonsteroidal anti-inflammatory drugs during pregnancy and the risk of selected birth defects: a prospective cohort study. PLoS One. 2021;6(7):e22174.
13. Oyen N, Poulsen G, Boyd HA, et al. Recurrence of congenital heart defects in families. Circulation. 2019;120(4):295–301.

УДК 338.242.2

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МАРКЕТИНГОВАЯ МОДЕЛЬ УПРАВЛЕНИЯ ИНФОРМАЦИОННЫМИ ПРОДУКТАМИ

Аннотация. В этой статье рассматривается проблемы управления информационными продуктами в предприятиях, разрабатывающих программное обеспечение. Также приведена маркетинговая модель управления в этих субъектах. Особо отмечены приоритетные стороны маркетингового управления информационными продуктами.

Ключевые слова: информационный продукт, маркетинговая модель, программное обеспечение, компания, фирма, ориентация, разработка.

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MARKETING MODEL OF INFORMATION PRODUCTS MANAGEMENT

Annotation. This article examines the challenges of managing information products in software enterprises. The marketing management model in these entities is also given. The priority aspects of marketing management of information products are especially noted.

Key words: information product, marketing model, software, company, firm, orientation, development.

Введение

Компания - сложный организм, где в процессах осуществления деятельности, сталкиваются интересы разных функций (скажем, маркетинга и финансов), и требуется распределение ресурсов между различными видами деятельности.

Маркетинг — это скоординированная система различных видов *бизнес-деятельности,* созданная для предоставления продуктов, услуг и идей, которые удовлетворяют потребителей.

Поэтому процесс планирования и осуществления деятельности в области маркетинга представляет собой цепочку компромиссов, на которые вынуждена идти компания.

Методы и исследования.

Наш опыт анализа деятельности компаний показывает, что на многих из них основными факторами, препятствующими реализации функций маркетинга, являются:

- историческое место маркетинга в организационной структуре компании,
- квалификационный уровень персонала, занятого маркетинговыми задачами,
- проблемы реалистичности и невовлеченности персонала,
- отсутствие межфункционального согласования и согласования по уровням управления, а - также отсутствие систематичности в процессе планирования маркетинговой деятельности.

Эти проблемы ярко проявились на фирмах, ООО и предприятиях, которые осуществляет свою деятельность в области разработки программного обеспечения. Несмотря на лидирующее положение в группе компаний этой отрасли, оно не добилось развития функции маркетинга. Превосходство маркетинговых служб партнеров позволяет им диктовать цены и контролировать потоки продвижения продуктов. В контексте данной проблемы предприятий разработки программного обеспечения можно считать типичным предприятием ИКТ, поставляющим продукцию на отечественный рынок.56

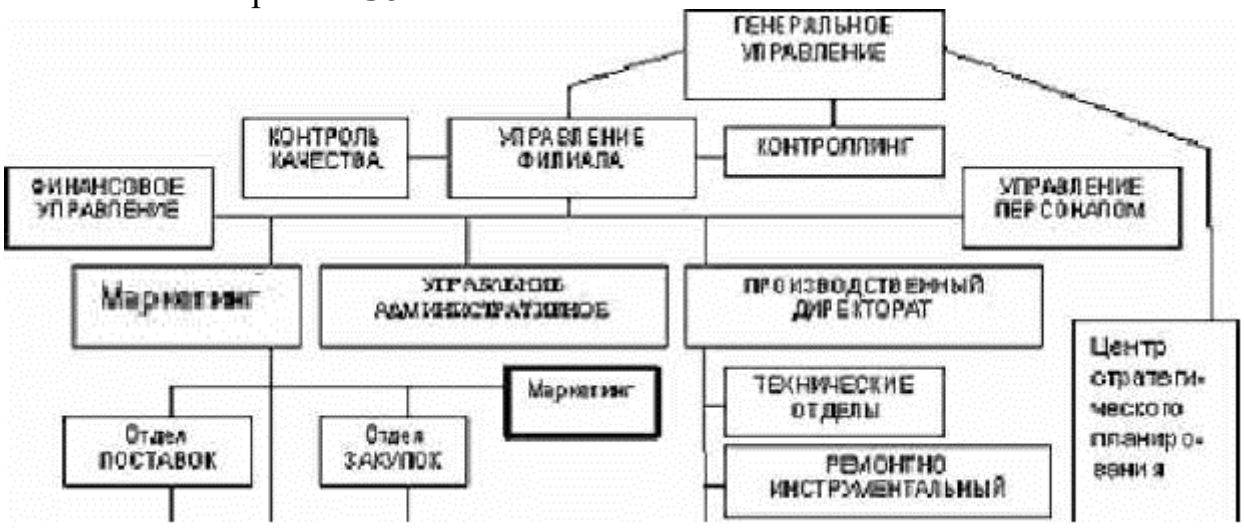

Рис. 1. Организационная структура компании в 2023 году

Отдел маркетинга состоит из 3 человек и функционально подчинен коммерческому директору. Формировался отдел маркетинга в 2017 году из сотрудников компании, работавших в отделах сбыта и технологическом. Задекларированная роль маркетинга в организации направлена на реализацию корпоративных целей:

Задекларированная роль маркетинга в организации направлена на реализацию корпоративных целей:

56 Салливан, Э. Время - деньги. Создание команды разработчиков программного обеспечения / Э. Салливан. - М.: Русская редакция, 2002. - 54 с

• ориентацию служб предприятия на потребителей;
• оценку привлекательности рынка;
• развитие общей ценности фирмы;

на уровне стратегического управления функция маркетинга ответственна за:

• выбор целевого рынка;
• позиционирование продукта;
• разработку стратегических планов маркетинга;
• планирование и осуществление вхождения в список поставщиков производителей Software и мировых лидеров Software на вторичный рынок;

на уровне оперативного хозяйственного подразделения функция маркетинга ответственна за:

• изучение конкурентов;
• исследование потребностей и предпочтений потребителей;
• прогноз спроса и продаж;
• определение бюджетов службы маркетинга;
• реализация стратегии и тактики формированияцеп,
• организация акций;
• разработка тактических планов маркетинга и краткосрочных планов маркетинговой деятельности.57

Результаты авторского исследования.

Выделение этих функций маркетинга как основных с вязано с особенностями продукта и спецификой рынка информационных продуктов, среди которых следует выделить:

1. Особенности рынка информационных продуктов (первичный рынок), а именно:

- ограниченная численность поставщиков;
- ограниченная численность потребителей;
- требования надежного качества;
- высокий барьер вхождения;
- долговременные контакты;
- требование "системного" снижения цены;
- поставки "точно в срок";
- преобладание прямых поставок.

2. Особенности рынка информационных продуктов (вторичный рынок), а именно:

- поставщики: предприятия в области информационных продуктов;
- значительная численность потребителей;
- требования надежного качества;
- присутствие продуктов «серого» качества;
- формирование запасов в разных точках логистического канала;
- широкая дифференциация продукции по параметрам «цена-

57 Мараско, Дж. IT-проекты: фронтовые очерки / Дж. Мараско. - СПб.: Символ-Плюс, 2007. - 38с.

качество».58

3. Характеристики конкурентной среды:

- потребители имеют как минимум 3 источника поставок и проводят постоянный мониторинг поставщика и ранжирование поставщиков;
- интенсивный ценовой прессинг;

но:

- важно устанавливать не самые низкие цены, а «приемлемые» цены при соответствующем качестве;
- для вхождения в круг поставщиков нужно пройти долгий и сложный путь проверок.

Процесс принятия текущих решений в области маркетинга должен быть организован таким образом, чтобы будущие решения могли быть приняты:

- в короткие сроки;
- экономически целесообразно;
- с минимальными негативными последствиями для бизнеса.

Анализ работы службы маркетинга показал, что ряд функций выполняется на приемлемом уровне, это:

- изучение конкурентов;
- исследование потребностей и предпочтений потребителей;
- прогноз спроса и продаж;
- определение бюджетов службы маркетинга;
- организация акций;
- разработка краткосрочных планов маркетинговой деятельности;
- выбор целевого рынка.

Обсуждения.

Но вот большинство стратегических функций в той или иной степени не выполнялось. Это произошло по причинам неполноты информации или неумения ее анализировать.

- нет полного представления о процессах на рынке (вторичном), хотя потенциальное предложение товара на рынке известно, в результате краткосрочные планы предприятия не учитывали количественные перспективы изменения спроса на рынках, предприятие не сравнивало свои технологии продвижения товара с технологиями конкурентов;
- нет глубокого мониторинга нисходящей цепочки поставок;
- нет информации о ценах в сделках конкурентов и посредников;
- нет понимания механизмов ценообразования, в результате - не проводится последовательная ценовая политика.59

Кроме того, явные недостатки в оперативной деятельности отдела маркетинга привели к следующим результатам:

- участие в выставках неэффективно;

58 Макконелл, С. Профессиональная разработка программного обеспечения / С. Макконелл. - СПб.: Символ-Плюс, 2006. - 240 с.

59 S.Jamoldinov - Axborot mahsulotlari baholarining belgilanish xususiyatlari. Машинасозлик илмий-техника журнали. www.andmiedu.uz №1-2023 ISSN2181-1539

- предварительные переговоры с потенциальными партнерами и представление фирмы как надежного партнера, зачастую, не результативны;
- постоянный разрыв между требованиями клиентов по сроках поставки и сроками готовности партий, принимаемыми производством.

На основании анализа сложившегося положения были приняты направления реорганизации функции маркетинга в ближайшей перспективе, которые исходили из следующего:

первое - профессиональный уровень работников отдела маркетинга низок и их сфера ответственности должна быть сужена; за отделом маркетинга оставить: сбор информации, проведение маркетинговых акций, планирование и реализация тактических маркетинговых планов,

второе - компания обладает квалифицированными кадрами для выполнения задекларированных перед маркетингом задач, но ротация их в отдел маркетинга невозможна, поэтому передать в другие отделы функции: анализа рынка, нахождения точки ценового равновесия в отношениях с посредниками, подготовку оферт и ответов на анкеты обследования партнеров.60

Исходя из вышесказанных, можно сделать следующие выводы.

- основной задачей при построении модели управления, опирающейся на маркетинговые задачи, признать распространение требований потребителей на всю цепочку создания продукта. Из них важнейшими являются управление качеством, сроками поставки, снижение стоимости:
- функции маркетинга невозможно выполнять без участия смежных отделов в связи с высокой технологической сложностью продукции.61

В результате, которого изменена организационная структура компании, в которой отдел маркетинга и контроллинга подчинены центру стратегического развития материнской компании (рис.2)

60 Расулова, Т. П., Жамолдинов, С. Х., & Атаханов, К. (2020). Основы функционирования и эффективность внедрения систем мониторинга транспорта UzGPS в Узбекистане. *Universum: технические науки*, (7-1 (76)), 18-22.

61 Уришев, Б. А., Парпиев, Г. Г., & Жамолдинов, С. Х. (2021). ВОПРОСЫ МОДЕЛИРОВАНИЯ ПРОЦЕССОВ НАХОЖДЕНИЯ ОПТИМАЛЬНОГО ЗНАЧЕНИЯ СОДЕРЖАНИЯ ХЛОПКОВЫХ ВОЛОКОН В СМЕСИ НА ОСНОВЕ ОПЫТА РАБОТЫ НА ПРЯДИЛЬНОМ ПРЕДПРИЯТИИ. *Universum: технические науки*, (6-2 (87)), 74-76.

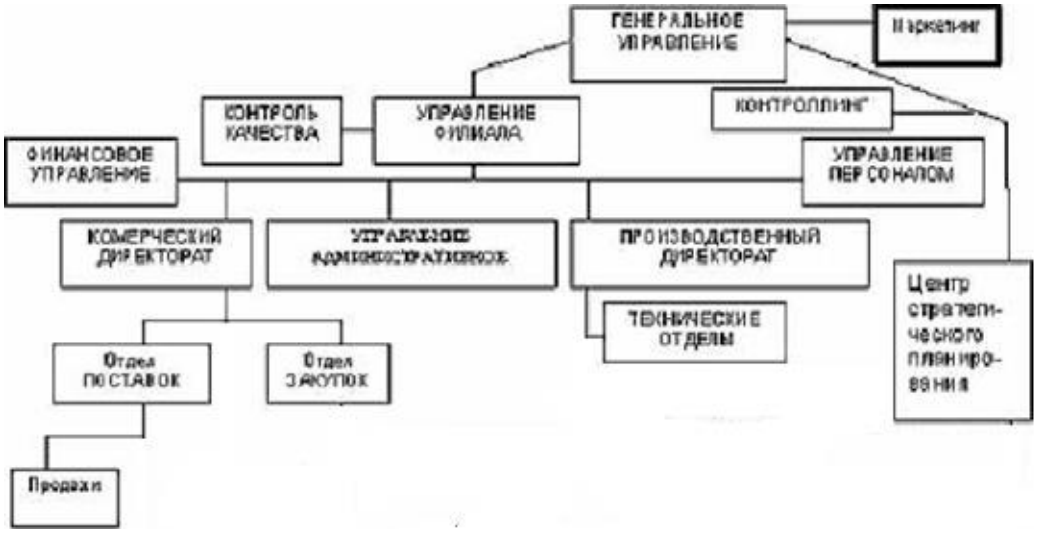

Рис. 3. Организационная структура компании в 2021 году62

Кроме этого, установлено новое распределение функций маркетинга. (табл.1)

Таблица 1.

Распределение функций маркетинга

Функция маркетинга	Ответственный	Содержание
1	2	3
Исследовательская - аналитическая	Отдел контроллинга	исследования внешней и внутренней среды; анализ рынков; исследования рынков капитала, грудовых и материальных ресурсов; изучение
	Отдел маркетинга	исследование продаж; исследование потребностей и предпочтений потребителей; прогноз спроса и продаж;
Производственная	Центр развития	определение и разработка ассортиментной структуры производства;
1	2	3
Сбытовая и распределительная	Центр стратегического развития материнской компании	реализация политики сбыта и распределения товаров; выбор каналов сбыта и товародвижения товара;
	Отдел маркетинга	определение бюджетов;

62 Эркин, К., Жамолдинов, С. Х., & Буронов, Б. А. У. (2018). Результаты внедрения современных информационных продуктов в сфере пассажирского транспорта. *Universum: технические науки*, (2 (47)), 5-8.

Ценообразование	Отдел контроллинга	реализация стратегии и тактики формирования цен; разработка механизма изменения текущих цен;
Коммуникативная	Отдел маркетинга	организация акций
	Отдел сбыта	реализация стратегии продвижения; координация действий торговых
Интеграционная	Центр стратегического развития мат. компании	согласование деятельности всех отделов компании и ориентация их на интересы клиента; координация маркетинговых функций с точки зрения интересов
Планирование, организация, контроль	Центр стратегического развития мат. компании	разработка стратегических планов маркетинга; разработка товарной, ценовой. коммуникативной, распределительной стратегий;
	Отдел маркетинга	разработка тактических планов маркетинга; краткосрочные планы маркетинговой деят-ти;
	Отдел контроллинга	планирование и проведение ситуационного анализа.

Заключение.

Выполнение вышеуказанной функции маркетинга и структурное изменение места маркетинга в компании обеспечивает тщательное проведение маркетинговых исследований в целом, которое становится гарантом продвижения и развития предприятий машиностроения. А также является основным фактором конкурентоспособного производства.

Использованные источники:

1. Салливан, Э. Время - деньги. Создание команды разработчиков программного обеспечения / Э. Салливан. - М.: Русская редакция, 2002. - 544 с.
2. Мараско, Дж. IT-проекты: фронтовые очерки / Дж. Мараско. - СПб.: Символ-Плюс, 2007. - 384 с.
3. Макконелл, С. Профессиональная разработка программного обеспечения / С. Макконелл. - СПб.: Символ-Плюс, 2006. - 240 с.
4. Спольски, Д. Руководство командой разработчиков программного обеспечения. Прикладные мысли / Д. Спольски. - М.: ООО «ИД Вильямс», 2008. - 144 с.
5. Microsoft Solutions Framework. Дисциплина управления рисками MSF, вер.1.1 [Электронный ресурс] / Корпорация Майкрософт (Microsoft Corp.), 2002. URL: http://www.microsoft.com/rus/msf.
6. Фатрелл, Р.Т. Управление программными проектами: достижение

оптимального качества при минимуме затрат / Р.Т. Фатрелл, Ф.Ш. Дональд, Л.И. Шафер. - М.: Вильямс, 2004. - 1135 с.
7. Уришев, Б. А., Парпиев, Г. Г., & Жамолдинов, С. Х. (2021). ВОПРОСЫ МОДЕЛИРОВАНИЯ ПРОЦЕССОВ НАХОЖДЕНИЯ ОПТИМАЛЬНОГО ЗНАЧЕНИЯ СОДЕРЖАНИЯ ХЛОПКОВЫХ ВОЛОКОН В СМЕСИ НА ОСНОВЕ ОПЫТА РАБОТЫ НА ПРЯДИЛЬНОМ ПРЕДПРИЯТИИ. *Universum: технические науки*, (6-2 (87)), 74-76.
8. S.Jamoldinov - Axborot mahsulotlari baholarining belgilanish xususiyatlari. Машинасозлик илмий-техника журнали. www.andmiedu.uz №1-2023 ISSN2181-1539
9. Расулова, Т. П., Жамолдинов, С. Х., & Атаханов, К. (2020). Основы функционирования и эффективность внедрения систем мониторинга транспорта UzGPS в Узбекистане. *Universum: технические науки*, (7-1 (76)), 18-22.
10. Эркин, К., Жамолдинов, С. Х., & Буронов, Б. А. У. (2018). Результаты внедрения современных информационных продуктов в сфере пассажирского транспорта. *Universum: технические науки*, (2 (47)), 5-8.

УЎТ: 633.511: 575.127.2: 631

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ҒЎЗАНИНГ ТУРЛИ ХИЛ ҲУДУДЛАРДА ЕТИШТИРИЛГАН ТИЗМАЛАРИНИНГ АСОСИЙ ҚИММАТЛИ-ХЎЖАЛИК БЕЛГИЛАРИ ЎРТАСИДАГИ КОРРЕЛЯЦИОН БОҒЛИҚЛИКЛАР

Аннотация. Интрогрессив тизмаларнинг турли тупроқ-иқлим шароитида қимматли-хўжалик белгиларининг ўзгарувчанлик даражаси, коррелятив боғлиқлик ва вилтга бардошлилигини аниқлаш асосида ҳосилдор, тезпишар, тола чиқими 41,0-43%, сифат кўрсаткичлари ҳамда мослашувчанлик имконияти юқори бўлган тизмалар ажратиб олинган. Республикамизнинг ҳар хил тупроқ-иқлим шароитларида ўрта толали янги интрогрессив тизмаларини бир хил шароитларда етиштирилганда уларнинг популяциялари ичида қимматли хўжалик белгилари бўйича юқори кўрсаткичга эга бўлган "С-6782" нави ташқи муҳитни ноқулай омилларига чидамли нав сифатида танлаб олинган.

Калит сўзлар: ғўза, вегетация даври давомийлиги, мослашувчанлик, географик узоқ дурагайлаш, интрогрессив шакллар, нав синаш, каррелатция.

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CORRELATIONSHIPS BETWEEN MAIN VALUE-ECONOMIC CHARACTERISTICS OF COTTON LINES GROWN IN DIFFERENT REGIONS

Annotation. On the basis of determining the degree of variability, correlative dependence and resistance to wilt of introgressive ridges in different soil and climate conditions, the ridges with high yield, quick ripening, fiber yield of 41.0-43%, quality indicators and high adaptability were selected. "S-6782" variety, which has a high index of valuable economic traits among their populations, was

selected as a variety resistant to adverse factors of the external environment when new medium-fiber introgressive varieties were grown under the same conditions in different soil-climatic conditions of our republic.

Key words: cotton, duration of vegetation period, adaptability, geographical long hybridization, introgressive forms, variety testing, correlation.

Кириш. Дунёнинг кўплаб мамлакатларида қишлоқ хўжалиги экинларининг селекциясида олиб бориладиган танлаш ишлари самарадорлигининг таҳлили шуни кўрсатадики, бу жараёнда қўлланиладиган танлаш усуллари маҳаллий тупроқ-иқлим, об-ҳаво ҳамда ҳар бир мамлакатнинг технологик ва ижтимоий-иқтисодий шароитларига мослашган бўлиши керак. Шунинг учун, қишлоқ хўжалиги экинларининг янги навларини яратишда генотиплар потенциалини бир вақтнинг ўзида бир нечта географик жойларда баҳолаш, кенг мослашувчанлик имкониятига эга шаклларни аниқлаш истиқболли йўналишлардан бири ҳисобланади. Шу ўринда, интрогрессив тизмалар асосида ҳосилдор, сифат кўрсаткичлари ва иқтисодий самарадорлиги юқори бўлиши билан бир қаторда, ноқулай ташқи муҳит омилларига чидамли ҳамда истиқболли навлар яратиш муҳим илмий-амалий аҳамият касб этади.

Адабиётлар шархи. Қишлоқ хўжалик ўсимликлар селекциясининг экологик усулларини илмий асосларини ишлаб чиқиш ва фойдаланиш академик Н.И.Вавилов номи билан боғлиқ. Унинг ғояларини давомчиси Е.Н.Синская (1933) биринчилар қаторида «экологик селекцияни» аниқлаб берди ва кўп йиллик ем-хашак ўтларнинг экологик селекциясининг бир қатор муаммоларини кўрсатиб берди. Бугунги кунда экологик селекциясини назарий асослаш ва самарали олиб боришнинг назарий асоси бўлиб, Н.П.Дубинин, Я.П.Глембовский «Популяциялар генетикаси ва ўсимликлар селекцияси» (1976), А.А.Жученко «Маданий ўсимликларнинг экологик генетикаси» (1980), А.В.Кильчевский, Л.И.Хотылева «Ўсимликлар экологик селекцияси» (1985, 1987), Н.Г.Симонгулян «Ғўзанинг миқдорий белгилар генетикаси», Г.С.Шахмедова «Ғўза нав намуналарининг жанубий Россия шароитига мослашувчанлиги» каби ишланмалари ва ишлари ҳисобланади. Адаптив селекциянинг муҳим йўналиши - нав ва дурагайларда юқори потенциал маҳсулдорлик билан абиотик ва биотик стрессларга чидамлилигини жамлаш бўйича мамлакатимизда Н.А.Саакова, А.П.Абуховская, Е.В.Хегай (2001), Вентура Марте, С.М.Ризаева (2016), С.А.Усманов (2020), С.М.Набиев (2019), С.А.Эгамбердиева (2021), С.Т.Жураев (2022) каби тадқиқотчилар ишларида ёритилган.

Тадқиқотнинг мақсади Тошкент, Фарғона ва Қашқадарё вилоятлари шароитларида интрогрессив ғўза тизмаларининг асосий қимматли-хўжалик белгилари ўртасидаги корреляцион боғлиқликлари

Тадқиқот натижалари. *Ўсув даври давомийлиги билан бошқа қимматли - хўжалик ўртасидаги корреляцион боғлиқликлар:*

Ўзбекистоннинг учта турли хил ҳудудларда етиштирилган *Gossypium hirsutum* L. тури ўрта толали ғўзанинг ўнта тизмасида ўсув даври давомийлиги ва айрим қимматли – хўжалик белгилари ўртасадаги корреляция коэффициентларини аниқладик.

Маълумки, мақсадга йўналтирилган селекция жараёнлари учун ҳар хил белгилар ўртасидаги корреляцияни ўрганиш зарур. Шундай қилиб, тадқиқотчилар томонидан ғўзада ҳосилдорлик билан кўсаклар сони ўртасида, (0,84 дан 0,91 гача) яқин боғлиқлик аниқланган, ўртача ижобий корреляцион боғлиқлик кўсак йириклиги билан ҳосилдорлик ўртасида кузатилган (r = 0,32 дан 0,61 гача). Маҳсулдорлик билан чигит вазни ўртасида ўртача ва кучсиз даражада ижобий корреляция (0,28 дан 0,39 гача), маҳсулдорлик билан тола чиқими ўртасида кучсиз салбий корреляция кузатилган. Юқори даражада мувофиқлик ҳосилдорлик билан 1000 та чигит вазни ўртасида кузатилди. Кўсак йириклиги билан ўсимлик баландлиги ўртасида –ўртача ижобий боғлиқлик; чигит вазни билан тола узунлиги ўртасида кучсиз ижобий боғлиқликлар қайд этилган. Чигит вазни ва тола чиқими қоида сифатида салбий корреляцияда бўлади [худди шу жойда]. Турли хил ўзаро боғлиқликларни мужассамлаштирган шаклларни аниқлаш билан тадқиқотчилар дурагайларда содир бўладиган рекомбиногенезга таъсир этади.

Ўсув даври давомийлиги билан бир дона кўсакдаги пахта хом – ашёси вазни ўртасида 2019-2020 йиллар давомида кучсиз ижобий боғлиқлик кузатилди (r = +0.21 - +0.48) (5.1-жадвалга қаранг). 2018 йили синалган тизмаларда кўрсатиб ўтилган белгилар ўртасида тўғри ўзаро боғлиқликнинг ҳар хил даражаси намоён бўлди 0.19 дан (Тошкент вилоятида) 0.94 гача (Фарғона вилоятида). Яқин ўзаро боғлиқлик Қашқадарё вилоятида ҳам кузатилди r = 0.54. Яъни, ўсув даври давомийлиги узайиши билан кўсак вазни ортиб борди. Таъкидлаш лозимки, селекционерни тезпишарлик билан қандайдир белги ўртасидаги салбий боғлиқлик қизиқтиради.

Аксарият ҳолатларда, ўсув даври давомийлиги билан 1000 дона чигит вазни ўртасида ўзаро боғлиқлик мавжуд бўлмади (r= -0.07 - +0.03), ёки ҳам тескари, ҳам тўғри кучсиз бўлди (r= -0.21 - +0.28). Фарғона вилоятида 2018 йили синалган гуруҳлар бундан истисно бўлиб, юқори корреляцияни намоён этди r = 0.50. Ўртача ва кучли ижобий ўзаро боғлиқлик ўсув даври давомийлиги ва тола чиқими ўртасида, уч йиллик синов давомида ҳамма ҳудудларда аниқланди (0.28 дан 0.60 гача).

1 - жадвал

Ғўза тизмаларининг ўсув даври давомийлиги ва асосий қимматли хўжалик белгилари ўртасидаги корреляция.

Белги	Ҳудуд	йиллар	Ўсув даври давом	1 кўсак вазни	1000 дона чигит вазни	Тола узунлиги	Солиштирма уз.куч	Микронейр	Маҳсулдорлик	Ҳосилдорлик
Ўсув даври	Тош-кент	2018	0.19	0.20	0.56	-0.09	0.28	0.74	0.15	-0.75
		2019	0.38	0.28	0.36	-0.05	0.12	-0.12	0.39	-0.33
		2020	0.31	-0.17	0.48	0.24	0.15	-0.24	0.31	-0.46
Ўсув даври	Фар-ғона	2018	0.94	0.50	0.35	0.32	0.50	0.20	0.91	0.08
		2019	0.32	0.03	0.49	0.29	0.59	0.33	0.32	0.19
		2020	0.48	0.04	0.49	-0.10	0.33	-0.02	0.47	0.35
Ўсув даври	Қашқа-дарё	2018	0.54	0.13	0.60	-0.15	0.39	0.54	0.38	-0.73
		2019	0.21	-0.07	0.28	-0.11	0.38	0.48	0.26	0.42
		2020	0.31	-0.21	0.40	0.35	0.22	-0.11	0.03	-0.07

Жуда кучсиз даражадаги боғлиқлик ўсув даври давомийлиги билан тола узунлиги ўртасида кузатилди: (r= -0.05, r= -0.07) боғлиқлик мавжуд бўлмаслигидан, кучсиз тўғри боғлиқгача (r=0.35). Анча яқин боғлиқликлар тезпишарлик билан толанинг солиштирма узилиш кучи ўртасида кузатилди (0.12 дан 0.59 гача). Тезпишарлик билан тола микронейри ўртасидаги корреляцион боғлиқликлар турли синов йилларида ҳар хилда намоён бўлди – кучсиз салбийдан (r= - 0.24), боғлиқлик мавжуд бўлмаслиги (r= -0.02), кучли ижобийгача (r=0.74 Тошкент вилоятида 2018 й синалган тизма гуруҳларида). Юқори корреляция шунингдек, ўсув даври давомийлиги билан тола микронейри ўртасида, 2018 ва 2019 йилларда Қашқадарё вилоятида синалган тизма гуруҳларида аниқланди (мос равишда r=0.48 ва r=0.54)

Аксарият ҳолатларда ўсув даври давомийлиги билан маҳсулдорлик ўртасида кучсиз ижобий боғлиқлик кузатилди (0.15 дан 0.38 гача). Улар ўртасида кучли боғлиқликни Фарғона вилоятидаги тизма гуруҳларида 2020 (r

= 0.54) ва 2018 йиллари (r = 0.91) кузатдик. 2020 йили Қашқадарё вилоятидаги тажрибаларда мазкур белгилар ўртасида боғлиқлик мавжуд бўлмади (r = 0.03).

Кучсиз тескари боғлиқлик ўсув даври давомийлиги билан ҳосилдорлик ўртасида 2018 йили Тошкент ва Қашқадарё вилоятларида аниқланди (мос равишда r= -0.75 ва r = -0.73). Яъни, тезпишар шакллар юқори ҳосилдорликни намоён этди. Фарғона вилоятидаги уч йиллик синовда кўрсатиб ўтилган белгилар ўртасидаги корреляцион боғлиқлик кучсиз бўлиши (r = 0.19 ва r = 0.35) ёки мавжуд бўлмаслиги кузатилди (r = 0.08).

Уч йиллик тажриба маълумотларига кўра, ўсимликларнинг етиштириш ҳудудидан фарқли равишда тола чиқими, маҳсулдорлик, толанинг солиштирма узилиш кучи, бир дона кўсакдаги пахта хом-ашёси вазни кўрсаткичлари ўсув даври давомийлигининг ортиши билан кучли боғланган бўлади. Тажрибаларимизда тезпишарлик ҳосилдорлик билан яқин боғлиқликда бўлди, бу мазкур белгилар ўртасидаги аниқланган тескари боғлиқлик билан ҳам тасдиқланди яъни, тизмаларда ўсув даври қанча қисқа бўлгани сари уларнинг ҳосилдорлиги ҳам шунча паст бўлди.

Ҳосилдорлик ва бошқада қимматли - хўжалик белгилари ўртасидаги корреляция:

Ўзбекистоннинг учта турли ҳудудларида етиштирилган ғўза тизмаларининг ҳосилдорлиги ва айрим қимматли - хўжалик белгилари ўртасидаги корреляцион боғлиқликни уч йил давомида ўрганиш натижалари келтирилади. Ҳосилдорлик ва ўсув даври давомийлигининг ўзаро боғлиқлигини уч йил давомида, учта ҳар хил экологик ҳудудларда ўрганиш натижасида, етиштириш ҳудуди ва синов йиллари корреляция коэффициентига таъсир этиши аниқланди.

Шундай қилиб, Тошкент яъни, нисбатан шимолий ҳудудда юқорида келтирилганлар белгилар ўртасида ўртача кучли тескари боғлиқлик кузатилди (r= -0.76 дан r= -0.33 гача), яъни, ўсув даври нисбатан қисқа бўлган шакллар ҳосилдорли бўлди. (2-жадвалга қаранг).

Тизмаларнинг ҳосилдорлиги Фарғона вилоятида ўсув даври давомийлиги билан жуда кучсиз боғлиқликда бўлиши ёки ўзаро боғлиқлик мавжуд эмаслиги аниқланди (r= 0.08 дан r= 0.35 гача), яъни, ҳосилдорликни ўсув даври давомийлиги ҳар хил бўлган шакллар намоён этди Қашқадарё вилоятида синов йиллари давомида тизмаларда ўзаро боғлиқликлар турлича даража ва йўналишда – кучли тескари боғлиқликдан r = -0.73, ўртача кучли тўғри боғлиқликгача r= 0.42 бўлиши кузатилди.

Жадвал маълумотларига кўра, ҳосилдорлик билан бир дона кўсакдаги пахта хом – ашёси вазни ўртасида боғлиқликлар ёки мавжуд бўлмади, ёки жуда кучсиз салбий бўлди. Шундай қилиб, Қашқадарё вилоятида 2018 ва 2020 йиллари мазкур белгилар ўртасида корреляция коэффициенти мос равишда r= -0.26 ва r= -0.22 га тенг бўлди.

1000 дона чигит вазни шунингдек, ҳосилдорлик билан кучсиз корреляцияда бўлди ёки боғлиқлик мавжуд бўлмади (r= -0.21 дан 0.09 гача). Тола чиқими аксарият ҳолатларда ҳосилдорликга таъсир этмади. Бундан

истисно таризда, 2018 й. Тошкент ва Қашқадарё вилоятларидаги тажрибаларда мазкур белгилар ўртасидаги боғлиқликлар ўртача кучли тескари бўлиб, мос равишда r= -0.32 ва r= -0.47 тенг бўлди. Шунингдек, 2020 й. Фарғона вилоятида тола чиқими билан ҳосилдорлик ўртасидаги ўзаро боғлиқликнинг ўртача кучли тўғри бўлиши кузатилди (r=0.49).

2 - жадвал

Ғўза тизмаларида ҳосилдорлик билан асосий қимматли-хўжалик белгилари ўртасида корреляцион боғлиқликлар

Белги	Ҳудуд	йиллар	Ўсув даври	1 кўсак вазни	1000 дона ч.вазни	Тола узунлиги	Солиштирма уз. кучи	Микро-нейр	Тола чиқими
Ҳосил-дорлик	Тош-кент	2018	-0.76	-0.11	-0.17	-0.32	0.03	0.07	-0.53
		2019	-0.33	0.09	-0.03	-0.007	-0.41	-0.14	0.21
		2020	-0.46	-0.18	0.01	-0.001	-0.01	0.02	-0.08
Ҳосил-дорлик	Фар-ғона	2018	0.08	0.04	0.09	-0.09	-0.03	0.21	-0.29
		2019	0.19	0.05	0.02	-0.02	-0.17	0.08	0.06
		2020	0.35	0.01	-0.21	0.49	0.21	0.10	-0.16
Ҳосил-дорлик	Қаш-қадарё	2018	-0.73	-0.26	-0.04	-0.47	0.13	-0.28	-0.58
		2019	0.42	0.13	-0.21	0.14	-0.32	0.12	0.16
		2020	-0.08	-0.22	-0.16	0.04	-0.06	-0.21	0.34

Ҳосилдорлик билан тола узунлиги ўртасида корреляция мавжуд бўлмади, фақат 2019 й. Тошкент ва Қашқадарё вилоятларида олиб борилган тажрибалар бундан истисно қилди. Ушбу ҳолатларда корреляция коэффициенти мос равишда -0.41 ва -0.32 га тенг бўлиб яъни, мазкур белгилар ўртасида ўртача кучли тескари боғлиқлик аниқланди. Ҳосилдорлик ва солиштирма узилиш кучи ўртасидаги ўзаро боғлиқликни ўрганиш натижасида, боғлиқлик мавжуд бўлмаслиги, ёки боғлиқликлар кучсиз салбий ва кучсиз ижобий бўлиши аниқланди. Ўзаро боғлиқликнинг турли хил турлари ҳосилдорлик ва тола микронейри ўртасида намоён бўлди: ўртача кучли тескари боғлиқлик (r= -0.53, r= -0.58), яъни ҳосилдорлик қанча юқори бўлса, тола микронейри шунча паст бўлади, (2018 й. тажрибаларда.), боғлиқлик мавжуд бўлмаслиги, (r= -0.08 дан, r= 0.06 гача), ёки кучсиз ижобий ўзаро боғлиқликлар (r=0.16 дан r=0.34 гача).

Шундай қилиб, корреляция коэффициенти таҳлилларига кўра, уч йил давомида ўртача ҳосилдорлик билан ўсув даври давомийлиги ўртасида ўртача кучли тескари боғлиқликлар кузатилди. Таъкидлаш лозимки, етиштириш ҳудуди мазкур белгилар ўртасидаги корреляция коэффициентига таъсир этди. Ҳосилдорлик ва ўрганилган бошқа белгилар ўртасидаги боғлиқлик унча аҳамиятли бўлмади.

Хулосалар:

1. Ўсимликларда етиштириш ҳудудларидан фарқли равишда тола чиқими, маҳсулдорлик, толанинг солиштирма узилиш кучи, бир дона кўсакдаги пахта хом – ашёси вазни кўрсаткичлари ўсув даври давомийлигининг ортиши билан кучли боғланганлиги аниқланди. Тезпишарлик ва 1000 дона чигит вазни ўртасида аксарият ҳолатларда боғлиқлик мавжуд бўлмаслиги кўрсатилди. Тезпишарлик ва тола узунлиги ўртасида жуда кучсиз даражадаги ўзаро боғлиқлик аниқланди. Турли хил даражадаги ва йўналишдаги боғлиқлик ўсув даври давомийлиги ва тола микронейри ўртасида қайд этилди. Ўрганилган тизмалар учун ўсув даври давомийлиги ва ҳосилдорлик ўртасида салбий корреляция хос бўлди.

2. Ўрганилган тизмаларнинг уч йиллик корреляцион таҳлилларига кўра ҳосилдорлик ва вегетация даври орасида ўртача даражадаги тескари боғликликлар кузатилди. Мазкур белгилар ўртасидаги коррелляция коэффициентларига минтақа омили сезиларли таъсир кўрсатди. Ҳосилдорлик билан битта кўсакдаги пахта вазни, 1000 дона чигит вазни, тола чиқими ва толанинг сифат кўрсаткичари бўйича корреляцион боғлиқлик аҳамиятсиз бўлганлиги аниқланди.

Фойдаланилган адабиётлар:

1. Доспехов Б.А. Методика полевого опыта / Б. А. Доспехов. - М.: Колос, 1985. - 351с.
2. Кильчевский А.В. Экологическая селекция растений / Институт генетики и цитологии АН Беларуси, Белорусская сельскохозяйственная академия. – Минск: Техналогия, 1997. – 372 с.
3. Juraev, S. T. (2022). Changes in the weight of raw cotton in one box in varietary cotton hybrids. *Spectrum Journal of Innovation, Reforms and Development*, *10*, 18-21.
4. Jurayev, S. T. (2022). Yield of cotton lines in different climatic-soil conditions of Uzbekistan. International Scientific Journal Theoretical & Applied Science, 11(1), 310-313.
5. Xolmurodova, G. R., Tangirova, G. N., Jo'rayev, S. T. (2022). Селекция и семеноводство сои. LESSON PRESS, 1(1), 88.
6. Jo'rayev, S. T., Xudarganov, K. O. (2022). Qishloq ekinlari urug‘chiligi va urpug‘shunosligi. LESSON PRESS, 1(1), 167.
7. Jo'rayev, S. T. (2022). Go'za seleksiyasi va urug'chiligi. LESSON PRESS, 1(1), 288.

8. Jo'rayev, S. T., Ashurov, M., Narmatova, G., Toreev, F., Akhmedov, D., Mavlonova, N., Ergashev, J., Baratova, A. (2022). Cotton breeding and seed production. LESSON PRESS, 1(1), 224.
9. Jo'rayev, S. T. (2022). G‘o‘zaning introgressiv duragay va tizmalirning O‘zbekistondagi xar xil tuproq sharoitlarda bo‘lgan adaptiv patinsolidan foydalanish. LESSON PRESS, 1(1), 211.
10. Jo'rayev, S. T. (2022). G‘o‘za genetikasi. LESSON PRESS, 1(1), 96.
11. Jo'rayev, S. T., Ergashov, J. A. (2022). Moyli ekinlar seleksiyasi va urug‘chiligi. LESSON PRESS, 1(1), 120.
12. Жураев, С. Т. (2022). Оценка волокна гибридов хлопчатника, выращенных в различных регионах Узбекистана. Министерство сельского хозяйства и продовольствия Республики Беларусь учреждение образования «Гродненский государственный аграрный университет», 1(52-55), 5.
13. Djonibekova, NE, Jo‘raev, ST, Inoyatova, MH (2022). Effect of bap concentration and content of food environment on “in vitro” regeneration of rizamat (vitis vinifera l) cultivar. European Journal of Agricultural and Rural Education (EJARE), 3(2), 75-78.
14. Joraev, S. T., Ismoilov, A. A., Dilmurodov, Sh. D. (2022). Yasmiq nav va tizmalarining o’suv davri. Xorazm Ma’mun Akademiyasi, 22(6), 5-11.
15. Joraev, S. T., Raimova, D. (2022). Взаимосвязь периода вегитации линий хлопчатника с Некоторыми хозяйственно-ценными признаками в зависимости от регионов возделывания. Tafakkur manzili ilmiy-uslubiy jurnali, 1(1), 4-14.
16. Juraev, S. T., & Rakhmatullayeva, R. A. (2023). Organization of Primary Seeding of Pumpkin (Cucurbita Pepo L.) Orbita Variety. *Web of Agriculture: Journal of Agriculture and Biological Sciences*, *1*(7), 35-43.
17. Juraev, S. T., Shaikhova, D. D., & Akhatov, X. X. (2023). Effectiveness of Creating Vitamin-Rich Local Varieties of Lemon. *Web of Agriculture: Journal of Agriculture and Biological Sciences*, *1*(7), 1-7.
18. Jurayev, S. T., & Karimov, R. A. (2023). Selecting Initial Breeding Sources for Morning Varieties from The Potato Variety Sample Collection. *Web of Agriculture: Journal of Agriculture and Biological Sciences*, *1*(6), 7-12.
19. Juraev, S. T., & Sobirova, D. Z. (2023). Assessment of the value characteristics of local" sochilmas" and" nafis" varieties of soy. *Galaxy International Interdisciplinary Research Journal*, *11*(9), 65-71.
20. Jo’raev, S. T., Mirzaeva, B. K., & ugli Shukurov, A. A. (2023). Correlationships between value-economic traits in different ecological areas of new cotton ranges. *Galaxy International Interdisciplinary Research Journal*, *11*(7), 178-184.
21. Turdiqulivich, J. S., Nazarovna, B. N., & Bobokulovna, J. M. (2023). Selection of High Photosynthetic Productivity Of Broad Bean (Vicia Faba L.) Lines. *Diversity Research: Journal of Analysis and Trends*, *1*(4), 6-9.
22. Ismoilov, A. A., & Jurayev, S. T. (2023). Selection of varieties and ranges of lens (lens culinaris) with high grain yield and high protein content. *European*

International Journal of Multidisciplinary Research and Management Studies, *3*(05), 157-162.
23. Juraev, S. T. (2023). Correlation relationships between the main value-economic characteristics of cotton grown in different regions of Uzbekistan. *Open Access Repository*, *9*(2), 131-137.
24. Juraev, S. T., Shukurov, A. A., & Jabborova, N. O. (2022). Analysis of value-economic characters of cotton introgressive hybrids in different soil-climate conditions in Uzbekistan. *Galaxy International Interdisciplinary Research Journal*, *10*(11), 828-835.

УЎТ:633.11-631.52

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ЖАНУБИЙ МИНТАҚАДА ЎРГАНИЛГАН ҚАДИМГИ ЮМШОҚ БУҒДОЙ НАВЛАРИНИНГ ОБЁТИК ВА БИОТИК ОМИЛЛАРГА ЧИДАМЛИЛИГИ

Аннотация. Буғдой дони таркибидаги қимматли бўлган темирни янада самарали тўплаши мумкин бўлган буғдой генотиплари танланиб, дон ҳосилдорлиги оширилиши билан бир қаторда унинг дон сифати, нонбоблик хусусиятлари ва тўйимлилигини яхшилашга қаратилган селексия ишлари олиб бориш ҳозирги куннинг энг долзарб вазифаларидан бири ҳисобланади. Мазкур мақолада юмшоқ буғдой навларининг дон сифат кўрсатгичи ҳамда дон таркибидаги темир модда миқдори келтириб ўтилган.

Калит сўзлар: Юмшоқ буғдой, 1000 дона дон вазни, оқсил миқдори, дон таркибидаги темир моддаси.

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RESISTANCE OF ANCIENT COMMON WHEAT VARIETIES TO OBIOTIC AND BIOTIC FACTORS STUDIED IN THE SOUTHERN REGION

Abstract. Selection of wheat genotypes that can accumulate the valuable iron contained in wheat grain more effectively, and to increase grain yield, as well as carrying out selection work aimed at improving its grain quality, baking properties and nutrition, is one of the most urgent tasks of today. In this article, the grain quality indicator of soft wheat varieties and the amount of iron in the grain are mentioned.

Keywords: Soft wheat, 1000-grain weight, protein content, iron content of grain.

Кириш. Ш.Д.Дилмуродов, Н.Б.Бойсунов ва бошқалар фикрича (2018) эртапишар навлар яратишда ўсимликнинг ўсув даври узунлиги генетик жиҳатдан мураккаб эканлигини ўсув вегитация даврининг айрим фазалар узунлигининг йиғиндисидан иборат бўлганлигини ҳисобга олиш лозим. Эртапишар навлар яратиш учун чатиштирилаётган жуфтнинг биттасида бирор фаза, иккинчисида эса бошқа бир фаза қисқа бўлиши керак. Бундай шакилларни аниқлаш учун ўрганилаётган барча нав ва намуналар устида фенологик кузатишлар ўтказиб, ҳар бир ўсув фазанинг бошланиши ва тугашмуддатини белгилаб бориш керак. Вегетация даври бир хил ўртача бўлган лекин айрим ривожланиш фазалар-давирлари узун –қисқалиги турлича бўлган навларни чатиштириб эртапишар навлар яратиш мумкин [2].

Ўсимликнинг ўсув даври ғалла экинларида, одатда, 2 даврга бўлинади: униб чиқиш-бошоқлаш ва бошоқлаш-пишиш. Униб чиқиш–бошоқлаш даврининг давомийлиги навнинг асосан кўп миқдорда биологик хусусиятларига боғлиқ бўлиб, ташқи муҳит иқлим–шароити кичик даражада аҳамиятга эга, бошоқлаш-пишиш даврида эса ташқи муҳит иқлим–шароити сезиларли даражада таъсир кўрсатади [3].

Марказий Осиё регионида охирги марта сариқ занг касаллиги эпифитотияси 2009-2010 йилларда қайд қилинган. Бундан ташқари фитосанитар мониторингнинг кўрсатишича, Ўзбекистоннинг дон экиладиган территориясида ҳар йили буғдой зарарланган майдон 30-70%, баьзан 90% гача етади. Тажрибаларда исботланишича, сариқ занг касаллиги билан 80-100 % зарарланган навлар ҳосилдорлиги 18-20 ц/га, 1000 та дон вазни 26,0 г. Касаллик билан ўртача даражада зарарланганда ҳосилдорлик – 30,0 ц/га, чидамли навлар ҳосилдорлиги – 36 ц/га ни ташкил этган. Шуни ҳам қайд этиш лозимки, сариқ занг билан зарарланган буғдой донидан олинган ун нонбоплик сифатини йўқотади [4].

Олиб борилган тадқиқотимиз Қашқадарё вилояти Қарши тумани Жанубий деҳқончилик илмий тадқиқот институтидаги Я. Омонав тажриба даласида амалга ошарилди. Қадимий навлар экиш ишлари 2021- йил 30-сентябрда амалга оширилди. Навларнинг униб чиқиши 19-20 ноябр кунига тўғри келди. Эртачи униб чиқган навлардан Қизил буғдой, Қизил бошоқ навлари 19- ноябрда униб чиқди. Қолган навлар 2-3 кун фарқ билан униб чиқганлиги кузатилди. Навларнинг туплаш фазаси 5-8 январ кунларига тўғри келганлиги кузатилди. Қизил буғдой, Туя тиш, Грекум, Ғаллакор навлари 5-январда туплпшга ўтганлиги аниқланди. Қизил шарқ, Қизил буғдой (Узун), Қизил буғдой (Бойсук) навлари 8-январда кеч туплаганлиги аниқланди. Найчалаш фазасида дон экинларида бошоқ тортиш қисми бўлиб ҳисобланади. Биринчи бошоқ ҳосил бўлиши асосий пояда ривожланади. Кейин қўшимча пояларда бошоқчалар шакллана бошлайди. Буғдой навларининг найчалаш фазаси 19-27 март кунларига тўғри келди. Букор бобо, Кал буғдой, Қора

қилтиқ навлари 19- март куни найчалаш фазасига эртачи ўтганлиги кузатилди (1-жадвал).

1-жадвал

Қадимий навлар кўчатзорида навларнинг ўсув даври давомийлиги (Қарши 2022-йил).

№	Нав номи	Униб чиқиш, сана	Туплаш, сана	Найчалаш, сана	Бошоқлаш, сана	Тўлиқ пишиш, сана	Ўсув даври, кун	Сариқ занг (%)
1	Қизил буғдой	19.ноя	05.янв	26.мар	23.апр	15.июн	157	R
2	Букор бобо	24.ноя	07.янв	19.мар	18.апр	12.июн	165	R
3	Оқ буғдой 1	22.ноя	06.янв	24.мар	23.апр	18.июн	157	R
4	Оқ буғдой 2	23.ноя	07.янв	24.мар	24.апр	10.июн	166	R
5	Туя тиш	21.ноя	05.янв	26.мар	25.апр	20.июн	154	10MR
6	Сурхак	20.ноя	07.янв	27.мар	24.апр	11.июн	162	R
7	Грекум	20.ноя	05.янв	25.мар	25.апр	17.июн	156	R
8	Кал буғдой	23.ноя	06.янв	19.мар	18.апр	19.июн	157	R
9	Қизил шарк	24.ноя	08.янв	24.мар	24.апр	12.июн	165	R
10	Қора қилтиқ	21.ноя	07.янв	19.мар	23.апр	15.июн	159	15MR
11	Қизил бошоқ	19.ноя	05.янв	26.мар	18.апр	19.июн	153	R
12	Оқ бошоқ	21.ноя	06.янв	27.мар	19.апр	13.июн	161	R
13	Қайроқ тош	20.ноя	07.янв	24.мар	18.апр	14.июн	159	R
14	Қизил буғдой(Узун)	19.ноя	08.янв	27.мар	22.апр	15.июн	157	15MS
15	Қизил буғдой(Бойсук)	21.ноя	08.янв	24.мар	21.апр	09.июн	165	R
16	Ғаллакор	20.ноя	07.янв	26.мар	16.апр	16.июн	157	R
17	Ғаллакор	20.ноя	05.янв	25.мар	16.апр	13.июн	160	R
18	Ғаллакор	20.ноя	07.янв	27.мар	16.апр	14.июн	159	R
	Энг паст кўрсатгич	**19 ноя**	**5 янв**	**19 мар**	**16 апр**	**9 июн**	**153**	**0**
	Ўртача кўрсатгич	**20 ноя**	**6 янв**	**24 мар**	**20 апр**	**14 июн**	**159**	**0**
	Энг юқори кўрсатгич	**24 ноя**	**8 янв**	**27 мар**	**25 апр**	**20 июн**	**166**	**0**

Бошоқлаш фазаси дон экинларида ҳосилдорлик кўрсатгичининг асосий ҳусусияти ҳисобланади. Чунки бунда маҳсулдор ва ҳосилдор пояларнинг юқори бўлиши ижобий натижа кўрсатади. Қадимий навларда бошоқлаши 16-25 апрел кунларига тўғри келди. Тўлиқ пишиш 9-20 июнгача давом этганлиги кузатилди. Навларнинг униб чиқишдан пишишгача бўлган куни 153-166

кунгача давом этганлиги кузатилди. Эртачи пишган навлардан Қизил бошоқ нави 153 кун, Туя тиш нави 154 кун, Грекум нави 156 кун, Қизил буғдой, Оқ буғдой-1, Кал буғдой, Қизил буғдой (Узун), Ғаллакор навлари 157 кунда пишганлиги кузатилди. Замбуруғли касалликлардан бири бўлган сариқ занг касаллигига бардошлилиги 15 та навда чидамли, қолган 3 та навда касаликка берилувчанлиги кузатилди.

Фойдаланилган адабиётлар:

1. Ковтун В. И. Влияние селекции на качество зерна на юге России //Известия Оренбургского государственного аграрного университета. – 2010. – Т. 3. – №. 27-1.
2. Дилмуродов Ш.Д., Бойсунов Н.Б. Ўзбекистоннинг жанубий ҳудудларида бошақли дон экинлари селекцияси, уруғчилиги ва етиштириш агротехнологияларининг ҳолати ва ривожлантириш истиқболлари. Халқаро илмий-амалий конференция. Қарши, 14-15 май 2018 йил. Б 47-48.
3. Аленин, П.Г. Продукционный потенциал зерновых, зернобобовых, кормовых и лекарственных культур и совершенствование технологии их возделывания в лесостепи Среднего Поволжья: монография / П.Г. Аленин, А.Н. Кшникаткина. – Пенза, 2012. – С. 265.
4. Juraev, S. T. (2022). Changes in the weight of raw cotton in one box in varietary cotton hybrids. Spectrum Journal of Innovation, Reforms and Development, 10, 18-21.
5. Jurayev, S. T. (2022). Yield of cotton lines in different climatic-soil conditions of Uzbekistan. International Scientific Journal Theoretical & Applied Science, 11(1), 310-313.
6. Xolmurodova, G. R., Tangirova, G. N., Jo'rayev, S. T. (2022). Селекция и семеноводство сои. LESSON PRESS, 1(1), 88.
7. Jo'rayev, S. T., Xudarganov, K. O. (2022). Qishloq ekinlari urug‘chiligi va urpug‘shunosligi. LESSON PRESS, 1(1), 167.
8. Jo'rayev, S. T. (2022). Go'za seleksiyasi va urug'chiligi. LESSON PRESS, 1(1), 288.
9. Jo'rayev, S. T., Ashurov, M., Narmatova, G., Toreev, F., Akhmedov, D., Mavlonova, N., Ergashev, J., Baratova, A. (2022). Cotton breeding and seed production. LESSON PRESS, 1(1), 224.
10. Jo'rayev, S. T. (2022). G‘o‘zaning introgressiv duragay va tizmalirning O‘zbekistondagi xar xil tuproq sharoitlarda bo‘lgan adaptiv patinsolidan foydalanish. LESSON PRESS, 1(1), 211.
11. Jo'rayev, S. T. (2022). G‘o‘za genetikasi. LESSON PRESS, 1(1), 96.
12. Jo'rayev, S. T., Ergashov, J. A. (2022). Moyli ekinlar seleksiyasi va urug‘chiligi. LESSON PRESS, 1(1), 120.
13. Жураев, С. Т. (2022). Оценка волокна гибридов хлопчатника, выращенных в различных регионах Узбекистана. Министерство сельского хозяйства и продовольствия Республики Беларусь учреждение образования «Гродненский государственный аграрный университет», 1(52-55), 5.

14. Djonibekova, NE, Jo‘raev, ST, Inoyatova, MH (2022). Effect of bap concentration and content of food environment on “in vitro” regeneration of rizamat (vitis vinifera l) cultivar. European Journal of Agricultural and Rural Education (EJARE), 3(2), 75-78.
15. Joraev, S. T., Ismoilov, A. A., Dilmurodov, Sh. D. (2022). Yasmiq nav va tizmalarining o’suv davri. Xorazm Ma’mun Akademiyasi, 22(6), 5-11.
16. Joraev, S. T., Raimova, D. (2022). Взаимосвязь периода вегитации линий хлопчатника с Некоторыми хозяйственно-ценными признаками в зависимости от регионов возделывания. Tafakkur manzili ilmiy-uslubiy jurnali, 1(1), 4-14.
17. Juraev, S. T., Shaikhova, D. D., & Akhatov, X. X. (2023). Effectiveness of Creating Vitamin-Rich Local Varieties of Lemon. *Web of Agriculture: Journal of Agriculture and Biological Sciences*, *1*(7), 1-7.
18. Jurayev, S. T., & Karimov, R. A. (2023). Selecting Initial Breeding Sources for Morning Varieties from The Potato Variety Sample Collection. *Web of Agriculture: Journal of Agriculture and Biological Sciences*, *1*(6), 7-12.
19. Juraev, S. T., & Sobirova, D. Z. (2023). Assessment of the value characteristics of local" sochilmas" and" nafis" varieties of soy. *Galaxy International Interdisciplinary Research Journal*, *11*(9), 65-71.
20. Jo’raev, S. T., Mirzaeva, B. K., & ugli Shukurov, A. A. (2023). Correlationships between value-economic traits in different ecological areas of new cotton ranges. *Galaxy International Interdisciplinary Research Journal*, *11*(7), 178-184.
21. Turdiqulivich, J. S., Nazarovna, B. N., & Bobokulovna, J. M. (2023). Selection of High Photosynthetic Productivity Of Broad Bean (Vicia Faba L.) Lines. *Diversity Research: Journal of Analysis and Trends*, *1*(4), 6-9.
22. Ismoilov, A. A., & Jurayev, S. T. (2023). Selection of varieties and ranges of lens (lens culinaris) with high grain yield and high protein content. *European International Journal of Multidisciplinary Research and Management Studies*, *3*(05), 157-162.
23. Juraev, S. T. (2023). Correlation relationships between the main value-economic characteristics of cotton grown in different regions of Uzbekistan. *Open Access Repository*, *9*(2), 131-137.
24. Juraev, S. T., Shukurov, A. A., & Jabborova, N. O. (2022). Analysis of value-economic characters of cotton introgressive hybrids in different soil-climate conditions in Uzbekistan. *Galaxy International Interdisciplinary Research Journal*, *10*(11), 828-835.

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АНАЛИЗ ЭФФЕКТИВНОСТИ ВЗАИМОДЕЙСТВИЯ ПАО «ВТБ БАНК» И ГОСУДАРСТВА В ВОПРОСАХ ПОДДЕРЖКИ МСП В СЕЛЬСКОХОЗЯЙСТВЕННОЙ ОТРАСЛИ

Аннотация. В данной статье проводится анализ эффективности взаимодействия ПАО "ВТБ Банка" и государства в вопросах поддержки малого и среднего предпринимательства (МСП) в сельскохозяйственной отрасли. Рассматриваются основные инструменты финансовой поддержки, предоставляемые банком и государством, их влияние на развитие МСП в сельском хозяйстве. В статье также анализируются проблемы и перспективы сотрудничества между банком и государством в этой области, а также предлагаются рекомендации по улучшению эффективности данного взаимодействия.

Ключевые слова: государственная поддержка, МСП, ПАО «ВТБ Банк», кредитные продукты для МСП, Государственные программы для МСП.

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ANALYSIS OF THE EFFECTIVENESS OF INTERACTION BETWEEN «VTB BANK» PJSC AND THE GOVERNMENT IN SUPPORTING SMEs IN THE AGRICULTURAL SECTOR

Abstract. This article analyzes the effectiveness of the interaction between «VTB Bank» and the state in supporting small and medium-sized enterprises (SMEs) in the agricultural sector. The main financial support tools provided by the bank and the government and their impact on the development of SMEs in agriculture are considered. The article also analyzes the problems and prospects of cooperation between the bank and the government in this area, as well as offers recommendations for improving the effectiveness of this interaction.

Keywords: government support, SMEs, VTB Bank PJSC, credit products for SMEs, Government programs for SMEs.

Одна из приоритетных задач ПАО «ВТБ Банка» – поддержка предпринимателей. Она стала особенно актуальной в начале 2022 г., когда

клиентам пришлось в сжатые сроки искать новых партнеров, перестраивать цепочки поставок и сбыта на фоне роста издержек, сложностей с проведением оплаты и так далее. Многие предприниматели оказались в сложной ситуации, особенно это коснулось предприятий малого и среднего бизнеса. Банк стремился помочь им быстро адаптироваться к новым условиям и сохранить устойчивость бизнеса. Особо пристальное внимание банк уделяет поддержке малых и средних предприятий в сфере сельского хозяйства. Банк одним из первых среди российских финансовых учреждений начал работу по программе льготного кредитования, реализуемой совместно с Министерством сельского хозяйства РФ63.

В части финансирования клиентов МСП в 2019-2022 гг. в банке активно развивались программы государственной поддержки и льготного кредитования. В части поддержки сельскохозяйственных МСП в банке действуют следующие программы льготного финансирования Министерства сельского хозяйства Российской Федерации64:

– программа 1528;
– программа 512;
– программа 375.

Далее целесообразно более подробно рассмотреть содержание программ.

Программа 1528 утверждена Постановлением Правительства РФ от 29 декабря 2016 г. №1528. Ставка кредитования – от 1 до 5% годовых. Выдаются следующие виды кредитов:

1) краткосрочный кредит на цели развития подотраслей растениеводства и животноводства – на срок до 1 года, максимальную сумму определяет Минсельхоз РФ;

2) инвестиционный кредит на цели развития подотраслей растениеводства и животноводства – на срок от 2 до 15 лет (включительно), сумма не ограничена;

3) рефинансирование льготного инвестиционного кредита - срок в зависимости от цели рефинансируемого кредита, сумма кредита не более остатка ссудной задолженности по рефинансируемому кредиту.

Программа 512 утверждена Постановлением Правительства Российской Федерации от 26.04.2019 г. № 512. Виды поддержки:

1) льготное кредитование по ставке до 5% годовых на срок от 1 до 15 лет;

2) краткосрочные кредиты предоставляются на срок до 1 года с целью пополнения оборотных средств и ведения текущей деятельности компании;

63 Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 11.11.2023)

64 Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru(дата обращения 11.11.2023)

3) долгосрочные инвестиционные кредиты предоставляются на срок от 2 до 15 лет и предназначаются для привлечения капитальных затрат для строительства, реконструкции, модернизации производственных мощностей и инфраструктуры.

Программа 375 утверждена Постановлением правительства № 375 от 16 марта 2022 г. Договор на предоставление льготного оборотного кредита на осуществление операционной деятельности можно будет заключить в период с 21 марта по 15 декабря 2022 г. включительно по льготной ставке в 10% годовых на срок не более 1 года. Максимальный размер кредита - 5 млрд руб. Заемщик обязуется сохранять в течение периода действия кредитного договора не менее 90% численности работников по состоянию на 1 марта 2022 г. Выпадающие доходы банков по льготным кредитам будут возмещаться за счет субсидий.

Помимо государственных программ льготного кредитования банк «ВТБ» предлагает собственный продукт – «Урожайный бизнес».

В настоящее время по данному продукту действуют следующие условия (таблица1):

Таблица 1

Условия кредитования сельскохозяйственных МСП в банке «ВТБ» по продукту «Урожайный бизнес»

Условия кредита	Описание
Цель	Пополнение оборотных средств, финансирование капитальных затрат (включая приобретение недвижимости), рефинансирование кредитов сторонних банков
Срок кредитного договора	До 7 лет
Сумма кредита	До 150 млн руб.
Залог	Оборудование, транспорт, недвижимость торгового, офисного, производственно-складского и сельскохозяйственного назначения (включая незастроенные земельные участки сельскохозяйственного назначения), поручительство фонда поддержки малого предпринимательства
Формы предоставления	1) Кредит – разовое предоставление заемщику денежных средств с возможностью установления индивидуального графика погашения. 2) Невозобновляемая кредитная линия - кредит с возможностью единоразового использования и погашения нескольких траншей в рамках установленных сроков и сумм. 3) Возобновляемая кредитная линия - кредит с возможностью неоднократного использования и погашения нескольких траншей в рамках установленных сроков и сумм.
Требования к заемщику	1) Осуществляет деятельность в области сельского хозяйства, за исключением рыбоводства, рыболовства. 2) Опыт ведения деятельности в области сельского хозяйства не менее 3-х лет.
Документы для оформления	Анкета Учредительные и регистрационные документы Оригиналы паспортов владельцев бизнеса Официальная отчетность

	Документы, подтверждающие управленческую выручку Документы, подтверждающие договорные отношения с контрагентами/поставщиками Документы, подтверждающие право собственности на основные средства, используемые в бизнесе

Источник: Составлено автором по данным Официального сайт ПАО «ВТБ Банк» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 11.11.2023)

Также целесообразно рассмотреть, как менялся продукт «Урожайный бизнес». Данный продукт появился в кредитном портфеле банка в 2018 г. В 2019 г. ПАО «ВТБ Банк» в целях поддержки малого и среднего бизнеса обновил линейку продуктов «Урожайный бизнес» для сельскохозяйственных предприятий. В этом периоде минимальный размер кредита составлял 4 млн руб. Деньги выделялись на пополнение оборотных средств, приобретение имущества, а также ремонт и реконструкцию. Кроме этого, в обновленной линейке кредитов существенно упрощены требования к залоговому обеспечению. В частности, стала возможной реализация сделок, где единственным залогом выступает основной актив агропромышленного комплекса – земли сельскохозяйственного назначения65.

Кроме этого, в обновленной линейке кредитов существенно упрощены требования к залоговому обеспечению, в частности, стала возможной реализация сделок, где единственным залогом выступает основной актив АПК — земли сельскохозяйственного назначения.

В 2020 г. ПАО «ВТБ Банк» упростил процесс получения краткосрочных кредитов по льготной программе Министерства сельского хозяйства РФ (Программе 1528) для предприятий малых форм хозяйствования (МФХ), занятых в растениеводстве. Для оформления кредита на срок до 1 года по ставке от 1% до 5% годовых на развитие подотраслей растениеводства с 2020 г. не требуется предоставление детального подтверждения ежемесячной выручки. Порядок анализа деятельности клиента адаптирован под бизнес с выраженной сезонностью. Максимальная сумма кредита в 2020 г. составляла 30 млн руб.
Помимо упрощенных требований к документам клиента допускался залог сельскохозяйственных земель, была внедрена возможность замены части залогового обеспечения поручительством федеральной Корпорации по развитию малого и среднего предпринимательства или региональных фондов поддержки субъектов малого и среднего предпринимательства66.

65 Годовой отчет ПАО «ВТБ Банк» за 2019 год [Электронный ресурс]. – Режим доступа: https://rspp.ru/upload/uf/968/vtb_sustainability_report_rus.pdf (дата обращения 11.11.2023)

66 Годовой отчет ПАО «ВТБ Банк» за 2020 год [Электронный ресурс]. – Режим доступа: https://rspp.ru/upload/uf/34a/0msmvg3tgdaib6nkzgaj8mx0ykqk5dpm/%D0%92%D0%A2%D0%91%20%D0%98%D0%9E%202020.pdf (дата обращения 15.11.2023)

В 2021 г. ПАО «ВТБ Банк» еще больше упростил получение кредита по продукту «Урожайный бизнес», внедрив возможность оформления кредита онлайн. В результате объемы онлайн-кредитования по этому продукту во втором полугодии 2021 г. выросли в 3,5 раза.

В таблице 3.1.2 представлена динамика количества сельскохозяйственных предприятий малого и среднего бизнеса, обслуживаемых в ПАО «ВТБ Банке».

Данные таблицы 2 свидетельствуют о том, что наблюдается рост клиентов, относящихся к малому и среднему бизнесу в период с 2019 по 2022 гг.

Таблица 2

Динамика количества клиентов, являющихся сельскохозяйственными предприятиями малого и среднего бизнеса

Показатель	2019	2020	2021	2022	Темп роста 2022 г. к 2021 г., %
Количество клиентов- юридических лиц всего, тыс. ед.	655	742	872	1012	116,06
Количество малых и средних предприятий, тыс. ед.	645	731	860	989	115,00
Количество МСП сельскохозяйственной сферы, тыс. ед.	9,6	153,5	172	217	126,16

Источники: Составлено автором по данным Годовых отчетов ПАО «ВТБ» [Электронные ресурсы]. – Режимы доступа:

https://rspp.ru/upload/uf/968/vtb_sustainability_report_rus.pdf_____(дата обращения 15.11.2023);

https://rspp.ru/upload/uf/34a/0msmvg3tgdaib6nkzgaj8mx0ykqk5dpm/%D0%92%D0%A2%D0%91%20%D0%98%D0%9E%202020.pdf_(дата обращения 15.11.2023);

https://www.vtb.ru/media-files/vtb.ru/sitepages/ir/statements/annual/Annual_report_2022_RUS_.pdf (дата обращения 15.11.2023)

Рост числа клиентов МСП объясняется тем, что ПАО «ВТБ Банк» в этот период активно наращивал число активных клиентов среднего и малого бизнеса в рамках стратегической цели – миллион активных клиентов-предпринимателей к концу 2022 г67. Как видно из данных таблицы 2, миллион клиентов из числа МСП не был достигнут к концу 2022 г. Этому препятствовали нестабильная внешнеполитическая обстановка и введенные против банка санкции на фоне нее. Однако, на фоне санкций и перестройки банковской сферы банк смог не только предотвратить массовый отток клиентов, но и нарастить базу клиентов из числа МСП на 15%. По итогам года

67 Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 17.11.2023)

количество активных клиентов из числа юридических лиц ПАО «ВТБ Банка» превысило 1 млн. А число клиентов из числа сельскохозяйственных МСП увеличивается наиболее высокими темпами. Так, в 2020 г. по сравнению с 2019 г. количество клиентов из числа сельскохозяйственных МСП увеличилось почти на 60%, в 2021 г. по сравнению с 2020 г. – на 12%, в 2022 г. по сравнению с 2021 г. – на 26%. Рост количества клиентов из числа сельскохозяйственных МСП объясняется активным участием ПАО «ВТБ Банка» в госпрограммах по льготному кредитованию таких предприятий, а также упрощением процедуры получения кредита «Урожайный бизнес».

На рисунке 1 представлена динамика доли клиентов МСП по сферам деятельности.

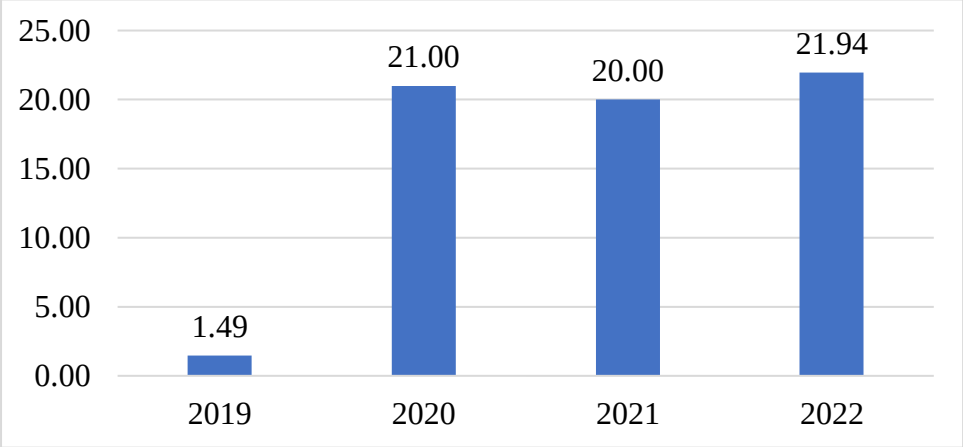

Рис. 1. Динамика доли клиентов из числа сельскохозяйственных малых и средних предприятий в 2019 - 2022 гг.,%

Источники: Составлено автором по данным Годовых отчетов ПАО «ВТБ» [Электронные ресурсы]. – Режимы доступа:

https://rspp.ru/upload/uf/968/vtb_sustainability_report_rus.pdf_____(дата обращения 15.11.2023);

https://rspp.ru/upload/uf/34a/0msmvg3tgdaib6nkzgaj8mx0ykqk5dpm/%D0%92%D0%A2%D0%91%20%D0%98%D0%9E%202020.pdf_(дата обращения 15.11.2023);

https://www.vtb.ru/medi-afiles/vtb.ru/sitepages/ir/statements/annual/Annualreport2022 RUS.pdf(дата обращения 15.11.2023)

Данные рисунка 1 свидетельствуют о том, что с 2020 г. доля клиентов из числа сельскохозяйственных МСП существенно увеличилась по сравнению с 2019 г. Это объясняется постепенным присоединением банка к программам льготного кредитования от Министерства сельского хозяйства РФ, а также тем, что банк постоянно упрощает механизм и условия получения кредита по продукту «Урожайный бизнес».

Таким образом, в общем объеме кредитного портфеля клиентов среднего и малого бизнеса ПАО «ВТБ Банка» доля клиентов из сферы сельского хозяйства составляет находится на втором месте в ТОП-3

лидирующих сфер - строительной отрасли (22%), пищевой промышленности и сельского хозяйства (21,94%), торговли (20%).

На рисунке 2 представлена динамика объемов кредитования сельскохозяйственных МСП в ПАО «ВТБ Банке».

Рис. 2. Динамика объемов кредитования сельскохозяйственных МСП в ПАО «ВТБ Банке» в 2019-2022 гг.

Источники: Составлено автором по данным Годовых отчетов ПАО «ВТБ» [Электронные ресурсы]. – Режимы доступа:

https://rspp.ru/upload/uf/968/vtb_sustainability_report_rus.pdf_____(дата обращения 15.11.2023);

https://rspp.ru/upload/uf/34a/0msmvg3tgdaib6nkzgaj8mx0ykqk5dpm/%D0%92%D0%A2%D0%91%20%D0%98%D0%9E%202020.pdf_(дата обращения 15.11.2023);

https://www.vtb.ru/medi-afiles/vtb.ru/sitepages/ir/statements/annual/Annualreport2022 RUS.pdf (дата обращения 15.11.2023)

Данные рисунка 2 свидетельствуют о том, что по состоянию на 31 декабря 2020 г. по программам кредитования сельскохозяйственных МСП действовало около 2 000 кредитных соглашений на общую сумму 283 млрд руб. Таким образом, объем действующих кредитов сельскохозяйственным МСП в 2020 г. увеличился более, чем на 150% по сравнению с 2019 г.

В 2021 г. в сегменте «Кредитование сельскохозяйственных МСП» действовало порядка 2047 кредитов на сумму 228 млрд руб. В 2022 г. наблюдается самое большое значение показателя действующих кредитов, выданных сельскохозяйственным МСП, но общая сумма выданных кредитов при этом составляет 255 млрд руб. Таким образом, можно сделать вывод, что в 2021-2022 гг. увеличивается число прокредитованных

сельскохозяйственных МСП, но при этом суммы выданных кредитов снижаются.

Наибольший кредитный портфель формируют программы льготного финансирования Министерства сельского хозяйства Российской Федерации (Программа 1528, Программа 512 и Программа 375)68.

Преимуществом ПАО «ВТБ Банка» в сфере кредитования сельскохозяйственных МСП является то, что банк активно участвует во всех программах государственной поддержки, предлагая в рамках данных программ специальные льготные условия финансирования.

Помимо этого, преимуществом банка является упрощенный порядок получения кредита, а именно:

– снижаются требования к заемщикам;

– банк постоянно предлагает новые условия для реструктуризации уже выданных кредитов с тем, чтобы уменьшить кредитное бремя для сельскохозяйственных МСП и сделать их условия работы более комфортными;

– также есть возможность оформлять кредиты онлайн, что очень удобно для тех сельскохозяйственных МСП, которые находятся далеко от городов, в которых есть офисы банка.

Поэтому своим клиентам из числа сельскохозяйственных МСП банк может предложить несколько вариантов кредитования – как по программам господдержки (на льготных условиях), так и собственный продукт.

План льготного кредитования на 2022-2023 гг. был утвержден исходя из необходимости обеспечить выполнение ранее принятых обязательств. Так, в целом в 2023 г. объем льготного кредитования снизился на фоне роста ключевой ставки ЦБ, поскольку существенный объем выделенных бюджетных средств был перенаправлен на поддержку ранее взятых кредитных обязательств. Так, по предварительной оценке экспертов ПАО «ВТБ Банка» объем кредитов, предоставленных сельскохозяйственным МСП за 2023 г. увеличился всего на 0,6% по сравнению с 2022 г., при том, что кредитование МСП из других сфер увеличилось в среднем на 9,3% по сравнению с 2022 г69.

Исходя их вышесказанного, можно сделать вывод, что ПАО «ВТБ Банк» активно участвует во всех программах государственной поддержки бизнеса, предлагая в рамках данных программ специальные льготные условия финансирования. Идет активный процесс по упрощению доступа субъектов малого и среднего предпринимательства к льготному кредитованию путем либерализации ряда требований к заемщику и расширения возможности реструктуризации ранее выданных кредитов, что позволит простимулировать

68 Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 17.11.2023)

69 Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 18.11.2023)

представителей малого и среднего бизнеса, действующих в сфере сельского хозяйства.

Использованные источники:

1. Годовой отчет ПАО «ВТБ» за 2019 год [Электронный ресурс]. – Режим доступа: https://rspp.ru/upload/uf/968/vtb_sustainability_report_rus.pdf (дата обращения 15.11.2023
2. Годовой отчет ПАО «ВТБ» за 2020 год [Электронный ресурс]. – Режим доступа: https://rspp.ru/upload/uf/34a/0msmvg3tgdaib6nkzgaj8mx0ykqk5dpm/%D0%92%D0%A2%D0%91%20%D0%98%D0%9E%202020.pdf (дата обращения 15.11.2023)
3. Годовой отчет ПАО «ВТБ» за 2022 год [Электронный ресурс]. – Режим доступа: https://www.vtb.ru/media-files/vtb.ru/sitepages/ir/statements/annual/Annual_report_2022_RUS_.pdf (дата обращения 15.11.2023)
4. Данные о ключевой ставке [Электронный ресурс]. – Режим доступа: https://base.garant.ru/10180094 (дата обращения 15.11.2023)
5. Официальный сайт ПАО «ВТБ» [Электронный ресурс]. – Режим доступа: https://www.vtb.ru (дата обращения 15.11.2023)

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ОСНОВЫ ОРГАНИЗАЦИИ ОБСЛУЖИВАНИЯ КЛИЕНТОВ

Аннотация. В данной статье, помимо особенностей видов услуг в нашей стране сегодня и основ организации обслуживания клиентов, автор разработал предложения и рекомендации по развитию сферы услуг.

Ключевые слова: услуга, экономика, оказание услуг, особенности.

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FUNDAMENTALS OF ORGANIZING CUSTOMER SERVICE

Abstract. In this article, in addition to the features of the types of services in our country today and fundamentals of organizing customer service, the author has developed suggestions and recommendations for the development of the service sector.

Key words: service, economy, service provision, features.

Обслуживание – 1) деятельность исполнителя услуги, проходящая при непосредственном контакте с потребителем; 2) предоставление услуг, создание условий, которые облегчат людям трудовую деятельность, передвижение, отдых и другие жизненно-важные функции.

Как и любому виду трудовой деятельности, обслуживанию потребителя присущи определенные принципы организации. Среди них можно выделить:

• более полное удовлетворение платежеспособного спроса населения на услуги;

• максимальное приближение услуг к потребителю;

• повышение внимания к заказчику, к его индивидуальным требованиям, вкусам и запросам;

• создание наибольших удобств и комфортных условий для заказчика при пользовании услугами;

• доведение услуг до потребителя с меньшими затратами.

Реализация этих принципов на практике предполагает осуществление комплекса мероприятий, направленных на решение следующих вопросов:

• Увеличение объема реализации услуг и расширение номенклатуры оказываемых услуг.

• Улучшение качества исполнения заказа.

• Улучшение качества обслуживания заказчиков за счет внедрения прогрессивных форм обслуживания.

• Повышение культуры обслуживания.

• Совершенствование ценообразования услуг.

• Повышение эффективности обслуживания достигается за счет проведения систематической работы в следующих направлениях:

• Внедрение прогрессивных форм обслуживания.

• Рациональное размещение подразделений предприятий, осуществляющих прием и выдачу заказов.

• Установление наиболее удобного режима работы предприятий и их подразделений, непосредственно оказывающих услуги населению.

• Соблюдение сроков исполнения заказов.

• Повышение культуры обслуживания.

Локальный характер спроса на услуги заставляет размещать предприятия сферы сервиса повсеместно в центре их потребления с учетом конкретных условий и особенностей зон обслуживания.

Принципами рационального расположения предприятий на территории являются:

-максимальное приближение к потребителям услуг;

-достижение минимальных затрат производственных ресурсов на оказание услуг.

Правильно установленный, удобный для населения режим работы предприятия и приемной сети, в первую очередь, должен обеспечить гарантированную возможность посещения их заказчиками во внерабочее время. Так, часы работы подразделений службы быта при промышленных предприятиях должны быть согласованы с режимом работы последних, чтобы предоставить возможность работающим пользоваться их услугами до начала работы или после окончания смены на производстве. Приемные пункты и салоны должны работать в утренние и вечерние часы, чтобы заказчики могли их посетить до начала или после окончания работы. Следует установить работу предприятий сферы сервиса в общие выходные дни. Иными словами, представляется целесообразным повсеместный перевод предприятий этой сферы на продленный рабочий день и шести-семидневную рабочую неделю.

Время обеденных перерывов необходимо устанавливать индивидуально для каждого предприятия, а при наличии возможности работать без перерыва на обед по скользящему графику (сдвиг начала - конца работы мастеров, приемщиков).

Огромную роль в привлечении потребителей играет соблюдение предприятиями сферы сервиса сроков исполнения заказов.

Своевременное выполнение заказа ликвидирует потери времени заказчика на дополнительное посещение предприятия.

С целью соблюдения сроков выполнения заказов необходимо, в первую очередь, предоставлять потребителю информацию об этих сроках, в том числе и на срочные услуги.

С целью избежания потребителем дополнительного посещения предприятия необходимо создать систему коммуникации между предприятием и потребителем. Здесь можно сформировать базу данных о

клиентах, где фиксировать и хранить информацию о средствах связи с заказчиком (телефон, E-mail, адрес) с целью его предупреждения о возможных задержках в выполнении заказа или его более раннем завершении.

Формирование базы данных о потребителях позволит не только избегать конфликтов, связанных с нарушениями сроков исполнения заказов, но и предоставит возможность предприятию анализировать и создавать образ своего потребителя, своевременно предупреждать его о необходимости повторного посещения предприятия. Такая забота о потребителе будет способствовать формированию положительного имиджа предприятия.

На всех предприятиях сферы сервиса должен осуществляться плановый контроль за соблюдением установленных сроков исполнения заказов, что исключит возможность их превышения и, как следствие, предотвратит неправомерное превышение нормативных (утвержденных) сроков.

Этика обслуживания - вежливое, внимательное и доброжелательное отношение работников сферы услуг к заказчикам. В связи с этим всем работникам, непосредственно контактирующим с заказчиками (приемщикам, диспетчерам, мастерам и др.), кроме профессиональной подготовки необходимо иметь навыки обслуживания и общения.

Эстетика обслуживания - благоприятная обстановка и комфорт, создаваемые заказчику при получении услуги, способствующие улучшению настроения человека и оставляющие хорошее впечатление от посещения предприятия.

Социальная функция рекламы заключается в экономии общественного времени. Так, при достаточно полной информации населения о видах оказываемых услуг и предлагаемых формах обслуживания, режимах работы предприятия, сроках и стоимости выполнения заказов отпадает необходимость выдачи справок по вопросам пользования услугами, более рациональным становится процесс обслуживания.

Экономическая функция рекламы состоит в стимулировании формирования потребностей людей в услугах, обеспечении сбалансированности спроса и предложения на услуги распространением среди населения доходчивой и убедительной информации о потребительских свойствах услуг, их выгодности для заказчика.

Воспитательная функция рекламы вытекает из ее роли в формировании разумных потребностей, полезных привычек и хорошего вкуса у людей, в преодолении необъективных мнений в вопросах пользования услугами в результате доведения достоверной и оформленной на высоком художественном уровне информации о работе предприятий сферы сервиса. Общее содержание рекламы в сфере сервиса должно обеспечить потребителю возможность получения услуг, полезных и рациональных как с потребительской, так и с эстетической точек зрения.

Использованные источники:

1. Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги “2022-2026 йиларга мўлжалланган янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида” ПФ-60-сон Фармони -74 б.
2. К.Х.Абдурахманов. Экономика труда. Теория и практика. Учебник: в 2 ч. — Москва: ФГБОУ ВО «РЭУ им. Г. В. Плеханова», 2019.
3. Л.В.Максимова. Набор и отбор персонала // Управление персоналом. - М.: Альфа-Н, 2009. - С. 45-63.

УДК 618. 162

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ОСОБЕННОСТИ ТЕЧЕНИЯ БЕРЕМЕННОСТИ И РОДОВ У ЖЕНЩИН С ПЕРЕНОШЕННОЙ БЕРЕМЕННОСТЬЮ, ПРОЖИВАЮЩИХ В НАШЕМ РЕГИОНЕ

Резюме. Переношенная беременность является одной из важных проблем современного акушерства. Переношенная беременность продолжается дольше физиологической на 10-14 дней и заканчивается рождением перезрелого ребенка. Роды при переношенной беременности относятся к патологическим и называются запоздалыми.

Течение переношенной беременности характеризуется высоким процентом осложнений (гестозы, анемия, гипоксия и асфиксия плода), а также осложнений в родах (преждевременное излитие околоплодных вод, аномалии родовых сил, клинически узкий таз, гипотоническое кровотечение, гипоксия и асфиксия плода, родовые травмы матери и плода). Частота переношенной беременности, по данным различных авторов, составляет от 2 до 14% случаев.

Ключевая слова: переношенная беременность, течения беременности, регион.

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FEATURES OF THE COURSE OF PREGNANCY AND CHILDBIRTH IN WOMEN WITH POST-TERM PREGNANCIES LIVING IN OUR REGION

Resume. Delayed pregnancy is one of the important problems of modern obstetrics. The postponed pregnancy lasts longer than the physiological one by 10-14 days and ends with the birth of an overripe child. Childbirth during delayed pregnancy is considered pathological and is called delayed.

The course of post-term pregnancy is characterized by a high percentage of complications (gestosis, anemia, hypoxia and fetal asphyxia), as well as complications in childbirth (premature discharge of amniotic fluid, abnormalities of labor forces, clinically narrow pelvis, hypotonic bleeding, hypoxia and fetal asphyxia, birth injuries of the mother and fetus). The frequency of postponed pregnancy, according to various authors, ranges from 2 to 14% of cases.

Keywords: postponed pregnancy, pregnancy course, region.

Актуальность. Проблема переношенной беременности остается весьма актуальной для современного акушерства, что связано с рядом факторов. Несмотря на прогрессивное развитие перинатальной медицины, переношенная беременность на сегодня занимает одно из первых мест среди причин перинатальной смертности и неонатальной заболеваемости [2,6].

В РФ в 2004 году показатель перинатальной смертности составил 10,9%о, в то время как в 1999 году этот показатель составлял 14,2%о [1,4]. Значительным резервом снижения перинатальной смертности и перинатальной заболеваемости является оптимизация тактики ведения переношенной беременности.

В настоящее время не возникает сомнения, что выбор наиболее оптимального метода ведения родов невозможен без учета степени перинатального риска [5,9]. По данным Е.А. Чернухи и соавт. (2001) [7], дифференцированный подход к беременным различной степени риска позволяет снизить уровень перинатальной смертности почти на 30%.

Поэтому крайне важной остается стратегия риска в современных акушерстве и перинатологии, которая появилась при изучении причин материнской и перинатальной смертности [6,9].

Беременность высокого перинатального риска всегда связана с увеличением риска смерти или болезни плода и новорожденного вследствие неблагоприятного влияния заболеваний матери, осложнений беременности, заболеваний самого плода, аномалий его развития [3].

Современное состояние и тенденции в заболеваемости женщин и новорожденных порождают замкнутый цикл: больной плод - больной ребенок - больной подросток - больные родители. Продолжительность этого цикла составляет 20-25 лет, и с каждым новым циклом патологическая поражаемость новорожденных возрастает.

Ухудшение здоровья населения планеты и научно технический прогресс, обеспечивающий широкие возможности для диагностики и лучшие условия для оперативного вмешательства, имеют тенденцию к постоянному росту. Эту же тенденцию имеет и частота кесарева сечения во всем мире. Действительно, как отмечают А.Н. Стрижаков и др. (2000) [4], в условиях низкой рождаемости нетрудно обосновать показания к первому кесареву сечению в интересах плода. Этот вывод не может не вызывать настороженности. Расширение показаний к абдоминальному родоразрешению не может быть бесконечным, поскольку не улучшает индекса здоровья ни женщин, ни рожденных детей. Решению этих вопросов, в частности оптимизации тактики ведения переношенной беременности, и посвящена данная работа.

Цель исследования. Улучшить исход переношенной беременности и родов путем дифференцированного подхода к выбору времени и метода родорарешения.

Материалы и методы исследования. Чтобы выполнить поставленную перед нами задачу, мы отобрали для обследования в общей сложности 80

женщин в послеродовом периоде, проживающих в нашем регионе, и изучили особенности протекания у них беременности и родов

Результаты исследования. Переношенная беременность в нешем регионе составляет 2,0% от общего числа родов и в 2,3 раза чаще встречается среди первородящих.

Основными факторами риска переношенной беременности у первородящих являются: возраст - старше 25 лет, заболевания мочевыделительной системы (23,8%), ожирение (27,3%), беременность вне брака (24,1%); у повторнородящих: возраст 31 год и старше, отягощенный соматический анамнез - заболевания сердечно-сосудистой системы (36,1%), мочевыделительной (22,5%) и пищеварительной систем (23,3%), ожирение (29,3%), репродуктивные потери в анамнезе. Установить однозначно достоверный прогностический фактор не представляется возможным - не исключено, что его нет.

В основе выбора тактики родоразрешения женщин с переношенной беременностью при наличии совокупности относительных показаний лежит определение степени перинатального риска: 25 баллов и выше - абдоминальное родоразрешение; до 24 баллов - программированные роды. Наиболее оптимальным сроком родоразрешения женщин с перенашиванием является 41 неделя беременности, так как с увеличением срока перенашивания прямо пропорционально увеличивается показатель перинатальной заболеваемости: среди родоразрешенных в 41 неделю - 10,8%, в 42 недели - 32,5% и в 43 недели - 164,5% соответственно.

У беременных с перенашиванием и "незрелой" шейкой матки, низкой и средней степенью перинатального риска необходимо избегать пассивного ожидания спонтанной родовой деятельности или "созревания" шейки матки, а проводить преиндукционную подготовку шейки матки, чтобы затем применить родовозбуждение. Достижение степени риска 25 баллов и выше, в том числе определенных интранатально, должно стать основанием для абдоминального родоразрешения.

Разработанный алгоритм дифференцированного подхода к выбору времени и метода родоразрешения в зависимости от степени перинатального риска, срока гестации и "зрелости" шейки матки позволяет полностью нивелировать перинатальную смертность и снизить перинатальную заболеваемость с 77,6% при спонтанных родах до 16,8% - при программированных родах (на примере родильного дома №25 г.Москвы в течение 2004-2006гг.).

При перенашивании у беременных с низкой и средней степенью перинатального риска, особенно при пограничных значениях оценки перинатального риска (20-24 балла), необходимо проводить постоянное антенатальное слежение за состоянием плода с привлечением УЗИ, кардиотокографии, допплеровского исследования и т.п.

Отсутствие роста БПР, ПЗРГ, БРГ и ПЗРЖ на фоне увеличения БРЖ, снижение оценки БФП плода (суб- и декомпенсированные фазы ПН), развитие

феномена централизации плодового кровообращения, появление поздних децелераций и вариабельность сердечного ритма должны стать основанием для абдоминального родоразрешения.

Для снижения ложноположительных и ложноотрицательных результатов в диагностике маловодия от амниоскопии следует отказаться или её данные необходимо сопоставлять с эхографическими показателями. В любом случае количество вод следует оценивать эхографически.

При перенашивании у рожениц с околоплодными водами, окрашенными меконием, необходимо прибегать к амниоинфузии теплым изотоническим раствором в течение 2-3 часов под постоянным кардитокографическим контролем. В случае появления поздних децелераций и снижения вариабельности сердечного ритма родоразрешать путем экстренного кесарева сечения.

Использованные источники:

1. Апресян В.В. Генетические аспекты репродуктивного здоровья женщин с алиментарно-конституциональным ожирением: Автореф. дис.канд.мед.наук. М., 2004. - 23с.
2. Белослудцева Н.Н. Перинатальная смертность в Нижегородской области: клинико-биологические и медико-социальные аспекты: Автореф. дис. канд. мед. наук. -М., 1996.
3. Бондаренко К.В. Программированные роды — резерв снижения материнской и перинатальной заболеваемости и смертности: Автореф. дисс. канд. мед. наук. М., 2007. - 23 с.
4. Василенко Л.В., Змеева М.А. Индукция родовой деятельности при перенашивании беременности // Индукция сократительной деятельности матки: Сб. науч. тр. Саратов: Изд-во СМУ, 2000. - С. 35-37.
5. Подтетенев А.Д. Прогнозирование, профилактика и лечение слабости идискоординации родовой деятельности): Автореф. дис.. док. мед. наук. -М., 2003. – 44 с.
6. Радзинский В.Е., Костин И.Н. Акушерская агрессия как причина снижения качества родовспоможения // Вестник РУДН. 2005. - №4 (32). -С.9 -12.
7. Baskett T.F., Allen V.M., O'Connell C.M. et al. Predictors of respiratory depression at birth in the term infant // BJOG. 2006. - V.l 13, №7. - P.769-774.
8. Treger M., Hallak M., Silberstein T. et al. Post-term pregnancy: should induction of labor be considered before 42 weeks? // J Matern Fetal Neonatal Med. 2002. - V. 11, №1. -P.50-53.
9. Urban L., Lemancewicz A. The Doppler cerebroplacental rations and perinatal outcome in post-term pregnancy // Gynecol. Pol. 2000. - V.71, №4. -P.317-321.
10. Verrotti C., Bedocchi L., Piantelli G. et al. Amniotic fluid index versus largest vertical pocket in the prediction of perinatal outcome in post-term pregnancies // Acta Biomed. 2004. - V.75 Suppl 1. - P.67-70.

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МОНИТОРИНГ ТЕХНОГЕННЫХ ВОЗДЕЙСТВИЙ ХВОСТОВЫХ ХОЗЯЙСТВ ГОРНОГО ПРОИЗВОДСТВА НА ЭКОЛОГИЧЕСКУЮ СРЕДУ

Аннотация. В тексте рассматривается процесс рекультивации дамб хвостохранилищ. В нем представлен обзор хвостохранилищ, их негативное влияние не только на окружающую среду, но и на жизнь людей в результате аварий на них, рассмотрены меры и предложения по ликвидации или снижению негативного воздействия этих свалок в условиях современного экологического кризиса, а также шаги по их рекультивации.

Ключевые слова: хвостохранилище, мониторинг по экологическому безопасности, экология, окружающая среда, природные ресурсы, загрязнение, рекультивация.

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MONITORING TECHNOGENIC IMPACTS OF MINING TAILINGS MANAGEMENTS ON THE ECOLOGICAL ENVIRONMENT

Annotation. The text discusses the process of remediation of tailings dams. It provides an overview of tailings dumps, their negative impact not only on the environment, but also on people's lives as a result of accidents on them, measures

and proposals for eliminating or reducing the negative impact of these dumps in the context of the current environmental crisis are considered, as well as steps for their reclamation.

Key words: tailings dump, environmental safety monitoring, ecology, environment, natural resources, pollution, reclamation.

В настоящее время важное значение приобретает проблема охраны окружающей среды и рационального использования природных ресурсов [29]. Повышение действенности контроля за улучшением использования земельных ресурсов требует совершенствования методов маркшейдерских наблюдений за деформациями бортов карьеров, отвалов и дамб хвостохранилищ, исследования динамики нарушения устойчивости откосов и разработки инженерного метода расчета устойчивости дамб хвостохранилищ [4, 29]

Хвостохранилища – это сооружения, используемые для хранения отходов горнодобывающей промышленности, таких как песок, ил и химикаты, образуемые при переработке полезных ископаемых [14,24]. Эти плотины часто имеют большие размеры и могут содержать токсичные вещества, которые представляют опасность для окружающей среды и близлежащих населенных пунктов [26]. Поэтому крайне важно восстановить эти плотины, чтобы свести к минимуму воздействие на окружающую среду и потенциальную опасность, которую они представляют.

Хвостохранилища горнодобывающих предприятий могут оказывать вредное воздействие на окружающую среду несколькими способами:

1. Загрязнение воды. Хвосты, представляющие собой отходы, образующиеся при добыче полезных ископаемых, часто содержат различные токсичные вещества, такие как тяжелые металлы (например, ртуть, свинец, мышьяк). При отсутствии надлежащего управления эти хвостохранилища могут загрязнить близлежащие водоемы и источники подземных вод, что приведет к серьезному загрязнению воды [10]. Это загрязнение может нанести вред водной жизни, разрушить экосистемы и сделать воду непригодной для использования человеком.

2. Загрязнение почвы. Когда отходы хвостохранилища сбрасываются на землю, они могут загрязнять почву химическими загрязнителями. Это загрязнение может отрицательно повлиять на плодородие и продуктивность почвы, делая ее непригодной для сельского хозяйства или других видов землепользования. Это также может повлиять на растительность и нарушить естественные экосистемы.

3. Загрязнение воздуха. Хвостохранилища могут выбрасывать в атмосферу частицы пыли и другие переносимые по воздуху загрязняющие вещества [17]. Эти частицы могут содержать вредные вещества, такие как тяжелые металлы или асбестовые волокна, и могут рассеиваться на большой территории, влияя на качество воздуха и здоровье человека.

4. Разрушение земель и среды обитания. Строительство хвостохранилищ часто требует расчистки больших территорий, включая растительность и места обитания диких животных. Это разрушение может привести к потере биоразнообразия и перемещению или исчезновению некоторых видов, нарушая местные экосистемы.

5. Кислотные дренажи шахт. Некоторые типы хвостов, особенно содержащие сульфидные минералы, могут выделять кислоту при воздействии воздуха и воды. Это явление, известное как кислотный дренаж шахт, приводит к образованию серной кислоты, которая может еще больше загрязнять близлежащие водоемы, убивать водную жизнь и наносить ущерб окружающим экосистемам.

6. Долгосрочное воздействие. Хвостохранилища могут представлять экологический риск даже после закрытия горнодобывающих предприятий. Если эти объекты не будут должным образом восстановлены или не будут управляться должным образом, токсичные вещества из хвостохранилищ могут продолжать выщелачиваться в окружающую среду в течение многих лет, что приведет к стойкому загрязнению и деградации экосистемы [2, 3].

Обеспечение промышленной и экологической безопасности объектов хранения отходов горнопереработки связано с необходимостью анализа воздействия объектов хранения отходов на все компоненты окружающей среды, их систематизации, классификации их последствий с целью выявления экологических проблем осваиваемых территорий и разработки перспективных направлений природоохранной деятельности [7].

Вопросы комплексного системного подхода, установления причинно-следственных связей технологических приемов эксплуатации объектов и состояния окружающей природной среды, систематизации техногенных воздействий и их последствий, разработки методов экологического картографирования, инженерно-экологического районирования и разработки природоохранных технологий рассматриваются в работах В.А.Богословского, Б.В.Виноградова, А.Е.Воробьева, А.СГерасимовой, М.А.Глазовской, Г.А.Голодковской, Т.Я.Емельяновой, А.Д.Жигалина, Б.А.Иванова, Н.С.Касимова, А.А.Касьяненко, В.А.Королева, Ф.В.Котлова, Н.С.Красиловой, М.Б.Куринова, А.Б.Лолаева, Г.Г.Мирзаева, В.И.Осипова, В.Т.Трофимова, К.О.Цурикова, А.Л.Чеховского и ряд азарубежныхавторов [5, 7, 11, 16].

Сегодня ни для кого не секрет, что экологическая обстановка в Узбекистане становится все хуже и хуже, и наши экологи сетуют на необходимость скорейшего решения этой проблемы. На территории Республики Узбекистан продолжает сохраняться высокий уровень техногенных и природных опасностей как главный источник различных видов чрезвычайных ситуаций. Основными причинами техногенных аварий и катастроф в республике являются высокий износ основных производственных фондов, низкие темпы обновления этих фондов, повышение технологической опасности и сложности производства, транспортировки, хранения и

использования вредных веществ, материалов и изделий, а также накопление отходов производства.

В Узбекистане основным способом удаления отходов является их складирование на объектах размещения – полигонах, хвостохранилищах, шламонакопителях, свалках. Насчитывается более трехсот объектов размещения. Подавляющее большинство из них не оборудовано системой контроля и не отвечает экологическим требованиям [20]. В регионах Узбекистана, особенно в городах, всё более ухудшается ситуация по загрязнению воздуха, не организована системная работа по снижению нагрузки выбросов в атмосферу. Состояние полигонов отходов продолжает не соответствовать экологическим и санитарным требованиям, затягивание внедрения технологий переработки и утилизации отходов порождают угрозу их превращения в будущем в проблему на уровне экологической катастрофы.

Ежегодный объем образования отходов производства и потребления в стране составляет более 100 млн тонн, из них свыше 14 процентов – токсичные. Объем утилизируемых отходов составляет около 0,2 процента, а вся остальная масса складируется в накопителях на территориях предприятий и незначительная часть – на полигонах, свалках. Наибольший объем отходов, который составляет порядка 90 млн тонн в год, образуется на предприятиях горнодобывающей и перерабатывающей промышленности. В горнопромышленном комплексе на отвалах месторождений накоплено свыше 1,25 млрд кубометров вскрышных пород. В хвостохранилищах размещено свыше 1,3 млн тонн отходов обогащения руд, а в специальных отвалах накоплено большое количество шлаков металлургического производства. Ежегодно по комплексу образуется 25 млн кубометров вскрышных пород, 42 млн тонн отходов обогащения и 300 тысяч тонн шлаков металлургического передела [8, 21].

В составе вскрышных пород Ангренского угольного месторождения содержатся полезные компоненты: каолины вторичные и первичные, известняки, суглинки, мергели, песчаники и др. Общий объем добычи каолина составляет 6 млн тонн, из которого фактически используется не более 5-6 процентов.

В отраслях цветной и черной металлургии ежегодно образуется около 300 тысяч тонн шлаков металлургического производства. Отходы энергетики, машиностроения, пищевой и легкой промышленности представляют отходы различного состава и класса опасности [1].

Основными отходами химического производства по-прежнему остаются фосфогипс, лигнин, марганцевый шлам, кек серы, а также различные промышленные стоки. Сохраняются и объемы их образования – 68-70 млн тонн фосфогипса, около 15 млн тонн лигнина, 10 млн кубометров жидких отходов.

Вскрыша месторождений АГМК, НГМК и отходы предприятий химического производства образовали «рукотворные горы», проблема использования и переработки которых не решена. Предприятия требуют

дополнительного отвода земель. Между тем отвалы, хвостохранилища, шламонакопители и золошлакоотвалы – активные источники загрязнения атмосферного воздуха, почв, поверхностных и подземных вод.

Радиоактивные отходы – еще одна серьезная проблема, о которой стоит сказать особо. Добыча радиоактивных руд на территории Узбекистана и в прилегающих районах стала реальностью еще в начале прошлого столетия, но особенно усилилась в 40-е годы прошлого столетия. За этот период сформировалось около 150 участков радиоактивного загрязнения. В процессе добычи урана на территории республики скопилось множество отвалов как горной добычи урана, так и подземного выщелачивания, требующих дезактивации и рекультивации по специальной программе.

Особого внимания требуют хвостохранилища, в которых сосредоточены радиоактивные отходы уранового производства. На территории Узбекистана и на смежных площадях Таджикистана и Кыргызстана находятся хвостохранилища, в которых сосредоточено значительное количество радионуклидов. Обоснованную тревогу, как было отмечено, вызывает состояние хвостохранилищ месторождения Майлуу-Суу.

Исходя из вышеперечисленных проблем, важна разработка мер по мониторингу и рекультивации дамб хранения опасных отходов и отходов обогатительных фабрик, расположенных на территории республики.

Рекультивация хвостохранилищ — сложный и трудоемкий процесс, требующий тщательного планирования, управления и мониторинга. Однако это важно для смягчения воздействия горнодобывающей промышленности на окружающую среду и обеспечения долгосрочной устойчивости пострадавших территорий [12, 22]. Восстанавливая хвостохранилища, мы можем восстановить земельные и водные ресурсы, способствовать экологическому балансу и защитить здоровье и благополучие сообществ, живущих поблизости.

Процесс рекультивации начинается с оценки устойчивости дамбы хвостохранилища и оценки экологических рисков, которые она представляет. Это включает в себя анализ целостности конструкции плотины, изучение химического состава хранящихся материалов и оценку возможности загрязнения подземных вод [4, 10, 27]. После завершения оценки разрабатывается план рекультивации. Этот план включает стратегии по стабилизации плотины и предотвращению дальнейшей эрозии.

Помимо стабилизации физической структуры плотины, процесс рекультивации также направлен на обработку хранящихся материалов. Тяжелые металлы и другие вредные химические вещества необходимо нейтрализовать или удалить, чтобы предотвратить загрязнение грунтовых вод и прилегающих территорий. Для достижения этой цели могут быть использованы различные методы, такие как нейтрализация, фильтрация и химическая обработка.

На протяжении всего процесса рекультивации необходим мониторинг. Регулярный мониторинг гарантирует, что плотина остается стабильной,

надлежащий контроль за загрязнением и охрана окружающей среды [18, 19]. Он включает в себя регулярные проверки, отбор проб воды и почвы и оценку успеха восстановления растительного покрова.

Устранение вредного воздействия хвостохранилищ требует ответственной практики добычи полезных ископаемых, адекватных систем управления отходами и использования безопасных и устойчивых альтернатив захоронению хвостохранилищ. Оценка воздействия на окружающую среду, строгие правила, надлежащий мониторинг и меры по восстановлению необходимы для минимизации негативных последствий для окружающей среды.

На наш взгляд предлагаемыми мерами являются:

1. Внедрить надлежащие системы локализации и очистки: разработать и обеспечить соблюдение строгих правил, которые требуют от горнодобывающих компаний надлежащего хранения и обработки хвостов для предотвращения утечек и просачивания в окружающую почву и водоемы. Этого можно достичь за счет использования непроницаемых прокладок, регулярного наблюдения и применения эффективных методов лечения.

2. Пропагандировать экологически безопасные методы добычи полезных ископаемых. Поощрять горнодобывающие компании применять экологически безопасные методы добычи полезных ископаемых, такие как сокращение использования токсичных химикатов и содействие переработке и повторному использованию воды в процессе добычи полезных ископаемых. Минимизируя образование хвостов, в первую очередь, можно значительно снизить вредное воздействие на окружающую среду.

3. Реабилитация и рекультивация заброшенных хвостохранилищ: определить приоритетность реабилитации и рекультивации заброшенных хвостохранилищ для предотвращения дальнейшей деградации окружающей среды. Это может включать удаление и переработку хвостохранилищ, а также восстановление растительности и экосистем на пострадавших территориях.

4. Поощрять использование альтернативных технологий: изучать и поддерживать разработку и внедрение альтернативных технологий управления хвостохранилищами.

5. Содействовать исследованиям и инновациям. Инвестировать в исследования и разработки для выявления инновационных решений по безопасному захоронению и управлению хвостохранилищами. Это может включать изучение природных процессов, которые могут помочь устранить вредное воздействие хвостохранилищ, а также разработку новых технологий обработки и локализации хвостохранилищ.

6. Информированность и участие общественности: Повысить осведомленность общественности об опасностях, связанных с хвостохранилищами, и важности надлежащего управления. Вовлечь местные сообщества и заинтересованные стороны в процессы принятия решений, связанные с горнодобывающей деятельностью и управлением

хвостохранилищами, гарантируя, что их проблемы будут услышаны и решены.

7. Обеспечить соблюдения строгих экологических норм: укрепить нормативно-правовую базу и строго соблюдать экологические нормы, связанные с управлением хвостохранилищами. Ввести штрафы за несоблюдение требований и обеспечить регулярный мониторинг и проверки горнодобывающих предприятий для обеспечения соблюдения экологических стандартов.

8. Долгосрочный мониторинг и обслуживание: разработать долгосрочные программы мониторинга и обслуживания для оценки эффективности мер по управлению хвостохранилищами и оперативного решения любых потенциальных проблем или рисков. Регулярный мониторинг может помочь выявить любое потенциальное воздействие на окружающую среду и обеспечить своевременное вмешательство для предотвращения дальнейшего ущерба.

9. Снижение уровня загрязнения окружающей природной среды по всей территории республики до экологических норм.

10. Совершенствование и дальнейшее внедрение экономического механизма регулирования взаимодействия государственных органов различных уровней и природопользователей, включение экологических требований в процедуру оценки социально-экономической эффективности принимаемых управленческих решений.

11. Разработка карты поврежденных территорий и их кадастра. Изучение состава вредных веществ, попадающих в экологию и окружающую среду территорий расположения дамб хвостохранилищ, и создание их картограммы. Создание единой системы экологического мониторинга, прогноза и информации.

12. Углубление сотрудничества с мировым сообществом в решении экологических проблем.

Использованные источники:

1. Markov A., Kazakov A., Haqberdiyev M., Muhitdinov Sh., Rahimova M. On the calculation of tectonic stresses in the earth’s crust of SouthWestern Uzbekistan. // IOP Conference Series: Earth and Environmental Science. 937 (2021) 042087 IOP Publishing doi:10.1088/1755-1315/937/4/042087, 2021

2. Аксенов С.Г., Жабовский В.П. Проблемы безопасности накопителей промстоков (хвостохранилищ, шламохранилищ и гидроотвалов) промышленных предприятий и пути повышения их устойчивой работы //Белгород: ГУПВИОГЕМ, № 1, 1997 – С. 127-132.

3. Бутюгин В.В., Гулан Е.А., Геодинамическая и геоэкологическая безопасность хвостохранилищ в Норильском промышленном районе. (материал интернета) 2005. – С. 122-126.

4. Временные методические рекомендации по расчету зон при внезапном прорыве ограждающих дамб хвостохранилищ. – Белгород: ВИОГЕМ, 1981. – 22 с.

5. Гальперин А.М., Кутепов Ю.И., Круподеров В.С., Семенов О.Д. Мониторинг и освоение техногенных массивов на горных предприятиях //М.: ГИАБ, 2009. – С. 131-142.
6. Гидротехнические сооружения: Справочник проектировщика /Под ред. В.П.Недриги. – М.: Стройиздат, 1983. – 543 с.
7. Гулан Е.А. Оценка воздействий хвостохранилищ на окружающую среду криолитозоны. (например Норильского промышленного района). Автореферат диссер. на соискание уч. степ. кан. тех. наук. – Москва 2005, С. 24.
8. Закон Республики Узбекистан. О безопасности гидротехнических сооружений. 20.08.1999 г., № 826-I.
9. Иногамов И.И., Рахимова М.Х. Обоснование устойчивости отвалов вскрышных пород маркшейдерскими наблюдениями с использованием автоматизированных технологий. // Республиканская научно-техническая конференция “Геодезические и маркшейдерские проблемы ведения кадастровых работ на объектах горно-металлургической отрасли”. – Ташкент, 2018 – С. 119-124.
10. Инструкция по организации и проведению натурных наблюдений на хвостохранилищах обогатительных фабрик: - Белгород, изд. НИИ ВИОГЕМ, 1979. – 38 с.
11. Кириченко Ю.В. Инженерно-геологическое обеспечение экологической безопасности формирования техногенных массивов. /Автореф. дис. на соиск. учен. степ. д.т.н.. – Москва, 2001. – 383 с.
12. Классификация объектов отходов горнодобывающей промышленности. Заключительный отчет. Подготовлено DHI Water Environment Health (Вода, окружающая среда, здоровье) в сотрудничестве с SGI, Шведский геотехнический институт и AGH, Университет науки и технологии, Краков. Европейская комиссия, 2007. – 204 с.
13. Ковалёв Н.В., Рахимова М.Х., Гозиев И.Р. Разработка проекта маркшейдерско-геодезического мониторинга с целью слежения за устойчивостью и состояния дамбы хвостохранилища МОФ (АГМК). // Международная научно-практическая online конференции «Интеграция науки, образования и производства - основа реализации Плана нации» (Сагиновские чтения №13), посвященную 30-летию независимости Республики Казахстан. – Караганда, Казахстан, 2021. – С.1200-1203
14. Мирмахмудов Э.Р., Ковалёв Н.В., Ниязов В.Р., Рахимова М.Х. Оптимальный метод проектирования геодезической сети сгущения вблизи карьера. // Научный журнал. Universum: Технические науки. № 6(87), 2021 – № 6(87), Часть 1. – С. 83-88 http://7universum.com/ru/tech/archive/category/687 ISSN: 2311-5122 DOI - 10.32743/UniTech.2021.87.6.11986.
15. Мирмахмудов Э.Р., Хасанов Ш.И., Рахимова М.Х. Построение цифровой модели рельефа окрестности карьера по топографическим картам. // Международный научно-практический журнал. XIII Глобальные науки и инновации 2021: Центральная азия. – Нур-Султан, Казахстан, 2021. – С 29-33.

16. Мосейкин В.В. Геолого-экологическая оценка намывных техногенных массивов хранилищ горнопромышленных отходов /Диссер. на соис. уч. степени д.т.н. – М.: МГГУ, 2000. – 359 с.
17. Немировский А.В. Разработка метода формирования намывного хвостохранилища, устойчивого к ветровым потокам /Дис. на соис. кан.тех.наук. – Москва, 2016. – 131 с.
18. Низаметдинов Ф.К, Портнов В.С, Низаметдинов Н.Ф. Совершенствование способов инструментальных наблюдений прибортовых массивов на карьерах. - Алматы: КазНТУ, 2006.
19. Нурпеисова М.Б., Касымканова Х.М., Кыргизбаева Г.М. и др. Методические указания по наблюдениям за деформациями бортов, анализ их результатов и оценки устойчивости. – КазНТУ, Алматы, 2003. – 33 с.
20. Постановление Президента Республики Узбекистан №УП-4124 от 17.01.2019 г. «О мерах по дальнейшему совершенствованию деятельности предприятий горно-металлургической отрасли».
21. Правила «О безопасности работ при эксплуатации хвостовых хозяйств». [Зарегистрирован Министерством юстиции Республики Узбекистан 31 мая 2006 г.].
22. Правила безопасности гидротехнических сооружений накопителей жидких промышленных отходов (ПБ 03-438-02).
23. Правила безопасности при эксплуатации хвостовых, шламовых и гидроотвальных хозяйств. - НИИ ВИОГЕМ Минпрома России, 1997. – 98 с.
24. Рахимова М.Х. Контроль за состоянием хвостохралилищ. // Science time. Материалы Международных научно-практических мероприятий Общества Науки и Творчества. – Казань, 2019 – №10 – С. 66-71.
25. Рахимова М.Х. Определение и анализ деформационных процессов гидротехнических сооружений (на примере дамбы хвостохранилища АГМК) //Сборник научных статей Международной научно-технической конференции “Ресурсопроизводящие, малоотходные и природоохранные технологии освоения недр, Москва (Россия)-Бишкек (Кыргызстан)” – Бышкек: 2015. – С. 56-60.
26. Рекомендации по обследованию гидротехнических сооружений с целью оценки их безопасности. ОАО «ВНИИГ им. Б.Е. Веденеева». – Санкт-Петербург 2001, С. 48.
27. Рекомендации по проектированию хвостовых хозяйств предприятий металлургической промышленности. - М., Стройиздат, 1975. 176 с.
28. Саййидкосимов С. С., Раимжанов Б. Р., Умаров Ф. Я., Рахимова М. Х. Прогнозная оценка напряженно-деформированного состояния дамб хвостохранилищ на базе пространственной конечно-элементной модели // Горный информационно-аналитический бюллетень. – 2023. – № 9. – С. 38–55. DOI: 10.25018/0236_1493_2023_9_0_38.
29. Султанов Т.З. Теория и методы оценки прочностной надежности грунтовых плотин с учетом пространственного и нелинейного

деформирования сооружений. Автореферат докторской диссертации. - Ташкент, 2014, С. 84.

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СТАНОВЛЕНИЕ И РАЗВИТИЕ АДМИНИСТРАТИВНО-ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ В СТРАНАХ ЦЕНТРАЛЬНОЙ АЗИИ

Анотация. В статье речь идет о том, что на сегодняшний день все государства центральноазиатского региона продолжают модернизировать свою политическую систему, что вполне созвучно складывающимся вызовам времени.

Ключевые слова: государство, политическая система, центральноазиатский регион, гражданское общество, диалог, модернизация.

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FORMATION AND DEVELOPMENT OF ADMINISTRATIVE AND PUBLIC ADMINISTRATION IN THE COUNTRIES OF CENTRAL ASIA

Annotation. The article talks about the fact that today all the states of the Central Asian region continue to modernize their political system, which is quite consistent with the emerging challenges of the time.

Key words: state, political system, Central Asian region, civil society, dialogue, modernization.

На сегодняшний день все государства центральноазиатского региона продолжают модернизировать свою политическую систему, что вполне созвучно складывающимся вызовам времени. Важным фактором процессов модернизации политической системы являются совершенствование и оптимизация административно-государственного управления. Ввиду того, что современная эпоха требует иного характера взаимоотношений гражданского общества и государства, в котором гражданское общество все больше имеет влияние на принятие того или иного политического решения. Представляется, что формирование эффективных механизмов диалога гражданского общества и государства возможно лишь, тогда, когда государства центральноазиатского региона создадут прозрачную систему административно-государственного управления на всех уровнях, поскольку прозрачная система администрирования является ключевым звеном во взаимоотношениях государства и общества.

Следует отметить, что для данной работы сравнительный анализ политических реформ в государствах центральноазиатского региона не являются основной целью. Данная глава является методологической и гносеологической частью данной работы. Поэтому анализ процессов демократизации политических систем, в том числе в Республике Узбекистан, полагаем должен проводиться не только в контексте опыта реформирования административно-государственного управления в развитых странах мира, но и на основе сравнительного анализа реформирования административно-государственного управления в странах Центральной Азии.

Сравнительный анализ процессов политических реформ не порождает проблемы сравнимости, так как исторические процессы, происходящие в центральноазиатском регионе, сформировали почти идентичные стартовые условия для демократизации политических систем. Сравнительный анализ политических реформ в государствах центральноазиатского региона поможет ученым и политикам Узбекистана сконструировать наиболее эффективную модельадминистративно-государственного управления в стране с учетом достоинств и недостатков проводимых реформ в соседних государствах центральноазиатского региона.

Для рассмотрения процессов становления административно-государственного управления в центральноазиатских государствах, необходимо подробно остановиться на характерных чертах административно-командной системы бывшего Советского Союза, которая сформировала элементы управления, оказывающие, и по сей день негативное влияние на выработку оптимальных механизмов управления на всем постсоветском пространстве.

В свою очередь, управленческая структура Советского Союза сохранила в какой-то мере традиции Российской империи. Этому свидетельствует патерналистское восприятие власти в тоже время, как и обладание большими полномочиями управленческого аппарата. Во время Советского Союза тотальное огосударствление в экономической и в других сферах общественной жизни повлияло на динамику развития бюрократизма и вширь, и вглубь. Были созданы новые мотивационные механизмы следования устоявшимся нормам бюрократических отношений. В идеологии превращение идеи в догму означало верить в партию, а также Ленину и Сталину. В бюрократической системе активно развивались элементы сакрализации различных ведомств «железных наркомов». Так, каким же образом развивалась советская управленческая структура?

Революционный романтизм в первые годы становления советской власти оказался не таким уж привлекательным, ведь главное состояло не в том, чтобы все разрушить, а преобразовать, не превращаясь в изгоев человеческой истории. Резкий перелом в общественном развитии породил у многих надежду на скорейшее избавление от «язв и ужасов» прошлого. В то время казалось, что самый простой метод, избавляющий общество от бюрократизма является ликвидация старого аппарата управления, не только

его институтов и функции, но и его чиновников. Но жизнь показала ошибочность этого решения. В 1918 году борьба с бюрократизмом закипела. Множество записок и телеграмм В. И. Ленина были насыщены призывами «карать за волокиту!».

С другой стороны, сама экономическая и социальная политика большевиков создавали предпосылки закрепления бюрократизма на новой социальной почве. Это было связано с установлением режима военного коммунизма. В области экономики тотальная национализация промышленности и сельского хозяйства переместили центр тяжести деятельности субъектов партии со сферы производства в сферу распределения. Фактически происходило становление новой социальной структуры, детерминирующим фактором этого процесса выступала политика государства, направленная на создание такой структуры общества, где было бы возможно фиксировать принадлежность к той или иной социальной группе посредством ограничения и репрессий. Подобная политика требовала создания особого аппарата, который, разрастаясь и захватывая все новые области, превращал выдвинутые революционные идеалы в символы, лишенные реального содержания. Усиление бюрократических тенденций в бывшем Советском Союзе связанно не только с трансформацией принципов управления, но и с жесткой регламентацией в политической жизни.

Монополия одной партии во всех сферах общественной жизни задерживала нормальное функционирование политической системы. Таким образом, на ранних этапах становления Советского Союза бюрократический аппарат набирал силу, чтобы в конце двадцатых годов утвердить себя в виде одной из существующих качеств советской системы, а борьба против ее отдельных представителей ничего не смогла изменить ни тогда, ни в последующие времена.

Принимаемые государственной властью решения не соответствовали интересам народа, а соответствовали интересам государственной бюрократической элиты. Следовательно, рекрутирование бюрократической элиты в тоталитарную эпоху происходило по усмотрению вождя и по его указанию. По логике вещей несложно догадаться, что чиновник не был уверен в завтрашнем дне из-за неограниченной власти вождя, который по собственному усмотрению мог делать все, что угодно. Следовательно, в тоталитарную эпоху, чиновника парализовал страх, который лишает его дара действовать и превращает в некотором роде в машину, которая способна лишь восхвалять мудрость, справедливость и принципы управления своего покровителя.

Особенно, после сталинского периода предпринимались попытки разрушить подсистему страха, предпринимались полумеры отказа от ключевых принципов управления. Неудачи заключались в том, что принимаемые меры точнее полумеры не изменили существующий менталитет. Происходила социализация, сформулированная сталинской политической системой. Экономика продолжала нести в себе отпечаток чисто

тоталитарных принципов, то есть не уничтожалась грань между государством и экономикой.

Практика второй половины XX века стала прологом интенсивного процесса бюрократизации управления в политической системе. Правда, золотой век бюрократии пришелся на период застоя. Именно в эти годы функционирующая политическая система регулировалась бюрократией и отражала её собственные корпоративные интересы. А также в эти годы сформировались парадоксальным образом свойства бюрократии, которые заключались в псевдоактивной деятельности не в интересах дела, а ради отчетов и рапортов, служащих залогом ее социального выживании. Клятва в верности генеральной линии с откровенным игнорированием государственных и партийных решений требовала согласия и «улыбки по ослепительней», а вовсе не исполнения дела.

Многие авторы определяют брежневскую систему, как политику экономического сюрреализма, так как способ функционирования политической системы в действительности предстает в роли некоего «сюра», когда в воображении наблюдателя просматривается абсурдность. Но в этой системе просматривается своя логика, только логика специфическая, если не перевернутая или весьма, своеобразно субъективированная. В сюрреализме есть своя логика и выстроенность, свой «бес труда», понимаемый посвященными как некий кодекс и театр абсурда, выстроенный по своим ни чуть, не менее жестким правилам, чем театральный жанр70.

Это происходило по закону гротескного почитания разворачивающегося в условиях всеобщего понимания того простого факта, что «король-то голый»71. В этот период происходил реальный процесс консолидации бюрократии и формирования ее как социального слоя, связанного с родственными и клановыми отношениями. Именно в этот период шлифуются механизмы социального самосохранения бюрократии, и охрана ее общих корпоративных интересов, появляется специфическое управление, как бюрократический централизм. Если относиться к этой категории с научной точки зрения, то бюрократический централизм можно определить, как специфическую разновидность централизма, в которой, какая-либо бюрократия или бюрократическая структура приемлет лишь централизм, замыкающийся на них самих. К примеру, для министерской бюрократии приемлемый централизм заканчивается на самом министерстве. Таким образом, можно констатировать тот факт, что ведомства, а точнее его интересы, выше, чем интересы общества и государства, хотя ведомство является элементом государственной структуры.

В эпоху перестройки меняется восприятие людей к своему прошлому. Эта эпоха многими публицистами и философами того времени определялась как демократизация советского общества, но реальная жизнь показала

70 Королев В.: «Искус корпоративности и мутация системы - советская бюрократия в структуре политической власти - бюрократия и общество» М 1991 г. ст. 126

несостоятельность доводов известных публицистов того времени. Многие демонстративные действия четко показали утрату у людей веры в идеологию и во властные структуры советского общества, где присутствовало хищение государственной собственности, что способствовало стагнации в масштабе всей страны и отчасти обусловили крушение Советского Союза. Перед исследователями в странах СНГ встает вопрос, почему реформы в области «трансформации» бюрократии не привели к успеху, и какие проблемы мешали в то время построить наиболее эффективную модель управления политической системой?

Многие исследователи и аналитики считают, что это проблемы, которые впоследствии нам прилось учесть и при реформировании политической системы в Республике Узбекистан:

1. Критерием подбора персонала того времени не всегда была компетентность и энергичность, что соответственно не могло обеспечить эффективное функционирование управленческого аппарата. Как показала жизнь, в качестве решающих критериев была лояльность руководителю. Также в рекрутировании управленческого персонала играли важную роль родственные, клановые, корпоративные, дружеские и другие неформальные связи. Таким образом, получалось, что в аппарате министерства, ведающего, к примеру, добычей полезных ископаемых трудились «специалисты», зачастую не имеющие никакого отношения к данному направлению, но зато связанные родством и иными связями с руководителем.

2. Народ в условиях командно-административный системы не имел возможности влиять на образование элитных групп, контролировать их и демонстрировать свое мнение. В этой системе функционировал известный библейский принцип «возлюби самого себя», по которому организация заботилась больше о себе, нежели о тех задачах, которые она призвана была выполнять. Данный принцип находил в бывшем Советском Союзе явные и латентные подтверждения. Это в свою очередь приводило к пропасти в отношениях между гражданами и властью.

Кроме того, имели место проблемы, которые не позволяли сформировать эффективную управленческую структуру в стране:

1. Отсутствие мотивации у чиновничества для введения в организации или ведомстве инноваций.

2. Отсутствие возможности у общества проявлять какие-либо инициативы, которые могли бы повлиять на функционирование бюрократической элиты.

Таким образом, мы можем констатировать тот факт, что в значительной мере деструктивные и дисфункциональные методы управления в политической системе, среди них: круговая порука, формализм, война в Афганистане, гонка вооружений и другие привели к распаду СССР.

Специфический путь развития Республики Узбекистан был определен Президентом И.А Каримовым: «Нами создаваемое правовое государство, прежде всего, основывается на достижениях мировой цивилизации и

развитых стран, а также оно формируется на основе наших национальных ценностей».

Ученые Западной Европы и США пришли к выводу, что традиции и национальные ценности не являются препятствием модернизационных процессов, наоборот, они помогают процессам социально-политического развития. Построение государственности в Республике Узбекистан тесно связано с учениями таких выдающихся мыслителей, так как Абу Наср Аль Фараби, Юсуф Хосхожиб, Амир Тимур, Алишер Навои и т.д.

Построение демократического и правового государства связано с социально-политическим участием граждан. Следует отметить, что для углубления демократических реформ, необходимо повышение политического участия граждан и превращение их в защитников демократических ценностей. Данное явление требует поэтапного процесса повышения политической культуры граждан страны. Исходя из этого, для реализации стратегических целей, а именно для построения демократического государства является воспитание всесторонне развитого человека, который осознает свои права и механизмы реализации тех или иных интересов. Личность может участвовать в социально-политической жизни общества по следующим причинам:

1. осознание демократических ценностей в сознании человека;
2. реализация личных прав и понимание своих социальных обязанностей;
3. сознательное восприятие своих интересов.

Следует отметить, что социально-политическая активность граждан зависит от особенностей той или иной личности (половозрастные, образовательные и т.д. Важнейшим элементом демократизации политической системы является реформирование государственной службы. Государственная служба должна реформироваться в соответствии или опережая другие общественные реформы, так как общественные реформы, начинаются с реформ управленческого аппарата. Административные реформы проводимые в Республике Узбекистан осуществляются исходя из тех же позиций. Если реформы государственной службы отстают от общественных реформ, данный факт будет препятствовать общественному развитию, именно поэтому в Республике Узбекистан реформированию государственной службы уделяется особое внимание. Реформирование государственной службы в Республике Узбекистан осуществляется по следующим направлениям:

1. создание эффективных структур государственной службы;
2. укрепление правовых основ государственной службы;
3. повышение квалификации кадров государственных служащих;
4. обеспечение информационной, материальной и технической базы государственных служащих;
5. внедрение научных разработок и заключения экспертов в государственную службу для чего и принят был закон о госслужбе.

Для анализа проводимых административных реформ в Республике Узбекистан необходимо акцентировать внимание на становлении и развитии политической системы.

Как мы видим из вышеперечисленных реформ, на первом этапе кардинально изменилась управленческая структура. Она начала подстраиваться под либерализацию экономики и демократизацию политической системы Республики Узбекистан. Наряду с вышеперечисленными реформами управленческих структур, возникли новые министерства, такие как Министерство обороны, Министерство внутренних дел, Министерство иностранных дел, юстиции и т.д., призванные выполнять определенные общественные задачи. Таким образом, мы можем сказать, что первый этап реформ, который положил начало преобразованию государственной структуры, подготовил страну к полномасштабной административной реформе, которая была начата еще с конца 2003 года.

Использованные источники:

1.Каримов И.А.Избранные произведения. 1-18 тома. Т.: 1996-2010.
2.Каримов И.А. Узбекистан: Собственная модель перехода на рыночные отношения. – Т.: Узбекистон, Т.: 1993. С.9
3.Каримов И.А. Основные направления дальнейшего углубления демократических преобразований и формирования гражданского общества в Узбекистане. Доклад на 9-й сессии Олий Мажлиса // газета «Народное слово». – 2002, 30 августа
4.Каримов И.А. «Юксак маънавият – енгилмас куч». Маънавият,Т.: 2008.
5.Конституция Республики Узбекистан/ http://www. gov.uz
6.Закон о выборах в Республике Узбекистан.Т.: 2009. С.8-9
7.Абдулло Р. Таджикистан: к вопросу о политических итогах десятилетия независимости// Центральная Азия и Кавказ, 2001. – №6(18) - С.106-107
8.Абдуазимова Н., Абдурахмонов О. “Ўзбекистонда жамиятни демократлаштириш ва янгилаш, мамлакатни модернизация ва ислоҳ қилиш йўлида. Т.: “Akademiya” 2005 й. Б.111
9.Азизхонов А.Т., Ефимова Л.П. Теория и практика строительства демократического общества в Узбекистане: Учеб.пособие. – Т.: НУУз им. М.Улугбека, 2005,
10.Алексеева Т.А. Политическая философия. М.,2007.
11.Алексеева Н.Н., Иванова И.С. Средняя или Центральная Азия. http//ia-centr.ru 27.12.2007.
12.Алимов Р.М. Центральная Азия: общность интересов. – Ташкент.: Шарк. 2005. –С. 200-201.

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АНАЛИЗ ОСТРОЙ ТОКСИЧНОСТИ ПИЩЕВОЙ ДОБАВКИ «AIS-101» СБОРНЫЙ ТРАВЯНОЙ ЧАЙ

Аннотация. В статье представлены результаты исследование острой токсичности пищевой добавки растительных компонентов «АИС-101» сборного травяного чая. Действующие вещества этих лекарственных растений являются важными факторами активизации биохимических процессов в организме и нормализации обменных процессов, функций жизненно важных органов и систем.

Ключевые слова. Пищевая добавка, "AIS-101" сборный травяной чай, острая токсичность.

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ANALYSIS OF ACUTE TOXICITY OF FOOD ADDITIVE “AIS-101” COMPLEX HERBAL TEA

Annotation. In this article, a study of the acute toxicity of the dietary supplement of the plant components "AIS-101" of combined herbal tea is attached. The active substances of these medicinal plants are important factors for activating biochemical processes in the body and normalize metabolic processes, functions of vital organs and systems.

Keywords. Food additive, "AIS-101" combined herbal tea, acute toxicity.

Введение

В последнее десятилетие свободные радикалы и их роль в развитии заболеваний стали предметом многих исследований. Так, активация процессов перекисного окисления липидов в тканях организма приводит к развитию патологий, связанных со свободными радикалами, таких как атеросклероз, гипертоническая болезнь, ишемическая болезнь сердца, онкология, катаракта и др. [1,2].

Для лечения таких заболеваний рекомендуются лечебно-профилактические средства, а в настоящее время все чаще используются биологически активные добавки, пищевые добавки, содержащие витамины, полифенолы, флавоноиды, катехины и дубильные вещества, содержащие большой набор биоантиоксидантов [2,3].

Пищевая добавка растительных компонентов «AIS-101» сборный травяной чай состоит из листьев мать-и мачехи и сельдерея, а также корневища сабельника болотного. Активные вещества (витамины, флавоноиды, биогенные элементы, сахариды, аминокислоты, белки) этих целебных растениях являются важными факторами для активации биохимических процессов в организме и нормализируют метаболических процессов, обмен веществ и функции жизненно-важных органов и систем.

Токсичность - свойство вещества при попадании в определенных количествах в организм человека, животных или растений вызывать их отравление или гибель.

Острая токсичность это- токсическое действие вещества, введенного в однократной дозе или в многократных дозах не более 24 ч, которое может выражаться в расстройстве физиологических функций или нарушении морфологии органов экспериментальных животных, а также гибели животного.

Метод исследований: острую токсичность изучали общепринятым методом, описанным в литературе однократным введением лекарственных препаратов с определением LD_{50} и класса токсичности [1,8].

Вид и количество животных: для эксперимента использовали белых беспородных мышей самцов и самок в количестве 36 голов, массой тела 19 – 21 г, выдержанных на карантине в течение 14 дней.

Проведение эксперимента: эксперимент по изучению острой токсичности сравниваемых препаратов проводили в двух сериях. В первой серии эксперимента мышам вводили 6,66 % водную раствор препарата «AIS -101» - сборный травяной чай следующим образом:

1 группа (6 мышей) – Per os в дозе 1332 мг/кг (0,4 мл);

2 группа (6 мышей) – Per os в дозе 1998 мг/кг (0,6 мл);

3 группа (6 мышей) – Per os в дозе 2664мг/кг (0,8 мл).

Во второй серии эксперимента мышам вводили 6,8% р-р препарата сравнения «Инсти», производства Herbion Pakistan (Pvt) Ltd, Пакистан следующим образом:

1 группа (6 мышей) – Per os в дозе 1360 мг/кг (0,4 мл);

2 группа (6 мышей) – Per os в дозе 2040 мг/кг (0,6 мл);

3 группа (6 мышей) – Per os в дозе 2720 мг/кг (0,8 мл).

Наблюдение: В первый день эксперимента за животными вели наблюдение ежечасно в условиях лаборатории, при этом регистрировали показатели внешнего вида (состояние шерсти, слизистых оболочек и т.д.); функционального состояния (выживаемость в течение опыта, общее состояние, возможные судороги и гибель) и поведения.

Далее ежедневно, в течение 2-х недель в условиях вивария, у животных всех групп наблюдали за общим состоянием и активностью, особенностями поведения, реакцией на тактильные, болевые, звуковые и световые раздражители, частотой и глубиной дыхательных движений, ритмом сердечных сокращений, состоянием волосяного и кожного покрова, положением хвоста, количеством и консистенцией фекальных масс, частотой мочеиспускания, изменением массы тела и др. показателями. Все подопытные животные содержались в одинаковых условиях и на общем рационе питания со свободным доступом к воде и пище [4,5].

Полученные результаты и их обсуждении: При изучении острой токсичности препарата «AIS -101» были получены следующие данные:

1 группа (доза 1332 мг/кг): после введения препарата в течение дня мыши оставались активными, изменений в поведении и функциональном состоянии не наблюдалось. Состояние шерсти и кожных покровов обычное без изменений, от пищи и воды не отказывались, гибели мышей не наблюдалось.

На второй день и в последующий период наблюдения патологических изменений в поведении и физиологических показателях мышей не было. Употребление воды и корма в норме, отставание в росте и развитии не наблюдалось. Гибели мышей в течение 14 дней не было.

2 группа (доза 1998 мг/кг): после введения препарата в течение дня мыши активные, в поведении и функциональном состоянии видимых изменений не наблюдалось. Состояние шерсти и кожных покровов обычное без изменений, от пищи и воды не отказывались, гибели мышей не наблюдалось.

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3 группа (доза 2664 мг/кг) после введения препарата у мышей наблюдалась кратковременная вялость и малоподвижность, которая проходила через 30 - 40 минут. Через 1 час мыши возвращались к своему прежнему состоянию, поведение активное, физические показатели не отклонялись от нормы.

На второй день и во весь период наблюдения в течение 14 дней у мышей в поведении и других физических показателях изменений не наблюдалось, мыши охотно употребляли корм и воду, реакции на световые и звуковые раздражители оставались норме, шерсть и кожные покровы чистые, мочеиспускание и каловыделение в норме, масса и рост мышей не отставали в развитии. Гибели мышей не наблюдалось.

Аналогичные данные были получены при изучении острой токсичности препарата «Инсти», производства Herbion Pakistan (Pvt) Ltd, Пакистан (таблица №1). LD_{50} препаратов «AIS -101» - сборный травяной чай и «Инсти», производства Herbion Pakistan (Pvt) Ltd, Пакистан составляет дозу > 2664 мг/кг.

Согласно классификации токсичности веществ, сравниваемые препараты относятся к малотоксичным [8].

В народной медицине для профилактики заболеваний позвоночника применяют различные мази, лечебные чаи, настойки и отвары из растений мать-и -мачехи, сельдерея, сабельника. [9,10]. Кроме того, Ибн Сина использовал сельдерея при болях в спине, нервных простудах, очищении печени и селезенки, изгнании глистов.

Заключение: Таким образом, полученные данные показывают, что исследуемый препарат «AIS-101» - сборный травяной чай в сравнении с лекарственным препаратом «Инсти» - гранулы, производства Herbion Pakistan (Pvt) Ltd, Пакистан явился нетоксичным и можно применять для профилактики некоторых заболеваний позвоночника.

Использованные источники:

1. Асқаров И.Р. “Сирли табобат” Тошкент “Фан ва технологиялар нашриёт-матбаа уйи” 2021, 339-354.
2. Asqarov I.R. “Dalillarga asoslangan xalq tabobati usullari” Toshkent “Fan va texnologiyalar nashriyot-matbaa uyi” 2023, 254-261.
3. Аскаров И.Р. Табобат комуси. Мумтоз сўз. Т. 2019.
4. Гуськова Т.А. Токсикология лекарственных средств. Москва, 2008. – С.27-30.
5. Клинические лабораторные исследования / А.Я. Любина (и др.) // М.: «Медицина», 2004. – 288с.
6. Методические указания по изучению общетоксического действия фармакологических веществ. /В Руководстве по экспериментальному

(доклиническому) изучению новых фармакологических веществ. Под общей редакцией члена-корреспондента РАМН, профессора Р. У. ХАБРИЕВА. Издание второе, переработанное и дополненное/. М.: - 2005. - М.: ОАО «Издательство «Медицина», 2005.— С. 41-54
7. Назаренко Г.И. Клиническая оценка результатов лабораторных исследований / Г.И. Назаренко, А.А. Кишкун - М., «Медицина», 2005. – 542 с.
8. Основные методы статистической обработки результатов фармакологических экспериментов. /В Руководстве по экспериментальному (доклиническому) изучению новых фармакологических веществ Под общей редакцией члена-корреспондента РАМН, профессора Р. У. ХАБРИЕВА. Издание второе, переработанное и дополненное/. М.: - 2005. - М: ОАО «Издательство «Медицина», 2005.— С. 763-774.
9. Проблемы нормы в токсикологии (Под ред. Проф. И.М. Трахтенберга). – М. – Медицина. – 191. – 203 с.
10. Islomova, S., Asqarov, I.., Bussmann, R. W., Khojimatov, O. K., Zafar, M., & Makhkamov, T.. (2023). Ethnobotany, medicinal utilization and analysis of biogenic elements and flavonoids of Apium graveolens and Tussilago farfara from Uzbekistan. Ethnobotany Research and Applications, 26, 1–12.

УДК 621.382.3

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СЛОЙНЫЕ ТЕХНОЛОГИИ ПРОИЗВОДСТВА И ИХ ПРИМЕНЕНИЕ

Аннотация. В статье описана технология приготовления полупроводниковых слоев и ее применение.

Ключевые слова: p-n проводимость, полупроводник, слои, технология.

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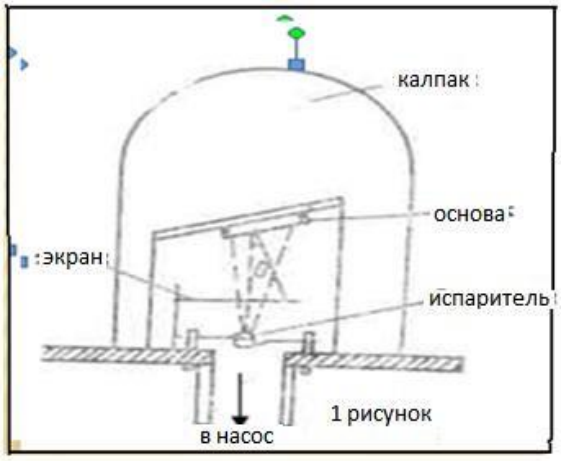
LAYER PRODUCTION TECHNOLOGIES AND ITS APPLICATION

Annotation. The article descirabes the technology of preparation of semiconductor layers and its application.

Keywords: p-n conductivity, semiconductor, layers, technology.

Ряд исследований был посвящен получению тонких слоев полупроводников из различных материалов. Такие слои готовятся с использованием специальных устройств [1,2]. Он состоит из крышки, основания, испарителя, экрана, насоса, в котором создается высокий вакуум (иногда только в особых случаях может быть низкий вакуум). (Фигура 1).

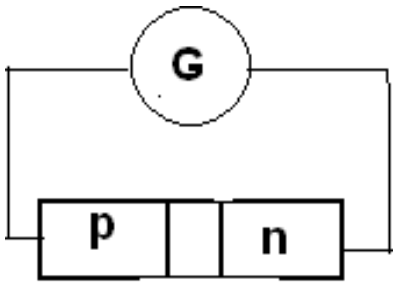


Готовые испарители могут быть использованы для передачи материала в лоток выпариванием или они могут быть изготовлены по определенной технологии [3,4].

Сначала крышка снимается, на основание помещается стеклянная пластина, ивиспарительдобавляется полупроводниковое соединение. Крышка

возвращается на место. Используя насос, воздух внутри колпачка всасывается для создания вакуума, затем полупроводниковое соединение испаряется путем подачи высокого напряжения на испаритель, в результате чего полупроводник испаряется и прилипает к стеклянной пластине [5,6]. Через определенное время воздух выпускается в крышку, крышка снимается с места. Стеклянная пластина также взята с основания, проволока приварена с обеих сторон и подключена к гальванометру. Если на стеклянную пластину поместить свет, гальванометр показывает, что генерируется ток. Рисунок 2.

Таким образом формируются слои p и n типа. Пар полупроводникового соединения сидит на стеклянной пластине, как зуб пилы [7]. Половина зуба пилы имеет форму p, а другая половина имеет n-образную форму.Пары титана быстро реагируют с водяным паром с выделением водорода, который легко извлекается диффузионным насосом. Пары титана также быстро реагируют с кислородом, азотом и водородом.



2 рисунок

Титан может испаряться с использованием танталовых испарителей или вольфрамовых проволочных испарителей [8].

Известно, что остаточный газ в камере оказывает большое влияние на свойства тонкого слоя. Когда материал начинает испаряться, вакуум может уменьшаться, и количество молекул остаточного газа может увеличиваться пропорционально выделению поглощаемого им кислорода. В таких случаях использование титана целесообразно [9].

При подготовке любого полупроводникового слоя необходимо найти четкую оптимальную моду в зависимости от цели, для которой он используется. Для этого важны время, температура, давление, объем, скорость всасывания, скорость испарения, чистота, количество и местоположение испаряемого материала, его чистота (смеси), путь введения, если смесь вводится. В зависимости от цели один или несколько из этих параметров должны быть постоянными. Основными параметрами являются давление, базовая температура и скорость [10].

Во время физической проводимости часто достигается температура 100-200 ° C, поскольку химически активная среда не используется. В этом процессе пары материала только конденсируются. Когда вакуума достаточно, атомы и молекулы материала достигают дна по прямой линии [11].

Во время приготовления слоев создается высокий вакуум, очень мало молекул остаточного газа поглощается, и процесс осуществляется в замкнутом объеме [12].

При подготовке слоев давление пара материала должно быть на несколько градусов выше, чем давление остаточного газа. В этом случае атомы испаряющегося материала распределяются по прямой линии, так что длина свободного пробега атомов в несколько раз превышает интервал «основание испарителя» [13]. Таким образом, в переходной зоне заряды движутся в двух направлениях. Тысячи p-n переходов или фотоэлементов могут быть собраны параллельно, чтобы сформировать солнечные панели.

Использованные источники:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.
2. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
3. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). "MAPLE" DA SO'NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
4. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI "MULTISIM" DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
5. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
6. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
7. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.

11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.

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ПРИМЕРЫ ВЫДЕЛЕННЫХ РАДИОДИАПАЗОНОВ

Аннотация. В этой статье мы можем поговорить о диапазоне частот определенного излучателя (естественного или искусственного происхождения) общего характера, или о диапазоне, выделенном радиослужбе, или, например, об общем распространении.

Ключевые слова: излучаемых источником частот, радиотехники, средних волн с амплитудной модуляцией.

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EXAMPLES OF DEDICATED RADIO BANDS

Annotation. In this article we can talk about the frequency range of a certain emitter (natural or artificial origin) of a general nature, or about the range allocated to a radio service, or, for example, about the general distribution.

Key words: frequencies emitted by a source, radio engineering, medium waves with amplitude modulation.

Диапазон частот — полоса излучаемых источником частот, которой зачастую присвоено условное наименование, одно из важнейших понятий радиотехники, а также физико-технических дисциплин в целом.

Это понятие имеет общий характер, то есть можно говорить или о диапазоне частот какого-либо конкретного излучателя (природного или искусственного происхождения), или о диапазоне, выделенном какой-то радиослужбе, или, например, об обобщённой разбивке всей полосы радиочастот.

Примеры выделенных радиодиапазонов.

Диапазон средних волн с амплитудной модуляцией (530—1610 кГц).

- Различные диапазоны коротких волн (5,9 — 26,1 МГц).
- Гражданский диапазон (26,965 — 27,405 МГц).
- Подвижные и фиксированные службы гражданского назначения (146-174 МГц)
- Частоты телевизионных каналов (48,5 — 862,0 МГц).
- Диапазон ультракоротких волн с частотной модуляцией (87,5 — 108 МГц, кроме 76 — 90 МГц в Японии; в России также 65,9 — 74 МГц).
- ISM диапазон.

• Диапазоны военных частот. 39-60 МГц (224-280 МГц военная авиация).

• Диапазоны частот гражданской авиации (108-118 навигационные для ILS, VOR)(118—136,975 МГц).

• Международный морской диапазон 156,050-162,025 МГц. Речной диапазон (Россия) 300-337 МГц.

Диапазоны радиочастот в гражданской радиосвязи

Для гражданской радиосвязи с использованием радиоэлектронных устройств, не требующих регистрации в территориальных гос. органах по надзору в сфере связи, выделены три диапазона частот:

• 27 МГц (Си-Би, СВ, гражданский диапазон), с разрешённой выходной мощностью передатчика до 10 Вт;

• 433 МГц (LPD), выделено 69 каналов для носимых радиостанций с выходной мощностью передатчика не более 0,01 Вт;

• 446 МГц (PMR), выделено 8 каналов для носимых радиостанций с выходной мощностью передатчика не более 0,5 Вт.

Диапазоны радиоволны

Ультракороткие волны			**Короткие волны**	**Средние волны**	**Длинные волны**	**Сверхдлинные волны**			
Сантиметровые	Дециметровые	Метровые	Декаметровые	Гектометровые	Километровые	Мириаметровые	Гектокилометровые	Мегаметровые	Декамегаметровые
1—10 см	10 см — 1 м	1—10 м	10—100 м	100 м — 1 км	1—10 км	10—100 км	100 км — 1 Мм	1—10 Мм	10—100 Мм
30—3 ГГц	3 ГГц — 300 МГц	300 — 30 МГц	30—3 МГц	3 МГц — 300 кГц	300—30 кГц	30—3 кГц	3 кГц — 300 Гц	300—30 Гц	30—3 Гц

Диапазоны в акустике

• Инфразвуковой — ниже 20 Гц.

• Звуковой — от 20 Гц до 20 кГц (в него полностью укладывается диапазон слышимых человеческим ухом частот).

• Ультразвуковой — от 20 кГц до 100кГц.

• Гиперзвуковой — свыше 100кГц.

Использованные источники:

1. Irisboyev, F. (2022). ELEKTR SIGNALLAR KUCHAYTIRGICHLARI VA ULARNING ASOSIY PARAMETRLARI VA TAVSIFLARI. Евразийский журнал академических исследований, 2(11), 190-193.

2. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
3. Irisboyev, F. B. (2023). THE INPUTS ARE ON INSERTED SILICON NON-BALANCED PROCESSES. НАНОЭЛЕКТРОНИКИ», 1(A4), 241.
4. Boymirzayevich, I. F., & Husniddin o'g'li, I. M. (2023). INTERNET QURILMALARINING IOT (INTERNET OF THINGS) TEXNOLOGIYALARI.
5. Islomov, M. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127-129.
6. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. Modern Science and Research, 2(9), 220–223. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/24108
7. Islomov, M.. (2023). CALCULATION OF SIGNAL DISPERSION IN OPTICAL FIBER. Modern Science and Research, 2(10), 127–129. Retrieved from https://inlibrary.uz/index.php/science-research/article/view/25048
8. J.T., M., & F.B., I. (2023). VOLATILE AND NON-VOLATILE MEMORY DEVICES. Modern Science and Research, 2(10), 116–119.
9. Ж. Метинкулов ИСПОЛЬЗОВАНИЕ МИКРОКОНТРОЛЛЕРОВ ДЛЯ УПРАВЛЕНИЯ НАПРЯЖЕНИЕМ Vol. SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM 2 No. 20 (2023)

DOI 10.5281/zenodo.10720790
УДК 330, 338

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СОВЕРШЕНСТВОВАНИЕ МЕХАНИЗМА УПРАВЛЕНИЯ ВЫСШИМ УЧЕБНЫМ ЗАВЕДЕНИЕМ ПОСРЕДСТВОМ ВНЕДРЕНИЯ ГИС В ПРОЦЕСС ТРУДОУСТРОЙСТВА ВЫПУСКНИКОВ

Аннотация. Данная статья посвящена исследованию возможности использования геоинформационных систем при решении проблемы трудоустройства выпускников вузов на примере использования системы QGIS.

Ключевые слова. Географические информационные системы, рынок работодателей, выпускник, карта, слой, базы данных.

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IMPROVING THE MANAGEMENT MECHANISM OF A HIGHER EDUCATION INSTITUTION THROUGH THE INTRODUCTION OF GIS INTO THE GRADUATE EMPLOYMENT PROCESS

Annotation. This article is devoted to the study of the possibility of using geoinformation systems in solving the problem of employment of university graduates using the example of using the QGIS system.

Keywords. Geographic information systems, employer market, graduate, map, layer, databases.

Введение. Постепенное открытие на территории государства иностранных высших учебных заведений порождает конкуренцию между вузами и является весомым аргументом в пользу поступательного развития всей системы высшего образования. Включение республики в единое европейское образовательное пространство, предусмотренное политикой государства в образовании, непосредственно связано с усовершенствованием как процесса приобретения знаний, навыков и компетенций, трансформированных в реальный сектор экономики с целью подготовки

конкурентоспособного на современном рынке труда выпускника и успешного его трудоустройства.

Методология. В контексте совершенствования механизма управления как отдельно взятым вузом, так и системой высшего образования в целом, изучается возможность применения геоинформационных технологий в прогнозировании трудоустройства выпускников вузов и новый взгляд на распределения полномочий между факультетами и администрацией вуза.

Априори известно, что конкурентоспособность выпускников высших учебных заведений зависит не только от приобретённых в вузе и накопленных практически компетенций, но и от того, на сколько их компетенции соответствуют реалиям на рынке труда? Нам представляется эффективным использование геоинформационных технологий для систематического контроля и мониторинга рынка труда и приведение в соответствие набора формирующихся компетенций у выпускников вузов со стороны факультетов, чтобы подготовленные специалисты по каждому направлению были востребованными и благополучно трудоустроены.

Для реализации метода предполагается использование открытой геоинформационной системы «QGIS». Мы намерены рассмотреть объекты ГИС, которые представлены в виде слоёв. Каждый слой состоит из однотипных данных, соответствующих группе объектов на карте и хранится в таблице QGIS. Помимо данных, отражающих, например, владельца помещения, юридический адрес, площадь зданий и конструкций, вид деятельности юридического лица, наименование и количество вакансий на предприятии, в таблице QGIS отводится место для невидимого столбца, в котором содержатся пространственные данные, дающие возможность отобразить на топографической карте каждый объект, описанный в соответствующей строке этой таблицы.

Для создания ГИС карты возможно использование данных из интернета, находящихся в открытом доступе: векторные слои (границы административно-территориального округа, пункты проживания населения, дорожные развязки, маршруты транспорта, интересующие объекты и т.п.). Возможны несколько вариантов для просмотра спутникового варианта региона. Например, самый популярный картографический ресурс «Google-maps». Однако, он не является бесплатными и не работает в режиме реального времени. Второй способ для просмотра карты региона - это карты Yandex. Опять же мы увидим изображение со спутника, сохранённое некоторое время назад. Третий вариант спутникового просмотра вашего региона – это приложение «Google планета Земля». Для его установки уходит около 5 минут. Наименование приложения «Google-earth» и с его помощью можно побывать в любой точке земного шара. Кроме прочего, здесь имеется огромное количество приложений, обеспечивающих дополнительной информацией. Так же есть специальная картографическая и навигационная программа SASPlanet – полностью бесплатная и позволяющая работать с большим количеством online карт: находим населённый пункт, выберем из

списка доступных карт карты от Bing – бесплатный аналог «Google-maps» в Яндекс. Выбираем масштаб 20 – самый крупный из возможных, нажимаем «Начать», чем запускаем операцию «приклеивания» объектов на карту.

Для разработки технологии создания ГИС карты трудоустройства выпускников вузов необходимо освоить навыки: по установке и поддерживанию QGIS в рабочем состоянии; по настройке интерфейса и расширению возможностей системы дополнительными модулями по управлению данными, находящимся в произвольных системах координат и ортогоналей; по осуществлению привязки сканированных карт и изображений; по созданию векторных изображений, контролю их топологии и заполнению атрибутов; по визуализации векторных слоёв; по обработке и визуализации растровых изображений (оцифрованного рельефа поверхности, спутниковой съёмки); по созданию и подготовке к печати карты; по работе с дополнительными источниками данных (БД, услугами WMS и WFS); использованию дополнительно других полезных приложений [1].

Известно, что изображения в компьютерной графике либо растровые, либо векторные, что касается и объектов визуализации, наносимых на карты. В качестве векторных объектов используются: точки, прямые и полигоны (контуры территорий). Создаётся проект, в котором создаются новые слои. Можно так же занести в проект созданные ранее либо находящиеся в массовой доступности таблицы слоёв, используя различные форматы файлов, в том числе *.shp, включая продукты QGIS. Возможны варианты с использованием БД, слоёв из различных сервисов интернета. Тогда при передаче картографической информации с целью её дальнейшего применения, отправляется либо один отдельный файл «*.shp», либо архив папки с файлами всего проекта.

Как было отмечено, геометрия хранится в отдельном поле таблицы. Если такого поля не предусмотрено, то его создают самостоятельно. К примеру, вполне возможно присоединение к проекту электронной таблицы приложения Excel, в которой хранится информация различного характера и в любом количестве, например, о работодателях в формате «*.csv», с последующим созданием в нём поля пространственных координат или конвертацией в стандарт «*.shp» с целью визуализации данных в ГИС. Но возможно и присоединение к проекту иных форматов файлов: *.csv, MapInfo с последующей конвертацией их в формат *.shp с целью произведения над ними дополнительных действий. Например, коррекция стиля.

Часто возникает проблема, когда код текста присоединённого слоя ошибочен. Тогда из свойств слоя подбирается подходящий вариант кодирования, и проблема будет решена. После интеграции слоёв в проекте все изменения сохраняются в исходные файлы. Поэтому их можно будет увидеть во всех приложениях, которые используют данные из этой таблицы.

Присоединённые к проекту слои не подвержены редакции. Поэтому, если появится необходимость нанести новые слои, внести изменения в данные полей, добавлять новые поля невозможно. Чтобы открыть доступ к этим

действиям надо выделить слой и нажать кнопку редактирования. Только после этих действий станет возможным его редактирование. Все текущие правки могут быть произведены только в выделенном слое. Если произошло переключение с текущего слоя на другой, то невозможно отметить на карте новый объект из прежней таблицы слоя вплоть до активации исходного слоя. Изменения, производимые в проекте, периодически необходимо сохранять.

Итак, будем исходить из того, что одна таблица – это один слой с однотипными данными. QGIS разделяет действия, связанные с хранением таблицы и управлением её стилем. Стиль настраивается по усмотрению пользователя и, как правило, определяет такие характеристики, как цвет, тип обозначений и растров; положение и добавление надписей соответствующим объектам и полей, коммутирующих с ними; масштаб надписей, обеспечение связи оформления слоя на карте и полей текущей или коммутирующей таблицы. Для трудоустройства выпускников вуза посредством ГИС на региональной карте разными знаками оформляются рынок работодателей, предлагаемые ими вакансии по каждой специальности. С другой стороны, можно визуализировать рынок образовательных услуг, по цветовой гамме соответствующих требованиям работодателей. Дополнительно настраиваются действия, производимые посредством щелчка мыши по топографическому обозначению с целью визуализации дополнительной информации.

Для отправки топографической информации, как правило, пользуются интернет-сервисами WMS или WFS. Интернет-услуга WMS обеспечивает отправку графической информации о топографическом ресурсе как растры с привязкой к системе координат. Сервис WFS обеспечивает возможность запроса и редакции векторных данных таких, например, как дорожные развязки, очертания берегов и территорий позволяет сервер WFS.

Из модуля QGIS «QuickMapServices», кроме услуг WMS, можно воспользоваться множеством других сервисов массовой доступности с целью визуализации топографического ресурса, для чего активизируется элемент управления «получить источники данных» из настроек - «загрузить сервисы». Тогда появится возможность воспользоваться кадастровой картой массового пользования, фото местностей Google, Yandex, станет доступной карта из «OpenStreetMap» (OSM), а также другие информационные таблицы, которые могут быть размещены в генерируемой ГИС.

Применив функцию «геокодинга» к информации, сохранённой в Excel с атрибутами работодателей и предлагаемых ими вакансий, её можно проанализировать на карте: в QGIS таблица из csv файла конвертируется в слой *.shp (модуль «RuGeocoder»). Тогда в таблице будет получено скрытое пустое поле, содержащее геометрию. Этот же продукт позволяет воспользоваться процедурой «геокодинга», с указанием готовой таблицы слоя и её поля с адресами. В этом случае выбирается поставщик услуги, например, для работы с почтовыми адресами на русском языке выбирается Yandex.

Запускается процедура геокодинга, в результате которой все обрабатываемые объекты расставляются на карте.

Результаты исследования. Местоположение объектов в ГИС определяется в заданном варианте системы координат. Например, если это широты и долготы точек на плоской модели земной поверхности - карте, то их измеряют градусами и десятичными дробями градусов. Локально же, на маленькой территории от фиксированной нулевой точки, возможно применение Декартовой системы координат, в связи с чем, она и называется локальной системой координат, в которой полагается, что земля на этой территории плоская. Поскольку такая система через несколько сот километров из-за неучтённого искривления поверхности планеты будет давать большую погрешность, то в QGIS предусмотрена возможность применения для разных слоёв – разных систем координат с последующей конвертацией их из одного типа в другой. Для этого слой сохраняется в «shape» файл или в БД и в качестве параметра выбирается новая система. Но при выводе проекта на экран все слои приводят в единую координатную плоскость [2,3].

Использованные источники:

1. L.A. Kadirova, B.N.Egamov. Management of regional education taking into account regional. Xorazm ma’mun akademiyasi axborotnomasi –2/2-2023, 19-25 p.p.

2. Rudy Ariyanto, Yan Watequlis Syaifudin, Dwi Puspitasari, Suprihatin, Ahmadi Yuli Ananta, Awan Setiawan, Erfan Rohadi State Polytechnic of Malang, Jawa Timur, IndonesiaA Web and Mobile GIS for Identifying Areas within the Radius Affected by Natural Disasters Based on OpenStreetMap Data URL: https://doi.org/10.3991/ijoe.v15i15.11507 (Дата обращения: 07.01.2024)

3. L.Kadirova. Методологические аспекты применения инструментария ГИС для управления трудоустройством выпускников региональных вузов. https://DOI 10.25205/1818-7900-2019-17-2-74-80 (Дата обращения: 06.01.2024)

УДК:658: 6П9.85 (575.1)

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ВОПРОСЫ УПРАВЛЕНИЯ ТРУДОВЫМИ РЕСУРСАМИ В УСЛОВИЯХ ГЛОБАЛИЗАЦИИ

Аннотация. Глобализация экономики предъявляет высокие требования к использованию трудовых ресурсов. Трудовые ресурсы занимают основное место в обеспечении конкурентоспособности предприятия и его продукции. В статье исследуются вопросы управления трудовыми ресурсами и намечаются пути совершенствования.

Ключевые слова: экономика, глобализация, предприятие, конкурентоспособность, труд, трудовые ресурсы, производительность труда.

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ISSUES OF HUMAN RESOURCE MANAGEMENT IN THE CONTEXT OF GLOBALIZATION

Annotation. Annotation. The globalization of the economy places high demands on the use of labor resources. Human resources occupy the main place in ensuring the competitiveness of the enterprise and its products. The article examines the issues of human resource management and outlines ways to improve it.

Keywords: economy, globalization, enterprise, competitiveness, labor, labor resources, labor productivity.

Кириш (Introduction). Трудовые ресурсы играют важную роль в экономическом развитии. Количество трудовых ресурсов увеличивается. В развивающихся странах с высокими темпами роста населения трудовые ресурсы составляют 50-55 процентов населения, а в некоторых странах 61-62 процента. Доля трудовых ресурсов среди городских жителей выше, чем среди сельских жителей. Трудовые ресурсы составляют 62-65% населения в городской местности и 56-57% в сельской местности. В 2023 году численность трудовых ресурсов в нашей стране составит 19,4 миллиона человек. Для

эффективного использования трудовых ресурсов необходимо совершенствовать управление ими.

Основная часть. В условиях глобализации экономики успех хозяйствующих субъектов все больше зависит от трудовых отношений. Развитие трудовых отношений зависит от организации трудового процесса и эффективного использования в этом процессе имеющихся трудовых ресурсов. На основе работ, проведенных в этих областях до настоящего времени, накопленного опыта и глубокого научного анализа социально-экономических процессов, исследования объективных закономерностей использования трудовых ресурсов и на основе результатов анализа делать конкретные выводы и разрабатывать предложения. Определение направлений эффективного использования трудовых ресурсов и создание в этом направлении эффективного механизма является сегодня залогом успеха.

Стратегия развития нового Узбекистана на 2022-2026 годы принята Указом Президента Республики Узбекистан от 28 января 2022 года №ПФ-60. Среди целей, поставленных в стратегии развития, также определена цель «создание новых рабочих мест в стране, увеличение доходов населения и тем самым сокращение бедности как минимум в 2 раза к концу 2026 года». Эта цель предусматривает занятость населения и эффективную организацию его труда. Возможность увеличения дохода создается в результате эффективной работы. Работники управления должны в процессе своей деятельности более активно участвовать в управлении трудовыми ресурсами, организовывать эффективную работу сотрудников и тем самым обеспечивать получение ими большего дохода.

Рабочая сила необходима для экономической деятельности. Любой производственный процесс – это прежде всего трудовой процесс. Трудовой процесс включает в себя предметы труда, орудия труда и рабочую силу. Труд – это сознательная деятельность людей, направленная к определенной цели, в результате этой деятельности они создают материальные блага и культурные богатства, изменяя существующие вещи в природе, приспосабливая их к своим потребностям. Выраженный таким образом характер труда остается основным условием производства в любом человеческом обществе. Без труда и трудового процесса невозможно создавать материальные блага, осуществлять процесс производства или оказания услуг.

Трудовые ресурсы – это работающая часть населения страны. Существуют разные взгляды на описание трудовых ресурсов. Прежде всего, речь идет об определенном возрасте населения, то есть в разных странах установлен разный возраст. В ряде случаев в состав трудовых ресурсов включаются также работающие лица, достигшие пенсионного возраста, и лица, не достигшие возраста трудоспособности.

Результаты и обсуждение. Трудовые ресурсы - часть населения страны трудоспособного возраста. В нашей стране в состав рабочей силы включены женщины в возрасте от 16 до 55 лет и мужчины в возрасте до 60 лет. Люди сначала присоединяются к рабочей силе по мере старения, а затем (по мере

старения) покидают ее. Рост трудовых ресурсов зависит от увеличения населения. Чем больше молодежи в составе населения, тем быстрее растет рабочая сила. В конце XX - начале XXI века трудовые ресурсы в Узбекистане ежегодно увеличивались на 320-350 тысяч человек. Большинство из них – это те, кто вступил в трудоспособный возраст.

Существуют разные взгляды на трудовые ресурсы. Среди них трудовые ресурсы определяются как общественные отношения, обеспечивающие создание, обмен и использование рабочей силы. Например, Н. А. Волгин, Ю. Г. Одегов показали, что в область трудовых ресурсов следует включать не только обмен рабочей силой, но и аспекты создания трудового потенциала, а также использования рабочей силы. Меньше внимания они уделяют вопросам обмена рабочей силы, образования и обучения, управления персоналом на производстве.

Уткин В.А. дает следующее мнение о составе трудовых ресурсов: «Основу трудовых ресурсов составляет экономически активное население страны, включающее в себя не только занятых работников, но и временно безработных, не имеющих возможности найти работу из-за недостаточного образования и затруднений адаптация к обществу». На наш взгляд, не стоит выделять недостаток образования и сложность адаптации в коллективе. Ряд других ученых и экспертов высказали ряд мнений по поводу трудовых ресурсов. В частности, А. Я. Кибанова показывает в качестве трудового ресурса людей с разными качествами. Он определяет «ту часть населения, которая обладает трудоспособностью, которая имеет возможность производить материальные блага или оказывать услуги посредством своих психофизиологических и интеллектуальных качеств, как трудовые ресурсы».

Обобщая определения понятий «труд» и «трудовые ресурсы», мы сочли целесообразным определить их следующим образом:

Труд – это специфический образ жизни человека, условие жизни общества: учитываются его экономика и политика, культура и быт, формы отношений между людьми в производственном процессе. Трудовые ресурсы предприятия характеризуют его потенциальную рабочую силу и выражаются в численности трудоспособных работников, обладающих совокупностью физических, умственных и духовных способностей, которые не могут быть реализованы вне трудового процесса создания материальных благ и услуг.

Выводы. Трудовые ресурсы – это все люди, способные работать в различных отраслях экономики. Уместно сказать, что резервными трудовыми ресурсами являются люди, которые временно не трудоустроены, но имеют возможность работать. Они пополняют ряды трудовых ресурсов с момента трудоустройства. Руководство осуществляет управление трудовыми ресурсами и всегда старается повысить их эффективность. Неустанно ведется работа по пополнению рядов трудовых ресурсов резервными трудовыми ресурсами. Значимость трудовых ресурсов еще больше возросла в современный период экономического развития, только в результате эффективной эксплуатации трудовых ресурсов можно рационально выйти из

различных рисков, создать возможность преодоления в конкурентной борьбе. Любая современная техника и технология не могут осуществлять конкурентоспособную деятельность без трудовых ресурсов.

Использованные источники:

1. Catter III, J.J., Kidwell, R.E. (2014). Function, governance, and trust in successor leadership groups in family firms. *Journal of Family Business Strategy*, *5*(3), 217-228. doi: 10.1016/j.jfbs.2013.06.001.
2. Elnara Alievaa, Olim Kazakov EFFECTIVE APPLICATION OF INNOVATIONS OF THE "THIRD RENAISSANCE" IN INCREASING THE COMPETITIVENESS OF SMALL BUSINESSES Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html © Platform & Workflow by: Open Journal Systems.
3. Olimjon Sabirovich Kazakov, Lutfillojon Uzoqov ISSUES TO INCREASE THE EFFICIENCY OF FAMILY ENTREPRENEURSHIP. TRANS Asian Journal of Marketing & Management Research (TAJMMR) https://tarj.in. Vol 10, Issue 4, April 2021
4. Казаков О.С. Анализ и оценка конкурентоспособности фирмы. «Экономика в меняющемся мире» VI Всероссийский экономический форум: сборник научных трудов (Казань, 27 апреля-31 мая 2022 г.) Издательство Казанского университета, 2022. – 603 с. 228-232 с. – Системные требования: Adobe Acrobat Reader. – URL: https://dspace.kpfu.ru/xmlui/handle/net/173184.
5. Kazakov Olim Sabirovich Management of the economic power of business activities and its impact on its efficiency Journal of Pharmaceutical Negative Results, Volume 13 Spesial Issue 6, 2022 https://www.pnrjournal.com/index.php/home/issue/view/25
6. Olim Kazakov, Shaxboz Valijanov, Bobur Nabiyev, Abdullo Mirzababayev. ECONOMIC POWER OF ENTREPRENEURSHIP AND ITS IMPACT ON ITS EFFICIENCY Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html © Platform & Workflow by: Open Journal Systems.
7. Казаков О.С. Управление результативностью производственных предприятий. Журнал "Экономика и социум" №1(104) 2023www.iupr.ru

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СОВЕРШЕНСТВОВАНИЕ УПРАВЛЕНИЯ В НАПРАВЛЕНИИ ИСПОЛЬЗОВАНИЯ ПОТЕНЦИАЛА ПРЕДПРИЯТИЙ

Аннотация. Важное значение в повышении конкурентоспособности имеет управленческая деятельность, организованная с целью эффективного использования потенциала предприятий. В статье рассмотрены управленческие действия, которые приводят к эффективному использованию потенциала предприятий, и разработаны предложения.

Ключевые слова: предприятия, потенциал предприятий, управления, совершенствование управления, эффективность, конкурентоспособность.

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IMPROVING MANAGEMENT TOWARDS USING THE POTENTIAL OF ENTERPRISES

Annotation. Management activities organized with the aim of effectively using the potential of enterprises are important in increasing competitiveness. The article examines management actions that lead to the effective use of the potential of enterprises and develops proposals.

Key words: enterprises, enterprise potential, management, management improvement, efficiency, competitiveness.

Кириш (Introduction). Одним из важнейших путей повышения эффективности производственной деятельности является эффективная организация и управление работой производственных предприятий, ее регулярное совершенствование. Наряду с положительными сторонами современного уровня организации управления производством на предприятиях, осуществляющих производственную деятельность, имеются и некоторые недостатки, для устранения которых требуется совершенствование организации управления. Производственные предприятия не могут продолжать свою деятельность в течение длительного времени, возникают трудности с налаживанием эффективной деятельности, их продукция и услуги

плохо реализуются не только на экспорт, но и на внутренний рынок, не могут найти своих покупателей.

В условиях острой конкуренции в условиях глобализации экономики производители и продавцы стремятся продать свой товар как можно выгоднее, а покупатели купить этот товар как можно дешевле.

Решение этого сложного вопроса указывает на необходимость совершенствования организации и управления в производственной деятельности, использования современных методов в процессах управления, широкого распространения передового опыта, соблюдения современных принципов управления в управленческой деятельности.

Основная часть. Совершенствование управления производством может осуществляться по следующим трем направлениям:

1. Руководители, занимающиеся управленческой деятельностью, должны хорошо знать и следовать своим задачам, способам их выполнения и эффективным методам.

2. Порядок осуществления управленческой деятельности должен быть установлен заранее и соблюдаться.

3. Необходимо знать правильную установку и использование средств управления производством. Важнейшей ситуацией в управленческой деятельности является принятие управленческих решений. Каждое принятое управленческое решение должно быть выполнено. Только в результате реализации управленческих решений может быть реализована эффективность управления.

Изучение факторов производственной среды занимает важное место в эффективности производственной деятельности. Под производственной средой понимаются условия и факторы, влияющие на работу производственного предприятия и требующие управленческих решений. Выделяют внутренние и внешние факторы производственной среды. Под внутренней средой понимается экономическая деятельность, включающая в себя механизм управления, направленный на увеличение прибыли фирмы.

Под внешней средой производства понимаются все условия и факторы, возникающие в окружающей среде независимо от деятельности конкурирующей фирмы, но влияющие на ее работу.

Чтобы получить большую прибыль, производственники должны определять свою цель в следующих областях: в области науки и техники – разработать и внедрить новый продукт; совершенствование технологического процесса в области производства и использования новой техники, повышение качества выпускаемой продукции; при передаче и реализации продукта необходимо сохранять и расширять долю рынка.

Основная задача менеджмента – определить характер и уровень влияния факторов и принять решения, направленные на обеспечение эффективной реализации и развития производственной деятельности.

В целях совершенствования управленческой деятельности на производственных предприятиях необходимо учитывать реальную ситуацию

при разработке маркетинговых исследований и маркетинговых программ, полностью изучать рыночные переменные, учитывать положение конкурентов и проводить аналогичные мероприятия. эффективно.

Правильная организация и управление производственной деятельностью является одним из необходимых условий развития производства. Нет сомнений в том, что хорошо организованный процесс управления обеспечит увеличение доходов, разумные расходы и увеличение прибыли за счет эффективного использования имеющихся возможностей.

К основным проблемам, вызывающим трудности у менеджеров в управлении производственной деятельностью, относятся:

- Выбор наиболее необходимых показателей для контроля производственных процессов в производственной деятельности и поиск эффективных методов их расчета;
- Создание максимально эффективного порядка управления производственным предприятием;
- модернизация производства, регулярное обновление техники и технологий с учетом достижений научно-технического развития;
- осуществление маркетинговой деятельности и маркетинговых исследований и в этом процессе правильное определение факторов, влияющих на маркетинговую среду;
- найти экономические ресурсы, необходимые в производственном процессе, определить пути их эффективного использования и наладить эффективное использование экономических ресурсов этими способами.

Выводы. Управление производством – это система управления производственной, сервисной и сбытовой деятельностью производственного предприятия, включающая анализ и изучение потребностей потребителей, адаптацию планов производства, продаж и поставок, а также планов оказания услуг в соответствии со спросом. Добиться совершенствования управленческой деятельности в производственной деятельности можно путем реализации задач, заявленных как основная цель производственного предприятия, и обеспечения их выполнения с низкими затратами.

Необходимо учитывать стадию жизни продукта, поскольку при выходе нового продукта на рынок можно определить период, когда он станет прибыльным или убыточным продуктом. Сложная управленческая работа, от создания модели изделия до его производства, реализации и послепродажного обслуживания, представляет собой работу менеджеров, осуществляющих управленческую деятельность в производственных организациях, включая управленческую деятельность и маркетинговую деятельность.

Внедрение этих направлений совершенствования организации и управления производственной деятельностью приводит к повышению эффективности производственной деятельности.

Использованные источники:

1. Указ Президента Республики Узбекистан от 28 января 2022 года № ПФ-60 «О стратегии развития Нового Узбекистана на 2022-2026 годы». Ташкент, Узбекистан, 2022 г.
2. Kazakov Olim Sabirovich Management of the economic power of business activities and its impact on its efficiency Journal of Pharmaceutical Negative Results, Volume 13 Spesial Issue 6, 2022 https://www.pnrjournal.com/index.php/home/issue/view/25
3. Olim Kazakov, Shaxboz Valijanov, Bobur Nabiyev, Abdullo Mirzababayev. ECONOMIC POWER OF ENTREPRENEURSHIP AND ITS IMPACT ON ITS EFFICIENCY Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html
© Platform & Workflow by: Open Journal Systems.
4. Elnara Alievaa, Olim Kazakov EFFECTIVE APPLICATION OF INNOVATIONS OF THE "THIRD RENAISSANCE" IN INCREASING THE COMPETITIVENESS OF SMALL BUSINESSES Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html
© Platform & Workflow by: Open Journal Systems.
5. Казаков О.С. Повышение эффективности использования экономических ресурсов. Journal of new century innovations. http://www.newjournal.org/Volume–22_Issue-1_February_2023
6. Казаков О.С. Управление результативностью производственных предприятий. Журнал "Экономика и социум" №1(104) 2023www.iupr.ru
7. Kazakov Olim Sabirovich. Issues improvement manajement of production enterprises. INTERNATIONAL JOURNAL ON ECONOMICS, FINANCE AND SUSTAINABLE DEVELOPMENT E-ISSN: 2620-6269. https://journals.researchparks.org/index.php/IJEFSD. Vol. 5 No. 2 | February 2023
16. Kazakov Olim Sabirovich. MANAGEMENT OF THE ECONOMIC POWER OF BUSINESS ACTIVITIES AND ITS IMPACT ON ITS EFFICIENCY. Journal of Pharmaceutical Negative Results ¦ Volume 13 ¦ Special Issue 6 ¦ 2022 https://www.pnrjournal.com/index.php/home/article/view/5743/7083
8. Казаков О.С. Современные проблемы и возможности использования концепций лидерства в развитии регионов. International Journal of Education, Social Science & Humanities. Finland Academic Research Science Publishers ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor Volume-11| Issue-10| 2023 Published: |22-10-2023|
9. Казаков О.С. Проблемы ускоренного развития промышленности. International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor Volume-11| Issue-10| 2023 Published: |22-10-2023|

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СТРАТЕГИИ УПРАВЛЕНИЯ ВНЕШНЕЭКОНОМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЙ ПРЕДПРИНИМАТЕЛЬСТВА

Аннотация. Эффективная деятельность предприятий предпринимателстьво во многом зависит от их внешнеэкономической деятельности. В статье рассматриваются вопросы повышения эффективности внешнеэкономической деятельности предприятий. Рассмотрены вопросы использования стратегий управления во внешнеэкономической деятельности.

Ключевые слова: предпринимательство, эффективность, внешнеэкономическая деятельность, менеджмент, стратегия.

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STRATEGIES FOR MANAGING FOREIGN ECONOMIC ACTIVITIES OF BUSINESS ENTERPRISES

Annotation. The effective activities of entrepreneurship enterprises largely depend on their foreign economic activities. The article discusses issues of increasing the efficiency of foreign economic activity of enterprises. The issues of using management strategies in foreign economic activity are considered.

Key words: entrepreneurship, efficiency, foreign economic activity, management, strategy.

Введение (Introduction). Для повышения эффективности деятельности предприятий предпринимательства необходимо будет совершенствовать управление всей деятельностью, особенно внешнеэкономической. Внешнеэкономическая деятельность предприятий предпринимательства составляет основу их развития. В управлении этой деятельностью большое значение имеет выявление новых стратегий. Необходимо довести управление деятельностью предпринимательских предприятий до масштабов и уровней предпринимательской деятельности в развитых странах, повысить эффективность механизмов управления предпринимательскими предприятиями в регионах и поддержать экспортные операции предпринимательства с помощью институциональных методов. Управление и поддержка предпринимательской деятельности с помощью институциональных методов возложения на определенные государственные органы задач по занятию проблемами предпринимательства, создание и

функционирование негосударственных некоммерческих организаций, представляющих интересы предпринимателей и представляющих государственные органы.

Основная часть. Региональные факторы, влияющие на деятельность предпринимателства, напрямую влияют на рациональную специализацию по различным сферам деятельности, на состав экспортной и импортируемой продукции, эффективное использование имеющегося природного и экономического потенциала, создание нового потенциала, равномерное расположение производственных сил по различным регионам страны.

В настоящее время потенциальные возможности предприятий предпринимательства по экспорту продукции очень высоки. Полное и эффективное использование этих возможностей позволит ускорить социально-экономическое развитие регионов. Существует ряд проблем, которые мешают в полной мере использовать существующие возможности действующих предприятий предпринимательства и дальнейшее расширение их экспорта. Среди этих проблем можно отметить следующие: отсутствие у субъектов малого бизнеса и предпринимательских предприятий средств, необходимых для финансирования затрат на организацию, управление и проведение в них маркетинговых исследований, отсутствие достаточной информации предпринимателей об изменяющихся условиях деловой среды и правовых условиях их деятельности на различных зарубежных рынках мире, дальнейшее повышение качества в вопросах предпринимательской деятельности, упаковки, сертификации, нанесения штрих-кодов на продукцию и тому подобные вопросы.

Экспортная номенклатура Узбекистана в настоящее время включает около 300 наименований (для сравнения: экспортная номенклатура Китая насчитывает 50 000 наименований). В этой номенклатуре вес готовой продукции и оборудования очень мал. Несмотря на ряд мер, реализуемых на протяжении многих лет, доля сырья и сопутствующей продукции в структуре экспорта остается высокой. Увеличение доли продукции, готовой к употреблению, остается одним из наиболее актуальных вопросов. Нельзя рассчитывать на экспорт сырья и незначительно модифицированной продукции, что не выведет эффективность процессов разработки на высокий уровень.

Для того чтобы внешнеэкономическая деятельность предприятий, осуществляющих предпринимательскую деятельность, была эффективной, необходимо, чтобы предприятия имели информацией о потенциальных покупателях видов продукции, производимой в разных странах (вид деятельности, финансовые и экономическая ситуация, отношения с конкурентами, поведение на рынке и т. д.) Недостаточная информированность могут вызвать определенные трудности в экспортной деятельности. Подобные ситуации затрудняют использование современных методов маркетинговых исследований на предприятиях предпринимательства. В экспортной товарной политике предприятий предпринимательства важно

учитывать реальные политические риски, связанные со странами, в которые поставляются товары.

Изучить социокультурную среду (уровень осознания национальной идентичности, религиозные особенности, язык, жесты и обычаи) той части международного рынка, на которой призваны действовать хозяйственные предприятия, осуществляющие внешнеэкономическую деятельность.

Выводы. Предприятия предпринимательства могут использовать ряд стратегий в своей внешнеэкономической деятельности.Эти стратегии могут быть следующими: Предпринимательство и предприятия малого бизнеса, осуществляющие внешнеэкономическую деятельность, изучают продукцию, технически и технологически аналогичную и совместимую с собственной продукцией, изучают ее существующие особенности и на основе этой информации создают новые виды продукции, что приводит к повышению экспортного потенциала. При этом предприятии малого бизнеса и предпринимательства могут найти вновь образовавшуюся группу потребителей своей продукции и начать производство для нее. Предприятиям малого бизнеса и предпринимательства важно создавать новую продукцию, совершенно не похожую на ранее существовавшую продукцию, производить эту продукцию, имеющую высокую потребительскую ценность, одновременно совершенствуя технологию производства, и экспортировать ее на международные рынки. Деятельность, осуществляемая таким образом, основана на риске и может принести большую прибыль.

Большое значение имеет использование вышеизложенных стратегий во внешнеэкономической деятельности предприятий малого бизнеса и предпринимательства. В этих стратегиях предприятия-экспортеры продукции должны иметь четкое представление о своих правах и обязанностях, иметь научно-технические, производственные и сбытовые ресурсы для своей деятельности.

Использованные источники:

1. Казаков О.С. Анализ и оценка конкурентоспособности фирмы. «Экономика в меняющемся мире» VI Всероссийский экономический форум: сборник научных трудов (Казань, 27 апреля-31 мая 2022 г.) Издательство Казанского университета, 2022. – 603 с. 228-232 с. – Системные требования: Adobe Acrobat Reader. – URL: https://dspace.kpfu.ru/xmlui/handle/net/173184.
© Platform & Workflow by: Open Journal Systems.
2. Elnara Alievaa, Olim Kazakov EFFECTIVE APPLICATION OF INNOVATIONS OF THE "THIRD RENAISSANCE" IN INCREASING THE COMPETITIVENESS OF SMALL BUSINESSES Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html
© Platform & Workflow by: Open Journal Systems.

3. Казаков О.С. Повышение эффективности использования экономических ресурсов. Journal of new century innovations. http://www.newjournal.org/Volume–22_Issue-1_February_2023
4. Казаков О.С. Управление результативностью производственных предприятий. Журнал "Экономика и социум" №1(104) 2023www.iupr.ru
5. Kazakov Olim Sabirovich. Issues improvement manajement of production enterprises. INTERNATIONAL JOURNAL ON ECONOMICS, FINANCE AND SUSTAINABLE DEVELOPMENT E-ISSN: 2620-6269. https://journals.researchparks.org/index.php/IJEFSD. Vol. 5 No. 2 | February 2023
6. 17. Kazakov Olim Sabirovich. MANAGEMENT OF THE ECONOMIC POWER OF BUSINESS ACTIVITIES AND ITS IMPACT ON ITS EFFICIENCY. Journal of Pharmaceutical Negative Results ¦ Volume 13 ¦ Special Issue 6 ¦ 2022 https://www.pnrjournal.com/index.php/home/article/view/5743/7083
7. Казаков О.С. Современные проблемы и возможности использования концепций лидерства в развитии регионов. International Journal of Education, Social Science & Humanities. Finland Academic Research Science Publishers ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor Volume-11| Issue-10| 2023 Published: |22-10-2023|
8. Казаков О.С. Проблемы ускоренного развития промышленности. International Journal of Education, Social Science & Humanities. Finland Academic Research Science Publishers ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor Volume-11| Issue-10| 2023 Published: |22-10-2023|
9. Казаков О.С., Валижанов Ш. Вопросы управление качеством в условиях глобализации. “Устойчивое развитие: анализ тенденций Российской и мировой экономики” Международная научно-практическая конференция. Дагестанский государственный университет, 4-5 апреля 2023 года. Махачкала 2023.

УДК 616.664.17

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СОВРЕМЕННЫЕ ВЗГЛЯДЫ НА ЛЕЧЕНИЕ И ПРОФИЛАКТИКУ КИШЕЧНОГО ТОКСИКОЗА У ДЕТЕЙ РАННЕГО ВОЗРАСТА

Резюм. Кишечный токсикоз – один из наиболее частых вариантов токсикоза, развивающегося у детей раннего возраста (особенно 1-го года жизни) при острых кишечных инфекциях. Он возникает как результат первичного ответа на инфекционный агент и вследствие значительных потерь воды и электролитов с рвотой и жидким стулом. Эти потери усугубляют нарушения периферического кровообращения и приводят к прогрессирующим неврологическим расстройствам.

Большое значение для развития кишечного токсикоза имеют врожденные заболевания обмена веществ, наследственный и приобретенный иммунодефицит и связанная с ним сенсибилизация в результате повторных инфекционных заболеваний, хронические расстройства питания, дефекты вскармливания.

Ключевые слова: ранний детской возраст, кишечный токсикоз.

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MODERN VIEWS ON THE TREATMENT AND PREVENTION OF INTESTINAL TOXICOSIS IN YOUNG CHILDREN

Resume. Intestinal toxicosis is one of the most frequent variants of toxicosis developing in young children (especially the 1st year of life) with acute intestinal infections. It occurs as a result of the primary response to an infectious agent and due to significant losses of water and electrolytes with vomiting and loose stools. These losses aggravate peripheral circulatory disorders and lead to progressive neurological disorders.

Of great importance for the development of intestinal toxicosis are congenital metabolic diseases, hereditary and acquired immunodeficiency and related sensitization as a result of repeated infectious diseases, chronic eating disorders, feeding defects.

Key words: early childhood, intestinal toxicosis.

Введение. По данным Всемирной Организации Здравоохранения (ВОЗ) в сотрудничестве с ЮНИСЕФ была разработана стратегия [4,6]. Данная стратегия сочетает улучшенное введение болезней детского возраста с

аспектами питания, иммунизации и некоторыми другими важными факторами, оказывающими влияние на здоровье ребенка, включая здоровье матери. [2,7] Диарея (кишечные токсикозы) тяжелые нарушения питания до настоящего времени обуславливают высокий процент летальности у детей до 5 лет [1,5]. Проведенный в 1996 году анализ глобального бремени заболеваний указывают на то, что перечисленные заболевания будут продолжать оставаться основными причинами детской смертности до 2020 года, если для борьбы с ними не будут предприняты гораздо более значительные усилия. [3,8]

Цель исследования. Как показывает опыт, в общепринятые методики' диагностики и лечения кишечных токсикозов у детей (при применении их в условиях жаркого климата) необходимо внесение некоторых уточнений, касающихся в первую очередь особенностей регидратационной терапии, а также ряда организационных моментов. Последние особенно важны, так как сочетание жаркого климата и заболеваемости кишечными инфекциями с некоторыми социальными факторами (высокая рождаемость, высокий удельный вес детей в возрастной структуре населения, проживание 2/3 детей в сельской местности) требуют конкретных рекомендаций как для практических врачей, так и для организаторов педиатрической службы.

Материалы и методы исследования. Наблюдения позволяют считать вододефицитную дегидратацию более распространенной, а в условиях жаркого климата - преобладающей.

Результаты исследования. Для быстрой дифференциации типа дегидратации при поступлении ребенка в стационар нами используется таблица основных симптомов, в которой на первом месте стоят температура тела и жажда. Таблица удобна и проста для запоминания (все параметры при вододефицитном типе повышены, а при соледефицитном - понижены).

Для дифференциации степени дегидратации и одновременного расчета объёма жидкости, необходимой для дегидратационной терапии, мы предлагаем таблицу, составленную по типу известной схемы Dennis (расчёты у новорожденных основаны на несколько измененных данных В.М. Балагина и соавт.). Все дети с обезвоживанием нуждаются дополнительной жидкости. Если есть у ребенка диарея: как долго? Если есть кровь в стуле. Для этого нужно осмотреть и ощутить:

общее состояние ребенка (летаргичен или без сознания), беспокоин или болезненно раздражён;

ищите естьли у ребенка запавшие глаза;

предложите ребенку жидкость - ребенок пьет плохо, пьет жадностью. Идет процесс тяжелого обезвоживание.

В основу лечения входит употребление дополнительной жидкости (столько, сколько ребенок выпьет). Если ребенок вскармливается исключительно грудью дайте ему ОРС 5 мл/кг/час, в течении 3-4-х часов и наблюдать. Если не находится на грудном вскармливании: раствор ОРС,

жидкости на основе пищевых продуктов (такие как суп, рисовый отвару кефир, биолакт, катык).

В дополнение к обычному количеству жидкости:

До 2-х лет - 50 - 100 мл после каждого жидкого стула;

2 года и старше - 100 - 200 мл после каждого жидкого стула.

Продолжать давать дополнительно жидкости до полного прекращения диареи [4,7]. Для дифференциации степени дегидратации в таблице использован только основной - потеря массы (в %) и как вспомогательный симптом диурез [1,3] (табл. 1).

Исходя из этого, нами введено правило, согласно которому участковый медицинский работник, направляя ребенка с кишечным токсикозом в стационар, обязательно указывает результат последнего взвешивания ребенка в поликлинике (до болезни) и его дату. Благодаря этому исключаются ошибки в определении степени потери массы тела, связанные с тем или иным отклонением в нарастании весовой кривой у ребенка до болезни. После определения степени дегидратации по табл.2 производится расчёт объёма жидкости, необходимого в 1 -е сутки лечения. При повышении температуры тела или температуры окружающего воздуха (что особенно важно в условиях Средней Азии) добавляется определенной объём жидкости. Если на догоспитальном этапе детям уже проводилась регидратационная терапия, то в результате этого через несколько часов симптомы дефицита воды и гипертонии плазмы (при вододефицитном варианте) могут значительно уменьшится, что даёт основание при госпитализации ребенка расценивать дегидратацию как изотоническую.

Вывод. Удельный вес вододефицитного обезвоживания в общей структуре кишечных токсикозов у детей раннего возраста в условиях жаркого климата колеблЬтся от 65 до 75% и этот тип является преобладающий.

Для достижения качественных новых результатов необходим более интегрированный подход к ведению больных детей. Программы по охране здоровье детей должны учитывать не только контроль заболевания, но и состояния в целом, и благосостояние детей.

Использованные источники:

1.Анганова, Е.В. Антибиотикорезистентность условно-патогенных энтеробактерий, выделенных от больных острыми кишечными инфекциями / Е.В. Анганова // Сибирский медицинский журнал (г. Иркутск). - 2012. -Т. 114, №7. – С. 98-99..

2.Бутакова, Л.В. Особенности течения кишечных инфекций, вызванных вирусно-вирусными ассоциациями, у детей / Л.В. Бутакова, В.П. Молочный, Л.И. Заварцева // Дальневосточный журнал инфекционной патологии. - 2012. - № 21(21). - С. 54-55.

3.Дорошина, Е.А. Клинико-эпидемиологические особенности и вопросы терапии норовирусной инфекции у детей автореф. дис.... к.м.н. / Е.А. Дорошина. - М., 2009. - 24 с.

4.Чихачева, Е.Н. Распространенность острых кишечных инфекций у детей Мурманской области / Е.Н. Чихачева, О.Ю. Богданова // Успехи современного естествознания. - 2011. - № 8. - С. 76-77.
5.Aggarwal, R. Role of zinc administration in prevention of childhood diarrhea and respiratory illnesses: a meta-analysis / R. Aggarwal, J. Sentz, M.A. Miller //Pediatrics. – 2007. – № 119(6). – P. 1120-1130.
6.Bovine lactoferrin inhibits influenza A virus induced programmed cell death in vitro / A. Pietrantoni [et al.] // Biometals. - 2010. - V. 23. - P. 465-475.
7.Matsushima, Y. Genome Sequence of a Novel Virus of the Species Human Adenovirus D Associated with Acute Gastroenteritis / Y. Matsushima, H. Shimizu, A. Kano // J. Genome Announcements. - 2013 January/February; 1(1).
8.Suzuki Y.A. Mammalian lactoferrin receptors: structure and function / Y.A. Suzuki, V. Lopez, B. Lonnerdal // Cell. Mol. Life. Sci. - 2005. - V.62. - P. 2560-2575.

УДК: 633:63:54

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ЕРЁҒОҚНИНГ ХАЛҚ ХЎЖАЛИГИДАГИ АХАМИЯТИ ВА БИОЛОГИК ХУСУСИЯТЛАРИ

Аннотация. Мақолада ерёнғоқнинг Қибрай-4 навининг ўтлоқи бўз тупроқлар шароитида озиқланиш майдонлари ўсиши ва ривожланишига, туганаклар сони ва вазнига, барг юзасига, ҳосил элементлари ва ҳосилдорлигига таъсир этишини илмий-амалий жиҳатдан асослаб берилган.

Калит сўзлар: биологияси, дон, тупроқ намлиги, минерал ўғит, униб чиқиш, ривожланиш фазаси.

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IMPORTANCE AND BIOLOGICAL PROPERTIES OF PEANUTS IN THE NATIONAL ECONOMY

Abstract. In the article, the influence of the Kibray-4 variety of peanut on the growth and development of the feeding areas, the number and weight of the pods, the leaf surface, the elements of the crop and the yield in the conditions of gray soils is scientifically and practically substantiated.

Key words: biology, grain, soil moisture, mineral fertilizer, germination, development phase.

Мамлакатимиз аҳолиси эҳтиёжини хилма-хил озиқ – овқат, саноатни ҳом-ашё маҳсулотлари билан таъминлаш, чорвачиликни тўйимли озуқа базасини яратишда тупроқ унумдорлиги ва зироатлар ҳосилдорлигини ошириш, деҳқончиликни илмий асосланган илмий-минтақавий тизимларини жорий этиш билан чамбарчас боғлиқдир.

Республикамизда олиб борилаётган қишлоқ хўжалигига боғлиқ бўлган барча амалий ишларни инобатга олган холда, 2021-йилда илмий татқиқот ишлари олиб бориш бўйича (Ерёнгоқ) экини етиштиришни тупроқнинг унумдорлиги ва кейинги экинлар хосилдорлигига таъсирини ўрганишни олдимизга мақсад қилиб олдик.

Илмий татқиқот ишлари 2021-2023 йилар давомида Андижон вилоятининг ўтлоқи бўз тупроқлари шароитида амалга оширилди. Кузги бошоқли дон экинларидан бўшаган майдонларга такрорий экинларни жойлаштиришда тупроқнинг агрофизик, агрокимёвий хоссаларини яхшилайдиган, аҳолининг озиқ-овқат ва чорва ҳайвонларини ем-хашак маҳсулотларига бўлган эҳтиёжларини тўла қондиришга хизмат қиладиган ҳамда саъноатни ҳом ашёга таъминлайдиган экин турларини танлаш ва етиштириш агротехнологияларини такомиллаштириш ҳамда ресурстежамкор имий тадқиқотлар олиб бориш, натижаларни жорий этиш долзарб масалалардан ҳисобланади.

Андижон вилоятининг ўтлоқи бўз тупроқлари шароитида, ерёнғоқ навларидан юқори ва сифатли ҳосил етиштиришда мақбул озиқланиш майдонини таъминлайдиган экиш тизимини аниқлашдан иборат.

Тадқиқот натижаларининг илмий аҳамияти шундан иборатки, Андижон вилоятининг ўтлоқи бўз тупроқлар шароитида озиқланиш майдонлари ерёнғоқнинг ўсиши ва ривожланишига, туганаклар сони ва вазнига, барг юзасига, ҳосил элементлари ва ҳосилдорлигига таъсир этишини илмий-амалий жиҳатдан асосланиши, ерёнғоқдан юқори ва сифатли ҳосил етиштирилганлиги, ушбу назарий маълумотлардан эса қишлоқ хўжалик йўналишидаги олий таълим муассасаларида илмий манба сифатида фойдаланиш мумкинлиги билан изоҳланади.

Ерёнғоқ капалакгулдошлар (Papilionaceae), яни дуккакдошлар (Fabaceae) оиласининг Arachis туркумига киради. Илдизи ўқ илдиз асоси жуда шохланган бўлиб ерга 190 см гача чуқур кириб боради. Илдизида жуда кўп тугунаклар хосил бўлади.Асосий пояси тик ўсади бўйи 6 см дан 80 см гача етади. Пояси шохланиб 4 тадан 20 тагача ён шох чиқаради. Пастки шохлари энг бақувват бўлиб хатто ассосий поядан узунроқ бўлиши мумкин. Шохларнинг асосий юмалоқ учи тўре қиррали сер тук бўлади. Ён шохлари асосий поядандеярли тик ёки ётиқ холда чиқади ёки ер бағирлаб ўсади. Ана шунга кўра унинг туп чала туп макилда ва ер баўирлаб ўсадиган шакиллари фарқ қилинади. Туп шаклидаги ўсадиган шакилларининг бўйи 30-40 см бўлса ер бағирлаб ўсадиган шакилларики 20-25 см тупнинг диамтри эса 1 м га етиши мумкин. Барғлари жуфт патсимон мураккаб барг бўлиб овал ёки тескари тухимсимон шакилда яшил ёки тўқ рангда бўладиган тўрттача баргчадан ташкил топган. Барг тук билан қопланган. Гули капалак нусха майда сариқ ёки зарғалдоқ рангда 5-10-15 донадан бўлиб шингил ёки рўвак шаклидаги тўпгулга йиқилган. Тўпгуллари барглар қўлтигида чуқур жойлашган. Гули ўзидан чангланади. Гули уруглангандан кейин кўп ўтмай учи бирмунча ўткирлашган кичикроқ найча шаклида тугунчаси ўса бошлайди. У гинофор деб аталади. Учида уруғланган тугунча бўлган гинофор ўсиб ерга тегади ва 8-9 см гача чуқур киради. Тугунча тупроқда горизантал холатга ўтиб ўса бошлайди ва оқариб мевага-дуккакка айланади. Ерга тегмай қолган гинофорлар қуриб қолади ва мева туғмайди. Тўлиқ пишиб етилган мева олиш учун умумий генофорлар ҳосил қилиш жараёни июн ва июл ойларига тўғри

келиши керак. Бизга маълумки, ерёнғоқ уруғлари ўз вазнига нисбатан 110 – 120 % намликни қабул қилгандан сўнг уна бошлайди. Ерёнғоқ ўсимлиги қисқа кун ўсимлиги бўлиб, тупроқда 14-15 ^{0}С иссиқлик бўлганда экилади, минимум 15-20 ^{0}С максимум 24-28 ^{0}С да яхши ўсиб ривожланади. -0-0,5 ^{0}С да нобуд бўлади.

Қўлланилган агротехник тадбирлар натижасида ерёнғоқнинг навларида юқори иқтисодий самарадорлик кўрсаткичлари 141,4-155,6 самарадорликка эришилди. Республикамизни турли тупроқ-иқлим шароитларида кейинги ўн йил ичида олиб борилган изланишларда такрорий ва оралиқ экинлар ҳақидаги маълумотлар етарли даражада.

Тупроқ унумдорлигини сақлаш ва ошириш ҳамда барқарор ҳосилдорликни узлуксиз таъминлаш учун Андижон вилояти тупроқлари шароитига мос илмий асосланган (қисқа ротацияли алмашлаб экишда) буғдойдан кейин экиладиган такрорий экинлардан энг самаралисини ажратиб олиб сўнгра ишлаб чиқиб амалиётга жорий қилиш кераклиги аниқланди.

Такрорий экин сифатида экилган мошдан кейин тупроқни ҳажм массаси ҳайдов ва ҳайдов остки қатламларида 0,023 дан 0,013 г/см^3 га камайди.

Фойдаланилган адабиётлар рўйхати:

1.Атабаева Х.Н, З.У. Умаров, Ҳ.Ч. Бўриев ва бошқалар. «Ўсимликшунослик». «Меҳнат» нашриёти, 2000 й. Б. 241 – 243.
2.Атабаева Х.Н, З.У. Умаров «Ўсимликшунослик» «Ўзбекистон Миллий Энциклопедияси» Тошкент – 2004. Б. 260 – 263.
3.Атабаева Х.Н, О. Қодирхўжаев. «Ўсимликшунослик», амалий машғулот дарслари учун. Тошкент «Янги аср авлоди» 2006. Б. 260–263.
4.Аманова М., Х.Бўриев, А.Рустамов. “Ерёнғоқ экинининг морфологик белгиларини ўрганиш бўйича услубий қўлланма”. Тошкент-2011. 26. б.
5.Аманова М., А.Рустамов. “Мойли экинлар жаҳон коллекциясини ўрганиш бўйича қўлланма”. Тошкент-2010. Б. 4-9.
6.Аманова М., Х.Бўриев, А.Рустамов. “Ерёнғоқ экинининг уруғчилиги бўйича тавсиянома”. Тошкент-2010. 16. б.
7.Лузина З.А. Арахис. Сельхозгиз, Москва Ленинград, Невский пр., 28. 1954 г. С. 131.
8.Министерство сельского хозяйства и развития. 2002. Решение номер 143/2002/qd-BNN-KHCN: Стандартные требования к семенам арахиса (10TCN 315-98), С. 9.
9.Методы агрохимических исследований почв Средней Азии” М.1973. С.135.
10. Нурматов Ш.Н., Азизов Т.Б. ва бошқалар. Ерёнғоқнинг суғориладиган ерларда етиштириш агротехникаси бўйича тавсиялар // Ўзбекистон илмий – ишлаб чиқариш маркази, Ўзбекистон мойли ва толали экинлар тажриба станцияси. Тошкент – 2010 й.
11. Дала тажрибаларини ўтказиш услублари. ЎзПИТИ, Т. 2007. 131. б.
12.Карпук В.В., Сидорова С.Г. “Растениеводство” Минск-2011. БГУ. С. 241-243.

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ПЕРСПЕКТИВЫ УСТОЙЧИВОГО РАЗВИТИЯ СЕЛЬСКОГО ТУРИЗМА В УЗБЕКИСТАНЕ

Аннотация. Статья анализирует развитие сельского туризма в Узбекистане, рассматривая его вклад в улучшение жизни на селе и устойчивое социально-экономическое развитие. Освещаются текущее состояние, проблемы и стратегии отрасли, а также экономические, социальные и экологические преимущества.

Ключевые слова: сельский туризм, устойчивое развитие, Узбекистан, экономика туризма, инфраструктура туризма, инвестиции в туризм.

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PROSPECTS FOR SUSTAINABLE DEVELOPMENT OF RURAL TOURISM IN UZBEKISTAN

Abstract. The article analyzes the development of rural tourism in Uzbekistan, considering its contribution to the improvement of rural life and sustainable socio-economic development. The current state, challenges and strategies of the industry, as well as the economic, social and environmental benefits are highlighted.

Key words: rural tourism, sustainable development, Uzbekistan, tourism economy, tourism infrastructure, investments in tourism.

Введение

Сельский туризм — это уникальная возможность для устойчивого развития и укрепления экономики сельских районов, которая особенно актуальна для стран с богатым культурным и природным наследием, таких как Узбекистан. Этот вид туризма позволяет местному населению использовать свои природные, исторические и культурные ресурсы для привлечения туристов, что в свою очередь способствует росту доходов и улучшению качества жизни.

Узбекистан, страна с богатым историческим прошлым и уникальными природными ландшафтами, представляет огромный интерес для развития сельского туризма. Имея в своем распоряжении более 74,000 объектов культурного наследия, включая древние города, мавзолеи и уникальные

природные парки, страна обладает значительным потенциалом для привлечения туристов из различных уголков мира.

Развитие сельского туризма в Узбекистане предполагает не только увеличение доходов местного населения и сохранение культурного и природного наследия, но и способствует диверсификации экономики, сокращению бедности и улучшению инфраструктуры. Однако для реализации этого потенциала требуется комплексный подход, включающий развитие инфраструктуры, обучение местного населения, маркетинговые исследования и создание благоприятного инвестиционного климата.

Анализ текущего положения сельского туризма в Узбекистане

После пандемии COVID-19, которая существенно повлияла на туристическую отрасль по всему миру, включая Узбекистан, страна активно работает над восстановлением и дальнейшим развитием этого сектора. Сельский туризм, как часть общей туристической индустрии, занимает особое место в стратегии экономического восстановления и развития.

Узбекистан разработал "Новую стратегию развития Узбекистана на 2022-2026 годы", которая включает в себя планы по трехкратному увеличению объема услуг в сфере туризма и созданию 3.5 миллионов новых рабочих мест. Предполагается, что количество местных туристов достигнет более 12 миллионов, а иностранных - 9 миллионов.

Во время пандемии были приняты решения по поддержке отрасли, включая освобождение туроператоров, турагентов и отелей от земельных и имущественных налогов до 31 декабря 2020 года и сокращение социальных налогов. Эти меры помогли снизить финансовое бремя на предприятия, связанные с туризмом.

Туризм признан одним из секторов, способных создавать новые рабочие места, что критически важно для страны, где значительное количество граждан вынуждено искать работу за рубежом. Туристическая индустрия может предложить занятость в сфере обслуживания, в гостиницах, ресторанах, а также в сопутствующих малых бизнесах, таких как ремесленные мастерские и производство сувениров.

Министерство туризма и культурного наследия Узбекистана разрабатывает стратегию развития туризма до 2030 года, учитывая глобальный кризис и новые условия конкуренции. Важным аспектом является соответствие стратегии целям устойчивого развития ООН, что предполагает долгосрочное и эффективное развитие туризма, с учетом экологического, социального и экономического баланса.

Узбекистан делает значительные шаги в развитии сельского туризма как важной части своей экономики, направленной на улучшение жизни в сельской местности и сохранение культурного наследия. Дальнейшее продвижение и развитие этого направления потребует интеграции различных стратегий, включая инфраструктурное развитие, образование, маркетинг и международное сотрудничество.

Проблемы и вызовы развития сектора сельского туризма в Узбекистане

Развитие сельского туризма в Узбекистане, несмотря на его значительный потенциал, сталкивается с рядом проблем и вызовов, которые могут замедлить или ограничить его рост и успех. Вот некоторые из ключевых проблем и вызовов:

Инфраструктурные ограничения: Одна из главных проблем – это недостаточное развитие инфраструктуры, включая дороги, транспорт, связь и туристические удобства, особенно в отдаленных и сельских районах. Это затрудняет доступ к туристическим объектам и снижает качество туристических услуг.

Недостаточное финансирование и инвестиции: В сектор часто не вкладывают достаточно средств для развития инфраструктуры, маркетинга, обучения и поддержки местных инициатив. Нехватка инвестиций ограничивает возможности развития и улучшения качества услуг.

Нехватка квалифицированных кадров: Отсутствие специалистов в области управления туризмом, гостеприимства и маркетинга затрудняет развитие профессиональных и качественных туристических услуг.

Для успешного развития сельского туризма в Узбекистане необходимо адресовать эти проблемы через комплексный подход, включающий улучшение инфраструктуры, привлечение инвестиций, обучение кадров, устойчивое управление ресурсами, развитие маркетинга и упрощение бюрократических процедур. Также важно укрепить сотрудничество между правительством, бизнесом и местными сообществами для достижения общих целей развития и улучшения качества жизни в сельских районах.

Заключение

Исследования в области сельского туризма в Узбекистане подчеркивают его значительный потенциал как инструмента экономического и социального развития. Уникальное природное и культурное наследие страны создаёт благоприятные условия для развития туризма. Однако для его реализации необходимо серьезное внимание к инфраструктурным, образовательным и маркетинговым аспектам, чтобы удовлетворить потребности и ожидания туристов.

В перспективе, с усиленной поддержкой и внедрением комплексных стратегий развития, сельский туризм может стать важной составляющей экономики Узбекистана, способствуя улучшению качества жизни в сельской местности, сохранению исторического и культурного наследия и устойчивому использованию природных ресурсов.

Взяв во внимание текущие исследования и тенденции, можно с уверенностью сказать, что будущее сельского туризма в Узбекистане выглядит многообещающим. С правильной стратегией и поддержкой, этот сектор сможет способствовать устойчивому развитию страны и улучшению жизни её жителей.

Использованные источники:

1. Ходжаева Д. Х. Сельский туризм как источник роста доходов населения в сельской местности Узбекистана. Bukhara State University, Uzbekistan.
2. Курпаяниди, К. И. К проблеме развития сектора услуг в сельской местности Республики Узбекистан / К. И. Курпаяниди, А. Н. Ойматов // Актуальные проблемы гуманитарных и социально-экономических наук. – 2013. – Т. 7, № 3. – С. 44-46. – EDN UNJHPP.

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АНАЛИЗ МЕХАНИЗМА РЕАЛИЗАЦИИ ИНФОРМАЦИОННОЙ ОТКРЫТОСТИ В ОРГАНАХ ПУБЛИЧНОЙ ВЛАСТИ КАРАЧАЕВО-ЧЕРКЕССКОЙ РЕСПУБЛИКИ

Аннотация. В статье раскрыты особенности реализации информационной политики органами публичной власти Карачаево-Черкесии. Представлен алгоритм формирования государственных пабликов в социальных сетях ВКонтакте», «Одноклассники» и мессенджере «Телеграм» для осуществления информационного взаимодействия с гражданами.

Ключевые слова: информация, информационная политика, государственные паблики, социальные сети, органы публичной власти, Карачаево-Черкесская Республика, Российская Федерация.

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ANALYSIS OF THE MECHANISM FOR IMPLEMENTING INFORMATION TRANSPARENCY IN PUBLIC AUTHORITIES OF THE KARACHAY-CHERKASSIAN REPUBLIC

Annotation. The article reveals the features of the implementation of information policy by the public authorities of Karachay-Cherkessia. An algorithm for the formation of state publics in the social networks VKontakte, Odnoklassniki and the Telegram messenger for information interaction with citizens is presented.

Key words: information, information policy, state publics, social networks, public authorities, Karachay-Cherkess Republic, Russian Federation.

Информационная открытость и публичная информационная политика органов публичной государственной власти является базовым условием развития демократического общества. В современном обществе информация и процесс ее передачи и распространения имеет огромное значение. Информационные потоки распространения представлены большим количеством каналов передачи: телевидение, радио, газеты, журналы, информационные стенды, Интернет сайты, порталы, социальные сети и мессенджеры - это каналы по которым население узнает о деятельности органов государственного аппарата управления на различных территориальных уровнях.

Принятие Федерального закона от 14 июля 2022 г. № 270-ФЗ [1] обязывает структуры федеральной, региональной и муниципальной власти осуществлять координацию и контроль представленной информации на официальных страницах в социальных сетях, список которых утверждает Правительство РФ. На официальных страницах социальных сетей органы публичной власти должны размещать информацию о своей деятельности, в частности, речь идет о публикации отчетов о реализуемых мероприятиях, комментариев по актуальным вопросам, номеров телефонов справочных служб, включая адрес электронной почты и других, актуальных для населения вопросов.

Учитывая прогрессивное развитие информационных технологий в последние годы, потребность перехода органов власти от сайтов к социальным сетям было необходимым и являлось вопросом времени. Ведь согласно социологическим исследованиям, с каждым годом все меньше и меньше пользователей интернета переходят на сайты информационных ресурсов и государственных органов. Что касается социальных сетей, то именно там жители России, в том числе и Карачаево-Черкесии, предпочитают писать жалобы и оставлять обращения органам публичной власти.

На первом этапе реализации ФЗ № 270 подразумевалась создание госпабликов, оформление шапок профилей и их обложек, набор минимального количества подписчиков, а также наличие минимального количества постов. В рамках первого этапа одним из важных и трудоёмких процессов для региональной системы информационной политики являлась верификация аккаунтов через портал «Государственные услуги». Данный процесс помог аккаунтам получить так называемую голубую «галочку». Все эти обстоятельства будут способствовать защите страниц государственных органов и пользователей социальных сетей от потенциальной опасности создания фейковых страниц и распространения ложной, недостоверной информации. Благодаря голубой «галочке» пользователь сможет понять, что он на официальной площадке государственного органа.

Уже на первых порах реализация ФЗ № 270 на местах возникли сложности и проблемы, такие как:

Во-первых, ключевой проблемой вопроса реализации закона о госпабликах стало отсутствие обученных кадров на местах, готовых и

мотивированных вести госпаблики, напомню в Карачаево-Черкесии заведено более 700 госпабликов.

Во-вторых, за каждым из них закреплены сотрудники различных ведомств и организаций. Данные сотрудники не являются специалистами в области ведения социальных сетей.

В-третьих, для данных сотрудников не разработаны должностные инструкции и должностной регламент деятельности, а лишь вменены обязанности, не освобождающие их от исполнения прежних обязанностей занимаемой должности.

В-четвертых, пока нет налаженной системы для мотивации данных сотрудников, в том числе в виде официальной доплаты государственным служащим за ведение пабликов.

С 1 декабря 2022 года на территории нашего государства вступили в силу поправки в Федеральный закон от 9 февраля 2009 г. № 8-ФЗ. [2]

Согласно данным поправкам 100 % социально значимых региональных органов исполнительной власти, администраций городов и муниципальных районов создали страницы в социальных сетях: ВКонтакте», «Одноклассники» и мессенджере «Телеграм» для осуществления информационного взаимодействия с гражданами.

Процесс реализации механизма открытости и публичности непосредственно связан с координацией деятельности по ведению аккуунтов. Координация осуществляется согласно единой информационной политике, реализуемой Центром управления регионом Карачаево-Черкесии в рамках информационного, консультативного и методического сопровождения создания и ведения официальных аккаунтов. Статус официального аккаунта подразумевает учетную запись в социальных сетях или мессенджерах, зарегистрированную от имени руководителя субъекта Главы Карачаево-Черкесии, от имени исполнительного органа Правительства Карачаево-Черкесии и иных органов публичной власти различных территориальных уровней Карачаево-Черкесии. Платформами для регистрации учетной записи являются социальные сети: «ВКонтакте», «Одноклассники» и мессенджере «Телеграм».

Платформа «Инцидент-менеджмент», работает таким образом, что при правильных настройках и внесении вводных данных, ресурс автоматически вычисляет негативные комментарии пользователей в социальных сетях: «ВКонтакте», «Одноклассники» и мессенджере «Телеграм». Модератору лишь остается направить комментарий в государственной орган региональной власти или муниципалитета, который курирует направление деятельности или предоставление услуг, описанное в жалобе гражданина написавшему комментарий.

При этом исполнителю на решение проблемы гражданина и реакцию на его жалобу дается 24 часа, то есть одни сутки. От скорости ответа на жалобу зависит общая «картина» эффективности региона в работе с общественностью

и позиция региона в общероссийском ежемесячном рейтинге по Инцидент-менеджменту.

Помимо скорости ответа, разумеется, учитывается качество ответа. Данный показатель складывается из того, насколько вежливым и эмпатичным был ответ исполнителя, насколько глубоко и детально был рассмотрен вопрос, а также доступность ответа для простого обывателя. К примеру, если ответ будет складываться из «дежурных» формулировок в «чиновничьем» стиле, то система оценит его, как низкоэффективным.

Аккаунт, используемый в работе с обращениями граждан должен являться официальным, правильно оформленным и «живым». То есть, страница в социальных сетях должна быть оформлена и заполнена новостными материалами и событиями из жизни ведомства, которое она представляет в данной социальной сети. Вопрос отсутствия официальной страницы, к примеру, муниципального образования, недопустим, так как данный аккпаунт обвязывает создать и вести федеральное законодательство. Как говорят эксперты, в современных реалиях это неприлично не иметь своего аккаунта, соответственно не освещать свою деятельность в социальных сетях. Работа через личную страницу допустима в освещении работы с обращениями граждан, лишь в отдельных исключительных случаях, политики регионального и муниципального уровня имеют право на эту деятельность.

Следующий фактор — это качество ответа. Все обращения к властной вертикали в социальных сетях и ее ответы по умолчанию являются публичными. Общество и население видят, когда власть ведет в диалогах отзывчиво и адекватно или, наоборот, отстраняется или реагирует формально, скрываясь за сухими формулировками и натянутой вежливостью. Именно поэтому ответ на жалобу гражданина должен начинаться с приветствия, сам ответ должен быть вежливым, ясным и понятным и отвечать прямо или косвенно на запрос пользователя.

Немаловажную роль в работе с обращениями граждан, по мнению специалистов, играет позиционирование. Иными словами, донесение до населения информации о проводимой работе с обращениями граждан. Правильное донесение через СМИ проводимой работы это бонусы и кредит доверия со стороны населения в стороны руководителя субъекта Федерации, как главного действующего лица, и его управленческой команды. Поэтому в регионах РФ, в том числе и Карачаево-Черкесии, используется такой инструмент, как позиционирование через главу региона. Для позиционирования эксперты также рекомендуют использовать SMM-менеджеров и блогеров.

Использованные источники:

1. Федеральный закон «О внесении изменений в Федеральный закон «Об обеспечении доступа к информации о деятельности государственных органов и органов местного самоуправления» и статью 10 Федерального закона «Об обеспечении доступа к информации о деятельности судов в Российской Федерации» от 14 июля 2022 г. № 270-ФЗ. [Электронный ресурс]

Официальный интернет-портал правовой информации. – Режим доступа: http://publication.pravo.gov.ru/Document/View/0001202207140024
2. Федеральный закон «Об обеспечении доступа к информации о деятельности государственных органов и органов местного самоуправления» от 09.02.2009 г. № 8-ФЗ. [Электронный ресурс] – Режим доступа: http://www.consultant.ru/document/cons_doc_LAW_84602/
3. Россошанский, А.В. Проблема информационной открытости публичной власти в современной России / А.В. Россошанский / [Электронный ресурс] – Режим доступа: http://financepro.ru/economy/8789-izbrannye-stati-iz-zhurnala-vlast-2009-12.html
4. Никитов, В.А. Информационное обеспечение муниципального управления. [Текст] Учебник / В.А. Никитов. - М., 2018. - 199 с.

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ПОВЫШЕНИЕ ТЕПЛОИЗОЛЯЦИОННЫХ СВОЙСТВ ОГРАЖДАЮЩИХ КОНСТРУКЦИЙ ЗДАНИЙ

Аннотация. В настоящее время процесс теплозащиты зданий, а также требования к используемым теплоизолирующим материалам постоянно повышаются. Использование эффективных теплоизоляционных материалов и рационального расположения их в ограждающих конструкциях обеспечивает более высокую теплотехническую однородность и эксплуатационную надежность наружных ограждений.

Ключевые слова: энергоэффективность, энергосбережение, теплоизоляция, теплопроводность, теплоизоляционные материалы, строительство зданий.

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INCREASING THE THERMAL INSULATION PROPERTIES OF BUILDING ENCOUNTERING STRUCTURES

Annotation. Currently, the process of thermal protection of buildings, as well as the requirements for the heat-insulating materials used, are constantly increasing. The use of effective thermal insulation materials and their rational arrangement in enclosing structures ensures higher thermal uniformity and operational reliability of external fences.

Key words: energy efficiency, energy saving, thermal insulation, thermal conductivity, thermal insulation materials, building construction.

Как показывает практика, порядка 40% тепловой энергии в зимний период фактически расходуется на обогрев воздуха на улице. Из этого количества примерно 40% потерь приходится на стены, 20% - на оконные и дверные проемы, 20% - на кровлю, 20% - на подвал и систему вентиляции. Для минимизации этих энергопотерь предпринимаются мероприятия по повышению энергоэффективности, в частности утепление ограждающих конструкций с использованием энергоэффективных теплоизоляционных материалов.

В Узбекистане на здания и сооружения приходится почти 50% от общего объема энергопотребления. Более 90% всех имеющихся в стране зданий было построено более 25 лет назад и по своим техническим характеристикам не соответствуют современным принципам энергоэффективности. Более того, существующая нормативная база не в полной мере нацелена на энергоэффективность зданий, отдавая предпочтение

снижению текущей стоимости строительства в ущерб будущей экономии при эксплуатации.

В результате, технологии, применяемые уже при новом строительстве, реконструкции и эксплуатации всех типов зданий в Узбекистане, имеют недостаточный уровень эффективности. Основные проблемы в этой области связаны с избыточными потерями энергии в инженерных системах вследствии отсутствия тепловой изоляции.

Значение различных технических мероприятий по энергосбережению в зданиях проиллюстрировано на рисунке 1.

Рис.1. Роль различных мероприятий в общем резерве энергосбережения в зданиях.

Исходя из полученных данных, более 50% экономии энергии может быть обеспечено за счет применения тепловой изоляции. Повышение энергоэффективности предусмотрено не только при новом строительстве и капитальной реконструкции. но и в процессе капитального ремонта зданий: в том числе утепление чердаков, подвалов, ограждающих конструкций, замена части окон наружными стенами.

В настоящее время назрела необходимость широкого развития в стране производства теплоизоляционных материалов. Природные недра (базальт, перлит, вермикулит, диатомит и пр.) развитая нефтегазовая и химическая промышленность (пенополиуретан, пенополистирол, вспененный полиэтилен) и строительная индустрия (ячеистые бетоны) позволяют решить эту проблему эффективным способом. Имеющиеся в республике большие запасы базальта могут быть использованы для производства различных видов теплоизоляционных, композиционных и армирующих материалов, используемых в сфере строительства и других отраслях промышленности. Это позволит развить новые подотрасли в различных отраслях промышленности, диверсифицировать экспорт и расширить долю экспорта с высокой добавленной стоимостью, создать дополнительны рабочие места.

В таблице 1 показаны результаты сравнительного анализа показателей теплоизоляционных материалов, применяемых в строительстве.

Таблица 1. Сравнительная характеристика теплоизоляционных показателей различных материалов

Теплоизоляционный материал	**Плотность кг/м3**	**Коэффициент теплопроводности, Вт/м К (Вт/(м·оС))**	**L, м м**	**Срок эксплуатации, лет**
Пенополиуретан	40-80	0,04-0,05	50	Более 25
Минеральная вата	50-150	0,052-0,068	65-85	20-50
Пенополистирол	35-40	0,041	50	15-25
Пенобетон (газобетон)	400-80	0,14-0,33	175-412	более 50
Керамзит	600-800	0,17-0,21	210-263	более 50
Кирпич	1800	0,7	875	50-100

L–эквивалентные толщины материалов, обеспечивающие одинаковую теплоизоляцию.

Важнейшей технической характеристикой теплоизоляционного материала является теплопроводность - способность материала передавать теплоту сквозь свою толщу, так как именно от нее напрямую зависит термическое сопротивление ограждающей конструкции. Количественно определяется коэффициентом теплопроводности λ, выражающим количество тепла, проходящее через образец материала толщиной 1м и площадью 1м^2 при разности температур на противолежащих поверхностях 1°С за 1 ч. Коэффициент теплопроводности в справочной и нормативной документации, имеет размерность Вт/(м·°С).

На величину теплопроводности теплоизоляционных материалов оказывают влияние плотность материала, вид, размеры и расположение пор (пустот) и т.д. Сильное влияние на теплопроводность оказывает также температура материала и, особенно, его влажность.

Наиболее эффективными по теплозащитным качествам являются пенополиуретан, пенополистирол, жёсткая минеральная вата и ячеистые бетоны (пенобетон, газобетон). В условиях Узбекистана можно выделить 3 основных направления для повышения теплоизоляционных свойств ограждающих конструкций:

1) Применение базальтового волокна для теплоизоляции

Общая потребность в базальтовом волокне с учетом нового строительства в республике составит 130 тыс.тонн (65% от общей потребности в материалах для теплоизоляции зданий). В качестве исходного материала для производства базальтового волокна может использоваться базальт (диабаз), имеющийся в Узбекистане (Асмансайское месторождение в Фаришском районе – 98 млн.тонн, Гавасайское месторождение в Чустком районе – 20,2 млн.тонн).

2) Утепление наружных стен за счёт применения полимерных материалов (вспененный пенополиуретан, пенополистерол) в качестве среднего утепляющего слоя в многослойных ограждающих конструкциях

В качестве исходных компонентов пенополиуретана, обычно применяются продукты нефтехимической промышленности (полиолы и полиизоцианаты). **Ежегодная экономия за отопительный период, при использовании напыляемого пенополиуретана или полистирола составит 94550 $ (100 тыс.м^2·0,061·15,5$/м), а общая экономия с учетом использования минеральной ваты – 25 094.**

3) Применение новых строительных материалов с низкой теплопроводностью: пенобетона, газобетона

При применении этих материалов сокращаются финансовые и материальные затраты на строительство от 7 до 12% на 1м^2, потери тепла от 30% до 45% и приводит к сокращению потребления природного газа или угля для обогрева помещения.

Принятие мер по повышению энергоэффективности зданий и развитию производства и широкого использования теплоизоляционных материалов способно оказать большое влияние на всю структуру строительного производства.

Международными экспертами подсчитано, что энергоэффективное строительство с использованием современных утеплителей, включая затраты на их разработку и строительство заводов, в три-четыре раза эффективней, чем традиционное строительство, ведущее к энергоемкому производству строительных материалов, освоению новых месторождений топлива, его добыче, транспортировке, переработке и сжиганию.

Использованные источники:

1. Гагарин В. Г. Методы экономического анализа повышения уровня теплозащиты ограждающих конструкций зданий. АВОК. – 2009. – №№1–3.
2. Зарубина Л.П. Теплоизоляция зданий и сооружение. Материалы и технологии. С. – Петербург. 2012. 406 стр.
3. *Mansurova Sh. P. (2023). ISSUES OF PRESSURE REGULATION IN HEATING NETWORKS. B INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY (Volume 3, Issue 10, October. 510–516).*
4. Karimovich, T. M., & Obidovich, S. A. (2021). To increase the effectiveness of the use of Information Systems in the use of water. Development issues of innovative economy in the agricultural sector, 222-225.
5. Sattorov, A., & Karimov, E. (2023). QURILISH MATERIALINI ISHLAB CHIQARUVCHI SANOAT PECHLARIDA GAZ YOQILG‘ISI YONUV ISSIQLIQ MIQDORLARINING NAZARIY TENGLAMALARINI TUZISH. Educational Research in Universal Sciences, 2(13), 313–317.
6. Sultonov, A. (2019). Water use planning: a functional diagram of a decision-making system and its mathematical model. International Finance and Accounting, 2019(5), 19.
7. Sultonov, A., & Turdiqulov, B. (2022). SUV QABUL QILISH INSHOOTLARINING ISHLASH SAMARADORLIGINI OSHIRISHDA FILTRLARNING O‘RNI. Евразийский журнал академических исследований, 2(11), 12-19.

8. Turdiqulov, B., Nazirov, S., & Karimov, Y. (2022). ATOM VA MOLEKULALARNING YORUG'LIKNI YUTISHI VA NURLANISHI. Евразийский журнал академических исследований, 2(13), 1252-1258.
9. Sh. P. Mansurova. (2021). Application of renewable energy sources in buildings. Galaxy International Interdisciplinary Research Journal, 9(12), 1218–1224.
10. Sattorov, A., & Karimov, E. (2023). HAVO ALMASHINUV TIZIMIDA UYNI ISITISHGA SARFLANADIGAN ISSIQLIK QIYMATINI XISOBLASH. Educational Research in Universal Sciences, 2(13), 318–321.
11. Toshmatov N. U., & Mansurova Sh. P. (2022). Efficiency of use of heat pumps. International Journal of Innovations in Engineering Research and Technology, 9(10), 1–5.
12. Turdiqulov, B., Ismoilov, A., & Shahobiddin, H. (2023). The Role of Ventilation in the Production of Various Clothing Materials. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(4), 124-133.
13. Nazirov, S. O. o'g'li. (2023). GLOBAL SUV TANQISLIGI DAVRIDA SUV TA'MINOTI TIZIMLARINI TAKOMILLASHTIRISH MASALALARI. Educational Research in Universal Sciences, 2(13), 109–115.
14. Karimov, Y. N. (2022). Aholini ichimlik suvi bilan ta'minlash muammolari. Science and Education, 3(12), 369-375.
15. Mansurova, S. (2023). SOLAR HEATING SYSTEMS FOR BUILDINGS. International Bulletin of Applied Science and Technology, 3(11), 311–315.
16. Каримов, Э. Т. ў. (2023). МАМАЛАКАТИМИЗДА ЕНГИЛ АВТОМОБИЛ ЮВИШ ШАХОБЧАЛАРИНИНГ ОҚОВА СУВЛАРИНИ ОҚИЗИШДА ЯНГИ ТИЗИМЛАРНИ ИШЛАБ ЧИҚИШ. Educational Research in Universal Sciences, 2(13), 263–267.
17. Nazirov Sanjar, & Karimov Yusuf. (2023). YER OSTI MUHANDISLIK TARMOQLARINI JOYLASHTIRISH VA ULARNING MUSTAHKAMLIK PARAMETRLARINI ANIQLASH. Innovations in Technology and Science Education, 2(9), 402–408.
18. Турсунов, М. К. (2020). Новые инновационные методы повышения экономической эффективности при дефиците воды в регионе. Science and Education, 1(4), 78-83.
19. Q.U. Takaboev (2022). ON INCREASING THE EFFICIENCY OF HOUSEHOLD WASTEWATER TREATMENT. British Journal of Global Ecology and Sustainable Development, 11, 96–101.

УДК 502.3

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ЭКОТУРИЗМ КАК ПУТЬ К СОХРАНЕНИЮ ПРИРОДЫ И УСТОЙЧИВОМУ РАЗВИТИЮ

Аннотация. В этой статье исследуется роль экотуризма в сохранении природы и достижении устойчивого развития. В статье обсуждается значительный потенциал экотуризма в способствовании экономическому и социальному развитию местных сообществ, а также охране природных ресурсов. Подчеркнута важность охраны природы и удовлетворения потребностей туристов для успешной реализации экотуризма. Эта статья предоставляет обзор текущего состояния экотуризма в нашей стране и призывает к сотрудничеству всех заинтересованных сторон для достижения устойчивого развития в туристической отрасли.

Ключевые слова: экотуризм, социально-экономический, устойчивое развитие, инфраструктура, экотуристические маршруты, биоразнообразие, экосистема.

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ECOTOURISM AS A WAY TO NATURE CONSERVATION AND SUSTAINABLE DEVELOPMENT

Annotation. This article explores the role of ecotourism in conservation and achieving sustainable development. The article discusses the significant potential of ecotourism in promoting the economic and social development of local communities, as well as the conservation of natural resources. The importance of nature protection and meeting the needs of tourists for the successful implementation of ecotourism is highlighted. This article provides an overview of the current state of ecotourism in our country and calls for the cooperation of all stakeholders to achieve sustainable development in the tourism industry.

Keywords: ecotourism, socio-economic, sustainable development, infrastructure, ecotourism routes, biodiversity, ecosystem.

Введение. В современном мире все больше внимания уделяется вопросам экологии и устойчивого развития, что отражается в растущей актуальности экотуризма [1] [2] [3]. Этот подход к путешествиям и отдыху

направлен на сохранение природы и стимулирование развития местных сообществ. Однако, несмотря на широкое распространение и признание концепции экотуризма на международном уровне, ее успешная реализация в различных странах, включая Узбекистан, сталкивается с рядом проблем и вызовов, которые требуют пристального внимания и решения.

Актуальность. Один из основных вызовов, с которыми сталкивается экотуризм, связан с балансированием между сохранением природных ресурсов и удовлетворением потребностей туристов. В контексте развивающихся стран, таких как Узбекистан, местные сообщества часто испытывают давление на свои природные ресурсы, такие как водные и лесные ресурсы, из-за роста туристической активности. Это может привести к истощению экосистем и ухудшению жизни местных жителей, если не будут предприняты соответствующие меры по управлению и контролю.

Другой важной проблемой, связанной с экотуризмом, является необходимость развития инфраструктуры и услуг, соответствующих принципам устойчивого развития. Отсутствие экологических стандартов и недостаток кадров, обладающих необходимыми знаниями и навыками в сфере экотуризма, могут оказаться серьезными препятствиями для успешной реализации концепции. Это требует усилий в области образования и подготовки персонала, а также стратегического планирования и инвестиций в развитие инфраструктуры для поддержки экотуристической активности.

Кроме того, необходимо преодолеть проблему информационной доступности и осведомленности о преимуществах экотуризма как у туристов, так и у местных жителей. Недостаток информации о доступных экотуристических маршрутах, объектах и услугах может ограничить спрос на такие виды путешествий и препятствовать развитию экотуризма в целом.

Экотуризм представляет собой важную стратегию для достижения экологической устойчивости и развития местных сообществ. Однако его успешная реализация в странах, таких как Узбекистан, требует преодоления ряда проблем и вызовов. Сбалансированное использование природных ресурсов, развитие устойчивой инфраструктуры и повышение информационной осведомленности являются ключевыми аспектами, которые необходимо учесть и решить для обеспечения эффективного развития экотуризма. Только через совместные усилия государственных органов, местных сообществ, туристических компаний и общественности можно обеспечить устойчивое развитие экотуризма, способствующего сохранению природы и благосостоянию местных жителей.

В Узбекистане исследования в области экотуризма начались относительно недавно. В работе Каримова и соавторов (2019) отмечают, что Узбекистан обладает значительным потенциалом для развития экотуризма, однако для его успешной реализации необходимо преодолеть ряд проблем, таких как отсутствие квалифицированных кадров и недостаток инвестиций [4]. Исследование, проведенное Жураева и соавторов (2016) исследуется потенциал экотуризма в Узбекистане и его вклад в сохранение природных

ресурсов и развитие территорий [5]. Авторы обращают внимание на уникальность природы Узбекистана и возможности ее использования для развития экотуризма, который может способствовать устойчивому развитию и повышению уровня благосостояния местного населения. В исследовании Усмонова и Муҳамедова рассматривается развитие экотуризма в Узбекистане, с акцентом на вызовы и возможности в регионе Аральского моря. Авторы обсуждают вопросы устойчивого развития и влияние экотуризма на окружающую среду и местное население [6].

Материлы и методы исследования. Таким образом, исследования в области экотуризма подтверждают его потенциал в сохранении природы и развитии местных сообществ. Однако, для успешной реализации экотуризма в Узбекистане и других странах необходимо учитывать рекомендации и выводы, вынесенные иностранными и отечественными исследователями, и принимать меры по сбалансированному развитию экотуризма с учетом охраны природы и улучшения благосостояния местных сообществ. Обзор литературы выявил несколько ключевых тем и выводов. Во-первых, устойчивое развитие экотуризма требует баланса между экономическими выгодами и сохранением природных ресурсов. Исследования подчеркивают необходимость разработки и реализации стратегий и практик, которые способствуют сохранению биоразнообразия, защите экосистем и минимизации негативного влияния туризма на окружающую среду. Во-вторых, активное участие местного населения является ключевым фактором успеха экотуристических проектов. Исследователи подчеркивают важность вовлечения местных сообществ в процесс принятия решений, разработки и реализации проектов. Учет местных потребностей, интересов и культурных особенностей способствует созданию устойчивых экотуристических моделей, которые приносят пользу и местному населению, и окружающей среде.

Результаты исследования и их обсуждение. Для достижения целей исследования был использован комбинированный подход, объединяющий качественные и количественные методы сбора данных. Качественные данные были получены путем проведения полевых наблюдений, включающих непосредственное изучение природной среды, ее состояния и особенностей, а также взаимодействия местных жителей, туристов и представителей организаций, занимающихся экотуризмом в регионах. Были проведены интервью с целью получения глубокого понимания мнений, предпочтений и ожиданий участников экотуризма.

Анализ статистических данных свидетельствует о текущем состоянии развития экотуризма в выбранных регионах Узбекистана и его влиянии на социально-экономическую сферу. Наблюдается положительная динамика в развитии экотуризма в Гиссарском заповеднике, Китабском национальном природном парке и в Каршинской степи Кашкадаринского региона. Они отличаются привлекательностью природных ресурсов, уникальных экосистем и биоразнобразием.

Это свидетельствует о значимости экотуризма в экономическом развитии регионов и его потенциале в генерации доходов и создании рабочих мест.

Экотуризм в Узбекистане продолжает развиваться, привлекая туристов своей уникальной природой и предлагая им возможность насладиться её красотой, сохраняя при этом окружающую среду и способствуя развитию местных сообществ.

В Узбекистане существует значительный потенциал для развития экотуризма, который может привести к сохранению природных ресурсов, социально-экономическому развитию регионов и удовлетворению потребностей туристов. Основываясь на успешном опыте реализации экотуристических проектов, предлагается внедрить следующие проекты:

Таблица

Примеры экотуристических проектов и их влияние на природу и социально-экономическое развитие, включая данные о регионе, типе проекта, целях, мероприятиях и достигнутых результатов в Узбекистане.

Проект экотуризма в Узбекистане	**Цель проекта**	**Мероприятия**	**Ожидаемые результаты**
Региональный экотуристический	Сохранение экосистем и биоразнообразия Гиссарского заповедника	-Разработка экотуристических маршрутов -Использования экологически чистых транспортных средств -Создание информационных пунктов	-Увеличение числа посетителей на 25% в течение первого года -Развитие местной экономики -Сохранение уязвимых экосистем
Экологический проект в Китабском национальном природном парке	Сохранение природных и исторических достопримечательностей	-Охрана и восстановление памятников природы -Создание тематических экскурсий -Организация мастер-классов	-Увеличение числа туристов на 30% в течение первого года -Сохранение и продвижение уникального культурного наследия -Повышение уровня доходов местного населения
Экологический проект в Каршинской степи	Восстановление экосистемы	-Работы по оздоровлению и восстановлению растительного покрова и животного мира -Развитие экотуристической инфраструктуры	-Увеличение числа туристов на 20% в течение первых двух лет -Повышение осведомленности о проблеме Каршинской степи

		-Организация экскурсий и программы	-Создание новых рабочих мест

Развитие экотуризма не только способствует сохранению природных ресурсов и биоразнообразия, но и создает новые возможности для развития экономики и повышения уровня жизни местного населения. Предложенные проекты имеют потенциал привлечь большое число туристов, увеличить сознательность об экологических проблемах и способствовать сохранению уязвимых экосистем. Внедрение этих проектов требует сотрудничества между государственными органами, местными сообществами и частными инвесторами, чтобы обеспечить их успешную реализацию и долгосрочную устойчивость.

Проект экотуризма в Узбекистане представляет собой уникальную возможность достичь сбалансированного развития, обеспечивая благосостояние местного населения и сохраняя богатое природное и культурное наследие страны.

Результаты внедрения проектов экотуризма в Узбекистане являются важным сигналом для развития устойчивого туризма в стране. Увеличение экологических и экономических результатов, а также других ожидаемых результатов, подтверждает стремление Узбекистана к балансу между сохранением природы и культуры и созданию благоприятной среды для развития экотуризма. Результаты внедрения проектов экотуризма в Узбекистане не только способствуют сохранению окружающей среды и развитию местного населения, но также предоставляют туристам возможность погрузиться в уникальные природные и культурные атмосферы страны. Эти проекты отражают стремление Узбекистана к устойчивому развитию туризма, удовлетворяющего потребности современных путешественников и содействующего сохранению ценностей будущим поколениям.

Заключение

Экотуризм является важным инструментом сохранения природы и устойчивого развития, а его значимость только усиливается в современном мире, где сохранение окружающей среды становится все более приоритетной задачей. Он предлагает уникальную возможность совместного развития экономических, социальных и экологических аспектов, причем местные сообщества играют ключевую роль в этом процессе. Проекты экотуризма в Узбекистане, которые были представлены в данной статье, демонстрируют стремление страны к реализации устойчивого развития через использование туристического потенциала природы и культурного наследия. Ожидаемые результаты этих проектов включают значительное увеличение экологических, экономических и других показателей, что указывает на положительное влияние экотуризма на различные сферы жизни.

Таким образом, экотуризм представляет собой область с огромным потенциалом для содействия сохранению природных ресурсов и устойчивому развитию. Проекты экотуризма в Узбекистане являются примером стремления к достижению баланса между сохранением природы, улучшением экономического благосостояния и удовлетворением потребностей туристов. Чтобы успешно реализовать экотуризм, необходимо продолжать исследования и сотрудничество между различными заинтересованными сторонами, чтобы разработать наилучшие подходы и стратегии для достижения устойчивого развития в этой области.

Использованные источники:

1. Weaver, D. (2001). Ecotourism. Wiley, Sydney.
2. Fennell, D. (2003). Ecotourism: An Introduction. Routledge, London.
3. Goodwin, H. (2002). Local Community Involvement in Tourism around National Parks. Tourism Management, 23(3), 347-357.
4. Karimov, U., Abdullaev, K., Shukurov, J. (2019). Ecotourism Development in Uzbekistan: Opportunities and Challenges. Tourism in Central Asia: Cultural Potential and Challenges, 213-227.
5. Жураев А. и соавт. Потенциал экотуризма в Узбекистане и его вклад в сохранение природных ресурсов и развитие территорий. 2016.
6. Usmonov, S., & Mukhamedov, N. (2020). Ecotourism Development in Uzbekistan: Challenges and Opportunities in the Aral Sea Region. Central Asian Journal of Water Research, 6(2), 85-98.

УДК 616.12-005.4-036.8:616.61

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МОНИТОРИНГ МИКРОАЛЬБУМИНУРИИ ПРИ СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТИ И МЕРЫ ПО ЕЕ ЛЕЧЕНИЮ

Резюме. Многочисленные работы в последние десятилетия посвящены исследованию клинической, в том числе прогностической, значимости микроальбуминурии (МАУ), методов ее выявления и количественного определения, а также лечебных мер, направленных на борьбу с данным патологическим состоянием.

Ключевые слова: микроальбуминурия, прогностический маркер, сердечной недостаточности, патологическая состояния.

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MONITORING OF MICROALBUMINURIA IN HEART FAILURE AND MEASURES FOR ITS TREATMENT

Resume. Numerous works in recent decades have been devoted to the study of the clinical, including prognostic, importance of microalbuminuria (MAU), methods for its detection and quantification, as well as therapeutic measures aimed at combating this pathological condition.

Key words: microalbuminuria, prognostic marker, heart failure, pathological condition.

Введение. Многочисленные работы в последние десятилетия посвящены исследованию клинической, в том числе прогностической, значимости микроальбуминурии (МАУ), методов ее выявления и количественного определения, а также лечебных мер, направленных на борьбу с данным патологическим состоянием. Интерес к проблеме объясняется тем, что МАУ расценивается как один из ранних неблагоприятных прогностических признаков и факторов риска развития поражения органов-мишеней при таких широко распространенных заболеваниях, как артериальная гипертензия (АГ) и сахарный диабет (СД). В то же время, по данным исследованиям Copenhagen City Heart Study-3 [7,8], и более низкая экскреция альбумина с мочой также может указывать на

повышенный риск заболеваний сердечно-сосудистой системы (ССС) и кардиоваскулярной смерти.

МАУ является важнейшим ранним признаком поражения почек, отражающим начальные стадии патологии сосудов (эндотелиальной дисфункции, атеросклероза), и неизменно коррелирует с увеличением заболеваемости ССС и смертности. По данным клинических исследований, даже небольшое повышение экскреции альбумина с мочой ассоциируется со значительным ростом риска кардиоваскулярных событий, в том числе фатальных. Прогрессирующее увеличение уровня МАУ однозначно указывает на ухудшение состояния сосудов и, соответственно, обуславливает дополнительное повышение риска [6,9]. В связи с этим МАУ признана независимым фактором сердечно-сосудистого риска и наиболее ранним (доклиническим) признаком поражения таких уязвимых органов-мишеней, как почки.

МАУ – следствие повышенной потери альбумина из плазмы крови через эндотелий и потому определяется как маркер развития системной эндотелиальной дисфункции. А эндотелиальная дисфункция характерна для ранних стадий атеросклероза и непосредственно связанна с повышением сердечно-сосудистого риска [5,6,9]. Недавно установлена связь микроальбуминурии с выраженным коронарным атеросклерозом по данным ангиографии [1,4,7]. В одном из субисследований LIFE (Losartan Intervention For Endpoint reduction in hypertension) [2] было выявлено, что повышенная экскреция белка с мочой четко ассоциировано с левожелудочковой гипертрофией, причем независимо от возраста, пола, расы, уровня артериального давления (АД), наличия СД, курения, уровня креатинина в крови. Особенно часто выявляется МАУ при СД и АГ. По разным данным МАУ встречается у 10-40% больных СД 1-го типа и у 15-40% больных СД 2-го типа [3,6].

Так, например, в исследовании EUCLID (EURODIAB controlled trial of lisinopril in insulin dependent diabetes) МАУ определялась примерно у 15% из 530 больных СД 1-го типа [5]. Частота обнаружения МАУ возрастает с увеличением длительности заболевания при СД обеих типов. В крупном британском исследовании UKPDS (United Kingdom Prospective Diabetes Study) МАУ выявлялась у 12% больных с впервые выявленным СД 2-го типа и почти у 30% больных с длительностью заболевания более 12 лет [4]. Выявляемость новых случаев МАУ у больных СД может колебаться от 1 до 3 % в год. Под наблюдением большинства исследований, среди нелеченных больных с мягкой и умеренной АГ распространенность МАУ варьирует от 15 до 40%, составляя в среднем около 25%. Частота обнаружения МАУ выше у больных с впервые выявленной АГ и при неадекватной гипотензивной терапии. В крупномасштабном исследовании i-SEARCH (2007) с участием около 22 тыс. больных из 1750 центров МАУ встречалась у большинства пациентов с АГ: в 53-71% случаев, при этом самые высокие уровни экскреции белка с мочой регистрировались при неконтролируемой АГ [2]. В исследовании

DIABHYCAR (2003) достоверно продемонстрировано, чти выявление МАУ ассоциировано с высоким риском развития сердечной недостаточности [1,3]. В исследовании MICROHOPE (Microalbuminuria, Cardiovascular and Renal Outcomes Heart Outcomes Prevention Evaluation) пациенты с исходной микроальбуминурией имели достоверно выше риск больших кардиоваскулярных проявлений, общей смертности и госпитализаций, связанных с сердечной недостаточностью по сравнению с больными, не имевшими исходно МАУ, причем независимо от наличия сахарного диабета [4].

По данным исследования Johan Arnlov и соавт. (2005) микроальбуминурия увеличивает риск сердечно-сосудистых заболеваний и сердечно-сосудистой смертности более, чем в 3 раза [1]. Результаты исследования PREVEND (Prevention of Renal and Vascular Endstage Disease) дали убедительные доказательства того, что МАУ – мощный предиктор сердечно-сосудистой смертности в популяции, независимо от других факторов риска [3].

Материалы и методы. Под МАУ понимают уровень экскреции альбумина с мочой от 30 до 300 мг/сут (или от 20 до 200 мкг/мин). В европейских странах для определения потерь белка с мочой нередко используют величину отношения альбумин/креатинин в моче – на микроальбуминурию соответственно указывают цифры 2,5 – 30 мг/ммоль у мужчин и 3,5 – 30 мг/ммоль у женщин [6].

Таблица 1.

Распределение больных по полу, возрасту и сопутствующим патологиям

	Кол-во	Средний возраст	Диабет	Гипертония	Отсутствие сопутствующей патологии
Мужчины	22 (73%)	63,23	10	15	5
Женщины	8 (27%)	68,25	4	8	-

Обследование включало электрокардиографию (ЭКГ), эхокардиографию (ЭхоКГ), биохимический анализ крови и определение микроальбуминурии в утренней моче (в мкг/мин). Определение уровня альбуминурии производился турбодиметрическин методом на биохимическом анализаторе “HITACI cobac c 311” (Roche) с использованием диагностических наборов Tina-Qant.

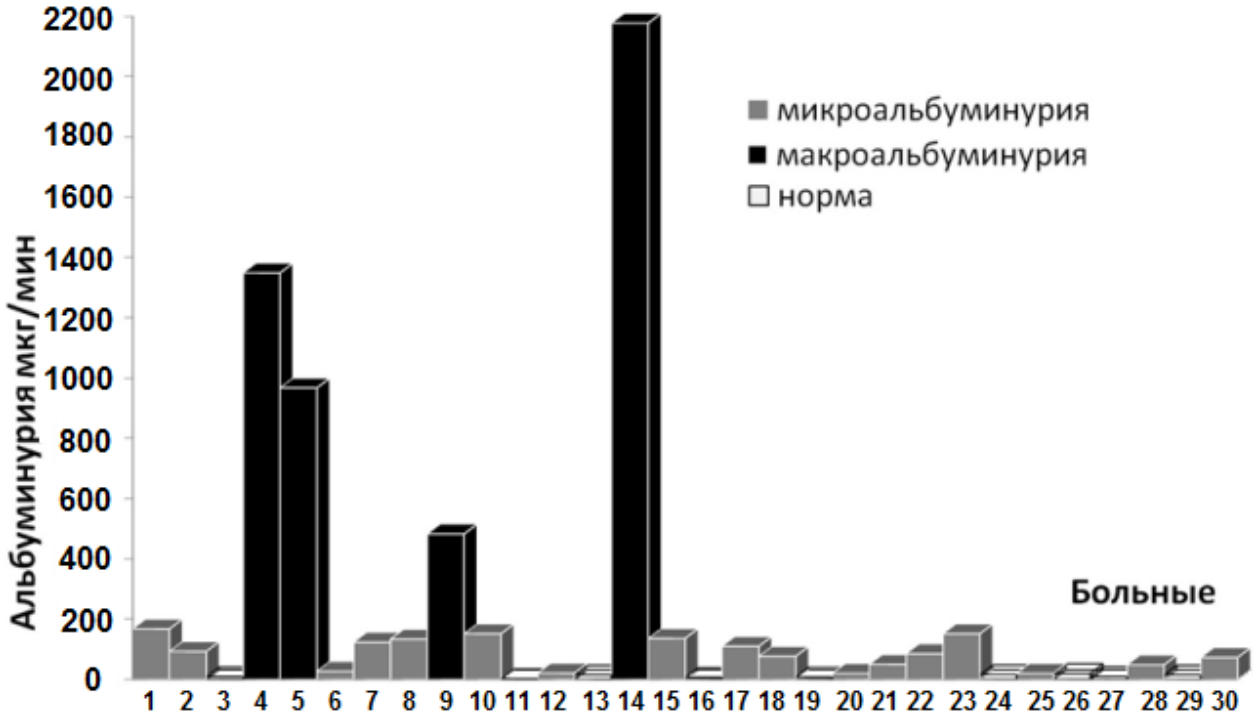

Рис 1. Уровень альбумина в моче пациентов

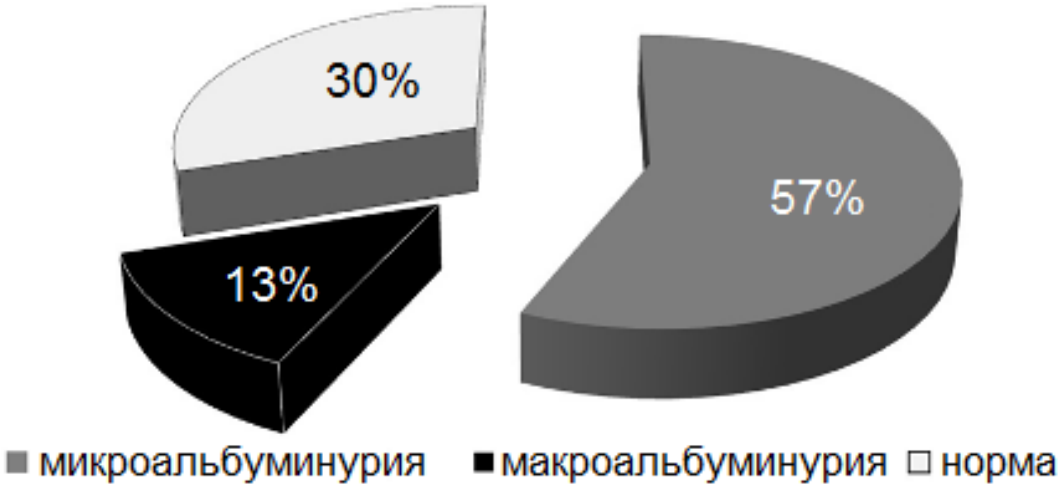

Рис. 2. Процентное соотношение больных с различным уровнем альбумина в моче

Результаты исследований. Количество больных с микроальбуминурией составило 17 человек (57%). У 9 больных уровень альбумина в моче не превышал уровень 20 мкг/мин - норма (30%). 4 пациента имели макроальбуминурию - уровень выше 200 мкг/мин (13%) (рис. 1-2). Повторная госпитализация наблюдалась у 8 больных с микроальбуминурией и у 1 больного с макроальбуминурией. Летальный исход зарегистрирован у 1 пациента с микроальбуминурией и у 2 пациентов с макроальбуминурией.

Вывод. Таким образом, проведенные исследования еще раз подтвердили, что пациенты с исходной МАУ имели более высокий риск общей смертности, повторных госпитализаций, связанных с сердечной

недостаточностью, чем пациенты без МАУ. На основании этих данных можно заключить, что МАУ является ранним доклиническим признаком эндотелиальной дисфункции сосудов и достоверным маркером высокого сердечно-сосудистого риска.

Использованные источники:

1. Arnlov J. et al. Low-Grade Albuminuria and Incidence of Cardiovascular Disease Events in Nonhypertensive and Nondiabetic Individuals.The Framingham Heart Study// Circulation 2005;l 12:969-975.
2. Böhm M, Thoenes M, Danchin N, Bramlage P, La Puerta P, Volpe M. Association of cardiovascular risk factors with microalbuminuria in hypertensive individuals: the i-SEARCH global study. J Hypertens. 2007 Nov; 25(11):2317-24.
3. Diercks G.F., van Boven A.J., Hillege H.L., Janssen W.M., Kors J.A., de Jong P.E., Grobbee D.E., Crijns H.J., van Gilst W.H. Microalbuminuria is independently associated with ischaemic electrocardiographic abnormalities in a large non-diabetic population. The PREVEND (Prevention of REnal and Vascular ENdstage Disease) study.. Eur Heart J. 2000 Dec;21(23):1922-7.
4. Heart Outcomes Prevention Evaluation Study Investigators. Effects of ramipril on cardiovascular and microvascular outcomes in people with diabetes mellitus: results of the HOPE study and MICRO-HOPE substudy// Lancet 2000 Sep 2;356(9232):860.
5. Gerstein H.C., Mann J.F., Yi Q. et al. Albuminuria and risk of cardiovascular events, death, and heart failure in diabetic and nondiabetic individuals// JAMA, 2001; 286: 421–6.
6. Karalliedde J., Viberti G. Microalbuminuria and cardiovascular risk// Am J Hypertens 2004; 17: 986-93.
7. Klausen K., Johnsen K.B., Rasmussen F. et al. Very low levels of microalbuminuria are associated with an increased risk of coronary heart disease and death independent of renal function, hypertension, and diabetes// Am Heart Association 2004; 110:32-35.
8. Klausen K., Scharling H., Jensen J. Very low level of microalbuminuria is associated with increased risk of death in subjects with cardiovascular or cerebrovascular diseases // Intern. Med. – 2006; 260 (3): 231–237.
9. Pedrinelli R., Dell'Omo G., Di Bello V. et al. Microalbuminuria, an integrated marker of cardiovascular risk in essential hypertension// J Hum Hypertens, 2002; 16: 79–89.

УДК 616.379(008.64

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ОСОБЕННОСТИ КУПИРОВАНИЯ МАКРОАНГИОПАТИИ ПРИ САХАРНОМ ДИАБЕТЕ И МЕРЫ ПО ИХ УСТРАНЕНИЮ

Резюме. Сахарный недуг нередко вызывает осложнения, одним из самых распространенных является диабетическая макроангиопатия нижних конечностей. Заболевание возникает спустя долгие годы терапии диабета, и поражает всю сосудистую систему. Если повреждены мелкие капилляры и сосуды, то ее классифицируют как микроангиопатия, в свою очередь, при поражении крупных, развивается макроангиопатия. Чаще всего эта болезнь и многие другие возникают как осложнение диабета. Макроангиопатия может локализоваться в любой части тела и вызывать серьезные осложнения, вплоть до летального исхода.

Ключевые слова: макроангиопатия, сахарный диабет, инфаркт миокарда, сердечно – сосудистая заболевания.

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FEATURES OF RELIEF OF MACROANGIOPATHY IN DIABETES MELLITUS AND MEASURES TO ELIMINATE THEM

Resume. Sugar disease often causes complications, one of the most common is diabetic macroangiopathy of the lower extremities. The disease occurs after many years of diabetes therapy, and affects the entire vascular system. If small capillaries and vessels are damaged, then it is classified as microangiopathy, in turn, if large ones are damaged, macroangiopathy develops. Most often, this disease and many others arise as a complication of diabetes. Macroangiopathy can be localized in any part of the body and cause serious complications, up to and including death.

Key words: macroangiopathy, diabetes mellitus, myocardial infarction, cardiovascular disease.

Актуальность. Диабетическая макроангиопатия – генерализованные атеросклеротические изменения, развивающиеся в артериях среднего и крупного калибра на фоне длительного течения сахарного диабета.

Диабетическая макроангиопатия приводит к возникновению ИБС, артериальной гипертензии, нарушений мозгового кровообращения, окклюзионных поражений периферических артерий. Диагностика диабетической макроангиопатии включает исследование липидного обмена,

проведение УЗДГ артерий конечностей, сосудов головного мозга, почек, ЭКГ, ЭхоКГ и др [4]. Основными принципами лечения диабетической макроангиопатии являются коррекция гипергликемии, дислипидемии, контроль АД, улучшение реологических свойств крови.

В основе развития циркуляторных нарушений, приводящих к ишемическим повреждениям органов и тканей, лежит диабетическая ангиопатия, формирование которой обусловлено метаболическими нарушениями, сопутствующими течению сахарного диабета 2-го типа, прежде всего гипергликемией и гиперинсулинемией [2,3]. Структурные нарушения сосудистой стенки, имеющие место у больных сахарным диабетом 2-го типа, являются необратимыми. Ранняя (доклиническая) диагностика формирующейся диабетической ангиопатии с последующим проведением адекватного лечения основного заболевания и профилактики сосудистых осложнений позволяет значительно улучшить прогноз у этой категории больных.

В соответствии с данными морфологических исследований [5] основными проявлениями диабетической макроангиопатии являются артериосклероз (атеросклероз), диффузный фиброз интимы и медиакальциноз (кальцифицирующий склероз), сопровождающиеся грубыми нарушениями структуры сосудистой стенки артерий мышечного и эластического типа. Ранним проявлением формирующегося сосудистого поражения является повышение жесткости сосудистой стенки [3,4], которое может наблюдаться не только при сахарном диабете 2-го типа, но и у пациентов с нарушением толерантности к глюкозе. По мнению ряда авторов [6], снижение эластичности стенок магистральных артерий может приводить к повышению уровня систолического артериального давления, вторичной гипертрофии миокарда левого желудочка и нарушению диастолической перфузии миокарда. Эти факторы значительно увеличивают риск развития сердечно-сосудистых осложнений [5,7].

Для оценки наличия и степени выраженности нарушений эластических свойств сосудистой стенки и ее структурных изменений, характерных для диабетической ангиопатии, в настоящее время используется ультразвуковой метод. Исследование структуры сосудистой стенки осуществляется в В-режиме. Для анализа жесткости стенок артерий используется ряд расчетных параметров, основными из которых являются: коэффициент эластичности, коэффициент растяжимости, эластический модуль Петерсона, модуль Юнга, деформация потока, индекс жесткости, скорость распространения пульсовой волны [4-8].

Результаты ряда исследований [4,6,8] продемонстрировали информативность перечисленных показателей при выявлении нарушений жесткости стенок артерий эластического и мышечного типа у пациентов с факторами риска развития атеросклероза, артериальной гипертензии, сахарного диабета. Общепринятого мнения о характере эхографической

картины начальных (доклинических) стадий диабетической ангиопатии в настоящее время не существует.

Цель исследования - Целью настоящего исследования явилась комплексная ультразвуковая оценка состояния стенки общей сонной артерии (ОСА) у пациентов с сахарным диабетом 2-го типа без клинических признаков цереброваскулярной патологии.

Материал и методы исследования. В период 2022 -2023 года было обследовано 72 пациента с клинически верифицированным диагнозом “сахарный диабет 2-го типа” (1 группа) в возрасте от 29 лет до 71 года (средний возраст 56 ± ± 10 лет), из них 40 (55,6%) мужчин в возрасте от 29 лет до 71 года (средний возраст 54 ± 11 лет), 32 (44,4%) женщины в возрасте от 40 до 70 лет (средний возраст 58 ± ± 9 лет). Контрольную группу (2 группа) составили 17 практически здоровых лиц без лабораторных признаков нарушения метаболизма глюкозы в возрасте от 23 до 62 лет (средний возраст 51 ± 8 лет).

Результаты исследования и их обсуждение. Продолжительность сахарного диабета 2-го типа была от 1 года до 20 лет. В соответствии с общепризнанными классификационными подходами у 16 (22,2%) пациентов определялась легкая степень течения заболевания, у54 (75,0%) - средней тяжести и у 2 (2,8%) - тяжелая.

Максимальный уровень глюкозы крови за все время заболевания в среднем по 1 группе составил 14,7 ± 4,6 ммоль/л (8,0-26,0 ммоль/л). “Рабочий” уровень глюкозы крови в среднем по группе был

± 1,4 ммоль/л (6,0-12,0 ммоль/л). За “рабочий” уровень глюкозы принимали показатель, наиболее часто фиксируемый натощак на фоне привычной диеты и медикаментозной терапии.

У 54 (75,0%) пациентов сопутствующим заболеванием была артериальная гипертензия 1-2 стадий. У 20 (27,8%) больных определялись клинические и лабораторные признаки ишемической болезни сердца.

Всем больным 1 и 2 групп измеряли величину системного артериального давлении (АД) с расчетом пульсового АД. Средняя величина систолического АД у пациентов 1 группы составила 130,4 ± 15,0 мм рт. ст. (100,0-170,0 мм рт. ст.), диастолического Ад - 82,0 ± 8,9 мм рт. ст. (60,0-100,0 мм рт. ст.), пульсового АД - 48,5 ± 13,3 мм рт. ст. (30,0-80,0 мм рт. ст.). У лиц 2 группы соответствующие показатели были 118,7 ± ± 10,0 мм рт. ст. (100,0-130,0 мм рт. ст.), ± 8,2 мм рт. ст. (60,0-90,0 мм рт. ст.), 32,5 ± 10,2 мм рт. ст. (30,0-50,0 мм рт. ст.).

Исследование брахиоцефальных артерий на экстракраниальном уровне проводили на ультразвуковых сканерах Sonoline G60 и Acuson Sequoia-512 (Siemens, Германия) датчиками линейного формата в частотном диапазоне от 5 до 10 МГц. В процессе исследования оценивали проходимость сонных и позвоночных артерий, наличие внутри - просветных образований. Оценку состояния стенки ОСА (качественных и количественных параметров) осуществляли по данным В-режима. Структурная характеристика включала

анализ эхогенности и степени дифференцировки на слои комплекса интима-медиа (КИМ). За условный эталон при оценке эхогенности интимы принимали эхо- генность окружающих сосуд тканей, ме- дии - эхогенность просвета сосуда.

Толщину КИМ измеряли по задней относительно поверхности датчика стенке сосуда на 1,0-1,5 см проксимальнее бифуркации ОСА. Для уменьшения операторзависимой ошибки измерения плоскость сканирования ориентировали строго перпендикулярно к продольной оси сосуда. При наличии утолщения КИМ измерение выполняли в зоне максимального визуального утолщения.

Для расчета показателей, характеризующих упруго-эластические свойства стенки ОСА, дополнительно анализировали максимальный систолический и минимальный диастолический диаметры сосуда при исследовании в М-режиме. Изображение в М-режиме получали при расположении сосуда на экране в В-режиме строго параллельно поверхности ультразвукового датчика. Для оценки соответствия диаметра сосуда определенной фазе сердечного цикла выполняли мониторинг ЭКГ.

Статистическая обработка полученных результатов проводилась стандартными методами. Количественные данные представлены в виде M ± ***a*** или медианы (в зависимости от характера распределения), а также минимальных и максимальных значений показателей. Различия считали достоверными при $p < 0,05$.

У всех обследованных пациентов с сахарным диабетом 2-го типа брахиоцефальные артерии на шее были проходимы. Признаки стенозирующего атеросклеротического поражения выявлены у 16 (22,2%) пациентов. Во всех случаях атеросклеротические бляшки локализовались в области бифуркации ОСА, имели однородную эхоструктуру. Справа степень стеноза по диаметру варьировала от 20 до 40%, слева - от 20 до 30%. У остальных пациентов 1 группы признаков внутрипросветных образований выявлено не было.

У всех лиц контрольной группы сонные и позвоночные артерии были проходимы, признаков внутрипросветных образований не определялось.

При анализе эхоструктуры КИМ ОСА выявлены следующие варианты нарушений: повышение эхогенности в сочетании с частичной или полной утратой дифференцировки на слои (1-й тип), повышение эхо- генности с появлением в структуре КИМ дополнительных слоев повышенной и пониженной эхогенности (“слоистость”) (2-й тип).

Более чем у половины пациентов с сахарным диабетом 2-го типа были выявлены различные структурные изменения КИМ ОСА. Повышение эхогенности КИМ в сочетании с нарушением дифференцировки на слои чаще рассматривают как ультразвуковой эквивалент атеросклероза.

Выводы. 1. У пациентов с сахарным диабетом 2-го типа выявляется статистически достоверное повышение жесткости сосудистой стенки ОСА.

2. Среди расчетных показателей, характеризующих жесткость сосудистой стенки, статистически достоверные изменения получены для коэффициентов эластичности, растяжимости и показателя деформации потока.

3. Выявляемые в В-режиме изменения эхогенности, степени дифференцировки на слои и толщины КИМ ОСА у пациентов с сахарным диабетом 2-го типа неспецифичны по отношению к сахарному диабету и могут являться следствием воздействия комплекса патологических факторов.

Использованные источники:

1. Алиферова В.М., Цыренжапова Р.Б., Столярова В.А. Современные подходы в ранней диагностике диабетической нейропатии // Сибирский медицинский журнал. - 2011. - Т. 26. - № 4. - Вып. 2. - С. 28-35.
2. Белоусова Т.Е., Бойцов И.В. Тестирование кожных симпатических реакций у пациентов с дистальной диабетической полинейропатией // Журнал неврологии и психиатрии. - 2013. - № 5. - С. 54-57.
3.Бойцов И.В. Динамическая сегментарная диагностика вертеброгенной транзиторной ишемии спинного мозга // Вестник неврологии и психиатрии. - 2012. - № 2. – С. 66-72.
4.DCCT Reserch Group: factors in development of diabetes therapy on the development and progression of neuropathy // Diabetes. - 1998. - Vol. 37. - P. 476–483.
5.Melton U., Duck P.J., Thomas P.K. In Diabetic Neuropathy Epidemiology. - 1999. – P. 259-278.
6.Tavakoli M., Asghar O., Alam U. et al. Novel insights on diagnosis, cause and treatment of diabetic neuropathy: focus on painful diabetic neuropathy // Ther. Advanc. Endocrinol. Metabol. - 2010. - P. 69–88.
7.Tesfaye S., Boulton A.J., Dyck P.J. et al. Diabetic neuropathies: update on definition, diagnostic criteria, estimation of severity, and treatments // Diabetes Care. - 2010. - № 33. - P. 2285-2293.
8.Tesfaye S., Selvarajan D. Advances in the epidemiology, pathogenesis and management of diabetic peripheral neuropathy // Diabetes Metab Res Rev. - 2012. - Vol. 28. - № 1. - P. 8-14.

УДК 625.731.8

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ОСНОВНЫЕ ДЕФЕКТЫ И ДЕФОРМАЦИИ ЗЕМЛЯНОГО ПОЛОТНА И НЕОТЛОЖНЫЕ МЕРЫ ПО ИХ УСТРАНЕНИЮ

Аннотация. В данном статье обсуждается задача земляного полотна автомобильной дороги, усиление надзора за состоянием дороги, опознавательные признаки, оползания откосов насыпи, деформация земляного полотна, причины и неотложные меры по устранению.

Ключевые слова: автомобильная дорога, земляное полотно, деформация дорог, защитные работы.

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MAIN DEFECTS AND DEFORMATIONS OF THE SUBSTRATE AND IMMEDIATE MEASURES FOR THEIR ELIMINATION

Abstract. This article discusses the task of the roadbed, strengthening supervision over the condition of the road, identification signs, landslides of embankment slopes, deformation of the roadbed, causes and urgent measures to eliminate.

Keywords: highway, roadbed, road deformation, protective works.

Главной задачей содержания земляного полотна является обеспечение исправности состояния всех его элементов, предупреждение появления неисправностей, своевременное их устранение, а также ликвидация причин, вызывающих появление неисправностей. Земляное полотно автомобильного

дороги служит основанием для дорожного одежды и состоит из комплекса инженерных сооружений, рассчитанного на длительные сроки службы.

Основой содержания земляного полотна являются надзор за его состоянием с целью своевременного выявления признаков и причин деформаций, предупреждение опасных деформаций, могущих приводить к аварийным ситуациям, проведение неотложных мер, выполнение планово-предупредительных работ в комплексе работ по верхнему строению дороги, а также ремонт или усиление его в качестве самостоятельных работ по индивидуальным проектам [1, 2].

В течение длительного срока службы земляное полотно претерпевает различные видоизменения, которые приводят к превращению типовых поперечных профилей в эксплуатационные (типичные). Земляное полотно и его сооружения должны обеспечивать безопасность движения транспортных средств с заданными нагрузками, скоростями движения при установленной грузонапряженности. Земляное полотно, его отдельные элементы и сооружения должны отвечать к требованиям прочности, устойчивости на весь период службы при соблюдении периодичности ремонта.

Дефекты являются следствием недоработок при проектировании земляного полотна, его защитных и укрепительных сооружений; нарушений технологии строительного процесса; неудовлетворительного текущего содержания и ремонтов автомобильных дорог.

Деформации земляного полотна возникают при недостаточной несущей способности грунтов, из которых оно возведено; несоответствии мощности верхнего строения дороги и нагрузкам от обращающегося подвижного состава; при недостаточной защите грунтов земляного полотна от неблагоприятных воздействий климатических и инженерно-геологических факторов (оползней, селей, наводнений). Низкое качество содержания земляного полотна, когда не обеспечивается от вод поверхностных и грунтовых вод, несвоевременно устраняются мелкие повреждения защитных и укрепительных устройств, не ликвидируются причины снижения несущей способности грунтов и другие нарушения при содержании и ремонтах автомобильного дороги, приводит к перерастанию мелких повреждений в опасные деформации, угрожающие безопасности и движения автомобилей [3, 4].

Земляное полотно - инженерное сооружение длительных сроков службы, в котором могут возникать и накапливаться дефекты и деформации. Основными более распространенными деформациями земляного полотна, опознавательные признаки, причины и неотложные меры по устранению приведены ниже.

1. Пучины - деформации и разрушения в виде бугров и сетки трещин, образующиеся при сезонном промерзании и оттаивании на дорожной одежде при определенных условиях. Они возникают в результате пучения (пучинообразования), неоднородных по площади проезжей части взбугриваний дорожной одежды, образующихся при одновременном

сочетании следующих трех факторов: 1-интенсивного морозного влагонакопления; 2-промерзания грунта под дорожной одеждой на глубину $h_{пр} > 0,5$ м; 3-наличием мелких пылеватых песков и супесей, пылеватых суглинков и других пучинистых грунтов. Размер деформации пучения зависит от влажности грунта, глубины промерзания, продолжительности холодного периода, скорости промерзания грунта, прочности дорожной одежды. Неравномерное морозное пучение может достигать 8-10см, что существенно снижает скорость движения автомобилей.

Рисунок-1. Пучинообразования на автомобильных дорогах

Опознавательные признаки: деформации возникают в периоды промерзания и оттаивания грунтов; отступления дороги и по уровню и в продольном профиле, вызывающие неспокойный ход автомобилей при движении по пучинному участку; зависание асфальтобетонной покрытие над основанием вблизи пучинных неровностей; продольные трещины в снежном покрове, на поверхности откосной част; при оттаивании грунта возникают просадки, перекосы, выплески, выпирание грунта при проходе автомобилей с выпучиванием обочин, откосов кюветов и канав, сдавливание лотков.

Причины: наличие неоднородных или неодинаково увлажненных грунтов основной площадки; увлажнение глинистых грунтов, слагающих основную площадку, вследствие наличия бессточных неровностей; неравномерное увлажнение грунтов в зоне сезонного промерзания грунтовыми водами и при запущенном состоянии водоотводов; неодинаковая глубина промерзания земляного полотна; неравномерное загрязнение и увлажнение рабочего слоя [6].

Таблица-1

Классификация грунтов по степени пучинистости при замерзании

Группы грунтов по пучинистости	Степень пучинистости	Относительное морозное пучение
I	Непучинистый	1 и менее
II	Слабопучинистый	Свыше 1 до 4
III	Пучинистый	Свыше 4 до 7
IV	Сильнопучинистый	Свыше 7 до 10

V	Чрезмернопучинистыи	Свыше 10

Неотложные меры: усиленный надзор за состоянием дороги и в периоды рост а пучин зимой и особенно, при их спаде весной (вплоть до ежедневных осмотров); своевременное устранение отступлений от норм содержания дорожной колеи с применением пучинных подкладок или под покрытых прокладок; тщательное содержание водоотводных устройств (кюветов, канав, лотков, дренажей) с заблаговременной подготовкой к отводу воды в периоды длительных оттепелей и весеннего снеготаяния; в периоды быстрой осадки пучин при высокой температуре наружного воздуха и интенсивных атмосферных осадках возможно ограничение скорости движения автомобилей. После оседания пучин и прекращения просадок необходима выправка дорог с изъятием пучинных подкладок [1-4].

2. Оползания откосов насыпи - отслоение откосной части насыпи с захватом основной площадки чаще всего до оси дороги и смещение ее к подошве откоса, иногда с захватом основания насыпи.

Опознавательные признаки: появление продольных трещин на обочинах, откосах асфальтобетонного покрытии, бугров на откосе и увлажненных складок в нижней части откоса; искажение очертаний откосов и поверхности земли рядом с основанием откоса. При оползании вначале происходит вертикальное смещение грунта с образованием стенки отрыва, затем смещение грунта в полевую сторону. Как правило, другая часть насыпи остается устойчивой. Этим отличается оползание откосов от общего смещения всей насыпи.

Рисунок-2. Оползания откосов насыпи автомобильной дороги.

Причины: недостаточная плотность грунтов насыпи и откосных частей; завышенная крутизна откосов; сооружение насыпи из слабых грунтов, не пригодных для строительства; разница в плотности и влажности грунтов ядра и откосной части; наличие продольных лож, наличие завышенной крутизной его откоса и смачиванием контакта глинистых и дренирующих грунтов; наличие слабых грунтов в основании откосной части насыпи; плохое текущее

содержание земляного полотна; переувлажнение грунта обильными атмосферными осадками, талыми водами.

Неотложные меры: планировка обочин, заделка трещин, уборка снега в конце зимы; предотвращение поступления воды в тело насыпи (гидроизоляция

или перехват воды и от вод ее за пределы насыпи); срезка оползающих грунтов откосов; нарезка уступов на глиняном ядре и восстановление качественным грунтом с нормируемым уплотнением; присыпка берм или контрбанкетов для усиления откоса. При восстановлении насыпи дренирующими грунтами, недопустимо перегружать верхнюю часть откоса, а от контакта глинистых и дренирующих грунтов необходимо обеспечивать от вод впитывающейся воды.

3. Подмыв основания земляного полотна водными потоками.

Опознавательные признаки: размыв берега у основания откоса земляного полотна с отложениями наносов в излучинах и подмывами нижних частей откосов; загромождение русла карчами, валунами, мелким камнем и песком с образованием местных подпоров воды и поднятием ее до верха земляного полотна; при обильных атмосферных осадках, таянии ледников вероятно полное затопление дороги с размывами рабочего слоя, повреждениями и разрушениями регуляционных сооружений, опор мостов, водопропускных труб; при катастрофических паводках возникает угроза безопасности движения транспортных средств [1-4].

Причины: несвоевременное устранение повреждений и дефектов в конструкциях защитных и укрепительных устройств и сооружений; неудовлетворительное содержание регуляционных, струенаправляющих сооружений и их креплений; недостаточная сопротивляемость грунтов и защитных конструкций волновым, ледовым воздействиям и течению воды; изменение режима водотока (водоема), связанное со спрямлением русел, устройством плотин.

Неотложные меры: выполнение защитных работ в соответствии с планами вод борьбы, местными инструкциями, указаниями оперативного штаба, создаваемого на опасный период начальником участки дороги, а при необходимости начальником отделения или начальником дороги; наращивание имеющихся регуляционных сооружений или возведение их вновь на участках угрозы размыва (от сыпка горной массы, обвалование и другие мероприятия); устранение местных завалов русла, создающих подпор воды; надзор за состоянием участка дороги и устранение возникающих неисправностей.

Использованные источники:

1. Хархута Н.Я., Васильев Ю.М. Прочность, устойчивость и уплотнение грунтов земляного полотна автомобильных дорог. -М.: Транспорт, 1975. 288 с.

2. Леонович И.И., Вырко Н.П. Водно-тепловой режим земляного полотна автомобильных дорог. Минск, БНТУ. 2013. -175 с.

3. Золотарь И.А. Водно-тепловой режим земляного полотна и дорожных одежд. –М.: Транспорт, 1971. -414 с.
4. Каюмов А.Д. Расчетные характеристики и технология уплотнения лессовых грунтов. –Ташкент, «ФАН», 2006, -132 с.
5. Казарновский В.Д. Оценка сдвигоустойчивости связных грунтов в дорожном строительстве. – М.: Транспорт, 1985. - 168 с.
6. Добров Э.М. Механика грунтов –М.: Издательский центр «Академия», 2008. -272с.:

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ПРОБЛЕМЫ ОРГАНИЗАЦИИ И ПРОХОЖДЕНИЯ СЛУЖБЫ В ПРАВООХРАНИТЕЛЬНЫХ ОРГАНАХ

Аннотация. в статье рассматриваются основные проблемы, касающиеся организации и прохождения службы в правоохранительных органах.

Ключевые слова: правоохранительный орган, правоохранительная деятельность, органы правопорядка.

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PROBLEMS OF ORGANIZATION AND SERVICE IN LAW ENFORCEMENT AGENCIES

Abstract. the article discusses the main problems related to the organization and service in law enforcement agencies.

Keywords: law enforcement agency, law enforcement, law enforcement agencies.

Главной целью работы правоохранительных органов является охрана общественного порядка, а также защита законных интересов и прав граждан страны.

Исследованию вопросов организации деятельности правоохранительных органов Российской Федерации посвящены немало работ. К ним относятся работы труды Н. И. Свечникова, И. Э. Мартыненко, В. В. Мальченкова, М. В. Шайкова, В. П. Рябцева, О. С. Капинуса и т.д. Н.И. Свечников исследует понятие «правоохранительная деятельность», раскрывает ее суть и характеризует как основной институт охраны и защиты порядка общественности. Вопросы об организационно-структурном построении органов правоохранительной деятельности изучает М.Б. Шайкова, в которых она подчеркивает проблемы касающиеся этой области.

Казалось бы, что работа правоохранительных органов давно автоматизирована и не имеет недостатков в организации. Но, существует ряд проблем, в организации и прохождении службы в органах правоохранительной деятельности. Как и в любой области, данные проблемы мешают налаженной работе сотрудников, тем самым уменьшая эффективность прохождения службы. Рассмотрим некоторые из них.

1. Проблемы, связанные с организационной и структурной составляющей в управлении органом правоохранительной системы, к которым относятся:

– появление подразделений с размытыми функциями оказывает заметное влияние на организацию и сотрудничество между ними;

– различные подразделения в организации занимаются одним и тем же видом работы, не имея четкого разграничения обязанностей;

– между аппаратами управления областных (республиканских) и районных (городских) органов правопорядка одной организационной системы наблюдается недостаточно четкое взаимодействие [2,с.182].

2. Отсутствие четкой нормативно-правовой базы взаимодействия служб и подразделений органов правопорядка, которая приводит к следующим проблемам: неопределенность полномочий, несогласованность действий, недостаток координации, низкая эффективность работы.

3. Отсутствие критериев для оценки эффективности взаимодействия служб и структурных подразделений органов правоохранительной деятельности часто создает сложную ситуацию. Ввиду этого руководителям данных органов сложно оценить отклонения в работе, связанные с неэффективностью сотрудничества различных подразделений, поскольку отсутствует надежная система оценки этого взаимодействия. Более того, отсутствие критериев для оценки деятельности сотрудников подразделений органов правоохранительной деятельности негативно сказывается на их мотивации и не способствует развитию систематического сотрудничества.

4. Отсутствие равномерного распределения служебных обязанностей между сотрудниками органов правоохранительной деятельности. Анализ деятельности разных служб показывает, что сотрудники следственного комитета и оперативной службы загружены обязанностями, в то время, например, кадровые и штабные служащие не имеют большой загруженности. Практика показывает, что большая загруженность работой снижает качество службы.

5. Отсутствие системы взаимного обмена информацией между сотрудниками подразделений органов правоохранительной деятельности. Часто, важная информация не доходит до всех сотрудников, которые должны были информированы. Как вариант, в этой ситуации можно создать централизованный банк информации, но при этом должны строго соблюдаться правила секретности информации.

6. В организации службы органов правоохранительной деятельности нет четкой системы материального и морального поощрения работников

различных служб за эффективное сотрудничество и гармоничную коллективную работу. Опыт деятельности органов правопорядка свидетельствует о том, что зачастую сотрудники стимулируются только за выполнение своих основных функций, в то время как их усилия и вклад в предоставление надежной информации другим службам, создание благоприятных условий для работы, обеспечение ресурсами деятельности других подразделений и прочие достижения признаются и поощряются лишь в незначительной степени [1,с,237].

7. Отсутствие объективного отношения руководителя органов правопорядка к подразделениям и отдельным службам. К отдельным службам и подразделениям уделяется больше внимания и их статус ставиться выше, чем у остальных. Хотя руководитель органов правоохранительной деятельности должен придерживаться тактики равноправия между подразделениями органов правопорядка, практика показывает, что это не всегда так. Часто некоторые подразделения служат другим, обеспечивают их информацией и выполняют мелкие поручения.

8. Некоторые личностные качества сотрудников правоохранительной деятельности отрицательно сказываются на эффективности всей системы в целом. К таким качествам относятся: Отрицательные личностные качества некоторых сотрудников правоохранительной деятельности: пробуждение внутреннего стремления к достижению высот в сфере профессионального развития, стремление угодить отдельным личностям, подхалимство, стремление к доминированию, агрессивность, самоутверждение за счет результатов деятельности партнеров по взаимодействию.

9. Коллектив службы или подразделения органов правоохранительной деятельности проявляет функциональный эгоизм. Этот эгоизм включает две основные направленности: коллективную, которая направлена на решение общих задач, и узкофункциональную, которая проявляется в тенденции замыкаться на своих задачах и недостаточно проявлять интерес к совместной работе с другими службами и подразделениями органа правопорядка.

Это основные проблемы в области организации и прохождения службы в правоохранительных органах.

Так же существуют проблемы в области правового регулирования деятельности органов правопорядка и к ним относят отсутствие законодательно закрепленного списка органов, которыми осуществляется деятельность по защите прав и законных интересов граждан [2,с.181].

Важной проблемой является вопрос о классификации структур исполнительной власти как правоохранительных органов. Например, можно ли рассматривать внутренние войска, входящие в систему МВД и привлеченные к выполнению полицейских функций в обеспечении общественного порядка и безопасности, как полноценные органы правоохранительных ведомств, не являющиеся подразделениями ОВД. За последнее время возникло множество споров относительно юридического статуса представителей других структур, включая судебных приставов.

Таким образом, система государственной правоохранительной службы имеет ряд проблем и нуждается в дальнейшей разработке, а принятие федеральных законов, предназначенных для регулирования ее прохождение, затрудняется как существенно юридическими вопросами, так и внутренними интересами, и противоречиями различных министерств и ведомств.

Использованные источники:

1. Понкратова, С. А. Система организации и прохождения службы в правоохранительных органах / С. А. Понкратоват // Молодой ученый. - 2020. - № 52 (342). - С. 236-238.
2. Дремова, А. Н. Проблемы организации и прохождения службы в правоохранительных органах / А. Н. Дремова // Молодой ученый. - 2021. - № 5 (347). — С. 181-182.
3. Понкратова, С. А. Сущность правоохранительной деятельности / С. А. Понкратова. - Текст: непосредственный // Молодой ученый. - 2020. - № 50 (340). - С. 288-289.
4. Воронцов С.А. Правоохранительные органы Российской Федерации / С.А.Воронцов. - Ростов н/Д: Феникс, 2020. - 448 с.

УДК 631. 314. 4

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УГОЛ УСТАНОВКИ ПОЧВОСДВИГАЮЩЕЙ ПЛАСТИНКИ К НАПРАВЛЕНИЮ ДВИЖЕНИЯ

Аннотация. В статье приведены результаты теоретических исследований по определению угла установки почвосдвигающей пластинки к направлению движения.

Ключевые слова: рабочий орган, плоскорежущая лапа, высота почвосдвигающей пластинки, длина почвосдвигающей пластинки, крошение почвы, обрабатываемая полоса.

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INSTALLATION ANGLE OF THE SOIL SHIFTING PLATE TO THE DIRECTION OF MOVEMENT

Annotation. The article presents the results of theoretical studies to determine the angle of installation of the soil-shifting plate to the direction of movement.

Key words: working body, flat-cutting paws, height of the soil-shifting plate, the length of the soil-shifting plate, crumbling of the soil, the cultivated strip.

Основными параметрами рабочих органов, оказывающими влияние на их качественные и энергетические показатели работы, являются: высота и длина почвосдвигающей пластинку, а также угол установки почвосдвигающей пластинки к направлению движения [1,3].

Почвосдвигающая пластинка должна обеспечить перемещение в сторону перерезанных полкой плоскорежущей лапы корней и остатков растений без сгруживания их перед рабочим органом. Для этого необходимо

обеспечить свободное скольжение растений по рабочей поверхности почвосдвигающей пластинки [2,4,5,6].

Условия скольжения корней и остатков растений определяется следующим неравенством

$$\beta_{П} \langle \pi / 2 - \varphi_{к} \quad (1.1)$$

где $\beta_{П}$ - угол установки почвосдвигающей пластинки к направлению движения, град;

$\varphi_{к}$ -угол трения корней и остатков растений по рабочей поверхности почвосдвигающей пластинки, град.

Однако из условия (1.1) следует, что при заданном значении угла трения, угол $\beta_{П}$ можно выбрать равной величины, лишь бы он был меньше угла $\pi / 2 - \varphi_{к}$. Следовательно, эта зависимость имеет односторонний характер и поэтому не дает оптимального соотношения между углами $\beta_{П}$ и $\varphi_{к}$, обеспечивающего такие условия работы, при которых вероятность скопления корней и остатков растений перед почвосдвигающей пластинкой была минимальной.

Значение угла $\beta_{П}$, при котором обеспечивается вышеотмеченные условия работы, т.е. вероятность скопления корней и остатков растений будет минимальна, можно определить из условия минимального времени скольжения их по рабочей поверхности почвосдвигающей пластинки. Пусть почвосдвигающая пластинка перемещается из положения I в положение II (рис. 1.1).

При этом растение или его корень, находившийся в начале движения в точке А, перемещаясь по навравлению равнодействующей силы R (нормальной силы N и силы трения F) в точке B_1 сходит почвосдвигающей пластинки. Определим время, за которое растение сходит с почвосдвигающей пластинки.

$$t = l_{П} / V_{C} \quad (1.2)$$

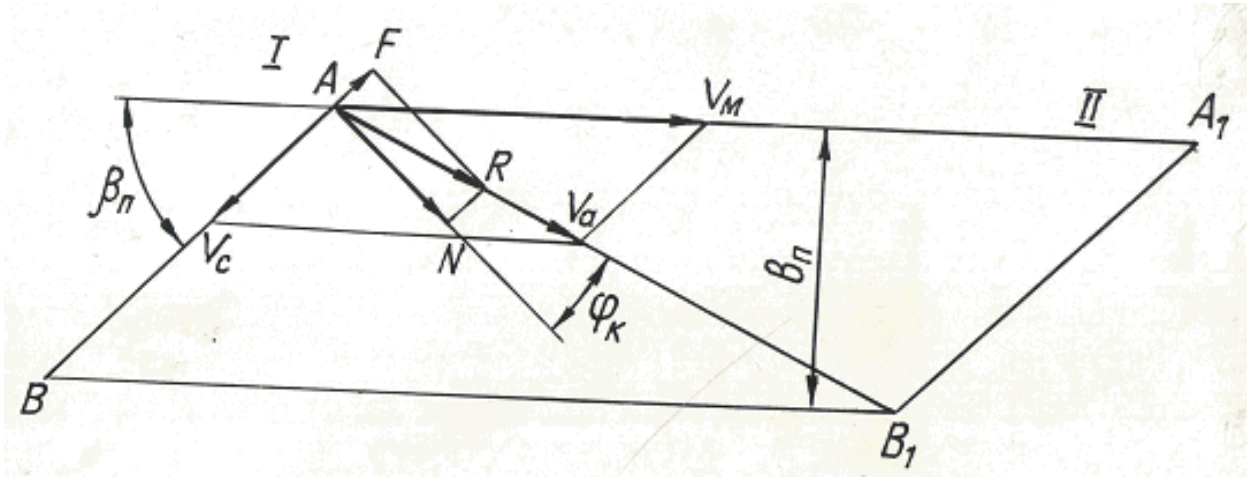

Рис. 1.1. Схема к определению угла установки почвосдвигающей пластинки к направлению движения.

где $l_П$ - длина почвосдвигающей пластинки, м;

V_c - скорость скольжения растений по рабочей поверхности почвосдвигающей пластинки, м/с.

Из рис. 1.1

$$l_П = b_П / \sin \beta_П \quad (1.3)$$

и

$$V_c = V_M \cos(\beta_П + \varphi_К) / \cos \varphi_К \quad (1.4)$$

где $b_П$ - ширина захвата почвосдвигающей пластинки, м;

V_M - поступательная скорость движения агрегата, м/с.

С учетом (1.3) и (1.4) выражение (1.2) имеет следующий вид

$$t = \frac{b_П \cos \varphi_К}{V_M \cos(\beta_П + \varphi_К) sis \beta_П} \quad (1.5)$$

Уравнение решено на ПК IBM с помощью программы, составленных на языке BASIC.

На рис. 1.2 показана зависимость изменения времени, за которое растение сходит с почвосдвигающей пластинки, от угла $\beta_П$ при $b_П$=20 см, $V_М$ = 1,5 м/с и различных значениях $\varphi_к$.

Из графиков видно, что функция $t = f(\beta_П)$ имеет минимум, причем, чем больше угол трения $\varphi_к$, тем меньше значение угла установки пластинки к направлению движения, при котором время, за которое растение сходит с почвосдвигающей пластинки, будет минимально.

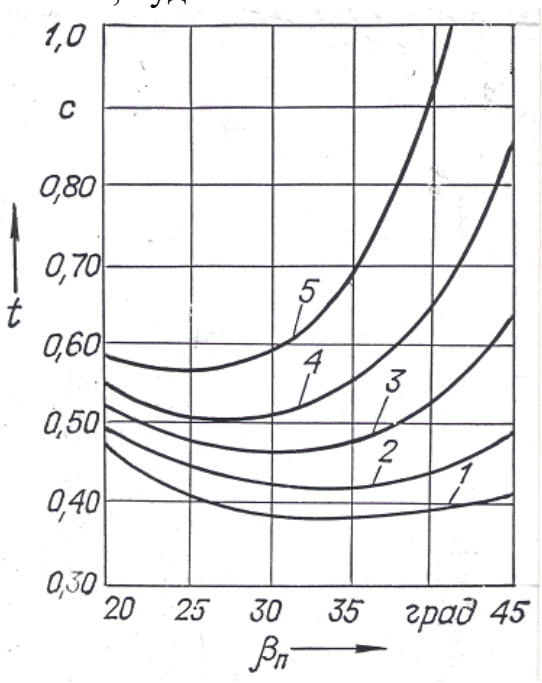

Рис. 1.2. Зависимость времени t, за которое растение сходит с почвосдвигающей пластинки, от угла $\beta_П$: 1- при $\varphi_к$ = 200; 2-$\varphi_к$ = 250; 3-$\varphi_к$ = 300; 4-$\varphi_к$ = 350; 5-$\varphi_к$ = 400.

Для определения значения угла $\beta_п$, при котором время скольжения сорняков почвосдвигающей пластинке будет минимально, уравнение (1.5) исследуем на экстремум и получим [7,8,9,10].

$$\beta_п = \frac{\pi_п}{4} - \frac{\varphi_к}{2} \text{. (1.6)}$$

Подставляя в это выражение известные значения $\varphi_к$, равные 30…34^0, получим $\beta_п$=28…30^0.

Таким образом, для того чтобы перед плоскорежущей лапой не происходило скопления растительных остатков и корней угол установки почвосдвигающей пластинке к направлению движения должен быть в пределах 28…30^0.

Использованные источники:

1. Насритдинов А.А., Киргизов Х.Т. Агрегат для полосной обработки почвы// Современные научные исследования и инновация. -2015. -№12. Москва. -С. 43-48.
2. Синеоков Г.Н., Панов Н.М. Теория и расчет почвообрабатывающих машин. -М.: Машиностроение, 1977. -328 с.
3. Киргизов, Х. Т. (2021). Результаты исследований по выбору типа рабочих органов для полосной обработки. *Universum: технические науки*, (3-1 (84)), 14-17.
4. Киргизов, Х. Т. (2020). Оптимизация параметров почвосдвигающей пластинки. *Universum: технические науки*, (5-1 (74)), 45-46.
5. Киргизов, Х. Т., Саидмахамадов, Н. М., Хожиев, Б. Р. (2014). Исследование движения частиц почвы по рабочей поверхности сферического диска. *Вестник развития науки и образования*, (4), 14-19.
6. Отаханов, Б. С., Киргизов, Х. Т., Хидиров, А. Р. (2015). Определение диаметра поперечного сечения синусоидально-логарифмического рабочего органа ротационной почвообрабатывающей машины. *Современные научные исследования и инновации*, (11), 77-83.
7. Отаханов, Б. С., Киргизов, Х. Т. (2014). Обоснование диаметра ротора бесприводного ротационного рыхлителя с гибким рабочим органом. *Вестник развития науки и образования*, (4), 8-10.
8. Kirgizov, X. T., Abdukaxarov, A. (2021). Study of the Movement of Soil Particles along the Working Surface of a Spherical Disc. *International Journal of Discoveries and Innovations in Applied Sciences*, *1*(5), 288-294.
9. Отаханов, Б. С., Киргизов, Х. Т., Ашурбеков, Ж. К. У., & Мамажонов, Э. Х. У. (2018). Машина для обмолачивания створок маш ручной сборки. *Интерактивная наука*, (6 (28)).
10. Kirgizov, X. T., Kosimov, A. (2021). Combined Tillage Unit. *Academic Journal of Digital Economics and Stability*, *9*, 91-96.
11. Qirgizov, X., Mamadaliyev, S. M., & Yigitaliyev, J. (2021). INDICATORS SCIENTIFIK AND PRACTICAL RESEARCH OF WATER-SPRINKLER. *Экономика и социум*, (5-1), 398-400.

12. Киргизов, Х. Т. (2022). ПРОГРЕССИВНЫЕ СИСТЕМЫ СМАЗКИ. *ТАЪЛИМ ВА РИВОЖЛАНИШ ТАҲЛИЛИ ОНЛАЙН ИЛМИЙ ЖУРНАЛИ*, 138-144.

УДК 131.1

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ОБ ОЦЕНКЕ ЦИФРОВОЙ КОМПЕТЕНТНОСТИ СОТРУДНИКОВ

Аннотация. В статье рассмотрена актуальность изменения системы оценки кадрового потенциала сотрудников, обусловленная воздействием внешней среды, реализацией национального проекта Российской Федерации и состоянием рынка труда

Ключевые слова: развитие сотрудников, оценка кадрового потенциала, модель оценки персонала, цифровая компетентность.

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ON THE ASSESSMENT OF DIGITAL COMPETENCE OF EMPLOYEES

Abstract. The article considers the relevance of changing the system of personnel potential assessment of employees due to the impact of the external environment, the implementation of the national project of the Russian Federation and the state of the labor market

Keywords: employee development, human resources assessment, personnel assessment model, digital competence.

Сегодня мир вокруг нас становится качественно другим. Организациям приходится изменяться, формировать готовность адекватного реагирования на вызовы, наращивать скорость внутриорганизационных изменений для обеспечения нормального функционирования.

Управление бизнесом больше не может быть статичным. Предприятия создают гибкие структуры управления с акцентом на развитие кадрового потенциала.

Требования к сотрудникам меняются, карьерные треки модернизируются. Важным становится умение сотрудника легко осваивать новые, незнакомые задачи, эффективно действуя в рамках усложняющихся систем управления.

Для организаций четко организованная система развития кадрового потенциала становится важным фактором, позволяющим обеспечить рост

эффективности процессов и, как следствие, рост объема получаемой, прибыли, что является основной целью функционирования.

Проведенный нами анализ существующих методов оценки кадрового потенциала показал, что применяемые процедуры в организациях, требуют индивидуального подхода для каждого предприятия. Учитывается отрасль, регион и социально-экономическая ситуация в стране. Организации вынуждены разрабатывать механизмы мониторинга потенциала сотрудников. Затем важно полученную информацию использовать для принятия решения о развитии человеческого потенциала в направлении, необходимом для решения стратегических задач предприятия в условиях экономической безопасности. Как правило, это совместная прерогатива кадровой службы, службы безопасности и отдела охраны труда.

Соблюдая законодательство и реализуя программы развития сотрудников, способных к реализации стратегических задач, руководство организаций многое делает для развития потенциала своих сотрудников. Однако, делается это, в большей степени, традиционно и без учета существующей ситуации.

Традиционно оценочные процедуры потенциала сотрудников производится на промышленных предприятиях на высоком уровне и включают: регулярную аттестацию сотрудников, выявляют уровень достигнутого ими потенциала и определяют векторы дальнейшего их развития. Сотрудников с высоким потенциалом – HiPo, например, ожидает более широкий спектр материального и морального стимулирования. Однако слабо применяются на практике ориентиры на стратегию развития информационного общества в Российской Федерации, в которой определено понятие «цифровая экономика»: «цифровая экономика – хозяйственная деятельность, в которой ключевым фактором производства являются данные в цифровом виде…» [3].

В новых экономических условиях, организации обязаны пересматривать локальные акты на предмет создания и реализации подходов по содействию сотрудникам в освоении ключевых компетенций цифровой экономики, обеспечении массовой цифровой грамотности и персонализации развития их трудового потенциала.

Однако, четкая модель оценки потенциала сотрудников не сформирована. Новые экономические и технологические условия требуют создания и реализации подходов по содействию сотрудникам в освоении ключевых компетенций цифровой экономики, обеспечении массовой цифровой грамотности и персонализации образования. В этих целях реализуется федеральный проект «Кадры для цифровой экономики» национальной программы «Цифровая экономика Российской Федерации» [3].

Выявленная проблема побудила разработать модель оценки персонала с указанием в ней места компетенции «цифровая грамотность» сотрудников (рисунок 1).

Рисунок 1 – Взаимосвязь оценки персонала и организационно-экономических факторов деятельности организации

Появление принципиально новой продукции и снятие с производства устаревшей, зарождение современных технологий, вытесняющих и сокращающих старые рабочие места, – все это обесценивает прежние знания и навыки, что и приводит к моральному износу человеческого капитала. Процесс этот неизбежен, но он предсказуем [1].

Опираясь на концептуально-интегративную модель места оценки персонала в системе управления персоналом и общей системе управления организацией, на рисунке показано место оценки персонала в общей системе управления организацией [2]. Периодически оцениваются личностные, деловые и профессиональные качества, определяется уровень развития компетенций или формирование новых, необходимых для работы в инновационной среде.

Как мы понимаем, решение о дополнительной IT-подготовке персонала потребует дополнительных затрат на обучение. Затем возникнет вопрос о повышении оплаты труда за более высокую квалификацию сотрудников. Поэтому, с точки зрения экономической безопасности организации, необходимо оценить не только сами затраты, но и тот экономический эффект, который получит организация после обучения сотрудников. Экономическое обоснование цифровизации определено в п. 14 Программы цифровой экономики России: «Главным способом обеспечения эффективности цифровой экономики становится внедрение технологии обработки данных, что позволит уменьшить затраты при производстве товаров и оказании услуг» [4].

Итак, разработанную систему оценивания потенциала сотрудника с учетом определения наличия у него цифровой компетентности, следует рассматривать как фактор улучшения управленческих процессов и применять в процессе развития кадрового потенциала сотрудников предприятий.

Использованные источники:

1. Кифа Л.Л., Шевлякова Е.М. Обеспечение организации трудовыми ресурсами в условиях цифровой экономики // Economic aspects of industrial development in the transition to a digital economy: сборник статей по материалам международной научно-практической конференции (28 декабря 2019 г., г. Уфа). Уфа: Изд. НИЦ Вестник науки, 2019. 293 с. С. 163–169.
2. Махмудова И.Н. Оценочные персонал-технологии: практика управления: монография. Самара: Изд-во «Самарский университет», 2014. 436 с.
3. Сайт министерства цифрового развития, связей и массовых коммуникаций. «Кадры для цифровой экономики». - URL: https://digital.gov.ru/ru/activity/directions/866/ (дата обращения 05.01.2024)
4. Указ Президента Российской Федерации от 09 мая 2017 года за № 203 «О Стратегии развития информационного общества в Российской Федерации на 2017–2030 годы». [Электронный ресурс]. URL: http://www.kremlin.ru/acts/bank/41919 (дата обращения: 12.12.2023).

УДК 343

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АКТУАЛЬНЫЕ ВОПРОСЫ ОБЕСПЕЧЕНИЯ ПОДОЗРЕВАЕМОМУ И ОБВИНЯЕМОМУ ПРАВА НА ЗАЩИТУ

Аннотация. Одним из самых актуальных вопросов уголовного судопроизводства является обеспечение подозреваемому и обвиняемому права на защиту. В статье проводится анализ права на защиту как одного из фундаментальных конституционных прав граждан. На основе проведенного исследования сделаны предложения по совершенствованию действующего уголовно-процессуального законодательства.

Ключевые слова: уголовное судопроизводство, подозреваемый, обвиняемый, право на защиту, правосудие, уголовное дело.

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TOPICAL ISSUES OF ENSURING THE RIGHT TO DEFENSE FOR THE SUSPECT AND THE ACCUSED

Abstract. One of the most pressing issues of criminal proceedings is to ensure the right of the suspect and the accused to a defense. The article analyzes the right to protection as one of the fundamental constitutional rights of citizens. Based on the conducted research, proposals have been made to improve the current criminal procedure legislation.

Keywords: criminal proceedings, suspect, accused, right to defense, justice, criminal case.

Необходимым условием справедливого правосудия является соблюдение права на защиту обвиняемому и подозреваемому, которое обеспечивается государством. Рассматривая содержание принципа «обеспечение права обвиняемого и подозреваемого на защиту», необходимо определиться с понятием «право на защиту» и его содержанием.

Для достижения этой цели, в рамках настоящего исследования были использованы такие методы как общенаучные (анализ, синтез, индукция, дедукция, сравнение, эксперимент); собственно-юридические (формально-юридический, сравнительно-правовой).

Исходя из положений ч. 1 ст. 6 УПК РФ назначением уголовного судопроизводства являются защита прав и законных интересов лиц и организаций, потерпевших от преступлений; защита личности от незаконного и необоснованного обвинения, осуждения, ограничения ее прав и свобод [2]. Таким образом, правом на защиту обладают и лица, потерпевшие от преступлений, и лица, подозреваемые и обвиняемые в совершении преступления.

В уголовном судопроизводстве есть два способа осуществления защиты: само лицо, в отношении которого осуществляется уголовное преследование, может защищать свои права и законные интересы, либо профессиональный адвокат, который выступает в качестве защитника.

Составляющим элементом рассматриваемого права является право на получение квалифицированной юридической помощи, которое обеспечивает реализацию права на защиту. В ч.1 ст. 48 Конституции РФ закреплено: «Каждому гарантируется право на получение квалифицированной юридической помощи. В случаях, предусмотренных законом, юридическая помощь оказывается бесплатно» [1].

Обеспечение права на защиту заключается в обязанности государственных органов и должностных лиц, ведущих уголовное судопроизводство разъяснить конкретному участнику процесса его права и обязанности и принять меры к их обеспечению. Верховный Суд Российской Федерации четко высказал по этому поводу свою позицию: «Обеспечение права на защиту является обязанностью государства и необходимым условием справедливого правосудия» [3].

Обеспечение права на защиту заключается в обязанности государственных органов и должностных лиц, ведущих уголовное судопроизводство разъяснить конкретному участнику процесса его права и

обязанности и принять меры к их обеспечению. Верховный Суд Российской Федерации четко высказал по этому поводу свою позицию: «Обеспечение права на защиту является обязанностью государства и необходимым условием справедливого правосудия».

Право обвиняемого на защиту зачастую нарушается в ходе производства по уголовному делу.

В частности, в стадии предварительного расследования обвиняемым не предоставляется достаточно времени для ознакомления с материалами уголовного дела, при этом следователи, реализуя полномочия, предоставленные ч. 3 ст. 217 УПК РФ, ограничивают такое время, ссылаясь на умышленное затягивание стороной защиты сроков расследования [2].

Одной из актуальных проблем обеспечения права на защиту обвиняемого, подозреваемого при производстве по уголовному делу также являетсяфактическая невозможность самостоятельной защиты своих прав и свобод лицом, находящимся под стражей.

Задержанный или находящийся под стражей обвиняемый лишен доступа к современным справочным - правовым системам, другим источникам правовой информации, не имеет возможности искать специалистов и получать у них консультации, искать новые источники доказательственной информации, подтверждающие его позицию и опровергающие версию стороны обвинения, и т.д.

Действующее законодательство должно создать надежные гарантии сохранения семейных отношений обвиняемого, подозреваемого, любые ограничения на свидания с родными и близкими должны быть обоснованы конкретными фактическими обстоятельствами и подлежать реальному судебному контролю.

Для решения данной проблемы предлагаетсядополнить ст. 18 Федерального закона от 15 июля 1995 г. № 103-ФЗ2 нормой, в соответствии с которой отказ в предоставлении свидания должен быть обоснован конкретными фактическими обстоятельствами, подтверждающими наличие угрозы правам и свободам других лиц, воспрепятствования производству по уголовному делу. Также данный отказ может быть обжалован в суд общей юрисдикции.

Еще одной проблемой при реализации права на защиту обвиняемого, подозреваемого является проблема «двойной защиты», суть которой заключается в вовлечении в уголовное судопроизводство без согласия обвиняемого, подозреваемого второго защитника (дополнительного к защитнику, ранее вступившему в дело на основе соглашения об оказании юридической помощи) по решению суда, следователя, дознавателя, основанному на праве данных должностных лиц назначать защитника в случаях, указанных в законе. Сложность четкой регламентации в данной ситуации обусловлена тем, что, с одной стороны, должностные лица должны иметь возможность противостоять недобросовестному поведению тех адвокатов, которые срывают следственные и иные процессуальные действия

путем неявки на них, отказываются подписывать процессуальные документы, хотя и участвуют в процессуальных действиях, и др [5].

Столкнувшись с такими злоупотреблениями со стороны защитников или предвидя их возможность, судьи, следователи прибегают к «простому» решению проблемы: если адвокат, участвующий по соглашению, не выполняет свои обязанности, в дополнение к нему необходимо пригласить защитника по назначению, который даже своим присутствием на следственном действии и подписанием процессуального документа создает необходимые условия для вывода о законности производимых процессуальных действий.

Адвокат по назначению может приглашаться и обязан принять участие в производстве по делу при наличии защитника по соглашению только в том случае, если процессуальная деятельность защитника по соглашению или поведение подозреваемого по реализации права на свободный выбор защитника являются явно недобросовестными и ущемляют конституционные права других участников уголовного процесса.

Адвокат, установивший, что его назначение было проведено с нарушением требований законодательства и нарушением права на защиту, обязан сделать об этом официальное заявление суду (следователю) и устраниться от участия в процессуальных действиях.

Соответственно, игнорирование данных требований защитником-дублером является нарушением обязательных требований органов адвокатского сообщества и может быть рассмотрено в качестве нарушения профессиональной этики и основания для дисциплинарной ответственности. На данном этапе развития законодательства, проблема участия адвокатов-дублеров законодательно не регламентирована в должной мере [4].

Итак, право обвиняемого на защиту представляет собой совокупность субъективных процессуальных средств, используя которые он может противостоять выдвинутому против него обвинению: знать, в чем он обвиняется; оспаривать участие в совершении преступления; опровергать обвинительные доказательства; представлять оправдывающие его доказательства; защищать другие законные интересы. Проблемы обеспечения судом права обвиняемого на юридическую помощь на стадиях, следующих после вступления приговора в законную силу, имеют особую актуальность, поскольку они не получили однозначного решения ни в юридической теории, ни в правоприменительной практике. вопросов составляет большую половину судебной нагрузки.

Таким образом, можно сделать вывод, что деятельность законодателя на нынешний день просит внесения конфигураций и добавлений в Уголовно-процессуальный кодекс Российской Федерации, которые дозволят наиболее эффективно обеспечить осуществление обвиняемым и подозреваемым права на защиту. Данная деятельность, на наш взгляд, должна включать в себя следующие элементы

- нормативное закрепление понятия «злоупотребление правом на обвинение»;

- привлечение к дисциплинарной ответственности защитника, злоупотребившего своими процессуальными правами;

- обязательное привлечение защитника при задержании лиц в порядке ст. 91 УПК РФ;

- обязательное участие защитника в уголовном судопроизводстве не только для особо перечисленного перечня лиц, но и для всех обвиняемых (подозреваемых), кто решил осуществлять свою защиту самостоятельно. Подводя итог, мы считаем, что право на защиту в уголовном процессе является сложной правовой категорией, охватывающей неограниченный спектр правовых возможностей. На наш взгляд, проблемы реализации этого права, в том числе перечисленные выше, могут быть устранены в первую очередь при условии качественной и эффективной деятельности должностных лиц, допускающей возможность беспрепятственного использования подозреваемым (обвиняемым) права на защиту.

Использованные источники:

1. Конституция Российской Федерации (принята всенародным голосованием 12.12.1993 с изменениями, одобренными в ходе общероссийского голосования 01.07.2020).

2. Уголовно-процессуальный кодекс Российской Федерации от 18.12.2001 N 174-ФЗ (ред. от 05.12.2022) (с изм. и доп., вступ. в силу с 26.12.2022) // [Электронный ресурс] – URL: https://www.consultant.ru/document/cons_doc_LAW_34481/ (дата обращения 28.12.2022)

3. Постановление Пленума Верховного Суда РФ от 30.06.2015 № 29 «О практике применения судами законодательства, обеспечивающего право на защиту в уголовном судопроизводстве» // СПС «КонсультантПлюс».

4. Мажогина Е.А. «Право обвиняемого на защиту как основополагающее начало уголовно-процессуального законодательства россии // Научные известия. 2022. №29».

5. Мигон Б.С.К. «Проблемные вопросы защиты прав обвиняемых по уголовным делам в Российской Федерации // Право и управление. 2023. №1».

УДК: 616.12-005.8-076.5

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ЛЕЧЕНИЕ И ВЕДЕНИЕ ИШЕМИЧЕСКОЙ БОЛЕЗНИ СЕРДЦА И ФАКТОРОВ РИСКА, НАБЛЮДАЕМЫХ ПРИ СОПУТСТВУЮЩЕЙ ПАТОЛОГИИ

Резюме. Коморбидная патология широко распространена у больных инфарктом миокарда. Одним из актуальных направлений современной кардиологии является изучение вклада коморбидности в прогноз у пациентов, перенесших инфаркт миокарда, а также оценка дисфункции эндотелия, как одного из ключевых звеньев в патогенезе атеросклероза. В исследование было включено 106 пациентов с инфарктом миокарда.

Ключевые слова: дисфункция эндотелия, коморбидность, инфаркт миокарда.

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TREATMENT AND MANAGEMENT OF CORONARY HEART DISEASE AND RISK FACTORS OBSERVED IN CONCOMITANT PATHOLOGY

Resume. Comorbid pathology is widespread in patients with myocardial infarction. One of the current directions of modern cardiology is to study the contribution of comorbidity to the prognosis in patients who have suffered a myocardial infarction, as well as the assessment of endothelial dysfunction as one of the key links in the pathogenesis of atherosclerosis. 106 patients with myocardial infarction were included in the study.

Key words: endothelial dysfunction, comorbidity, myocardial infarction.

Актуальность. В современном обществе сохраняется высокий уровень инвалидизации и смертности от сердечно-сосудистой патологии [4]. Вероятность развития фатальных сердечнососудистых осложнений повышается при разнообразных сочетаниях факторов риска с коморбидными состояниями [1,5].

Смертность от сердечно-сосудистых заболеваний и их осложнений в структуре общей смертности занимают первое место среди четырех основных

причин; а для ИМ в частности - на 50% превышают таковые от цереброваскулярных заболеваний в целом [8].

ИМ - патологическое состояние, характеризующееся абсолютным или относительным нарушением кровоснабжения миокарда вследствии поражения коронарных артерий сердца (определение Всемирной организации Здравоохранения, данное в 1965 году) [3,7].

За последнее время это определение не подверглось изменению. ССЗ, патогенетически связанные с атеросклерозом, а также их осложнения являются ведущей причиной смертности и инвалидизации в странах Западной Европы среди взрослого населения, США и Японии, а также в России.

Ежегодная смертность от ИМ составляет 2-3 %, а несмертельный инфаркт миокарда имеет частоту около 3 %. Важно подчеркнуть, что показатели смертности от ИМ среди пациентов мужского пола в возрасте 45-74 лет в России с 1965 по 1998 год выросли с 499 до 1152, а среди женщин этой же возрастной группы - с 237 до 402 на 100 тыс. населения [2,6]

Цель исследования. Изучить региональные особенности распространенности основных факторов риска и структуры коморбидной патологии у пациентов с ИМ с целью оптимизации вторичной профилактики у пациентов с ИМ.

Материалы и методы исследования. В исследование было включено 106 больных ИМ. Включение проводили при наличии информированного согласия. Критерии исключения: возраст пациента старше 75 лет, острая или хроническая экзогенная интоксикация, отказ пациента от исследования.

Результаты исследования. Всем пациентам проводили общеклиническое обследование (анализ крови, в том числе липидограмма, эхокардиография, суточное мо-ниторирование электрокардиограммы). Для оценки функционального класса (ФК) ХСН использовали тест с шестиминутной ходьбой (ТШХ). На 10-14 сутки ИМ, через 3, 6 месяцев и 1 год определяли функциональное состояние эндотелия методом периферийной артериальной тонометрии (ПАТ) на аппарате эндо-РАТ-2000 с программным обеспечением «Itamar Medical Ltd».

В республике Узбекистан пациенты с ИМ находятся преимущественно в возрасте 50-59 лет, для них характерна низкая социальная интегрированность; а также низкая социальная защищенность для женского контингента с ИМ;

Наиболее распространенными поведенческими факторами риска для пациентов с ИМ, проживающими в республике Узбекистан являются нарушения питания (100%), гиподинамия (53% с превалированием у женщин), а для мужчин к указанным факторам добавляется курение(24,3%).

Распространенность основных факторов риска (АГ, ГХС,НУВ) ССО не имеет половых различий, (АО) чаще встречается у женщин, возраст начала развития ИМ у женщин меньше чем у мужчин.

Основные усилия при коррекции ФР ССО направлены на достижение целевого уровня АД (57,4%), однако в связи с отсутствие должного

лабораторного контроля коррекция гипергликемии (34%)и гиперхолестеринемии (7,5%) находятся на крайне низком уровне.

У пациентов с ИМ наиболее часто выявляются заболевания ЖКТ и ХОБЛ. Язвенная болезнь желудка, мочекаменная болезнь и ХОБЛ у мужчин с ИМ выявляются в 2 раза чаще чем у женщин ($p<0,01$)

Соматические заболевания имеют наибольшую достоверную корреляционную связь с поведенческими факторами (нарушение питания, гиподинамия, курение, избыточный прием алкоголя) и АО, гиперхолестеринемией, гипергликемией и АГ.

Следовательно, коррекция факторов риска ССО приведет не только к снижению риска развития ССО, но и будет способствовать достижению ремиссии коморбидных заболеваний.

Вывод. Тактика лечения и профилактика у больных со стенокардией напряжения должны носить многокомпонентный характер с учетом широкого спектра социально-демографических показателей, основных факторов риска и сопутствующих заболеваний. Подобная тактика может улучшить качество и продолжительности жизни пациентов с коморбидным состоянием.

Для улучшения диагностики и коррекции основных факторов риска ССО и сопутствующих заболеваний необходимо расширить программы усовершенствования знаний врачей и медперсонала. Необходима также организация школ здравоохранения для пациентов с коморбидным состоянием.

Использованные источники:

1. Акимова Е.В., Пушкарев Г.С., Смазнов В.Ю., Гафаров В.В., Кузнецов В.А. Социально-экономические факторы риска кардиоваскулярной смерти: данные 12-летенго проспективного исследования. Российский кардиологический журнал. 2014. № 6 (110). С. 7-11.
2. Гиляревский С.Р., Резван В.В., Кузьмина И.М., Голшмид М.В.. Современные подходы к противоишемической терапии больных со стабильным течением ишемической болезни сердца. Русский медицинский журнал. 2014. Т. 22. № 12. С. 928-932.
3. Кантемирова Р.К., Кривенков С.Г., Фидарова З.Д. Значимые для клинико-трудового прогноза факторы у больных пожилого возраста с ишемической болезнью сердца, перенесших хирургическую реваскуляризацию миокарда. Успехи геронтологии. 2014. Т. 27. № 1. С. 120-123.
4. Лупанов В.П. Новые европейские методические рекомендации 2013 г. по лечению стабильной ишемической болезни сердца. Русский медицинский журнал. 2014. Т. 22. № 2. С. 98-105
5. Нуриллаева Н.М. Анализ распространенности и значение поведенческих факторов риска у больных ишемической болезнью сердца в амбулаторных условиях. Профилактическая медицина. 2011. Т. 14. № 1. С. 11-15.
6. Шальнова С.А., Деев А.Д., Капустина А.В., Евстифеева С.Е., Муромцева Г.А., Туаева Е.М., Баланова Ю.А., Константинов В.В., Киселева Н.В., Школьникова М.А. Ишемическая болезнь сердца у лиц 55 лет и старше.

Распространенность и прогноз. Кардиоваскулярная терапия и профилактика. 2014. Т. 13. № 4. С. 21-28.
7. Chan PS, Patel MR, Klein LW, Krone RJ, Dehmer GJ,Kennedy K, Nallamot hu BK, Masoudi FA, Rumsfeld JS, Brindis RG, Spertus JA. Appropriateness of percutaneous coronary intervention. JAMA 2011;306:53-61.
8. Sotoodehnia N, Turan TN, Virani SS, Wong ND, Woo D, Turner MB. Hea rt disease and stroke statistics: 2012 update: a report from the american heart association. Circulation2012;125:e2-e220

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ШАХС МАЪНАВИЙ КАМОЛОТИ РИВОЖИНИНГ ЎЗИГА ХОС ЖИҲАТЛАРИ

Аннотация. Мақолада маънавий камолот мазмуни, уни шакллантиришнинг ўзига хос жихатлари ифодаланган.

Калит сўзлар: маънавият, инсон, ахлоқ, фан ва техника, маънавий камолот.

Маънавият ва жамият бир-бири билан диалектик боғлиқ ва жамият маънавиятсиз бўлмаганидек, маънавият ҳам жамиятсиз юзага келиши, мумкин эмас.

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SPECIFIC ASPECTS OF PERSONAL SPIRITUAL PERSONAL DEVELOPMENT

Abstract. The article describes the content of spiritual maturity, specific aspects of its formation.

Key words: spirituality, human, ethics, science and technology, spiritual perfection.

Маънавият инсонга ўзига хос бетакрор моҳият, имконият бахш этиб, жамият аъзоларини бирлаштириб, уюштириб туради, у шахснинг, инсоннинг халқнинг, давлатнинг, жамиятнинг кучи ва қудратидир. “Биз кейинги пайтда, минг афсуски, «маънавият» тушунчасининг обрўйини тушириб юбордик. Маънавиятга гўёки кераксиз нарсадек муносабатда бўлдик. Бугун кўпчилик ёшлар онгини истеъмолчилик кайфияти, Ватан, эл-юрт тақдирига бепарволик, «оммавий маданият» кўринишлари эгаллаб олмоқда. Ўзингиз айтинг, ўз халқининг тарихини, маънавий ва диний қадриятларини ҳурмат қилмайдиган, уларни ҳимоя қилишга қодир бўлмаган одам ватанпарвар ва элпарвар бўлиши мумкинми?” [1].

Исоннинг моҳияти унинг жисмоний борлиғи билан эмас, балки маънавияти билан белгиланиб, маънавиятсиз инсон бўлмагандек, маънавиятдан ҳоли бўлган маърифатли, ривожланган жамият ҳам бўлмайди.

Чунки кишилар онгида янгича фикрлаш бўлмаса, яъни фуқаролар дунёқарашида тафаккурида янги дунёқарашни шакллантирмай туриб, сиёсий-иқтисодий амалга ошиши қийин кечади ва режалаштирилган мақсадларга эришиш қийин кечади.

Ҳар бир жамиятнинг маънавияти исон камолотининг у ёки бу босқичига хос бўлган иймон ва эътиқоди, аҳлоқ-одоби, тажриба ва малакасини ўз ичига олди ва кишилар фаолияти, истеъдоди, қобилияти, юриш-туришида, намоён бўлади. Кишиларнинг маънавий фазилатлари, дунёқараши, мафкуравий эътиқоди билан боғланиб муайан тартибга тушади ва уларнинг бевосита таъсири натижасида жамият олдидаги вазифаларини анчлашга ёрдам беради. Мустақиллик шароитида фуқаролар маънавий камолотнинг имкониятлари кенгаяди. Мустақиллик барча йўналишларад чуқур, мустаҳкам илдиз отиб бораётган шароитда такомиллашиб, кенгайиб ва чуқурлашиб бораётган аҳлоқий, ҳуқуқий бурч ва маъсулият билан боғланган манфаатлар маънавий камолотининг янги муаммоларини келтириб чиқараверади.

Муаммоларни миллий ва умуминсоний қадриятларга асосланиб ҳал қилиш маънавий тараққиётнинг асосий омилидир. Маънавий камолот халқнинг тархий, маданий мероси, миллий умуминсоний қадриятларнинг моҳиятини чуқур англаш ва аҳамиятини ҳолисона тушуниш, улардан оқилона фойдаланиш, ривожлантириш билан боғликдир. Жамият тараққиёти ва инсон маънавий камолотининг ўзига хос қуйидаги томонларини қайд қилиш мумкин. Биринчидан, биринчи Президентимиз И.Каримов таъкидлагандек, маънавият инсон қалибига она сути-ю, ота ўгитлари, авлодлар тажрибаси, жамоатчилик таъсири, маданий мерос, умуминсоний қадриятлар орқали сингади ва ҳаёт тажрибаси сабоқлари асосида мустаҳкамланиб, унинг шуурига кириб боради. Ирқидан, миллатидан, яшаётган аниқ жуғрофий шаритидан қатъий назар, инсон фарзандларининг барчасида, маънавий камолотнинг субъектив имкониятлари бир хилдир. Лекин шахс яшаётган давр, ижтимоий, сиёсий, маданий шароитлар билан тақозо қилинаётган объектив имкониятлар турлича бўлиши мумкин. Бу ҳам маънавий камолотнинг даражаси ва имкониятларига таъсир этади. Жамият тараққиёти жараёнида турли мамлакатлар ва халқларнинг маънавий камолоти даражаси турлича бўлиши ҳам шу объектив имкониятлар, шароитлар, эҳтиёжлар билан белгиланади.

Иккинчидан, инсон маънавий камолоти жамият тараққиётининг муҳим таркибий қисми, ҳал қилувчи омилидир.

Жамият маънавиятининг доимий равишда тараққий этиб бориши объектив қонуният бўлиб, шахс маънавий камолоти ҳам тарихий жараён ҳисобланиб, унинг ривожланиши учун доимо янги имкониятлар, эҳтиёжлар пайдо бўлаверади.

Ҳар бир тарихий даврда муайян шароитлар, ижтимоий эҳтиёж ва талаблар тақозоси билан маънавиятнинг ривожланиши учун маълум имкониятлар туғилади

Инсон маънавий камолоти асосида адолатга таяниш ётиб, адолатли жамиятда комил инсонни тарбиялашга имкони яратилиб, комил инсонлари жамият тараққиётини таъминлайдиган асосий омил ҳисобланади.

Учинчидан, инсон ақли, аҳлоқи такомиллашиб, фан ва техника ютуқларини, жамият тараққиёти тажрибаларини ўрганиб, ўзлаштириб

боргани сари маънавий омилларнинг жамият ҳаётига бўлган таъсири тобора ортиб бораверади. Дарҳақиқат, жамиятдаги барча катта-кичик муаммоларнинг моҳияти ва уларнинг истиқболи масалалари даставвал кишилар онгида пишиб етилади, сўнгра турмушга тадбиқ этилади.

Абдулла Авлоний ёзишича, ақл-идрокнинг тантана қилишига ишонмоқ лозим, чунки, “Ақл инсонларни пири комили, муршиди ягонасидир. Руҳ ишловчи, ақл бошловчидир. Инсон ақли ила дин ва эътиқодни маҳкам қилур, шариат хукмларига бўйсунди... Расули Акрам Набиий саллолох алайхи вассалам шундай деганлар: “Эй инсонлар! Ақлингизга тавозе қилингиз, Сиз жаноби Хақ буюрган ва қайтарган нарсаларни ақлингиз ила билурсиз” [2].

Мутуфаккирлардан бири: “... агар ақлиниг қули нафсининг жиловини ушласа, сени ёмон йўлларга кирмоқдан сақлар ҳар нарса кўп бўлса, баҳоси арзон бўлур, ақл эса илм ва тажриба соясида қанча кўпайса, қиммат баҳо бўлур”-деган. Инсонни улуғлаш, унинг қадрига етиш, айниқса ўсиб кела-ётган ёш авлодни ақл-идрокли, одобли қилиб тарбиялаш, уларни камолотга етказиш соҳасида Республикамизда бир қанча ишларни амалга оширмоқда.Дунё, инсон, ақл-заковат, маънавият- булар бир-бири билан чамбарчас боғлиқдир. Дунё бунёд бўлибдики, инсон дунё юзини кўрибдики, ўзини инсон сифатида англабдики, у ўзини борлиқнинг энг мукаммал мавжудоти сифатида ақл-заковати билан таниб келади. Инсон онги, тафаккури ва маънавияти туфайли шундай устунликка эгадир. Инсон дунёга маълум бир мақсад билан келмайди. У ўзлигини идрок этгандан сўнг ҳаётда яшашдан маъно излайди ва бу нарса унинг ҳаёти мазмунини ташкил этади.

Инсонлар бор, дунёга келадилару кетадилар, улардан ном-нишон қолмайди, ҳаётнинг маъносига, қадрига етмайдилар. Инсонлар бор - мана шу келиши билан кетиши ўртасидаги "умр" деб аталмиш вақтга чақмоқдай чақнаб, ўзларининг ёркин изини қолдирадилар. Бу из ўчмасдир. Мана шундай ақл-заковати билан ўзидан кейин яхши от қолдирувчилар маънавий юксак инсонлардир. Маънавий комил инсонгина шундай юксакликка, авлод-аждодлар қалбида замонлар оша, асрлар оша яшашдай шарафга сазовордир.Демак, инсон ўз ҳаёти ва фаолиятини мазмунли ўгказиш учун аввало ўзини ўраб турган борлиқни билши, юксак ақл ва тажриба эгаси бўлиши лозим. Чунки, инсон ақли ва унинг ҳаётида муҳим ўрин тутиш, ақл-идрок туфайлигина инсон донолик, теран фикр, ростгўйлик, тўғрилик, узоқни кўра билиш, нафснинг кўйига тушмаслик каби хусусиятларни амалга ошириш мумкин. Халқимизнинг "Ақл инсоннинг кўрки,"Ақл сувдан тиниқ, ойнадай равшан" каби нақллар бежиз айтилмаган.Шунинг учун ҳам ақл инсон учун ғоят олий неъматдир.Ақл билан илм-маърифат эгалланади, касб ҳосил қилинади, дунё сирлари ўрганилади. "Ақл- юрак ичидаги нур, бу нур билан ҳақ ёки ноҳақ билиб олинади", "Ақл ўз соҳибини дунё маломатларидан қутқаради". Ақл кишининг ўз иродаси, қалби ва фикри асосида дунёвий, ҳаётий ҳақиқатларни англаш ва уларга ўз фаолиятида маънавий-инсоний нуқтаи- назардан амал қилишдир. Зеро, биринчи президентимиз И.Каримов айтганларидек: “Илм, маърифат биз учун бугун ҳам ўз аҳамиятини йўқотгани

йўқ, йўқолмайди ҳам. Ақл- заковатли, юксак маънавиятли кишиларни тарбиялай олсаккина олдимизга қўйган мақсадларимизга эриша оламиз” [3].

Адабиётлар:

1. Ш.Мирзиёев. “Фойдаланилмаётган салоҳият, обрўйи тушиб кетган «маънавият» тушунчаси ва ХТВ мавқеси ҳақида”24.08.2019. https://kun.uz/53911247.
2. ААвлоний. "Туркий гулистон ёхуд ахлоқ".Т. 1991. Б.28.
3. Каримов И.А. Баркамол авлод орзуси. Т. 'Шарқ". 1998. Б.128.
4. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. *Scientific progress*, *3*(3), 934-937.
5. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. *INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL*, *3*(3), 203-207.
6. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. *FAN, TA'LIM, MADANIYAT VA INNOVATSIYA*, *1*(2), 69-73.
7. Melikuziyevich, K. P., & Abdurashidovich, T. M. (2021). State and community management-as a priority task in the appeal. *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, *2*(2), 133-136.
8. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.
9. Ruziev, A. J. (2019). ИЗУЧЕНИЕ МИРОВОЗЗРЕНИЯ И ДЕЯТЕЛЬНОСТИ МЫСЛИТЕЛЕЙ КАК ИСТОРИЧЕСКОГО КРИТЕРИЯ. Theoretical & Applied Science, (11), 166-169.
10. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
11. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
12. Рўзиев, А. (2020). АМИР ТЕМУР ҚАРАШЛАРИДА СИЁСИЙ-ҲУҚУҚИЙ ҒОЯЛАРНИНГ АКС ЭТИШИ. Научно-просветительский журнал" Наставник".
13. Ibodullaevich, K. K., & Mahmatkobil, O. (2022). “Electronic System”-Estonia Is Among the Leaders in The Fight Against Corruption. Eurasian Journal of Humanities and Social Sciences, 5, 152-155.
14. Ibodullaevich, K. K. (2022, April). In the fight against justice and corruption as an effective road. In E Conference Zone (pp. 370-372).

УДК 617.546-009.7:612.829.32-085.276

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ФАКТОРЫ ОЦЕНКИ ЭФФЕКТИВНОСТИ НЕСТЕРОИДНЫХ ПРОТИВОВОСПАЛИТЕЛЬНЫХ ПРЕПАРАТОВ У ПАЦИЕНТОВ С ПОЯСНИЧНОЙ БОЛЬЮ

Резюме. Поясничная боль (ПБ) – один из наиболее распространенных клинических синдромов, с которым в повседневной практике сталкиваются неврологи, терапевты, врачи общей практики, представители других специальностей.

Распространенность ПБ в популяции сопоставима с распространенностью таких заболеваний, как острые сезонные респираторные инфекции, дегенеративные и воспалительные поражения мелких суставов, депрессивные расстройства.

Тенденция к рецидивированию, частые обострения болевого синдрома, временная и, нередко, стойкая утрата трудоспособности вследствие ПБ связаны со значительными материальными затратами.

Ключевые слова: поясничная боль, нестроидные противовоспалительные препараты.

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NON-STEROIDAL ANTI-INFLAMMATORY DRUGS IN PATIENTS WITH BACK PAIN

Resume. Low back pain (LP) is one of the most common clinical syndromes encountered in everyday practice by neurologists, therapists, general practitioners, and representatives of other specialties.

The prevalence of PB in the population is comparable to the prevalence of diseases such as acute seasonal respiratory infections, degenerative and inflammatory lesions of small joints, and depressive disorders.

The tendency to relapse, frequent exacerbations of pain syndrome, temporary and, often, persistent disability due to PB are associated with significant material costs.

Key words: low back pain, non-steroid anti-inflammatory drugs.

Актуальность. В настоящее время считается, что ПБ обусловлена сочетанием нейродегенеративных и дистрофических поражений дугоотростчатых суставов, межпозвонковых дисков, связочного аппарата позвоночника [3]. Важную роль в ее развитии играет изменение тонуса поперечно-полосатой мускулатуры – мышечный спазм, возникающий в ответ на болевые раздражители и приводящий к формированию нарушений осанки [1].

Крупные грыжи межпозвонковых дисков, являющиеся причиной болевого синдрома, значительно чаще встречаются у людей молодого и среднего возраста, ведущих активный образ жизни, испытывающих значительные физические нагрузки [2,5]. Относительно реже клинически значимые грыжи межпозвонковых дисков встречаются у пожилых пациентов, у которых источником болевого синдрома являются измененные суставы и связки позвоночника [4].

Цель исследования. Изучить эффективности нестероидные противовоспалительные препараты у пациентов с поясничной болью.

Материалы и методы исследования. Изначально в основную группу больных, на протяжении 10 дней получавших комбинацию Артрозана (по 15 мг/сут) и Комбилипена (по 2 мл в/м), были включены 48 больных с острой ПБ. В последующем из исследования по различным причинам выбыли 4 больных. Окончательному анализу были подвергнуты результаты наблюдения за 44 пациентами.

Результаты исследования. Группу сравнения составили 19 пациентов, получавших только Артрозан и не получавших Комбилипен. Средний возраст пациентов группы сравнения (10 мужчин и 9 женщин) составил 47,1±6,8 года. Группы были полностью сопоставимы между собой по основным клиническим и демографическим показателям.

Критерии включения больных в исследование: возраст от 18 до 75 лет; болевой синдром в области поясницы вне зависимости от наличия или отсутствия корешкового синдрома; доброкачественный характер заболевания, подтвержденный радиологическим исследованием (рентгенография, компьютерная или магнитно-резонансная томография поясничного отдела позвоночника, исследование состава периферической крови (количество клеточных элементов белой и красной крови, СОЭ); длительность болевого синдрома не более 4 нед.; готовность больного принять участие в исследовании.

Критерии исключения: наличие воспалительных и травматических поражений позвоночника; новообразований костей позвоночника, спинного мозга, его оболочек и спинальных корешков; длительность болевого синдрома более 4 нед.; язвенная болезнь двенадцатиперстной кишки или желудка в стадии обострения; тяжелые формы печеночной или почечной недостаточности; психические расстройства, исключающие возможность объективной оценки состояния больного; непереносимость препаратов Артрозан или Комбилипен либо компонентов, входящих в их состав;

одновременное применение миорелаксантов, противоболевых препаратов центрального действия (противоэпилептические средства, антидепрессанты).

Целями проводимой терапии являются не только устранение болевого синдрома, но и расширение возможностей самообслуживания пациента и достижение его полной независимости от посторонней помощи в повседневной жизни, повышение качества жизни больного. Для улучшения качества ведения пациентов с ПБ требуются максимально раннее устранение болевого синдрома, своевременное расширение двигательного режима, активное вовлечение больного в лечебно-реабилитационный процесс. Устранение боли обеспечивает возможности для проведения пациенту комплекса реабилитационных мероприятий.

В ряде случаев компрессия спинальных корешков грыж межпозвонкового диска приводит к формированию радикулярного болевого синдрома, характеризующегося структурными изменениями в самом нервном стволе и его оболочках, сочетанием элементов ноцицептивной и нейропатической боли, требующего специфических подходов к лечению. Лечение таких пациентов помимо обезболивания предполагает также восстановление структурной и функциональной целостности нервных волокон. В этой связи представляется перспективным применение комбинированной терапии, включающей одновременное назначение НПВП и витаминов группы В. Как свидетельствуют результаты проведенных ранее клинических исследований, применение такой терапии сопровождается не только более ранним и длительным обезболивающим эффектом, но и снижением потребности в приеме НПВП и уменьшением вероятности развития нежелательных побочных эффектов.

Полученные в результате исследования данные свидетельствуют о том, что комбинированное применение Артрозана и Комбилипена у пациентов с ПБ характеризуется хорошей переносимостью, низкой частотой клинически значимых нежелательных побочных эффектов, сокращением сроков купирования болевого синдрома. Положительный эффект комбинированной терапии наблюдается не только в период приема препаратов, но и в последующем. Данная комбинация препаратов может быть использована у значительной части пациентов с мышечно-скелетными болевыми синдромами.

Вывод. Полученные в результате исследования данные свидетельствуют о том, что комбинированное применение Артрозана и Комбилипена у пациентов с ПБ характеризуется хорошей переносимостью, низкой частотой клинически значимых нежелательных побочных эффектов, сокращением сроков купирования болевого синдрома. Положительный эффект комбинированной терапии наблюдается не только в период приема препаратов, но и в последующем. Данная комбинация препаратов может быть использована у значительной части пациентов с мышечно-скелетными болевыми синдромами.

Использованные источники:

1.Есин Р.Г., Есин О.Р., Ахмадеева Г.Д., Салихова Г.В. Боль в спине. Казань: Казанский полиграфкомбинат, 2010. 272 с.

2.Каратеев А.Е., Насонова В.А. НПВП-ассоциированная гепатопатия // Научно-практическая ревматология. 2013. № 4. С. 87–91.

3.Левин О.С., Мосейкин И.А. Комплекс витаминов группы В (Мильгамма) в лечении дискогенной пояснично-крестцовой радикулопатии // Журн. неврол. и психиатр. им. С.С. Корсакова. 2009. № 10. С. 30–35.

4.Asghar W., Jamali F. The effect of COX-2-selective meloxicam on the myocardial, vascular and renal risks: a systematic review // Inflammopharmacology. 2015 Feb. Vol. 23 (1). P. 1–16.

5.Chiu C., Low T., Tey Y., Singh V., Shong H. The efficacy and safety of intramuscular injections of methylcobalamin in patients with chronic nonspecific low back pain: a randomised controlled trial // Singapore Med J. 2011. Vol. 52 (12). P. 868–873.

УДК 616.132.2-008.64-06

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ПАТОГЕНЕЗ И МЕТОДЫ ЛЕЧЕНИЯ НЕСТАБИЛЬНОЙ СТЕНОКАРДИИ В ФАРМАКОТЕРАПИИ

Резюме. В качестве независимых маркеров и предикторов развития ИБС и сердечно-сосудистых осложнений изучены показатели периферического атеросклероза (лодыжечно-плечевой индекс) и функционального состояния почек (клиренс креатинина) у лиц без ИБС и пациентов с различными проявлениями ишемии миокарда.

Предложено мониторирование изучаемых показателей для улучшения прогноза здоровых лиц и пациентов ИБС.

Ключевые слова: ишемическая болезни сердца, эпидемиология, стенокардия.

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PATHOGENESIS AND METHODS OF TREATMENT OF UNSTABLE ANGINA PECTORIS IN PHARMACOTHERAPY

Resume. The indices of peripheral atherosclerosis (ankle-brachial index) and functional state of the kidneys (creatinine clearance) in patients without coronary artery disease and patients with various manifestations of myocardial ischemia were studied as independent markers and predictors of the development of ischemic heart disease and cardiovascular complications.

Monitoring of the studied parameters is proposed to improve the prognosis of healthy individuals and patients with coronary artery disease.

Key words: ischemic heart disease, epidemiology, angina pectoris.

Актуальность. Несмотря на то, что нестабильная стенокардия (НС), как одно из наиболее распространенных, но слабо предсказуемых клинических проявлений ишемической болезни сердца (ИБС), изучается уже более 50 лет, эта форма стенокардии и сегодня относится к числу актуальных проблем кардиологии [2,6]. По современным представлениям НС, наряду с инфарктом миокарда без зубца Q (мелкоочаговый инфаркт) и крупноочаговым инфарктом, входит в единое понятие «острый коронарный синдром» (ОКС). Это свидетельствует об ее опасности для здоровья и жизни пациента, в то же

время, в структуре ОКС эта форма ИБС, как никакая другая, позволяет с большей долей вероятности предупредить ближайшие и отдаленные неблагоприятные исходы [1,8].

В иностранной и отечественной медицинской литературе представлено значительное количество работ по различным аспектам НС. Подавляющее большинство из них посвящено вопросам диагностики и лечения этой патологии преимущественно в условиях стационара. Однако, существуют и другие важные вопросы, связанные с НС, которые исследованы явно недостаточно или не исследованы совсем. Фактически отсутствуют работы по изучению клинической структуры НС, частоты заболеваемости данной патологией на популяционном уровне как в целом, так и отдельных ее клинических форм [4].

Крайне мало исследований, посвященных длительному проспективному наблюдению за больными с НС. Явно недостаточно работ по выявлению наиболее угрожаемых, в- плане развития острого инфаркта миокарда (ОИМ), клинических форм НС, а таюке определению факторов, влияющих на дальнейшее течение и прогноз ИБС. Приводимые в литературе данные по указанным выше проблемам отрывочны, противоречивы и иногда достаточно «возрастные» [3,5].

За последние годы стало актуальным изучение вопросов диагностики и организации медицинской помощи больным с НС на догоспитальном этапе.

Цель настоящего исследования. На основе изучения особенностей патогенетических механизмов развития различных клинических вариантов нестабильной стенокардии разработать новые подходы к ее эффективному медикаментозному лечению.

Материалы и методы исследования. Для решения поставленных задач, мы обследовали 35 пациенток с диагнозом ИБС.

Результаты исследования. Хотя эти методики позволяют оценить распространение пациентов с ангинозным синдромом в популяции, точный диагноз истинной стенокардии (т.е. болевой синдром в грудной клетке, вызванный изменениями венечных артерий) требует документированного подтверждения ишемии миокарда в связи с ограниченной точностью симптомов - предикторов заболевания венечных артерий.

Несколько исследований в различных когортах больных показало, что ежегодный уровень неосложненной стенокардии составляет около 0,5% у жителей западных стран в возрасте старше 40 лет, хотя географические колебания очевидны. Например, частота встречаемости стенокардии составила 0,54% в Белфасте (Северная Ирландия) и только 0,26% во Франции. Такая географическая вариабельность также была подтверждена в недавних исследованиях, показывающих, что частота встречаемости стенокардии соответствует уровню смертности от ИБС. В целом, картина может выглядеть так: в большинстве европейских стран каждый год появляется от 20 000 до 40 000 новых больных стенокардий. Распространение стенокардии возрастает с

возрастом среди обоих полов. В возрасте 45-54 лет частота встречаемости стенокардии составляет около 2-5%, тогда как в возрасте 65-74 лет - 10-20%.

Распространенность хронической ИБС, однако, значительно больше и обусловлено частым отсутствием болевого синдрома у больных со стабильной или стабилизированной ИБС. Интересно, что распространенность стенокардии на протяжении нескольких десятилетий и в разных странах мира представляется несколько более высокой среди женщин, чем среди мужчин, со средним соотношением 1,2.

Эти данные относятся к оценке только симптомов, тогда как определенный диагноз обструктивного атеросклеротического поражения коронарного русла среди больных стенокардией устанавливается чаще у мужчин, чем у женщин. Действительно, среди больных с загрудинными болями, подозрительными на ишемию миокарда, которым выполняется коронароангиография, 10-30% имеют нормальные или почти нормальные (мало измененные) венечные артерии. 70-80% среди них женщины.

Вывод. Полученные результаты могут быть использованы при организации медицинской помощи больным с нестабильной стенокардией. Реализация высказанных рекомендаций может способствовать повышению эффективности ее деятельности.

Определены факторы, влияющие на ближайший и отдаленный прогноз нестабильной стенокардии, выявлены те клинические проявления данной патологии, которые являются наиболее угрожаемыми в отношении развития острых коронарных катастроф (ОКК).

Предложенная модель прогнозирования ближайших исходов НС - рекомендована к использованию врачам первичного звена для расчета шансов развития неблагоприятных исходов и определения оптимальной лечебной тактики по отношению к больному НС.

Использованные источники:

1. Вялкина Ю.А. Клиренс креатинина в долгосрочном прогнозировании риска сердечно-сосудистой смерти у больных острым коронарным синдромом без подъемов сегмента ST / Ю.А. Вялкина, С.В. Шалаев // Клиническая нефрология. - 2011. - № 2. - С. 27-30.
2. Грищенко М.Ю. Динамика факторов риска сердечно-сосудистых заболеваний по данным мониторинга 2002-2007 гг. / М.Ю. Грищенко, Э.Г. Волкова, С.Ю. Левашов // Последипломное образование и наука. - 2009. - № 1. - С. 21-27.
3. Дудко В.А. Атеросклероз сосудов сердца и головного мозга / В.А. Дудко, Р.С. Карпов. - Томск: STT, 2013. - 416 с.
4. Оганов Р.Г. Профилактика сердечно-сосудистых и других неинфекционных заболеваний - основа улучшения демографической ситуации в России / Р.Г. Оганов, Г.Я. Масленникова // Кардиоваскулярная терапия и профилактика. - 2015. - № 3. - С. 4-9.

5. Чазов Е.И. Ишемическая болезнь сердца и возможности повышения эффективности её лечения // Ишемическая болезнь сердца: материалы форума. - 2010. - С. 2-5.
6. Benchimol D. Accuracy of ankle-brachial index using an automatic blood pressure device to detect peripheral artery disease in preventive medicine / D. Benchimol, X. Pillois, A. Benchimol, A. Houitte, P. Sagardiluz, L. Tortelier, J. Bonnet // Arch. Cardiovasc. Dis. - 2009. - 102 (6-7) - P. 519-524.
7. Cockroft D.W. Prediction of creatinine clearance from serum creatinine / D.W. Cockroft, M.H. Gault // Nephron. - 2016. - Vol. 16. - P. 31-41.
8. Hiatt W.R. Medical treatment of peripheral arterial disease and claudication // N. Engl. J. Med. - 2011. - Vol. 344. - P. 1608-1621.

УДК 336.711

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СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА МЕТОДИЧЕСКИХ ПОДХОДОВ К ОЦЕНКЕ ЭФФЕКТИВНОСТИ ДЕЯТЕЛЬНОСТИ БАНКОВ

В данной статье проведена сравнительная характеристика методических подходов к оценке эффективности деятельности банков. Автором произведены оценки эффективности с использованием вероятностного многофакторного подхода (метод DEA) и рейтинговой методики, основанной на анализе коэффициентов экономической эффективности. Проведен анализ и дана оценка эффективности деятельности банков.

Ключевые слова: эффективность, деятельность банков, метод DEA, коэффициент, рентабельность.

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COMPARATIVE CHARACTERIZATION OF METHODOLOGICAL APPROACHES TO ASSESSING THE EFFICIENCY OF BANKS' ACTIVITIES

This article provides a comparative characterization of methodological approaches to the assessment of banks' efficiency. The author estimates efficiency using the probabilistic multifactor approach (DEA method) and rating methodology based on the analysis of economic efficiency ratios. The efficiency of banks' activity has been analyzed and evaluated.

Key words: efficiency, banks' activity, DEA method, coefficient, profitability.

Эффективное развитие финансовой и банковской системы страны является значимым и существенным фактором экономического роста выполняя важные функции, такие, как трансформация сбережений в

инвестиции и упрощение трансакций между экономическими агентами, банковская система может не обладать достаточной устойчивостью для противостояния кризисным ситуациям. Курс на формирование сильного и динамично развивающегося банковского сектора повышает значимость вопросов управления эффективностью деятельности каждого конкретного коммерческого банка для банковской системы в целом. Поэтому проблема оценки эффективности деятельности банков и принятия мер по ее повышению требует подробного изучения

Существует два основных подхода к оценке банковской эффективности. Первый основывается на расчете различных экономических коэффициентов, отражающих рентабельность, деловую активность, ликвидность, качество менеджмента и доходность активов. Данные коэффициенты могут быть использованы для расчета рейтинга банка по различным рейтинговым методикам. Второй подход (параметрический и непараметрический методы) основываются на построении границы эффективности. Наиболее распространенным методом для оценки эффективности банковского сектора является непараметрический метод DEA, активно используемый в мировой практике [1].

В качестве методологической основы исследования были выбраны два метода: метод оболочечного анализа данных (DEA) и рейтинговые показатели коэффициентов эффективности (рентабельность капитала и рентабельность активов).

С помощью метода DEA была проанализирована эффективность деятельности 12 банков Республики Беларусь за 2021 г. Информационную базу исследования составили данные Национального Банка Республики Беларусь [2]. Для анализа банковского сектора предпочтительнее является выбор «input»-модели, так как оптимизация расходов является важным элементом управления банком в условиях нестабильной экономики. В настоящее время банки «зарабатывают» значительную прибыль, постоянно расширяя спектр своих услуг и привлекая все новых клиентов, но главной оценкой работы банков является их эффективность, то есть способность работать и развиваться при минимальных издержках.

Рейтинговая методика включает расчет четырех групп показателей: финансовой устойчивости (доля собственного капитала в привлеченных средствах, мультипликатор капитала, доля собственного капитала в активах); деловой активности (коэффициент доходных активов, доля средств клиентов в обязательствах); ликвидности банка (коэффициенты ликвидности и мгновенной ликвидности); рентабельности (рентабельность активов и собственного капитала). Показатели рентабельности характеризуют эффективность менеджмента.

Коэффициент доходных активов показывает эффективность размещения ресурсов. Доля собственного капитала в привлеченных средствах отражает зависимость банка от привлеченных средств. Коэффициент мгновенной ликвидности показывает возможность банка погашать

средствами из кассы и корреспондентских счетов обязательства по всем депозитам. Мультипликатор капитала характеризует эффективность использования собственного капитала. Доля средств клиентов в пассивах характеризует популярность банка среди клиентов. Доля собственного капитала в активах показывает, насколько банк защищен от различных рисков.

Для сравнительной характеристики методов оценки банковской эффективности составим таблицу 1, содержащую оценку по результатам DEA-анализа и «классические» коэффициенты эффективности (рентабельность капитала и рентабельность активов) за 2021 год.

Таблица 1 – Выборочная сравнительная характеристика различных методов оценки банковской эффективности на 01.01.2022 год

Банк	Позиция в рейтинге DEA	Рэнкинг банков		ROA, %	ROE,%
		ROA	ROE		
Белинвестбанк	8	11	11	0,6	5,2
Банк Дабрабыт	1	4	3	2,5	20,1
Беларусбанк	12	9	10	1,0	6,9
Банк БелВЭБ	7	10	9	0,9	7,2
Технобанк	3	7	6	1,7	13,4
БНБ-Банк	6	8	7	1,6	12,6
Банк ВТБ	9	5	5	2,4	16,1
МТБанк	2	2	4	3,2	16,5
Белгазпромбанк	11	6	8	2,1	10,5
Альфа-Банк	4	1	1	4,6	28,5
Сбербанк	5	3	2	3,1	21,0
БТА Банк	10	12	12	0,3	2,4

За 2021 год из выше указанных банков самыми эффективными были: Банк Дабрабыт, МТБанк, Технобанк и Альфа-Банк. Данный рейтинг показал, что банки, которые имеют одни из наибольшего количества активов не всегда будут самыми эффективными. Белгазпромбанк, например, в 2021 году занял 11 место в рейтинге DEA, имея среднее количество активов.

В качестве проблем у всех банков можно отметить убыточность, неразвитость клиентской базы, высокую ликвидность, неэффективность использования собственного капитала, сильную зависимость от внешней среды. Все это ставит под вопрос дальнейшее существование данных банков. На мой взгляд, преодоление всех этих проблем возможно лишь при инновационном подходе и коренных реформах.

Таким образом, при помощи описанного выше инструментария можно оценивать эффективность работы банка. Использованные при оценке эффективности методы и методики помогают всестороннее рассмотреть банковские показатели и выявить скрытые проблемы. Очевидно, что данный метод желательно использовать в динамике и в сравнении между собой. Это позволяет судить о скрытых резервах той или иной кредитной организации,

или другими словами, о том, каковы дополнительные возможности повышения эффективности банка в рамках конкретных, заданных условий его деятельности. Полученные оценки эффективности могут быть использованы клиентами банковской системы в качестве объективного, прозрачного и сравнимого с другими банками рейтинги, а исследователями - в качестве статистического инструмента для анализа банковского сектора экономики. Оценки эффективности деятельности банка и ее взаимосвязь с различными факторами внешней и внутренней среды могут быть использованы управляющим персоналом банка с целью улучшения качества управления и анализа принятых решений.

Использованные источники:

1. Grmanova, E. Efficiency of banks in Slovakia: measuring by DEA models / E. Grmanova, E. Ivanova // Journal of International Studies. – 2017. –Vol. 11, №1. – P. 257-272.
2. Официальный сайт Национального банка Республики Беларусь [Электронный ресурс]. – Режим доступа:https://www.nbrb.by/. (дата обращения: 15.01.2024).

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ТЕХНОЛОГИИ ИЗГОТОВЛЕНИЯ ШПАЛ-МЕТАЛЛИЧЕСКИЕ КОНСТРУКЦИИ ПОДРЕЛЬСОВЫХ ОСНОВАНИЙ

Аннотация. Данное исследование представляет обзор технологий изготовления металлических шпал, являющихся важным элементом инфраструктуры железнодорожного транспорта. Рассматриваются современные методы проектирования и производства, начиная с концепции формы и размеров, а заканчивая инновационными процессами, такими как холодная однократная штамповка. Освещается история развития металлических шпал и их преимущества перед традиционными материалами. Исследование также выделяет роль металлических шпал в повышении устойчивости и долговечности железнодорожных путей.

Ключевые слова. металлические шпалы, подрельсовые основания, технологии изготовления, инфраструктура железнодорожного транспорта, долговечность, стойкость, холодная штамповка.

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TECHNOLOGIES FOR MANUFACTURING TIES-METAL STRUCTURES OF UNDER-RAIL BASES

Abstract. This study provides an overview of the technologies for manufacturing metal sleepers, an essential component of railway infrastructure. Modern methods of design and production are discussed, starting from the concept of shapes and sizes to innovative processes such as cold single-piece stamping. The historical development of metal sleepers and their advantages over traditional materials are highlighted. The study also emphasizes the role of metal sleepers in enhancing the stability and durability of railway tracks.

Keywords. metal sleepers, under-rail foundations, manufacturing technologies, railway infrastructure, durability, resilience, cold stamping.

В мире железнодорожного транспорта технологии изготовления шпал претерпевают постоянные изменения и совершенствования, направленные на увеличение долговечности, стойкости к воздействию природных факторов, а также обеспечение устойчивости и безопасности движения поездов. Среди различных типов шпал особое внимание уделяется металлическим конструкциям подрельсовых оснований, представляющим собой эффективное решение для определенных условий эксплуатации. В данном

обзоре рассмотрены современные технологии изготовления металлических шпал, а также их применение и преимущества.

Развитие металлических шпал от корпорации Nippon Steel началось в 1982 году, когда компания провела проект по производству шпал для экспорта на зарубежные горные железные дороги. В январе 1984 года началось производство прокатом стальных шпал для легких осевых нагрузок (осевая нагрузка P=18-25 т). В июле 1985 года в рамках отдела по технологиям строительства и оборудования была создана железнодорожная группа разработки для запуска проекта "Исследование структуры пути с длительным сроком службы", который завершился в 1988 году. Технический отчет UDC 625. 142. 3 "История стальных шпал и последние разработки" Хироки Ямада, Кодзи Ооба, Томонори Томинага, Хироши Уэда, Кэй Кавабата, Нобухито Ногучи, Тэцуро Саката, Хидетоси Сусуки. Разработка стальных железнодорожных шпал, выпускаемых корпорацией Nippon Steel & Sumitomo Metal Corporation и Nippon Steel & Sumikin Texeng. Co.,Ltd., началась в 1982 году в качестве экспортного продукта для иностранных горных железных дорог. Форма текущих шпал в основном разработана на основе формы и метода проектирования стальных шпал в Европе и Америке, но была усовершенствована на основе количественных исследований по вопросам безопасности и долгосрочной производительности службы. Также было проведено исследование крепежных устройств для улучшенной удобности использования и экономичности. В отчете рассматривается история развития стальных шпал и представлены последние оптимизации стальных тяжеловесных шпал, применяемых на железнодорожных путях сталелитейных заводов. С тех пор, с улучшениями различных частей, включая крепежные устройства с 1992 года, проводившиеся в целях расширения продаж в группу JR и другие частные компании, мы продолжаем разработку технологий. Запуск комитета по улучшению/разработке структуры переводных путей для тяжелых осевых нагрузок и его результаты разработки История разработки стальных шпал в NSC начинается с комитета по исследованию улучшения/разработки подструктуры переводных путей для тяжелых осевых нагрузок, созданного в июле 1979 года. Чтобы удовлетворить потребности в технической поддержке и сотрудничестве по строительству и реконструкции железных дорог в различных странах за границей, сталепрокатные и производственные отрасли страны должны были приобрести опыт. В этой ситуации деятельность комитета была стимулирована с целью применения стальных шпал к переводам для железнодорожных вагонов с тяжелой осевой нагрузкой, а также к обычным путям. Головной офис комитета был создан в ассоциации инженеров железных дорог Японии, членами которой были Японские национальные железные дороги (далее - JNR), Nippon Steel Corporation, Nippon Kokan Kabushiki Kaisha, Kawasaki Steel Corporation и Японская ассоциация производителей переводных путей. Комитет активно проводил исследования и разработки на основе данных, полученных как в Японии, так и за границей, путем изучения состояния установки и использования стальных шпал и анализа результатов исследований фактических

условий в участках строительства железных дорог. О завершении этих деятельностей было сообщено в отчете "Исследование улучшения/разработки переводных путей с тяжелой осевой нагрузкой" в марте 1983 года. Базовые концепции, используемые для определения условий проектирования и допускаемого напряжения стальных шпал, следующие. Проектные нагрузки изучались два типа стальных шпал: шпалы для легкой осевой нагрузки и тяжелой осевой нагрузки. Для шпал для легкой осевой нагрузки использовалась проектная осевая нагрузка JNR (P=16 т; для линий Шинкансен и обычных железных дорог), а для шпал для тяжелой осевой нагрузки использовалась стандартная осевая нагрузка E80 (P=36 т; для стальных конструкций), используемая Американской ассоциацией инженеров железнодорожного транспорта (AREA) при проектировании мостов. Методы проектирования использовались метод проектирования шпал PC Японских национальных железных дорог и метод проектирования стальных шпал Федеральных железных дорог Германии (Deutsche Bundesbahn [далее - D.B.]). Допускаемое напряжение базового материала определялось на основе концепции D.B.

Что касается поперечных форм и размеров стальных шпал, было разработано четыре формы поперечного сечения для шпал легких осевых нагрузок и три формы для шпал тяжелых осевых нагрузок, с учетом форм существующих стальных шпал (в форме перевернутой миски), используемых в различных европейских странах. Для форм и размеров концов стальных шпал проводились испытания бокового сопротивления балласта, и результаты испытаний сравнивались с результатами испытаний шпал PC и деревянных шпал. На основе результатов сравнения были определены высота чертежа, радиус изгиба и градиент изгиба. Вес шпал определялся с учетом веса деревянных шпал, используемых Японскими национальными железными дорогами (60 кг на шпальный блок), с учетом коррозионной запасности 1 мм. На основе вышеописанных условий толщина стальной шпали для легких осевых нагрузок была установлена на уровне 8 мм, а для тяжелых осевых нагрузок - 11 мм. После рассмотрения различных факторов, включая результаты испытаний предполагаемых стальных шпал, ограничения по изготовлению и стиль упаковки при отправке (при складировании), для каждого типа шпалы была выбрана одна форма.Параллельно с деятельностью вышеупомянутого комитета, NSC начала разрабатывать собственные стальные шпалы, когда к ней обратились в 1982 году две компании, занимающиеся горными железными дорогами: Companhia Vale do Rio Doce (далее "C.V.R.D."), базирующаяся в Бразилии, и British Columbia Mining Railways в Канаде (далее "B.C.R"). Развитие было сфокусировано под эгидой совместной структуры разработки отдела по технологиям строительства и оборудования (далее "PET-B") того времени, Бар Сталевого Инженерного Отдела в Yawata Works (далее "Yawata Bar Steel") и Yawata R&D Lab. (далее "Yawata Lab.") Центральных исследовательских лабораторий. В ходе разработки, основываясь на проектных условиях, предложенных каждой компанией в ходе дискуссий, было определено

допустимое напряжение материалов стали с учетом прошлых исследований JNR и D.B., и были рассмотрены поперечные свойства, необходимые для шпал.

Ориентируясь на прошлые исследования JNR и D.B., NSC определила допустимую напряженность напряжений (изгиб, растяжение и сжатие) материалов стали шпал в соответствии со Стандартом проектирования стальных конструкций Института архитектуры Японии, а также определила допустимую напряженность напряжений, связанную с усталостью, следуя концепции D.B., основанной на DIN (Deutsches Industrie-Norm). Поперечные формы стальных шпал были определены на основе различных значений допустимой напряженности и исследованных необходимых поперечных свойств. Окончательные основные формы были определены так, чтобы значение, полученное при делении модуля сечения на вес, было максимальным, выбрано из поперечных форм, которые удовлетворяли требуемому модулю сечения согласно формам поперечных сечений, которые исследовала JNR. Кроме того, формы изгибов на концах были проверены в различных внутренних испытаниях, проведенных совместно тремя вышеупомянутыми отделами с 1983 по 1984 год, и высота изгиба с боковым сопротивлением, эквивалентным шпалам PC-3, была установлена на уровне 210 и 170 мм.

В России применение металлических шпал остается довольно редким явлением, основными причинами которого являются их высокая металлоемкость, подверженность коррозии и создание большого шума при движении поездов. Несмотря на эти ограничения, металлические шпалы обладают несколькими преимуществами, что делает их конкурентоспособными на рынке. Преимущества использования металлических шпал включают в себя долгий срок службы, превосходящий сроки службы железобетонных и деревянных шпал. После завершения эксплуатации металлические шпалы могут быть легко переработаны, что позволяет сохранить до 40% их первоначальной стоимости, они также обладают устойчивостью к гниению, не растрескиваются, выдерживают высокие температуры, что делает их применимыми в различных климатических условиях, включая влажные тропические зоны. Одним из ключевых факторов, который сталкивается с проблемами при транспортировке грузов, являются сходы с рельсов подвижного состава, особенно в связи с уширением железнодорожной колеи. Применение металлических шпал позволяет сократить количество сходов по уширению, обеспечивая стабилизацию ширины колеи. Также следует отметить, что металлические шпалы обладают высокой ремонтопригодностью, в отличие от деревянных и железобетонных шпал, которые часто не подлежат восстановлению после сходов. Металлические шпалы могут быть подвергнуты ремонту и использоваться многократно, что снижает затраты на замену и поддерживает устойчивость инфраструктуры железнодорожного транспорта. В дополнение к железнодорожной инфраструктуре, металлические шпалы также находят применение в доменном и сталеплавильном производстве, где высокие температуры могут быть проблемой для деревянных шпал и железобетонных шпал подвержены расслоению бетона.

Производство металлических шпал в России осуществляется с использованием холодногнутых шпальных профилей из листовых заготовок разной толщины (6 мм, 8 мм, 10 мм) или горячекатаного проката. Разнообразие толщины листа позволяет создавать и эффективно использовать шпалы в зависимости от грузонапряженности конкретного участка железнодорожного пути. Первые металлические шпалы появились в России в 1834 году, а в 1903 году были впервые применены опытные железобетонные шпалы. Металлические шпалы были уложены на Мариупольском участке Донецкой железной дороги, а в 1912 году 135-километровый путь между станциями Гербы и Кельцы также был выполнен с использованием металлических шпал. Для производства металлических шпал предприятия приобретают листогибочные прессы и гильотинные ножницы. Шпалы из черных металлов обычно прессуются в окончательную форму после прокатки, но могут также собираться путем сварки или склепывания нескольких элементов вместе. Обычно они имеют поперечное сечение в форме буквы «U» или «омега» с очень короткими плечиками. Производство металлических шпал в России соответствует стандартам, таким как NF F50-404-1988 и ТУ 14-2-889-90 для шпал из горячекатаного проката. Существуют различные предприятия, такие как Магнитогорский Металлургический комбинат, «Губкинский ремонтно-механический завод» в Белгородской области, «Днепроспецсталь» в Украине, «Алчевский металлургический комбинат» в Украине и другие, занимающиеся производством металлических шпал. На данный момент доля металлических шпал в общем объеме составляет около 20%, но с каждым годом эта цифра увеличивается. Согласно различным прогнозам, к 2050 году металлические шпалы могут доминировать на железнодорожных путях, это объясняется их долгим сроком службы, прочностью, возможностью ремонта и другими преимуществами, что делает их привлекательным выбором для определенных условий эксплуатации.

Металлические шпалы, в сравнении с аналогами из дерева и железобетона, показывают превосходные результаты в сферах безопасности, стабильности и долговечности, данные преимущества делают их перспективным и важным элементом в обеспечении эффективного функционирования железнодорожной инфраструктуры в различных условиях. С учетом растущей доли металлических шпал на рынке и их перспективного будущего, эта технология продолжит играть ключевую роль в железнодорожном транспорте, обеспечивая стабильность и устойчивость в будущем.

Использованные источники:

1. Japan Railway Engineers' Association: Heavy Axle Load Turnout/Understructure Improvement/Development Research Report. March 1983
2. Nippon Steel Corporation: Determination Background of the Cross-sectional Design of Steel Sleepers Formed by Rolling and Their Insulation Structure. July 1986
3. ШПАЛЫ ЖЕЛЕЗОБЕТОННЫЕ ДЛЯ ЖЕЛЕЗНОЙ ДОРОГА КОЛЕИ 1520 мм ГОСТ Р 54747-2011

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ТЕХНОЛОГИИ ИЗГОТОВЛЕНИЯ ШПАЛ-ДЕРЕВО, КОМПОЗИТЫ, ЖЕЛЕЗОБЕТОН, МЕТАЛЛ

Аннотация. Статья представляет обзор современных технологий изготовления железнодорожных шпал, охватывая различные материалы, такие как дерево, композиты, металл и железобетон. Каждый вид шпал рассматривается с точки зрения преимуществ, недостатков и областей применения. Деревянные шпалы обеспечивают легкость обработки, композиты – инновационные технологии, металлические – высокую прочность, а железобетонные – долгий срок службы. Статья заключается в том, что выбор определенного типа шпал зависит от требований проекта, условий эксплуатации и стремления к устойчивому и эффективному функционированию железнодорожных путей.

Ключевые слова. железнодорожные шпалы, деревянные шпалы, композитные шпалы, металлические шпалы, железобетонные шпалы, транспортная инфраструктура, инновации, устойчивость, долговечность, технологии изготовления.

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TECHNOLOGIES FOR MANUFACTURING TIES-WOOD, COMPOSITES, REINFORCED CONCRETE, METAL

Abstract. The article provides an overview of contemporary technologies for manufacturing railway sleepers, encompassing various materials such as wood, composites, metal, and concrete. Each type of sleeper is examined in terms of advantages, disadvantages, and areas of application. Wooden sleepers offer ease of processing, composites bring innovative technologies, metals provide high strength, and concrete ensures a long service life. The article concludes that the choice of a specific type of sleeper depends on project requirements, operational conditions, and the pursuit of sustainable and efficient railway operations.

Keywords. railway sleepers, wooden sleepers, composite sleepers, metal sleepers, concrete sleepers, transportation infrastructure, innovations, sustainability, durability, manufacturing technologies.

В мире железнодорожного транспорта технологии изготовления шпал играют ключевую роль, определяя прочность, долговечность и устойчивость путевого полотна. С течением времени инженеры и строители разработали

различные материалы и подходы к созданию шпал, стремясь обеспечить оптимальные характеристики для железнодорожных трасс. В данной статье мы рассмотрим разнообразие технологий изготовления шпал, включая дерево, композиты, железобетон и металл, и проведем анализ их преимуществ, недостатков и областей применения в современных системах железнодорожного транспорта.

Деревянные шпалы, являющиеся неотъемлемой частью железнодорожной инфраструктуры, представляют собой особый тип опор, специально созданных для укладки и крепления рельсов. Их использование охватывает различные сферы, включая строительство металлических мостов, создание малогабаритных рам в тоннелях и, прежде всего, формирование железнодорожных путей. Несмотря на распространенность железобетонных шпал, деревянные компоненты продолжают находить активное применение в современных системах железнодорожного транспорта. Изготавливая деревянные шпалы, производители выбирают различные виды древесины, такие как пихта, сосна, кедр, ель, лиственница, а иногда дуб или бук. Производство подчинено стандартам, представленным в ГОСТ 78-2004. Разнообразие типов шпал включает необрезные, полуобрезные и обрезные варианты, каждый из которых подходит для определенных условий эксплуатации. Деревянные шпалы классифицируют также по целевому предназначению, включая главные пути, подъездные и станционные, а также те, которые используются на территории промышленных предприятий. Для повышения срока службы шпалы подвергаются обработке специальными антисептиками или каменноугольными маслами. Существует ряд преимуществ у деревянных шпал, таких как легкость обработки, гвоздимость, хорошее сцепление с щебнем и небольшая масса, но стоит учитывать их подверженность гниению и механическому износу, что сокращает период эксплуатации по сравнению с железобетонными аналогами. Для удлинения срока службы требуются дополнительные меры по укреплению и защите от негативных воздействий.

В начале лета 2019 года Россию охватила весть о революционных изменениях в мире железнодорожного транспорта – на Бутовской линии московского метро начали активно внедрять композитные шпалы вместо традиционных деревянных. Проект ремонтных работ, который охватывает участок между станциями "Улица Скобелевская" и "Улица Горчакова", представляет собой не только техническое обновление, но и совершенно новый взгляд на повышение эффективности и безопасности инфраструктуры. На сегодняшний момент более 600 композитных шпал уже уложены, а эта инновационная замена обещает значительные преимущества. Изготовленные из переработанного пластика, эти шпалы не только обладают продолжительным сроком службы – более полувека, но и демонстрируют высокую устойчивость к повреждениям и отличаются низкой проводимостью электрического тока. Введение композитных шпал также направлено на снижение уровня шума и вибраций, что содействует уменьшению воздействия вибрации на железнодорожные пути и сокращению необходимости в регулярном ремонте.

Глава департамента транспорта и развития дорожно-транспортной инфраструктуры Москвы, Максим Ликсутов, подчеркнул, что установка композитных шпал на Бутовской линии – это не только современный технологический шаг, но и стратегическое решение для обеспечения безопасности и надежности этой ветки метро. Планы включают замену более 11 тысяч шпал к 2021 году, что приведет к полной замене деревянных элементов на всей протяженности линии. В данном контексте актуальным становится сравнение различных типов шпал, включая деревянные, железобетонные и композитные. В следующих разделах статьи мы рассмотрим преимущества и недостатки деревянных и железобетонных шпал, сосредотачив внимание на перспективности композитных шпал в современной железнодорожной индустрии.

В условиях современного развития железнодорожного транспорта, металлические шпалы, хотя и редки, представляют собой инновационное решение, обладающее уникальными характеристиками и перспективами применения. В России их использование ограничено из-за высокой металлоемкости, склонности к коррозии и возможного возникновения значительного шума при движении поездов. Тем не менее, преимущества металлических шпал делают их значимым элементом в строительстве и обслуживании железнодорожных магистралей. Одним из ключевых преимуществ металлических шпал является продолжительный срок их службы, который превышает даже сроки железобетонных аналогов в 4-5 раз, данный фактор обуславливается устойчивостью металла к внешним воздействиям, отсутствием гниения и способностью выдерживать высокие температуры. После завершения срока службы металлические шпалы поддаются легкой переработке, сохраняя до 40% своей первоначальной стоимости, что делает их более экономически выгодными в долгосрочной перспективе. Важным аспектом является также снижение количества сходов подвижного состава, вызванных уширением железнодорожной колеи. Металлические шпалы способствуют стабилизации ширины колеи, минимизируя изнашивание шпал и балластного материала. При этом, металлические шпалы обладают высокой ремонтопригодностью, что отличает их от деревянных и железобетонных аналогов. После сходов металлические шпалы могут быть легко восстановлены и многократно использованы, что сокращает необходимость в постоянной замене. Металлические шпалы также нашли применение в доменном и сталеплавильном производстве, где высокие температуры и другие агрессивные условия делают их предпочтительным выбором. Они также обеспечивают устойчивость верхнего строения пути при повышенных нагрузках, поддерживая оси подвижного состава весом до 60 тонн. Срок службы металлических шпал оказывается значительно дольше, что делает их важным элементом в повышении эффективности и устойчивости железнодорожной инфраструктуры.

Железобетонные шпалы сегодня представляют собой неотъемлемую часть железнодорожных путей, заняв центральное место в инфраструктуре благодаря своей прочности и долговечности, данные конструкции, произведенные с

использованием современных технологий и соответствующие строгим стандартам, обеспечивают надежность движения поездов и устойчивость железнодорожных магистралей. Железобетонные шпалы играют ключевую роль в стабилизации рельсовых нитей. Укладываемые на верхнее строение балластного слоя, они распределяют давление от промежуточных скреплений и рельсов, обеспечивая оптимальную упругость. Сравнительно с деревянными аналогами, железобетонные шпалы проявляют высокую устойчивость к гниению и обладают большей прочностью при смятии. Продолжительный Срок эксплуатации железобетонных шпал при ежедневной нагрузке достигает в среднем до 50 лет, что значительно превосходит деревянные аналоги. Плавность Движения: Движение поездов по железобетонным шпалам более плавное, что создает оптимальные условия для работы бесстыкового пути и обеспечивает большую поперечную устойчивость. Изготовление железобетонных шпал осуществляется согласно требованиям ГОСТ, что гарантирует их соответствие высоким стандартам качества.

Характеристика	Деревянные Шпалы	Композитные Шпалы	Металлические Шпалы	Железобетонные Шпалы
Срок службы	5-15 лет	Более 50 лет	До 50 лет	До 50 лет
Прочность и Устойчивость	Сцепление с подложкой, гвоздимость, упругость	Устойчивость к повреждениям, низкая проводимость, снижение шума и вибрации	Устойчивость к гниению, высокая прочность при смятии, ремонтопригодность	Устойчивость к гниению, большая прочность при смятии, плавное движение поездов
Преимущества	Легкость обработки, гвоздимость, небольшая масса	Продолжительный срок службы, устойчивость к повреждениям, снижение вибрации	Долгий срок службы, устойчивость к гниению, ремонтопригодность	Плавное движение поездов, высокая прочность, ремонтопригодность

Недостатки	Подверженность гниению, короткий срок службы	Высокая стоимость, ограниченная эксплуатация	Большая металлоемкость, возможен шум	Высокая металлоемкость, подверженность различным погодным условиям
Применение	Железнодорожные пути, мосты, тоннели	Железнодорожные пути, мосты, тоннели	Ограниченное применение из-за шума	Основные опоры для железнодорожных путей
Экологические аспекты	Поддается гниению, короткий срок службы	Продолжительный срок службы, перерабатываемы	Поддается переработке	Производство с учетом стандартов, перерабатываемы
Технические Характеристики	В зависимости от типа: необрезные, полуобрезные, обрезные	В зависимости от композита и производителя	Различные типы и формы, устойчивость к температурам	Различные типы и формы, устойчивость к температурам

Таблица 1. Сравнительная таблица видов шпал

В железнодорожной инфраструктуре мира существует многообразие технологий и материалов для изготовления шпал, эти важные элементы, поддерживающие устойчивость и надежность железнодорожных путей. Рассмотрим разнообразие доступных вариантов – деревянные, композитные, металлические и железобетонные шпалы – каждый из которых обладает своими уникальными свойствами, преимуществами и техническими характеристиками. Деревянные шпалы, хотя и являются традиционным выбором, обеспечивают легкость обработки, гвоздимость и хорошее сцепление с подложкой, но их недостаточная устойчивость к гниению и короткий срок службы ставят под вопрос их эффективность в долгосрочной перспективе. Композитные шпалы, введенные сравнительно недавно, представляют собой инновационное решение с продолжительным сроком службы, устойчивостью к повреждениям и возможностью переработки. Их способность снижать шум и вибрации делает композитные шпалы особенно привлекательными для использования в городской среде. Металлические шпалы, несмотря на ограниченное применение из-за металлоемкости и возможного шума, обладают высокой прочностью и долгим сроком службы. Возможность ремонта и повторного использования

делает их значимым выбором в определенных условиях. Железобетонные шпалы, широко используемые в современных железнодорожных системах, предлагают выдающуюся прочность и стабильность. С их помощью достигается плавное движение поездов, создавая наилучшие условия для работы бесстыкового пути. Важно отметить, что выбор конкретного вида шпал зависит от множества факторов, включая требования проекта, условия эксплуатации, экологическую устойчивость и бюджетные ограничения. Каждая технология имеет свои сильные стороны и ограничения, и оптимальное решение должно быть принято с учетом уникальных особенностей конкретного проекта. Эволюция технологий в производстве шпал демонстрирует стремление к созданию более устойчивых, долговечных и экологически безопасных решений для железнодорожных систем. Внедрение инноваций в данной области играет важную роль в обеспечении безопасности и эффективности железнодорожного транспорта, продвигая технологический прогресс в сфере железнодорожного строительства и обслуживания.

Использованные источники:

1. http://poleznayamodel.ru/model/13/132452.html
2. http://www.findpatent.ru/patent/241/2412298.html
3. http://www.plastics.ru/pdf/journal/2011/11/Pogodina_11_2011.pdf
4. http://www.newchemistry.ru/letter.php?n_id=697
5. http://www.myshared.ru/slide/43402/
6. http://www.cadprofy.com/content/2412298

УДК 608.2

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РАЗРАБОТКА АЛГОРИТМА ПОДДЕРЖКИ ПРИНЯТИЯ РЕШЕНИЙ ПРИ ПЛАНИРОВАНИИ МАРШРУТА ДЛЯ ПЕРЕВОЗКИ ГОТОВОЙ ПРОДУКЦИИ

Аннотация. В данной статье автором проводится разработка алгоритма при помощи муравьиного метода. Был разработан общий алгоритм, который включал в себя подсистему.

Ключевые слова: алгоритм, готовая продукция, погрузка, загрузка.

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DEVELOPMENT OF A DECISION SUPPORT ALGORITHM IN ROUTE PLANNING FOR TRANSPORTATION OF FINISHED PRODUCTS

Abstract. In this article the author develops an algorithm using the ant method. A general algorithm was developed that included a subsystem.

Keywords: algorithm, finished products, loading, loading.

Задача эффективного планирования транспортировка продукции всегда привлекала повышенное внимание как экономистов и специалистов по логистике, так и математиков. Среди экономистов это обусловлено важность транспортировка товаров и связанных с ней издержек. Для математиков этот интерес вызван ее значительной сложностью.

Данная работа посвящена разработке эффективных алгоритмов планирования транспортировке продукции, которые применимы, в том числе для продукции, обладающей специфическими условиями транспортировки. Под такими специфическими условиями в данной работе будут подразумеваться следующее:

– транспортные средства, осуществляющие перевозку, состоят из одной или нескольких раздельных секций;

– при загрузке каждого транспортного средства разрешено наполнять каждую из секций только полностью, при разгрузке разрешено опустошать каждую секцию целиком.

Однако, помимо самой транспортировки необходимо еще помнить о процессе погрузочно/разгрузочных работ, которые отнимают много сил и времени.

С целью оптимизации работ при планировании погрузочно/разгрузочных работ на складе готовой продукции был разработан алгоритм, представленный ниже.

В алгоритм входят следующие блоки:

– блок «Выяснение количества продукции» - данный блок отвечает за определение количества продукции в партиях для перевозки заказчику;

– блок «Перемещение поддонов» - данный блок является процедурой, который отвечает на вопросы «Необходимо ли перемещение поддонов на складе?» и «Необходимо ли перемещение поддонов между складами?»;

– блок «Погрузка готовой продукции на автомобиль потребителя» - данный блок отвечает за процесс заполнения автомобиля потребителя товаров;

– блок «Загрузка транспорта основных предприятий» – потребителей» - данный блок отвечает за заполнение транспортного средства материальными ресурсами на одном заводском снабженческом складе и последовательной их разгрузке в производственных подразделениях основных предприятий.

Ниже представлен общий алгоритм погрузочно/разгрузочных работ на складе готовой продукции (Рисунок 1).

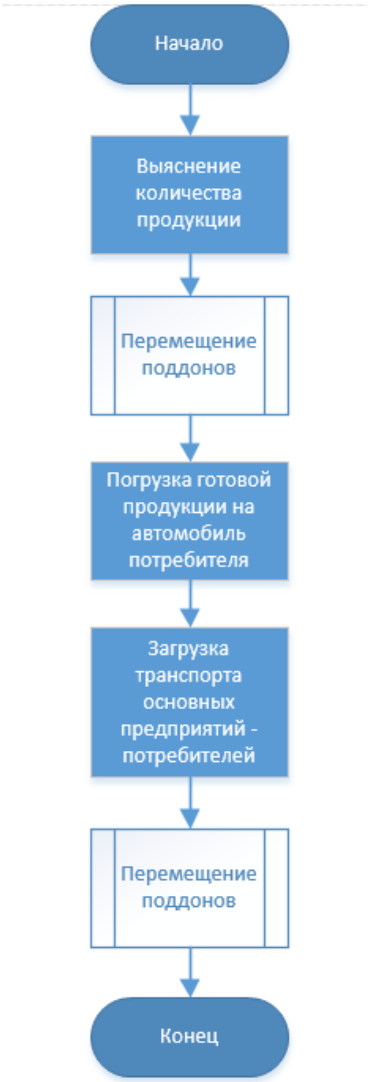

Рисунок 2.1 – Общий алгоритм погрузочно/разгрузочных работ на складе готовой продукции

В общем смысле процедура «Перемещение поддонов» включает в себя два блока условия:

– необходимо ли перемещение поддонов на складе – данный блок условия по ветке «да» предполагает действие «перемещение поддонов на складе», по ветке «нет» - переходит к выполнению следующего условия;

– необходимо ли перемещение поддонов между складами – данный блок условия по ветке «да» предполагает действие «перемещение поддонов между складами», по ветке «нет» - происходит выход из подсистемы.

Помимо вышеописанных алгоритмов был разработан двухфазный модифицированный алгоритм, основанный на муравьином алгоритме. Муравьиный алгоритм — это алгоритм оптимизации, вдохновленный поведением муравьев при поиске пути от места к месту.

Ниже представлена процедура «Перемещение поддонов» (Рисунок 2).

Рисунок 2 – Процедура «Перемещение поддонов»

Однако, при использовании данного алгоритма нельзя допустить того, чтобы время работы алгоритма значительно увеличилось. Для предлагаемого алгоритма был выбран метод двухточечной локальной оптимизации. Он заключается в перестановке двух клиентов в рамках маршрута одного транспортного средства.

Использованные источники:

1. Степыгин, В. И. Подъемно-транспортные установки. Проектирование: учебное пособие для вузов [Текст]/ В. И. Степыгин, Е. Д. Чертов, С. А. Елфимов. — 2-е изд., испр. и доп. — Москва: Издательство Юрайт, 2023. — 271 с.

2. Лукинский, В. С. Логистика и управление цепями поставок: учебник и практикум для вузов [Текст]/ В. С. Лукинский, В. В. Лукинский, Н. Г. Плетнева. — Москва: Издательство Юрайт, 2023. — 359 с.

3. Герами, В. Д. Управление транспортными системами. Транспортное обеспечение логистики: учебник и практикум для вузов [Текст]/ В. Д. Герами, А. В. Колик. — 2-е изд., испр. и доп. — Москва: Издательство Юрайт, 2023. — 533 с.

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ТАЪЛИМНИ СИФАТИНИ ОШИРИШ УЧУН ПЕДАГОГИК МЕТОДЛАРДАН ФОЙДАЛАНИШ

Аннотация. Ҳозирда таълим тизимида кечаётган ислохотлар уни тубдан ислоҳ қилиш, иқтисодий ва ижтимоий гуманитар фанларни ўқитиш методикаси жуда катта ўзгаришлар олиб борилмоқда. Ушбу мақолада шу ҳақида фирк-мулохазалар баён этилган.

Калит сўзлар: иқтисодий, ижтимоий, инновацион, анъанавий ноанъанавий

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USE OF PEDAGOGICAL METHODS TO IMPROVE THE QUALITY OF EDUCATION

Abstract. Currently, the reforms taking place in the education system are undergoing radical changes, and the methods of teaching economic and social humanities are undergoing great changes. This article discusses this.

Key words: economic, social, innovative, traditional, non-traditional.

Ўқитувчилар кўпроқ инновацион технологиялар ёрдамида дарс ўтиш афзал деб биладилар. Шу ўринда биз мактабда ўқитилаётганфанлардан анъанавий ва ноанъанавий методларни қўллаганда уларнинг афзаллик жихатини кўриб чиқамиз.

Анъанавий дарс – муайян муддатга мўлжалланган, таълим жараёни кўпроқ ўқитувчи шахсига қаратилган, мавзуга кириш, ёритиш, мустахкамлаш ва якунлаш босқичларидан иборат таълим модели ҳисобланиб, ўқув материали янги ва анча мураккаб бўлганда, анъанавий дарс кўп холларда таълим жараёнининг бир-бирдан методи бўлиб қолётганлиги кўзга ташланди.

Анъанавий дарс ўтишда ўқитувчи кўпроқ фаол иштирок этади. Шу сабаб, бу холларда анъанавий дарс самарадорлиги анча паст бўлиб, ўқувчилар таълим жараёнининг пассив иштирокчиларига айланиб қоладилар. Тадқиқотлар шуни кўрсатадики, анъанавий дарс шаклини сақлаб қолган холда, унга турли-туман ўқувчилар фаолиятини фаоллаштирадиган методлар билан бойитиш ўқувчиларнинг ўзлаштириш даражасини кўтарилишига олиб келар экан. Бунинг учун дарс жараёни оқилона ташкил қилиниши, ўқитувчи томонидан ўқувчиларнинг қизиқишини орттириб, уларнинг таълим жараёнида фаоллиги муттасил рағбатлантирилиб турилиши, ўқув

материалини кичик-кичик бўлакларга бўлиб, уларнинг мазмунини очишда бахс, мунозара, ақлий хужум, кичик гуруҳларда ишлаш, тадқиқот роли ўйинлар методларини қўллаш, ранг-баранг қизиқтирувчи мисолларни келтирилиши, ўқувчиларни амалий машқларни мустақил бажаришга ундаш, ранг-баранг баҳолаш усулларидан фойдаланиш, таълим воситаларидан жойида ва вақтида фойдаланиш талаб этилади.

Ана энди ноанъанавий ўқитиш моделига тўҳталсак, дарс ўтишнинг талабалар фаоллигини оширувчи интерактив усуллари айрим адабиётларда ноанъанавий дарс ўтиш усуллари деб ҳам таърифланади. Бу усуллардан аввалари ҳам фойдаланилган, лекин камроқ эътибор берилган. Ҳозирги кунда бутун дунёда фаол интерактив услубларни қўллаш дарс ўтишни самарали услуби сифатида тан олиниб, кенг қўлланилмоқда.

Ноанъанавий ўқитиш методларнинг афзалликлари;

Ўқитиш мазмунини яхши ўзлаштиришга олиб келиши, ўз вақтида алоқаларнинг таъминланиши,тушунчаларни амалиётда қўллаш учун шароитлар яратилиши,ўқитиш усулларининг турли хил кўринишлари таклиф этилиши, мотивациянинг юкори даражада бўлиши, ўтилган материалнинг яхши эслаб қолиниши, мулоқотга киришиш кўникмасининг такомиллашиши,

ўз-ўзини баҳолашнинг ўсиши, ўқувчиларнинг предметнинг мазмунинг, ўқитиш жараёнига бўлган ижобий муносабати, мустақил фикрлай оладиган ўқувчининг шакалланишига ёрдам бериши, нафақат мазмунини ўзлаштиришга ёрдам бермай, балки танқидий ва мантиқий фикрлашни ҳам ривожлантириши, муаммолар ечиш кўникмаларининг шаклланиши, ўқитиш жараёнида анъанавий ва ноанъанавий технологияларни мақсадга мувофиқ холда қўллай олиш, таълим сифатини ошириш, таълим олувчиларнинг мустақил ва мус- тахкам назарий билим, фаолият, кўникма ва малакаларини шакллантириш зарур, хар бир ўқитилаётган фанлардан инновацион технолгияларни фанларнинг мавзуларига мос холда қўллай олиш, ўқувчилар билим даражаси ва дунёқарашини кенгайтиришда албатта интерактив методлардан ўринли ва самаралин фойдаланиш зарур, таълим жараёнига янги педагогик технологияни тадбиқ этиш кадрлар тайёрлашга йўналтирилган умумий жараён мазмунининг сифат жиҳатдан ўзгаришини таъминлайди, янги педагогик технология назарияси ғояларидан фойдаланиган холда таълим жараёни етук шахс ва малакали мутахассисларни тарбиялаш борасидаги ижтимоий буюртманинг бажарилиш холатининг сифат кўрсаткичига эга бўлишига олиб келади, баркамол шахс ва малакали мутахассисларнинг ижтимоий ишлаб чиқариш жараёнидаги фаолиятлари ҳамда уларнинг самараси ижтимоий тараққиётнинг тезлашувига олиб келади.

Юқоридаги назарий-услубий хулосалардан келиб чиқиб, қуйидаги амалий таклифларни айтиш мумкин:

- Инновацион технолгиялар асосида ўқитиш бўйича махсус малака ошириш курсларини фаолигини ошириш;
- Ўқув амалиётига инновацион технологияларни кенг қўллаш учун моддий техник базани яхшилаш ва такомиллаштириш керак;

- Педагоглар инновацион технолгиялар билан ишлаш кўникма ва малакаларини шакллантириш учун турли семинарлар ташкил қилиш;
- Инновацион технолгияларни ўрганиш бўйича марказ ва ўқитиш курслари билан ўзаро хамкорлик алоқларини йўлга қўйиш;
- Олий ўқув юртларидаги илғор педагогларни инновацион технолгиялардан фойдаланиб дарс ўтиш жараёнларини тажрибаларини яқиндан ўрганиб оммалаштирлса ўқитиш сифатини янада оширишга имкон бўлади.

Фойдаланилган адабиётлар:

1. В.Каримова, Ф.Акромова.педагогика. Дарслик. – Т. ТДИУ, 2007-183 бет
2. В.Йўлдашева, С.Усмонова, Ф Жумабоева.Педагогика технология асослари.Ўқув қўлланма. – Т.2004. – 140 бет
3. Z.G.Otaboeva.Further developing culture of cooperation to higher education students with the help of “cluster”methodology FARS International Journal of Education,Social Sceince G Humanities.(FIJESH). ISSN:2945-4492 Finland.B.2480-2483 Sciatitic Journal Impact Factor
4. З.Ғ.Отабоева. Шахс ривожланиши хакида тушунча. Экономика и социум. 4-2 (83) 2021. 297-300-б

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САМООБРАЗОВАНИЕ КАК ДЕЯТЕЛЬНОСТЬ ОБУЧАЮЩИХСЯ

Аннотация. В статье рассматривается актуальная проблема самообразования современного человека, которая появилась в условиях информационного общества, где доступ к информации, умение работать с ней являются ключевыми. Информационное общество характеризуется как общество знания, где особую роль играет процесс трансформации информации в знание.

Ключевые слова: самообразование, цель, основная форма, саморазвитие, мотивация.

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SELF – EDUCATION AS THE ACTIVITY OF STUDENTS

Abstract. The article examines the actual problem of self-education of a modern person, which appeared access to information the ability to work with it are key. The information society is characterized as a knowledge society, where the process of transformation of information into knowledge plays a special role.

Key words: self-education, goal, basic form, self-development, motivation.

Сегодня общество испытывает самые глубокие и стремительные перемены за всю свою историю. На смену прежнему стилю жизни, когда одного образования хватало на всю жизнь, приходит новый жизненный стандарт. Одним из показателей профессиональной компетентности человека является его способность к самообразованию, которая проявляется в неудовлетворённости, осознании несовершенства настоящего положения и стремлении к росту, самосовершенствованию.

Самообразование – это приобретение человеком нужных ему с его точки зрения знаний, навыков и умений посредством самостоятельных занятий вне какого бы то ни было учебного заведения и без помощи преподавателя. Этим самообразование отличается от образования, от того стандартного обучения, с которым большинство из нас хорошо знакомы. В образовании на первое место ставится учитель, который определённым образом учит чему-то других людей или отдельно взятого человека. Тогда как в самообразовании в центре внимания находится сам ученик, то есть тот, кто

чему-то самостоятельно обучается. Ученик в таком случае одновременно является и учеником, и учителем, и вся ответственность за процесс получения знаний лежит именно на нём. И это позволяет человеку самому решать, чему и как он будет учиться. Совсем необязательно, что самообразование должно проходить исключительно без учителя, важно то, кто управляет этим процессом – ученик или учитель.

Стимулирующим фактором выступают не наставления преподавателя, а внутреннее желание, мотивация, а это – сильнейший двигатель саморазвития. Сфера науки значения не имеет – экономика, иностранный язык, игра на гитаре, главное — самообразование и саморазвитие. Знания, которые вы приобретаете самостоятельно, обладают большей ценностью для вас, нежели обучение от других лиц.

Самообразование требует от субъекта видения жизненного смысла в учении; сознательной постановки целей; способностей к самостоятельному мышлению, самоорганизации и самоконтролю. Это делает его невозможным для многих, в первую очередь, для детей. Однако начиная с юношеского возраста, самообразование может быть систематическим и очень результативным. Дж. Локк видел цель воспитания не в том, чтобы сделать юношу учёным, а развитии и направлении его ума, чтобы сделать его способным к восприятию любого знания, когда он сам пожелает приобрести его [3, 28]. Д. И. Писарев считал, что настоящее образование есть только самообразование и что оно начинается, когда человек прощается со всеми школами [4, 12].

Самообразование основывается на свободе выбора, а образование, в основном, на потребности общества в тех или иных специалистах.

Самообразование – приобретение систематических знаний в какой-либо области науки, техники, культуры, политической жизни и т.п., предполагающее непосредственно личный интерес обучающегося в органическом сочетании с самостоятельностью изучения материала. Вместе с тем, самообразование – средство самовоспитания, поскольку способствует выработке целеустремленности, настойчивости в достижении цели, внутренней организованности, трудолюбия и других моральных качеств. В широком смысле под самообразованием понимают все виды приобретения знаний, связанные с самостоятельной работой учащегося над изучаемым материалом.

Американский учёный-педагог Малком Ноулз утверждает, что самообразование – процесс, «... в котором индивиды, с помощью или без помощи других, берут на себя инициативу выявления своих образовательных потребностей, определения образовательных целей, обеспечения человеческими и материальными ресурсами, источниками для обучения, выбора и внедрения соответствующих образовательных стратегий и оценивания результатов» [6, 57].

Таким образом, самообразование – самостоятельно организуемая субъектом деятельность учения, удовлетворяющая его потребности в

познании и личностном росте. Так, самообразование становится необходимой составляющей саморазвития.

Особенно актуальной проблема самообразования современного человека стала в условиях информационного общества, где доступ к информации, умение работать с ней являются ключевыми. Информационное общество характеризуется как общество знания, где особую роль играет процесс трансформации информации в знание. Поэтому современные условия требуют от человека постоянного совершенствования знаний. Знания можно получать разными способами. Постоянное самообразование – вот тот определяющий актив жизни современного человека, который поможет не отстать от «поезда современности» [5, 43]. Самой характерной особенностью профессиональной деятельности является её подвижность, связанная с изменением информационных ресурсов и технологий. Чтобы успеть за этими процессами, у человека возникает необходимость постоянно учиться.

Человек, ориентированный на профессию и желающий совершенствоваться и обучаться, обязательно достигнет хороших результатов и определённого мастерства. Для этого надо осознавать и решить три основных задачи:

- учитывать изменения в профессиональной среде, происходящие под влиянием процессов информатизации, социально-экономических реформ;
- постоянно работать над повышением своего профессионального мастерства;
- обновлять знания и умения, обеспечивающие хорошую творческую форму.

Самообразование – форма образования, при которой человек обучает и воспитывает себя сам. Наступает момент, когда у человека возникает внутренняя неудовлетворенность своей деятельностью (мотив) и осознанная потребность в переподготовке, в дальнейшем профессиональном росте. Самообразование всегда имеет личную значимость. Оно возникает на основе потребностей, а они реализуются в профессиональной деятельности, быту, в процессе познания окружающего мира и воспитания в себе определённых качеств с целью реализовать себя в социальной среде. На основании этого можно выделить 4 вида самообразования:

- Бытовое – овладение социальным опытом, необходимым в быту (в том числе, досуг и отдых).
- Познавательное – познание окружающего мира.
- Самореализация – изменение свойств и качеств личности в соответствии с идеалом (физическая, интеллектуальная, духовная, нравственная сферы).
- Профессиональное – служит для сохранения и повышения профессиональной компетенции и социальной значимости [1, 34].

Цель самообразования может быть различной. Какая-то деятельность, предмет или информация провоцируют и создают мотивы у человека для

устойчивого интереса и освоения знаний: компьютерных технологий, астрономии, психологии. Это самоцельное самообразование.

Попутное самообразование: занимаясь целенаправленной деятельностью, человек узнаёт что-то новое, позволяющее ему использовать эти знания и умения дальше.

Целенаправленное самообразование связано с тем, что человек сам ставит себе цель в определённой области. Эта цель определяет дальнейшие шаги, поиск средств реализации цели, самостоятельность в постановке задач и решении их.

Понятие «самообразование» обычно рассматривается как готовность к самостоятельному обучению. Думается, что, прежде всего, осознание необходимости повысить свой профессиональный уровень лежит в основе успешной самообразовательной деятельности. Если ты сам захочешь, то найдёшь, где и чему будешь учиться.

Занятие самообразованием предусматривает расширение и углубление профессиональных знаний и умений, совершенствование профессионального уровня. Самообразование невозможно без умения чётко формулировать цель, конкретизировать проблему и фокусировать своё внимание на главных, значимых деталях, творчески переосмысливать процесс обучения и приобретаемые знания. Человек, владеющий навыками самостоятельной работы, будет иметь возможность подготовиться и перейти к целенаправленной научно-практической, исследовательской деятельности, что свидетельствует о более высоком профессиональном, образовательном уровне, а это, в свою очередь, влияет на качество профессиональной деятельности.

Основная форма самообразования – изучение научной, научно-популярной, учебной, художественной и другой литературы, прессы.

Самообразование предусматривает также возможность использования разнообразных вспомогательных средств: прослушивание лекций, докладов, концертов, консультации специалистов, просмотр спектаклей, кинофильмов, телепередач, посещение музеев, выставок, галерей, различные виды практической деятельности – опыты, эксперименты, моделирование и т.п.

К инновационным формам углубления профессиональных знаний, мотивирующих процесс самообразования и способствующих раскрытию творческого потенциала человека, можно отнести такие виды группового активного обучения, как деловые игры, «круглые столы», разбор проблемных ситуаций, профессионально-ориентированные тренинги, мастер-классы. Для углубленного коллективного изучения определённой темы и самообразования участников активно используется форма семинара [2, 49].

Успех самообразования зависит от целого ряда компонентов познавательной деятельности человека, среди которых первостепенными являются: осознание человеком персональной необходимости в приобретении дополнительных знаний; обладание человеком необходимым умственным развитием, способностями усматривать проблемы, формулировать их,

планировать последовательные шаги поиска ответа; умение актуализировать знания, способы деятельности. Самообразование есть творческая работа по развитию своей личности, расширению эрудиции.

Таким образом, самообразование – необходимое, постоянное слагаемое жизни культурного, просвещённого человека, занятие, которое сопутствует ему всегда.

Использованные источники:

1.Айзенберг А.Я. Самообразование: История, теория и современные проблемы. Учебное пособие для вузов. М.: Высшая школа, 2006. С. 34.
2.Гурина И.А. Самообразование в русской дидактике второй половины XIX – начала XX в. // Педагогическое образование и наука. 2007. № 5. С. 72-76.
3.Локк Дж. Опыт о человеческом разумении/Историко-философский ежегодник, 2006.
4.Писарев Д.И. Литературно-критические статьи. Изд. 5-е. М.: 1967
5.Шуклина Е.Л. Технологии самообразования: социологический аспект // Общественные науки и современность. 1999. № 5. С. 142.
6.Knowles M. Self-Directed Learning. A guide for learners and teachers. Englewood Cliffs: Prentice Hall: Cambridge, 1975. 135 pp.

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РЕКУПЕРАЦИЯ ВОЗДУХА В СИСТЕМЕ ВЕНТИЛЯЦИИ

Аннотация. Затраты на отопление помещений составляют существенную часть общей статьи расходов на поддержание здания в нормальном состоянии. Тепло «уходит» из здания через, так называемые, «мостики холода», через щели дверных и оконных проемов, за счет теплообменных процессов между внешними перекрытиями и наружным воздухом, а также с потоками воздуха через вытяжную вентиляцию. Частично сохранить тепло можно за счет общей теплоизоляции здания, но большая часть тепловой энергии все равно будет утилизироваться с вытяжным воздухом.

Экономия на отоплении здания становится особенно актуальной в зимний период. Для того чтобы сократить эксплуатационные расходы, в воздуховоды вентиляции встраивают специальные рекуператоры тепла, предназначенные для обмена тепловой энергией между вытяжным и приточным воздухом.

Ключевые слова: рекуператор воздуха, вентиляция, теплообменник, приточный воздух, вытяжной воздух, потери тепла.

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AIR RECOVERY IN THE VENTILATION SYSTEM

Annotation. The cost of heating premises constitutes a significant part of the total cost of maintaining the building in good condition. Heat "leaves" from the building through so-called "cold bridges", through cracks in door and window openings, due to heat exchange processes between external ceilings and outside air, as well as with air flows through exhaust ventilation. Heat can be partially saved due to the general thermal insulation of the building, but most of the thermal energy will still be utilized in the exhaust air.

Saving on heating a building becomes especially important in winter. In order to reduce operating costs, special heat recuperators are built into ventilation ducts, designed to exchange thermal energy between exhaust and supply air.

Key words: air recuperator, ventilation, heat exchanger, supply air, exhaust air, heat loss.

Рекуперация в переводе с латинского языка означает «обратное получение» или «возвращение», что подразумевает под собой возврат тепла из того воздуха, который был нагрет и «выброшен» при вентиляции. При строительстве зданий в советское время о вентиляции помещений мало кто задумывался, да и по сути, она происходила естественным путем. Ведь окна были деревянными и со временем очень сильно изнашивались, что вынуждало хозяев прибегать к их утеплению подручными средствами. С одной стороны, это очень неудобно и трудоемко, с другой – осуществлялась самостоятельная циркуляция воздуха. С приходом пластиковых оконных конструкций осуществление вентиляции стало одной из важных задач в современном строительстве. Качественную циркуляцию воздуха сегодня можно осуществить только при полном проветривании помещения при помощи настежь открытых окон, что недопустимо в зимний период времени. Следовательно, возникла острая потребность в таких устройствах, которые бы осуществляли естественный процесс принудительно.

На сегодняшний день производители энергосберегающего оборудования достигли того уровня, когда стал возможен выпуск приборов, работающих без нанесения урона окружающей среде. В число таких устройств входят рекуператоры, которые пока еще не столь популярны и востребованы среди потребителей, но по праву считаются незаменимым оборудованием в теплообмене.

Рекуператор – это устройство, которое предназначено для передачи тепловой энергии от вытяжного выбрасываемого воздуха к приточному воздуху, подаваемому в помещение. В данном случае под тепловой энергией понимается как тепловая, так и холодильная, то есть вытяжной воздух может отдавать приточному как своё тепло, так и свой холод, соответственно, нагревая или охлаждая его.

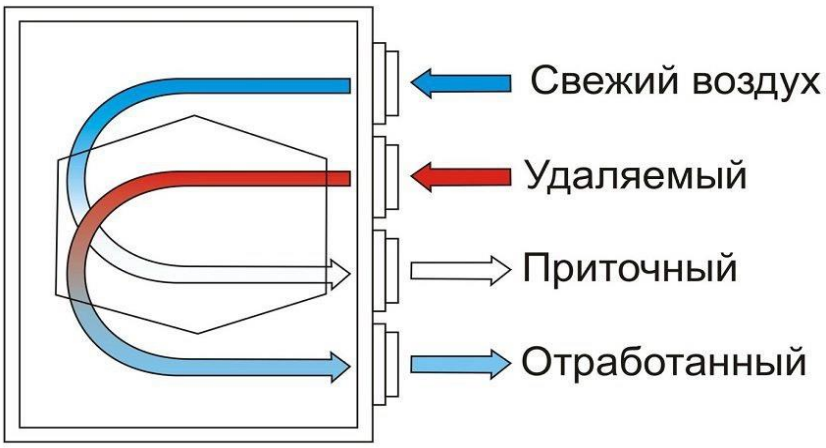

Рис.1. Схема обмена воздуха через рекуператор

Основной функцией рекуператора является получение полезной энергии от удаляемого воздуха из помещения. Эта функция дополняется условием: потоки не должны смешиваться, то есть приточный воздух не должен хоть сколько-нибудь значительно загрязняться отработанным вытяжным воздухом. В системах вентиляции и кондиционирования такое получение энергии актуально как зимой, так и летом.

В зимнее время задачей рекуператора является осуществление «бесплатного» нагрева приточного воздуха за счёт вытяжного. Для этого холодный поток воздуха с улицы и тёплый вытяжной поток воздуха из помещения подаются в теплообменник, где вытяжной воздух нагревает приточный. Так как вытяжной воздух всё равно был бы выброшен на улицу, можно говорить о том, что данный нагрев происходит «бесплатно».

Для вентиляционной установки такой нагрев позволяет существенно сэкономить на мощности электрического или водяного калорифера. Предположим, температура подаваемого в помещение воздуха зимой должна составлять +18 °С, а наружная температура составляет -26 °С. Таким образом, мощность нагревателя в системе без рекуператора следовало бы рассчитывать исходя из нагрева на 18-(26)=44°С.

При использовании рекуператора приточный воздух может быть нагрет за счёт вытяжного воздуха, например, до температуры +10 °С. В этом случае мощность нагревателя следовало бы рассчитывать исходя из нагрева всего на 18-10=8 °С. Так как мощность нагревателя прямо пропорциональна разнице температур, то рекуператор позволил бы сэкономить (44-8)100/44 = 82% мощности вентустановки.

К основным видам рекуператоров входят:

- Роторный рекуператор
- Пластинчатый перекрестно-точный рекуператор
- Рекуператор с промежуточным теплоносителем
- Камерный рекуператор
- Фреоновый рекуператор

Система вентиляции с рекуператором характеризуется таким рядом преимуществ:

- экономия денежных средств на отоплении;
- экономия на отдельных вытяжных вентиляторах;
- удаление малоприятных тяжелых запахов;
- удаление пыльных частиц;
- простота эксплуатации и монтажа;
- низкие затраты в использовании;
- автоматизация процесса;
- продолжительный срок службы системы.

Даже периодическое использование рекуператора позволит насыщать жилище чистыми атмосферными воздушными массами без потери тепла или, наоборот, увеличения температурного режима.

Среди недостатков рекуператоров выделяют следующие:

- Они создают дополнительное аэродинамическое сопротивление в сети. Действительно, как любой другой элемент в сети вентиляции, рекуператоры имеют некоторое сопротивление, которое следует учитывать при выборе вентилятора. Впрочем, это сопротивление не велико (обычно не более 100 Па), и к существенному увеличению мощности вентилятора не приводит.
- Рекуператоры повышают как стоимость вентиляционной установки, так и стоимость её обслуживания. Как и любое другое решение, направленное на повышение энергоэффективности системы, рекуператоры стоят определенных денег и требуют регулярного технического обслуживания. Однако опыт многократно доказал, что затраты на рекуперацию тепла гораздо ниже получаемой выгоды.
- Роторные, камерные и в гораздо меньшей степени пластинчатые рекуператоры имеют один недостаток, который может быть критичным на некоторых объектах – в них возможны перетечки потоков воздуха. В этом случае опасность представляет перетекание вытяжного воздуха в приточный. Такие перетечки нежелательны в системах вентиляции чистых помещений и не допустимы, например, в инфекционных отделениях больниц и операционных. Причиной служит опасность перетекания вирусов, которые попали в вытяжку из какого-либо помещения, в приточный поток воздуха с последующим распространением по всем помещениям объекта.
- Рекуператоры увеличивают габариты вентиляционной установки. В первую очередь это касается пластинчатых рекуператоров, так как они представляют собой воздухо-воздушные теплообменники и имеют достаточно крупные размеры. Кроме того, это касается рекуператоров с промежуточным теплоносителем ввиду наличия двух отдельных теплообменников, двух линий трубопроводов и узлов обвязки возле каждого из теплообменников.

Принудительная вентиляционная система с рекуперацией – это возможность сэкономить тепло и электрическую энергию. Особенно

актуальной покупка специального воздухообменника считается для квартиры и частного дома. Такое вложение средств довольно быстро окупается, а также способствует сохранению здорового микроклимата в помещении.

Использованные источники:

1. Вишневский Е.П. Рекуперация тепловой энергии в системах вентиляции и кондиционирования воздуха // СОК. № 11. 2004.
2. Архипцев А.В., Игнаткин И.Ю. Автоматизированная система микроклимата с утилизацией теплоты вытяжного воздуха // Вестник НГИЭИ. 2016. № 4(59).
3. *Mansurova Sh. P. (2023). ISSUES OF PRESSURE REGULATION IN HEATING NETWORKS. B INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY (Volume 3, Issue 10, October. 510–516).*
4. Tashmatov, N.U., & Mansurova, S.P. (2022). Some Features of Heat and Moisture Exchange in Direct Contact of Air with a Surface of a Heated Liquid. International Journal of Innovative Analyses and Emerging Technology, 2(1), 26–31.
5. Karimovich, T. M., & Obidovich, S. A. (2021). To increase the effectiveness of the use of Information Systems in the use of water. Development issues of innovative economy in the agricultural sector, 222-225.
6. Sattorov, A., & Karimov, E. (2023). QURILISH MATERIALINI ISHLAB CHIQARUVCHI SANOAT PECHLARIDA GAZ YOQILG‘ISI YONUV ISSIQLIQ MIQDORLARINING NAZARIY TENGLAMALARINI TUZISH. Educational Research in Universal Sciences, 2(13), 313–317.
7. Sultonov, A. (2019). Water use planning: a functional diagram of a decision-making system and its mathematical model. International Finance and Accounting, 2019(5), 19.
8. Sultonov, A., & Turdiqulov, B. (2022). SUV QABUL QILISH INSHOOTLARINING ISHLASH SAMARADORLIGINI OSHIRISHDA FILTRLARNING O‘RNI. Евразийский журнал академических исследований, 2(11), 12-19.
9. Turdiqulov, B., Nazirov, S., & Karimov, Y. (2022). ATOM VA MOLEKULALARNING YORUG’LIKNI YUTISHI VA NURLANISHI. Евразийский журнал академических исследований, 2(13), 1252-1258.
10. Turdiqulov, B. (2022). GAZ YONDIRGICHLARNING ISHLASH JARAYONINI TAKOMILLASHTIRISH. Евразийский журнал академических исследований, 2(11), 4-11.
11. Sh. P. Mansurova. (2021). Application of renewable energy sources in buildings. Galaxy International Interdisciplinary Research Journal, 9(12), 1218–1224.
12. Sattorov, A., & Karimov, E. (2023). HAVO ALMASHINUV TIZIMIDA UYNI ISITISHGA SARFLANADIGAN ISSIQLIK QIYMATINI XISOBLASH. Educational Research in Universal Sciences, 2(13), 318–321.

13. Toshmatov N. U., & Mansurova Sh. P. (2022). Efficiency of use of heat pumps. International Journal of Innovations in Engineering Research and Technology, 9(10), 1–5.
14. Turdiqulov, B., Ismoilov, A., & Shahobiddin, H. (2023). The Role of Ventilation in the Production of Various Clothing Materials. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(4), 124-133.
15. Nazirov, S. O. o‘g‘li. (2023). GLOBAL SUV TANQISLIGI DAVRIDA SUV TA’MINOTI TIZIMLARINI TAKOMILLASHTIRISH MASALALARI. Educational Research in Universal Sciences, 2(13), 109–115.
16. Turdiqulov, B. (2023). Improvement of the Operation Process of Gas Burners. Vital Annex: International Journal of Novel Research in Advanced Sciences, 2(3), 1-5.
17. Karimov, Y. N. (2022). Aholini ichimlik suvi bilan ta’minlash muammolari. Science and Education, 3(12), 369-375.
18. Mansurova, S. (2023). SOLAR HEATING SYSTEMS FOR BUILDINGS. International Bulletin of Applied Science and Technology, 3(11), 311–315.
19. Каримов, Э. Т. ў. (2023). МАМАЛАКАТИМИЗДА ЕНГИЛ АВТОМОБИЛ ЮВИШ ШАХОБЧАЛАРИНИНГ ОҚОВА СУВЛАРИНИ ОҚИЗИШДА ЯНГИ ТИЗИМЛАРНИ ИШЛАБ ЧИҚИШ. Educational Research in Universal Sciences, 2(13), 263–267.
20. Nazirov Sanjar, & Karimov Yusuf. (2023). YER OSTI MUHANDISLIK TARMOQLARINI JOYLASHTIRISH VA ULARNING MUSTAHKAMLIK PARAMETRLARINI ANIQLASH. Innovations in Technology and Science Education, 2(9), 402–408.
21. Saydullaev, S.R. (2020). Decision-making system for the rational use of water resources. Journal of Central Asian Social Studies, 1(01), 56-65.
22. Q.U.Takaboev. (2022). ON INCREASING THE EFFICIENCY OF HOUSEHOLD WASTEWATER TREATMENT. British Journal of Global Ecology and Sustainable Development, 11, 96–101. Retrieved from https://journalzone.org/index.php/bjgesd/article/view/181
23. Турсунов, М. К. (2020). Новые инновационные методы повышения экономической эффективности при дефиците воды в регионе. Science and Education, 1(4), 78-83.

УДК 6214-037-126

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СОВРЕМЕННЫЙ ПОДХОД К ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ ГРИБКОВЫХ ЗАБОЛЕВАНИЙ УХА

Резюме. Изучение этиологии и патогенеза отомикоза позволило наметить конкретные пути к осуществлению профилактических мероприятий при этом заболевании. В связи с тем, что предрасполагающими моментами для возникновения отомикозов являются различного рода дерматиты области наружного слухового прохода, предупреждение воспалительных процессов в этой области и своевременное их лечение являются одновременно и профилактикой отомикоза.

Ключевая слова: отомикоз, заболевания уха, дерматит слухового прохода.

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A MODERN APPROACH TO THE TREATMENT AND PREVENTION OF FUNGAL EAR DISEASES

Resume. The study of the etiology and pathogenesis of otomycosis made it possible to identify specific ways to implement preventive measures for this disease. Due to the fact that the predisposing moments for the occurrence of otomycosis are various kinds of dermatitis of the external auditory canal, the prevention of inflammatory processes in this area and their timely treatment are at the same time the prevention of otomycosis.

Keywords: otomycosis, ear diseases, dermatitis of the auditory canal.

Введение. Грибковые заболевания наружного уха могут возникать также у больных хроническими гнойными отитами. Поэтому при лечении последних с целью профилактики отомикоза следует тщательно проводить туалет наружного слухового прохода, избегая его травматизации.

Несомненное влияние в отношении возникновения отомикоза оказывает антибиотикотерапия, что нашло подтверждение и на материале наших наблюдений; развитию грибков в наружном слуховом проходе и в послеоперационных ушных полостях особенно способствовало местное применение антибиотиков. Следовательно, для профилактики отомикоза необходимо ограничивать использование антибиотиков для местного лечения наружных отитов, а главное, ограничивать длительность их применения и

также избегать часто необоснованно длительного применения общей антибиотикотерапии. При лечении антибиотиками целесообразно и необходимо исследовать чувствительность флоры к антибиотикам, что может повысить эффективность лечения и уменьшит длительность антибиотикотерапии.

Все это полностью относится к ведению больных после различных ушных операций, так как часто у этой группы больных неправильно проводимая терапия антибиотиками значительно ухудшает результаты оперативных вмешательств. Профилактически целесообразно после различных ушных операций местное применение водного раствора натриевой соли нистатина в виде ушных капель.

Цель исследования. Повышение эффективности диагностики и лечения микотического поражения уха посредством усовершенствования качества лабораторной диагностики микоза и специфической антимикотической терапии.

Материалы и методы исследования. Для выпольнения поставленную перед нами задачу, мы отобрали в общей сложности 50 пациентов с грибковыми заболеваниями уха с целью лечения и профилактики.

Результаты исследования. Проведённые нами эпидемиологические исследования установили, что среди пациентов с воспалительными заболеваниями уха доля грибкового поражения составляет 23%. У 69,1% имелся наружный грибковый отит, у 17,8% - микоз среднего уха и у 13,1% - микоз послеоперационных полостей. Разработан алгоритм диагностики отомикоза, включающий отомик-роскопию, световую и люминесцентную микроскопическую экспресс-диагностику, и посев на селективные питательные среды, что позволило сократить время постановки диагноза и начала лечения с 10-14 до 1 суток.

Возбудителями отомикоза являются плесневые грибы родов Aspergillus, Pénicillium, Mucor, Rhizomucor (у 60,5% обследованных) и дрожжеподобные грибы рода Candida (у 39,5% обследованных). Среди грибов рода Aspergillus доминирует Aspergillus niger (43,5%). Этиологическую значимость имеют не только Candida alb., но и другие виды Candida. 16,4% случаев выделены грибково-грибковые или грибково-бактериальные ассоциации.

Состав грибковой флоры меняется в зависимости от локализации воспалительного процесса. При5 микозе наружного слухового прохода плесневые грибы выявлены у 64,3% пациентов, дрожжеподобные - у 35,7% пациентов, при микозе среднего уха - у 20,8% и 79,2% пациентов, а при микозе послеоперационной полости - у 94,3% и 5,7% пациентов, соответственно. В патогенезе грибкового заболевания уха доминирующим предрасполагающим фактором является различная по генезу травма. Предрасполагающим фактором развития микоза среднего уха и послеоперационных полостей является сопутствующая соматическая патология, например, сахарный диабет, выявленный у 26,4% пациентов, против 2,85% - у пациентов с наружным грибковым отитом.

Основными клиническими симптомами наружного, среднего грибкового отита и микоза послеоперационной полости уха являются боль и выделения из уха. Патологическое отделяемое имеет характер казеозно-некротических масс, окрашенных в зависимости от гриба-возбудителя.

Разработан алгоритм лечения отомикоза, включающий применение местных и системных противогрибковых препаратов или их сочетаний в зависимости от локализации процесса и этиологического фактора, что позволило уменьшить количество неудовлетворительных результатов с 40% до 5% - при кандидозном и с 16% до 4% - при аспергиллёзном наружном отите, а долю рецидивов - с 16,6% до 10% и с 30% до 3,1%, соответственно. У пациентов с микозом среднего уха и микозом послеоперационной полости полное излечение достигнуто у 88% при кандидозном и у 82,4% -при аспергиллёзном процессе, доля рецидивов уменьшилась до 6% и 20%, соответственно. Оптимизированы условия фотодинамического воздействия на грибы и разработан метод фотодинамического лечения наружного грибкового отита, вызванного резистентными штаммами грибов рода Candida.

Вывод. Разработанный диагностический алгоритм при отомикозе, включающий использование операционного микроскопа для отоскопии и отбора материала для дальнейших микроскопических и микологических исследований, позволяет сократить время постановки диагноза грибкового заболевания до 1 суток. Разработанный алгоритм лечения грибкового отита, учитывающий локализацию процесса и вид гриба - возбудителя отомикоза позволяет сократить сроки лечения пациентов с грибковым поражением уха, уменьшить число рецидивов и неудовлетворительных результатов.

Предложенный нами алгоритм диагностики и лечения отомикоза можно использовать в амбулаторных и стационарных условиях.

Использованные источники:

1. Ананьев, В.Н. Новая адресная иммобилизованная лекарственная форма — лекарственные желатиновые пленки. / В.Н. Ананьев, Ю.Т. Новиков, В.А. Фурин и др. // М. «Медицинская книга». 2004. – С. 4, 114-115.
2. Буркутбаева, Т.Н. Клинико-лабораторные и патоморфологические аспекты диагностики и лечения микотических трепанационных полостей среднего уха. / Т.Н. Буркутбаева // Российская оториноларингология. -2009. – №2. – С. 48-53.
3. Кунельская, В.Я. Современное состояние вопроса диагностики и лечения грибковых заболеваний ЛОР-органов. / В.Я. Кунельская // Вестник оториноларингологии №4. 2009г. – С.75-79.
4. Чесноков, А.А. Системный анализ лечения отомикоза с использованием желатиновых пленок и желатиновых ушных трубочек в условиях севера. / А.А. Чесноков, А.В. Куяров, Ю.С. Гадко // Медицинская наука и образование Урала. 2009. – т. 10. – № 1. – С. 118-121.
5. Araiza, J. Otomycosis: clinical and mycological study of 97 cases. / J. Araiza, P. Canseco, A. Bonifaz // Rev Laryngol Otol Rhinol (Bord) 127 (2006) 251-254.

6. Kiakojuri, K. Southeast Asian Suction clearance and 2% topical miconazole versus the same combination with acidic drops in the treatment of otomycosis. / K. Kiakojuri, MR. Roushan, SA. Sepidgar // J. Trop Med Public Health. 2007 Jul; 38(4):749-753.
7. Youssef, YA. Studies on fungus infection of the external ear. II. On the chemotherapy of otomycosis. / YA. Youssef, MH. Abdou // J. Laryngol Otol. 1967 Sep; 81(9): 1005-1012.
8. Zaoli, G. Contribution to the study of mycoses of the external ear. / G. Zaoli // Boll Mai Orecch GolaNaso. 1959 Jul; 77:444-472.
9. Zaror, L. Otomycosis in the south of Chile. / L. Zaror, G. Aravena, C. Nunez //Rev Latinoam Microbiol. 1981 Apr-Jun; 23(2):97-101.

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ИННОВАЦИОННЫЕ ТЕХНОЛОГИИ В ВУЗОВСКОМ ОБРАЗОВАНИИ

Аннотация. В статье рассматриваются аспекты использования инновационных педагогических технологий в обучении студентов вуза. Также автором представлены виды и типы данных технологий и описываются примеры их использования на уроках русского языка в медвузе.

Ключевые слова: инновация, инновационные технологии, творческая личность, когнитивное мышление, современные образовательные технологии, цифровые образовательные ресурсы.

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INNOVATIVE TECHNOLOGIES IN UNIVERSITY EDUCATION

Abstract. The article discusses aspects of the use of innovative pedagogical technologies in teaching university students. The author also presents the types and types of these technologies and describes examples of their use in Russian language lessons at a medical university.

Key words: innovation, innovative technologies, creative personality, cognitive thinking, modern educational technologies, digital educational resources.

Инновация – (от латинского «innovation» - нововведение, изменение, обновление) – деятельность по созданию, освоению, использованию и распространению нового, с целенаправленным изменением, вносящим в среду внедрения новые элементы, вызывающие изменение системы из одного состояния в другое [1, 78].

Инновационные технологии – это производство (изобретение) нового для системы образования компонента.

Инновационные технологии в образовании – это организация образовательного процесса, построенная на качественно иных принципах, средствах, методах и технологиях и позволяющая достигнуть образовательных эффектов, характеризуемых: усвоением максимального объема знаний; максимальной творческой активностью; широким спектром практических навыков и умений. Целью инновационных технологий является формирование активной, творческой личности будущего специалиста,

способного самостоятельно строить и корректировать свою учебно-познавательную деятельность.

Инновационные технологии предполагают:

-повышение уровня мотивации к учебному труду.

-формирование высокого уровня развития обучающихся на основе включения их в постоянную усложняющуюся деятельность при активной поддержке учителя.

-постоянное повторение, систематизация знаний проговаривание вместе с учителем.

-формирование доброжелательной атмосферы, создание позитивного отношения к учению посредством индивидуального отношения к каждому студенту. [3, 23]

-создание когнитивной схемы мышления.

-воспитание чувства собственного достоинства

-в основе- дифференцированный подход.

-хорошее знание теоретического материала успешность обучения.

-создание проблемной ситуации.

-работа с одаренными студентами.

Универсальные учебные действияобеспечат возможность каждому обучающемуся самостоятельно ставить учебные цели и использовать для этого необходимые средства, научат определять способы их достижения. В конечном итоге даст возможность для развития самостоятельности и саморазвития. Для этого в своей работе мы используем педагогические технологии: проблемное обучение, технологию развития критического мышления, игровые технологии, технологию развития самостоятельности обучающихся, синквейн, кластер, мозговая атака, ключевые термины, исследование текста и др. К инновационным направлениям или современным образовательным технологиям отнесены:

-развивающее обучение;

-проблемное обучение;

-разноуровневое обучение;

-коллективная система обучения;

-технология решения задач;

-исследовательские методы обучения;

-проектные методы обучения;

-технологии модульного обучения;

-лекционно-семинарско - зачётная система обучения;

использование в обучении игровых технологий

(ролевые, деловые и другие виды обучающих игр);

-обучение в сотрудничестве (командная, групповая работа);

-информационно-коммуникационные технологии;

-здоровьесберегающие технологии [4, 18].

Цифровые образовательные ресурсы – совокупность средств программного, информационного, технического и организационного

обеспечения, электронных изданий, размещаемых на машиночитаемых носителях или в сети. Это цифровая фотография, видеофрагменты, статические и динамические модели, звукозаписи, символьные объекты и деловая графика, текстовые документы, презентации и иные учебные материалы, необходимые для организации учебного процесса.

Развивающее обучение – направление в теории и практике образования, ориентирующееся на развитие физических, познавательных и нравственных способностей учащихся путем использования их потенциальных возможностей. Основы теории развивающего обучения были заложены Л. С. Выготским в 30-е годы XX века.

С конца 50-х годов гипотезу Выготского разрабатывали два коллектива, созданные Занковым и Элькониным. Исходя из того, что традиционное начальное обучение не обеспечивает должного психического развития детей, Занков разработал новую дидактическую систему, основанную на взаимосвязанных принципах: обучение на высоком уровне трудности; ведущая роль теоретических знаний; высокий темп изучения материала; осознание школьниками процесса учения; систематическая работа над развитием всех учащихся.

Схема проблемного обучения представляется как последовательность процедур, включающих: постановку преподавателем учебно-проблемной задачи, создание для учащихся проблемной ситуации; осознание, принятие и разрешение возникшей проблемы, в процессе которого они овладевают обобщенными способами приобретения новых знаний; применение данных способов для решения конкретных систем задач.

Проблемная ситуация – это познавательная задача, которая характеризуется противоречием между имеющимися знаниями, умениями, отношениями и предъявляемым требованием.

Достоинства проблемного обучения: высокая самостоятельность учащихся; формирование познавательного интереса или личностной мотивации учащегося.

Личностно-ориентированные технологии предполагают учет индивидуальных особенностей каждого студента, т.е. дифференцированный подход в обучении к каждому с учетом его конкретных знаний, умений и навыков, а также такие критерии оценки, которые не только устанавливают уровень успешности обучения, но и оказывают воспитательное воздействие на учащихся, стимулируя их учебную деятельность. Разноуровневое обучение необходимо для того, чтобы дать возможность каждому студенту развить свои потенциальные способности.

Идея коллективного способа обучения В.К. Дьяченко.

Дидактическая основа КСО – сотрудничество. Работа организуется в парах сменного состава, позволяет обеспечить взаимообучение и взаимоконтроль обучаемых. Опыт показывает, что коллективная форма обучения означает такую организацию обучения, при которой все участники работают друг с другом в парах и состав пар периодически меняется. В итоге

получается, что каждый член коллектива работает по очереди с каждым, при этом некоторые из них могут работать индивидуально. Технология коллективного взаимообучения [4, 56] позволяет плодотворно развивать у обучаемых самостоятельность и коммуникативные умения.

Под педагогической задачей следует понимать осмысленную педагогическую ситуацию с привнесенной в неё целью в связи с необходимостью познания и преобразования действительности. Она является результатом осознания субъектом цели образования и условий её достижения в педагогической ситуации, а также необходимости выполнения профессиональных действий и принятия их к исполнению. Любая педагогическая ситуация проблемна. Осознанная и поставленная педагогом как задача, она в результате его деятельности в дальнейшем трансформируется в систему конкретных задач педагогического процесса.

Процесс обучения представляет собой взаимосвязанную деятельность преподавателя и учащегося. Метод обучения естественно следует рассматривать как способ, с помощью которого осуществляется эта взаимосвязанная деятельность. Известно, что для развития ученика его необходимо включить в самостоятельную деятельность по решению проблем. Именно эту задачу и призваны решать эвристические методы обучения. Следовательно, эвристические методы – это методы развивающего обучения. Ведущая деятельность учащегося в условиях такого метода должна носить поисковый характер. Объем и способность самостоятельной поисковой деятельности учащегося могут изменяться в широких пределах, в связи с чем эвристические методы делятся на: проблемное изложение; частично-поисковые методы; исследовательские методы.

В основе метода проектов лежит развитие познавательных, творческих навыков учащихся, умений самостоятельно конструировать свои знания, умений ориентироваться в информационном пространстве, развитие критического мышления.

Метод проектов – явление не новое в педагогике. Он применялся и в отечественной дидактике (особенно в 20-30 годы), и в зарубежной. В последнее время этому методу уделяется пристальное внимание во многих странах мира. Первоначально его называли методом проблем и связывался он с идеями гуманистического направления в философии и образовании, разработанными американским философом и педагогом Дж.Дьюи, а также его учеником В.Х.Килпатриком [3, 45]. Дж.Дьюи предлагал строить обучение на активной основе, через целесообразную деятельность ученика, сообразуясь с его личным интересом именно в этом знании.

Метод проектов всегда ориентирован на самостоятельную деятельность учащихся – индивидуальную, парную, групповую, которую учащиеся выполняют в течение определенного отрезка времени. Этот подход органично сочетается с методом обучения в сотрудничестве. Данный метод всегда предполагает решение какой-то проблемы, предусматривающей, с одной стороны, использование разнообразных методов, с другой - интегрирование

знаний, умений из различных областей науки, техники, технологии, творческих областей.

Метод проектов даёт возможность на уроке равномерно сочетать изучение нового материала с его практическим применением. Здесь уместна “мозговая атака”, где учащиеся самостоятельно работают над своими индивидуальными творческими заданиями. Например, при изучении темы «Профессиональный язык врача» мы обсуждаем вопрос методом МППО. Даётся тезис «овладение профессиональным языком необходимо врачу в дальнейшей деятельности». Студенты опровергают или соглашаются с данным мнением. В обоих случаях им необходимо приводить аргументы по поводу рассуждения на заданную тему и обобщать сказанное.

Модульное обучение основано на следующей основной идее: ученик должен учиться сам, а учитель обязан осуществлять управление его учением: мотивировать, организовывать, координировать, консультировать, контролировать. Модуль – это целевой функциональный узел, сущность которого состоит в том, что ученик полностью самостоятельно (или с определенной дозой помощи) достигает конкретных целей учебно-познавательной деятельности в процессе работы с модулем [4, 12].

Лекционно - семинарско-зачетная технология – это системный дидактический комплекс, включающий оптимальные формы, методы и средства, обеспечивающие интенсификацию самостоятельной работы деятельности школьников в процессе их обучения и развития. Таким образом, лекция, семинар, зачет в единстве и взаимосвязи реализуют задачи обучения и развития. Применение данной технологии позволяет быстрыми темпами, качественно, на уровне осмысления изучить большие блоки учебного материала. Лекционно-семинарская система позволяет включить в процесс обучения большой объем самостоятельных работ с различными источниками.

Инновационные технологии в образовании играют важную роль для обучающихся, которые имеют проблемы со здоровьем. Теперь они могут овладевать знаниями предметных дисциплин через дистанционное обучение.

Инновационные процессы в образовании имеют свои плюсы: во-первых, пробуждают мотивацию у учащихся к познавательной деятельности, особенно по проектированию; во-вторых, отмечается, что использование такого обучения создает более комфортный психологический климат для студента, в частности снимает напряжение при общении с преподавателем; в-третьих, информатизация стимулирует не только студентов, но и привлекает педагогов в большей степени из-за повышения производительности его труда и культуры [3, 34].

Известно, что игры активизируют процесс обучения. Применение игровых технологий на уроках русского языка дает возможность укрепить мотивацию на изучение предмета, поддерживать интерес, увлеченность процессом, вызвать положительные эмоции, то есть создать благоприятный эмоциональный настрой урока, увидеть индивидуальность каждого. Это способ самореализации, самовыражения, самооценки.

Например, при изучении темы “Медицинская терминология” проводим игру “Кто больше?”. Студенты делятся на команды и работают на доске. В течение 5 минут пишут анатомические, клинические, фармацевтические термины. В заверешении игры подсчитываем слова. Побеждает та команда, которая написала больше слов. Этот процесс проходит очень интересно и оживлённо.

Мы убеждены, что задача любого преподавателя, в том числе и преподавателя русского языка, состоит в том, чтобы создать условия для включения студентов в процесс творчества и найти методы, адекватные его психофизиологическим особенностям.

Таким образом, широкое внедрение инновационных технологий создают условия для повышения качества обучения, познавательной активности и мотивации учащихся. Применяемые технологии способствуют развитию познавательных интересов, творческих способностей студентов. У каждого педагога свой стиль и методы работы. Технологии выбираются с учётом контингента учащихся.

Использованные источники:

1. Гришина Е.А. Современный словарь иностранных языков. Русский язык, 1993
2. Епифанов В.А. «Лечебная физическая культура». Москва «Медицина». 2008. – стр. 490-491.
3. Полтава И., Козлова Г.И. Современные педагогические технологии на современном уроке» / И. - Златоуст: Изд-во ММЦ № 000, 2009 г. – стр.35.
4. Никишина И.В. Инновационные педагогические технологии и организация учебно-воспитательного и методического процессов в школе. Издательство «Учитель», Волгоград, 2008.

DOI 10.5281/zenodo.10724521

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ФОРМИРОВАНИЕ ИНДИВИДУАЛЬНО-ПСИХОЛОГИЧЕСКИХ ХАРАКТЕРИСТИК БУДУЩЕГО УЧИТЕЛЯ ИНФОРМАТИКИ В ВИРТУАЛЬНОЙ ОБРАЗОВАТЕЛЬНОЙ СРЕДЕ

Аннотация. В статье проводится анализ и обобщение опыта применения виртуальных образовательных сред в процессе подготовки будущих педагогов информатики, выявлены ключевые аспекты формирования индивидуальных психологических характеристик студентов, обучающихся в виртуальной среде.

Ключевые слова: виртуальная образовательная среда (вос), индивидуально-психологические характеристики, социальные навыки, персонализированное обучение, обратная связь, саморегуляция и планирование

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FORMATION OF INDIVIDUAL PSYCHOLOGICAL CHARACTERISTICS OF A FUTURE COMPUTER SCIENCE TEACHER IN A VIRTUAL EDUCATIONAL ENVIRONMENT

Abstract. The article analyzes and generalizes the experience of using virtual educational environments in the process of training future computer science teachers, and identifies key aspects of the formation of individual psychological characteristics of students studying in a virtual environment.

Key words: virtual educational environment (vos), individual psychological characteristics, social skills, personalized learning, feedback, self-regulation and planning.

В наше эпоху стремительного развития информационных технологий и широкого использования виртуальных образовательных сред, формирование компетентного и психологически устойчивого кадра в области информатики становится одной из ключевых задач образования. Особенно важным аспектом является понимание влияния виртуального обучения на

формирование индивидуально-психологических характеристик будущего учителя информатики.

В рамках данной работы мы обращаем внимание на теоретические аспекты формирования личности будущего учителя информатики, рассматриваем влияние виртуальной образовательной среды на психологическое развитие студентов, а также предлагаем практические рекомендации и примеры успешных методик, способствующих эффективному формированию индивидуальных характеристик в контексте виртуального обучения.

Исследование Дж. Смита (2018) подчеркивает, что виртуальное обучение способствует развитию когнитивных навыков будущих учителей информатики. В частности, выявлено улучшение у студентов способностей к анализу информации, принятию решений и решению творческих задач.

В работе Ж. Брауна (2020) исследовался вопрос адаптации студентов к быстро меняющейся виртуальной среде. Подчеркнута важность развития стрессоустойчивости и умения эффективно адаптироваться к новым образовательным технологиям, что влияет на успешное формирование профессиональных качеств будущего учителя информатики.

Обзор литературы, проведенный с учетом имен и годов исследований, подчеркивает необходимость дальнейших исследований для выявления новых тенденций, оптимальных практик и инновационных подходов, способствующих формированию индивидуально-психологических характеристик будущих учителей информатики в условиях виртуального обучения.

Виртуальная образовательная среда играет ключевую роль в формировании будущих учителей информатики, предоставляя инновационные методы обучения. Современные технологии позволяют студентам не только углублять теоретические знания, но и развивать практические навыки через интерактивные платформы и виртуальные инструменты. Эта среда способствует развитию критического мышления, творческого подхода к решению задач, а также обучает эффективному использованию современных образовательных ресурсов. В результате студенты, подготавливаясь в виртуальной среде, выходят в мир образования с уверенностью, адаптированные к быстро меняющимся требованиям современной информационной среды.

В условиях виртуальной образовательной среды формирование индивидуально-психологических характеристик будущего учителя информатики обретает особое значение. Прежде всего, важно обеспечить студентов инструментами развития критического мышления и аналитических навыков в процессе виртуального обучения.

Влияние виртуального обучения на психологическое развитие студентов является фундаментальным аспектом современного образования. Виртуальная среда предоставляет уникальные возможности для развития разносторонних психологических аспектов студентов.

Во-первых, виртуальное обучение способствует развитию самостоятельности и ответственности. Студенты сталкиваются с необходимостью управления своим временем, принятия решений и организации обучения в онлайн-режиме, что способствует их психологической зрелости.

Во-вторых, виртуальная среда стимулирует развитие адаптационных навыков. Студенты учатся эффективно адаптироваться к новым технологиям, обучающим платформам и формам взаимодействия, что способствует их гибкости и открытости к изменениям.

Виртуальная образовательная среда является не только средством передачи знаний, но и мощным инструментом для обогащения психологического опыта студентов, подготавливая их к современным вызовам и требованиям образовательного процесса.

В виртуальной образовательной среде формирование индивидуально-психологических характеристик учителя информатики становится неотъемлемой частью подготовки квалифицированных педагогов. Этот процесс направлен на развитие ключевых компетенций, необходимых для успешного обучения в онлайн-формате.

Такой подход к формированию индивидуально-психологических характеристик обеспечивает учителям информатики не только техническую подготовку, но и разностороннее психологическое развитие, делая их более гибкими и успешными в условиях современного виртуального образования.

Для преподавателей и организаторов образовательных программ важно учесть следующие рекомендации при формировании индивидуально-психологических характеристик будущих учителей информатики в виртуальной образовательной среде:

Использование разнообразных методик:	**Стимулирование виртуального взаимодействия:**	**Обеспечение доступности обучающего контента:**
• Интегрируйте различные методики виртуального обучения, включая интерактивные задания, онлайн-проекты и геймификацию, для создания разностороннего опыта студентов.	• Поощряйте студентов активно участвовать в онлайн-дискуссиях, групповых проектах и виртуальных коммуникациях для развития их социальных навыков.	• Гарантируйте легкий доступ к образовательным ресурсам, поддерживайте технологическую инфраструктуру и предоставляйте четкие инструкции по использованию виртуальных инструментов.

Организация обратной связи:	Создание индивидуализированных задач:	Обучение навыкам саморегуляции:
• Устанавливайте системы обратной связи, чтобы студенты могли оценивать свой прогресс и получать конструктивные комментарии, способствуя их личностному развитию.	• Развивайте учителей информатики, предоставляя персонализированные задания и проекты, учитывающие уровень навыков и интересов каждого студента.	• Интегрируйте в образовательный процесс задания, способствующие развитию навыков самостоятельной организации, планирования и самоконтроля.

В формировании характеристик будущих учителей информатики выделяются успешные практики, способствующие разностороннему развитию. Интерактивные виртуальные лаборатории и проекты, предоставляемые платформами, позволяют студентам применять теоретические знания на практике. Онлайн-семинары и вебинары, организованные опытными преподавателями, развивают коммуникативные навыки и способности эффективного ведения уроков в виртуальной среде. Кроме того, включение в образовательный процесс инновационных методик, таких как геймификация, поднимает мотивацию и активизирует интерес студентов к предмету, способствуя успешному формированию характеристик будущих учителей информатики.

Суммируя выше сказанное, можно подчеркнуть, что виртуальная образовательная среда становится неотъемлемым компонентом формирования индивидуально-психологических характеристик будущих учителей информатики. Освоение студентами современных технологий в обучении и использование инновационных методик способствуют не только углублению теоретических знаний, но и развитию ключевых социальных и личностных навыков.

Использованные источники:

1. Мамаджанова, С. В. "ВИРТУАЛЬНАЯ ИНФОРМАЦИОННАЯ ОБРАЗОВАТЕЛЬНАЯ СРЕДА: ОСОБЕННОСТИ И МЕТОДИЧЕСКАЕ ПРОБЛЕМЫ В ЕЁ ПРОЕКТИРОВАНИИ."
2. Muydinovich, Rasulov Inom, Mamadjanova Svetlana Valentinovna, and Maxkamova Dilshoda Xabibjonqizi. "THE ROLE OF INFORMATION TECHNOLOGY IN MODERN METHODS IN THE SYSTEM OF HIGHER EDUCATION." *International Journal of Early Childhood Special Education* 14.7 (2022).

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КРАТКАЯ ИСТОРИЯ РАЗВИТИЯ ИНСТИТУТА СТРАХОВАНИЯ

Аннотация. Страхование — одна из древнейших категорий общественно-экономических отношений. Истоки страхования уходят в такое далекое прошлое, что установить точное время его возникновения не представляется возможным. Оно зародилось тогда, когда в обществе еще только складывались отношения собственности и товарные отношения. История страхования берет свое начало еще в древних временах и развивалась на протяжении веков, отражая экономические, социальные и политические процессы в обществе. Во все времена собственник имущества волновался за его сохранность и соответственно за свое материальное благополучие. Именно на этой почве возникла идея возмещения материального ущерба путем солидарной раскладки между заинтересованными владельцами имущества. В данной статье мы познакомимся с основными этапами развития страхования в мире.

Ключевые слова: страхование, риск, имущество, ответственность, потеря, компенсация, страховой взнос.

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BRIEF HISTORY OF THE DEVELOPMENT OF THE INSURANCE INSTITUTE

Abstract. Insurance is one of the oldest categories of socio-economic relations. The origins of insurance go back so far that it is not possible to establish the exact time of its occurrence. It originated when property relations and commodity relations were still developing in society. The history of insurance dates back to ancient times and has developed over the centuries, reflecting the economic, social and political processes in society. At all times, the owner of the property was worried about its safety and, accordingly, for his material well-being. It was on this basis that the idea of compensation for material damage arose through a joint arrangement between the interested owners of the property. In this article, we will get acquainted with the main stages of insurance development in the world.

Keywords: insurance, risk, property, liability, loss, compensation, insurance premium.

Если бы каждый собственник попытался возместить ущерб за свой счет, то он был бы вынужден создавать материальные или денежные резервы,

равные стоимости своего имущества, что, естественно, экономически не оправдано и разорительно. В самом деле трудно представить себе в реальной жизни владельца небольшой мастерской по ремонту обуви, едва сводящего концы с концами, но при этом сумевшего отложить сумму, равную стоимости этой мастерской, на случай непредвиденных обстоятельств. В то же время многолетний жизненный опыт показывает, что, хотя непредвиденные и стихийные бедствия носят случайный и неравномерный характер, число пострадавших всегда меньше числа заинтересованных лиц или хозяйств. При каких условиях солидарная раскладка возможного ущерба между заинтересованными владельцами имущества существенно сглаживает последствия стихийных бедствий и случайностей. Чем больше заинтересованных лиц или хозяйства участвуют в раскладе ущерба, тем меньшая доля средств выходит на каждого участника. Так возникло страхование, сущность которого состоит в замкнутой раскладке возможного ущерба между заинтересованными лицами.

Страхование-это финансовый инструмент и защита имущественных интересов физических и юридических лиц при наступлении определенных событий за счет денежных фондов. Страховой договор — это договор между страховщиком и страхователем, в рамках которого страховщик возмещает страхователю убытки или выплачивает определенную сумму в случае наступления страхового случая за счет денежных фондов. Эти фонды формируются из уплачиваемых потребителями страховых взносов. Первоначальный смысл термина «страхование» исходит из его корневого значения «страх». Различные опасности подстерегали человека всегда и повсеместно. Страх перед пожарами, наводнениями, набегами, грабителями и другими опасностями был вполне естественной реакцией человека. Страхованием стали называть разделение опасности («страха») с другими людьми, ее передачу более сильным.

Принято считать, что страхование в современном виде зародилось в XV веке в Великобритании. На самом же деле страхование возникло на ранних этапах развития человеческого общества. Страхование встречается уже в древних цивилизациях, таких как Вавилон, Древний Египет и Китай. Первые меры по страхованию начали применять в древнем Вавилоне во 2м веке до н.э. Купцы получали выплаты в случае потери их товара караваном. Для этого со всех желающих брали плату равную части стоимости груза. Во 2м веке н.э. в Китае при переправе товаров по воде, купцы разделяли товары на несколько судов, для распределения рисков. Но эти мероприятия никак не подкреплялись мат расчетами, поэтому с современным страхованием имеют мало общего. Вавилонский кодекс Хаммурапи (ок. 1750 г. до н. э.) содержит первые упоминания о страховании, связанные с кредитными рисками и залогами. В Древнем Египте существовали формы коллективного страхования, когда в случае смерти рабочего на стройке пирамиды, его семье компенсировался ущерб. В Древнем Китае страхование использовалось для защиты караванов от ограбления и наводнений. Еще в период

рабовладельческого строя владельцы имущества использовали страхование как способ защиты их от уничтожения силами природы, утраты в связи с грабежами и другими непредвиденными ситуациями.

Наиболее примитивной формой раскладки ущерба было натуральное страхование. За счет запасов зерна, фуража и других однородных, легко отделяемых продуктов, формируемых путем от подушных натуральных взносов, оказывалась материальная помощь отдельным пострадавшим крестьянским хозяйствам. Однако такое страхование ограничивалась естественными рамками односторонности и делимости формируемых с его помощью натуральных запасов. По мере развития товарно-денежных отношений натуральное страхование уступило место страхования в денежной форме. Раскладка ущерба в денежной форме создавало широкие возможности, прежде всего для взаимного страхования, когда сумма ущерба возмещалась его участниками на солидарных началах либо после каждого страхового случая, либо по окончании хозяйственного года.

В средневековой Европе страхование начало активно развиваться в связи с ростом торговли и мореплавания. Страховые договоры стали заключаться на крупные торговые операции, защищая купцов от потерь, связанных с пиратством, бурями и кораблекрушениями. В середине XIV века в Италии появилось одно из первых сообществ, которое занималось морским страхованием в коммерческих целях. Он обеспечивал покрытие для капитанов судов и торговцев, на случай, если их груз будет потерян в море. Город Генуя был центром коммерции и торговли в XV веке. Отчасти это связано с тем, что это была естественная остановка для торговцев и капитанов кораблей, путешествующих через Средиземное море для торговли товарами. С таким большим количеством торговли и коммерции потери были неизбежны, особенно на море. Вполне естественно, что будет разработана система управления рисками для защиты торговцев и капитанов судов от финансовых потерь. Хотя мы мало знаем о группе, которая составила первую страховую компанию Генуи в конце XIV века, она, по-видимому, была создана как общество взаимопомощи. Другими словами, участники платили страховые взносы и разделяли стоимость убытков в случае потери их груза в море. К середине XV века страхование было хорошо зарекомендовавшей себя отраслью в Генуе, и город стал известен как центр страхования и управления рисками.

В начале Нового времени страхование становится все более сложным и разнообразным. В XVI-XVII веках появляются первые страховые компании, такие как Ллойд из Лондона (1688 г.) и парижская компания La Royale (1689 г.). Происходит разделение страхования на различные виды, такие как морское, пожарное, жизненное и другие. Важным шагом в развитии страхования стало создание актуарной науки, которая позволила определить вероятность наступления страховых случаев и рассчитать страховые тарифы. XIX век стал периодом роста и расширения страхового рынка. Возникают новые страховые компании, расширяется география страхования, появляются

новые виды страхования, такие как страхование от несчастных случаев и страхование имущества. Также в это время начинается активное использование взаимного страхования, когда страхователи объединяются для совместного покрытия рисков. В XIX веке страхование становится доступным не только для крупных предприятий, но и для малого бизнеса и частных лиц. XX век принес значительные изменения в страхование, связанные с развитием технологий, урбанизацией и глобализацией. В этот период появились новые виды страхования, такие как автомобильное, авиационное, страхование ответственности и киберстрахование. Во многих странах были введены государственные страховые программы, например, социальное страхование и обязательное медицинское страхование. В XX веке также началось активное использование реиншуринга – передачи страховых рисков от одной страховой компании другой с целью управления рисками и увеличения стабильности страхового рынка.

В начале XXI века страхование продолжает развиваться и адаптироваться к новым вызовам и возможностям. Цифровые технологии, искусственный интеллект и интернет вещей, привносят новые подходы к оценке рисков, продаже страховых продуктов и управлению страховыми процессами. В то же время страховые компании должны адаптироваться к новым глобальным вызовам, таким как изменение климата, пандемии и угрозы с кибербезопасностью.

Страхование это особый механизм рыночной экономики, который способствует "сглаживанию" негативных экономических положений, восстанавливать полноценное функционирование юридических лиц, потерпевших неудачу из-за тех или иных причин, а также является огромным потенциальным инвестором, способным вкладывать реальный капитал в развитие отечественной индустрии. В заключение, история страхования является отражением развития экономики, технологий и социальных процессов в обществе. От древних цивилизаций до современного мира, страхование продолжает эволюционировать, предлагая новые решения для защиты от рисков и убытков. В будущем мы, вероятно, увидим еще больше инноваций и прогресса в области страхования, поскольку отрасль продолжает адаптироваться к изменяющимся условиям и потребностям общества.

Использованные источники:

1. https://profistrah.ru/istoriya-strahovaniya/istoriya-strahovaniya-v-mire.html
2. Балабанов, Белоглазова, Беляева. Финансы, денежное обращение и кредит. Учебник для вузов/Под ред. Романовского. – М.:2001
3. Основы страховой деятельности: Учебник/ отв. ред. проф. Т. А. Федорова. -М.: Издательство БЕК, 1999 - 776с.
4. Финансы, денежное обращение. Кредит. Учебник для вузов/Под ред. Полянка Г.Б. – М.: ЮНИТИ-ДАЛА, 2-е изд. 2001 - 512с.

УДК 338.43

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ҚИШЛОҚ ХЎЖАЛИГИНИ ДАВЛАТ ТОМОНИДАН ТАРТИБГА СОЛИШ ТИЗИМИНИ ШАКЛЛАНТИРИШНИНГ АСОСИЙ ТЕНДЕНЦИЯЛАРИ

Аннотация. Мақолада иқтисодиётни самарали давлат томонидан тартибга солиш масаласи, қишлоқ хўжалиги тармоғида давлат томонидан ишлаб чиқарувчиларини қўллаб-қувватлаш механизми билан боғлиқ мураккаб жараён баён қилинган. Мазкур масала юзасидан иқтисодчи олимларнинг ғоялари, фик ва мулоҳазалари, шунингдек, мақолада “давлат томонидан тартибга солиш” тушунчасини таққослама таснифи келтирилган. Қишлоқ хўжалиги ишлаб чиқаришини давлат томонидан тартибга солиш концепция сифатида тармоқ хусусиятини акс эттириши, қишлоқ хўжалигининг ўзига хос хусусиятлари очиб берилган.

Калит сўзлар: давлат, иқтисодиётни давлат томонидан тартибга солиш, инвестиция, бозор мунособатлари, давлат томонидан қўллаб-қувватлаш.

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MAIN TRENDS IN THE FORMATION OF A SYSTEM OF STATE REGULATION OF AGRICULTURE

Annotation. The article examines the issue of effective state regulation of the economy, a complex process associated with the mechanism of state support for producers in the agricultural sector. The article presents the ideas and opinions of economists on this issue, as well as a comparative classification of the concept of “state regulation”. State regulation of agricultural production as a concept reflects the network nature, and the specific features of agriculture are revealed.

Key words: state, state regulation of the economy, investments, market relations, state support.

Кириш. Иқтисодиётни самарали давлат томонидан тартибга солиш масаласи ҳар доим назариясида ҳам, уни амалга ошириш амалиётида ҳам энг қийин соҳалардан бири ҳисобланган. Кўпгина тадқиқотчилар ушбу иқтисодий ҳодисанинг муҳим жиҳатларини - давлат аралашуви, иқтисодий жараёнларни

давлат томонидан тартибга солиш кабиларни ўрганишга ҳаракат қилганлари ва ҳозирда ҳам тадқиқ қилишлари бежиз эмас.

Сўнги йилларда Ўзбекистон қишлоқ хўжалиги барқарор ва рақобатбардош ривожланиш траекториясига интилмоқда. Ўзбекистон Республикаси Президентининг 11.09.2023 йилдаги ПФ-158-сонли Фармони билан тасдиқланган "ЎЗБЕКИСТОН — 2030" стратегиясида Қишлоқ хўжалигида ҳосилдорлик ва рентабеллик даражасини кескин ошириш –мақсад қилиб олинган. Унга кўра, аграр соҳага жами 15 миллиард доллар инвестицияларни жалб қилиш орқали қишлоқ хўжалигини давлат томонидан тартибга солиш ва соҳада қўзланган мақсадлар учун молиявий қўллаб-қувватлашнинг аниқ параметлари белгиланган [1].

Методлар ва тадқиқотлар. Таҳлил давомида статистик таҳлил, синтез, индукция, дедукция, статистик гуруҳлаш, эксперт баҳолаш ва илмий абстракция ҳамда регрессив таҳлил усулларидан фойдаланилди.

Тадқиқот ва натижалар. Мазкур масала узоқ йиллар давомида иқтисодчи олимларнинг диққат марказида бўлган ва турли илмий мактаблар ва йўналишлар амалиётчиларнинг ўзаро кескин, зиддиятли қарашлари, ёндашувларининг тадрижий кураши асосида шаклланган. Иқтисодиёт ривожланишида давлатнинг роли масаласида ҳозирги замон иқтисодиёти назарияси асосчилари ҳисобланган олимлар А.Смит (1723-1790) ва Д.Рикардо (1772-1823)ларнинг қарашлари давлатнинг ҳар қандай аралашуви натижада иқтисодий тараққиётни секинлаштиради, деган фикрлар билан изоҳланади. Масалан, А.Смит ғояси қуйидагича: «Бозор иқтисодиёти ўзини-ўзи бошқаришга мослашган, унинг асосида кўпроқ фойда олишга ҳаракат қилиш билан боғлиқ «кўринмас қўл», яъни шахсий манфаат ётади». А.Смит хулосасига кўра, иқтисодиётни тартибга солишда давлат аралашуви камайтирилса, иқтисодиёт самарали амал қилади ва бозор бутунлай эркин бўлиши зарур [2], деб таъкидлайди.

Энди бевосита қишлоқ хўжалиги тармоғида давлат томонидан ишлаб чиқарувчиларини қўллаб-қувватлаш механизми билан боғлиқ бундай мураккаб мавзуни тадқиқ қилишга ўтсак, соҳани давлат томонидан тартибга солиш тизимида биз биринчи навбатда иқтисодиётни давлат томонидан тартибга солиш тушунчасининг ўзига аниқлик киритишга, бу соҳадаги етакчи олимларнинг нуқтаи назарини тушунишга ҳаракат қиламиз.

Шундай қилиб, ўзбек изоҳли луғатида давлат тушунчаси қуйидагича таъриф берилади: "Ўзбекистон фуқароларининг ижтимоий-сиёсий ҳуқуқларини ҳимоя қилувчи, бунга қарши турувчи кучларни қаршилигини синдирувчи, ҳокимият органлари ва сиёсий ташкилотлар тизимига эга бўлган мустақил мамлакат" [3] "таниқли рус тилининг изоҳли луғати давлат тушунчасини жамиятнинг асосий сиёсий ташкилоти, унинг бошқарувини амалга оширадиган ва унинг иқтисодий ва ижтимоий тузилишини ҳимоя қилувчи сифатида белгилайди.

Ўзбекистон Миллий энциклопедиясида "давлат –мамлакат миқёсида жамиятни уюштириш масалаларини ҳал қилиш, унинг ташқи

муносабатларини белгилаш ваколатлари бўлган ҳукмрон тузилма. Давлат жамиятни ўз қонун-қоидаларига кўра идора қилади, турли тип, шаклларда ташкил топади" [4].

Институционал ёндашувга мувофиқ унинг асосий моҳиятини "трансакция харажатлари" категориясидан фойдаланган ҳолда Д.Норт қуйидагича таърифлайди, "давлат –зўрликни амалга оширишда қиёсий устунликларга эга бўлган, чегаралари унинг фуқароларга солиқ солиш қобилияти билан белгиланган жуғрофий ҳудудни қамраб олувчи ташкилот" [5]. Бинобарин, давлат томонидан тартибга солиш, энг аввало, давлатнинг жамият манфаатлари йўлида унинг мавжудлиги, намоён бўлишининг турли соҳаларида мақсадли фаолиятидир.

Шундай қилиб, машҳур Б. А. Раизберг, Л. Ш. Лозовский ва Е. Б. Стародубцеванинг "Замонавий иқтисодий луғати" [6] иқтисодиётни давлат томонидан тартибга солишни "... давлат органлари томонидан ифодаланган давлатнинг иқтисодий объектлар ва жараёнларга таъсири ҳамда уларда иштирок этувчи шахслар манфаатлари, жараёнларга уюшқоқлик тус бериш, хўжалик юритувчи субъектлар фаолиятини тартибга солиш, қонун ҳужжатларига, давлат ва жамият талабларига риоя этилишини таъминлаш мақсадида амалга оширилади".

Уларнинг фикрича, давлат томонидан тартибга солиш сўзнинг кенг маъносида "...прогнозлаш, режалаштириш, молиялаштириш, бюджетлаштириш, солиққа тортиш, кредитлаш, маъмуриятчилик, ҳисобга олиш, назорат қилиш"ни ўз ичига олади.

Нуфузли олимларнинг фикрича, давлат томонидан тартибга солиш марказлашган иқтисодиётда ҳам, бозор иқтисодиётида ҳам содир бўлади, лекин тартибга солиш шакллари сезиларли даражада фарқланади. Масалан, марказлашган иқтисодиётни кўриб чиқсак, у директив режалаштириш ва бошқарувга эътибор беради, лекин бозор иқтисодиёти аллақачон бюджетлаштириш, солиққа тортиш, шунингдек, кредитлаш, давлат харидлари ва қонунчилик такомиллашуви билан изоҳланади.

Бозор муносабатлари шароитида давлат томонидан тартибга солиш иқтисод жамият тараққиётининг объектив иқтисодий қонуниятларига ва энг аввало талаб ва таклиф қонунига, қиймат қонунига ва бошқаларга асосланади. Давлат томонидан тартибга солиш бозор тизимининг ишлаши учун ҳуқуқий асосни таъминлашга қаратилган бўлиб, унда ишлаб чиқарувчилар, етказиб берувчилар ва маҳсулот истеъмолчилари ўртасида ҳуқуқий ва самарали муносабатлар ўрнатилади.

Бошқа қарашлар ҳам мавжуд. Шундай қилиб, А. Б. Борисов [7] Катта иқтисодий луғатда давлат томонидан тартибга солишга ўзининг таърифини бериб, уни давлат органлари томонидан ифодаланадиган давлатнинг иқтисодий объектлар ва жараёнларга ва уларда иштирок этувчи шахсларга таъсири сифатида белгилайди. У давлат томонидан тартибга солиш функциялари орасида қуйидагиларни ажратиб кўрсатади: ижтимоий-иқтисодий муносабатларга уюшган характер бериш, жараёнлар, хўжалик

юритувчи субъектларнинг тартибли фаолият юритиши, қонунларга риоя этилишини таъминлаш, давлат ва жамият манфаатларини ҳимоя қилиш.

Хориж манбаларида масалан, Оксфорд расмли энсиклопедиясида [8] давлат томонидан тартибга солиш давлат томонидан тегишли соҳада таклиф этилаётган фаолият қоидаларини белгиловчи қонунлар ва бошқа норматив-ҳуқуқий ҳужжатлар чиқариш орқали жамият ҳаётининг муайян соҳасини ташкил этишга давлатнинг мақсадли таъсири сифатида талқин этилади. Давлат томонидан тартибга солиш ва ушбу масала бўйича тегишли таърифларни соддалаштириш учун асосий муаллифларни аниқлаш учун биз махсус жадвал ишлаб чиқдик, унинг бир қисми қуйида келтирилган (1-жадвал).

1 – жадвал. “Давлат томонидан тартибга солиш” тушунчасини таққослама таснифи

Аниқлаштириш	Манба	Таянч иборалар	Қисқа мазмун ва моҳияти
Давлат томонидан тартибга солиш	Б. А. Райзберг, Л. Ш. Лозовский, Стародубцева Е.Б. Современный экономический словарь. – 5-е изд., перераб. и доп. – М.: ИНФРА-М, 2006.– С.80.	Давлат томонидан тартибга солиш, иқтисодий объектлар, таъсир доираси, жамоат манфаатлари	Давлат томонидан тартибга солиш давлат органларининг иқтисодий объектлар ва жараёнларга, уларда иштирок этувчи шахсларга таъсири орқали амалга оширилади. Бундан кўзланган мақсад хўжалик юритувчи субъектлар фаолиятини тартибга солиш, қонунлар, давлат ва жамият манфаатларига риоя этилишини таъминлашдан иборат [9].
Давлат томонидан тартибга солиш	Новый экономический словарь / под ред. А. Н. Азрилияна. – М.: Институт новой экономики, 2006. – С.734.	Давлат томонидан тартибга солиш, иқтисодий тартибга солиш, ижтимоий тартибга солиш.	Давлат томонидан тартига солишда иқтисодий ва ижтимоий турларига ажратилиб кўрсатилган.
Давлат томонидан тартибга солиш	Беркинов Б.Б. Институционал иқтисодиёт.Ўқув қўлланма.2-нашр, қайта ишланган. – Т.: Иқтисодиёт, 2013. – 153-бет.	Давлатнинг иқтисодиётга аралашуви, иқтисодиётни тартибга солиш, иқтисодиёт субъектлари, сиёсий, ижтимоий-иқтисодий мунособатлар	Давлатнинг жамиятманфаатларини кўзлаб, иқтисодиётга аралашуви ва уни тартибга солиши жараёнлари ва бунда давлат билан иқтисодиёт субъектлари ўртасида юзага келадиган сиёсий, ижтимоий-иқтисодий муносабатлар йиғиндиси ташкил этади [10].
Давлат томонидан тартибга солиш	Ҳ.П.Абулқосимов М.Ҳ. Абулқосимов С.Р.	иқтисодиётни давлат томонидан тартибга солиш,	иқтисодиётни давлат томонидан тартибга солишга қаратилган давлатнинг

	Топилдиев Иқтисодиётни давлат томонидан тартибга солиш Иқтисодиёт, 2019.	давлатнинг иқтисодий сиёсати, иқтисодиётни ривожлантириш ва ижтимоий-иқтисодий жараёнлар	иқтисодий сиёсати – давлатнинг иқтисодиётни ривожлантириш ва ижтимоий-иқтисодий жараёнларга таъсир этиш мақсадида бозор иқтисодиётининг амал қилиши учун қулай шароитларни яратишга қаратилган мақсадли чора-тадбирлари йиғиндисидир [11].
Давлат томонидан тартибга солиш	Государственное регулирование экономики / Т. Г. Морозова, Ю. М. Дурдыев, В. Ф. Тихонов и др.; Под. ред. проф. Т.Г. Морозовой. – М.: ЮНИТИ-ДАНА, 2002. –255 с.	Иқтисодиётни тартибга солиш, давлат аралашуви ва иштироки, ижтимоий ва иқтисодий жараёнларга таъсир қилиш усуллари ва воситалари	Давлат томонидан тартибга солиш – бозор муносабатларини самарали шакллантириш мақсадида ижтимоий ва иқтисодий жараёнларга таъсир қилиш усуллари ва воситалари ёрдамида давлат аралашуви ва иштироки [12]
Давлат томонидан тартибга солиш	Экономика. – М.: Юристъ. А.С. Булатов. 1999.	Давлат томонидан тартибга солиш, иқтисодий жараёнлар, иқтисодий сиёсат.	Иқтисодиётни давлат томонидан тартибга солиш – “давлатнинг жамиятнинг иқтисодий ҳаётига ва у билан боғлиқ ижтимоий жараёнларга таъсир кўрсатиш жараёни бўлиб, бу жараёнда давлатнинг иқтисодий ва ижтимоий сиёсати муайян таълимотга асосланган ҳолда амалга оширилади”.
Давлат томонидан тартибга солиш	Бурханов А.Х. Қишлоқ хўжалиги иқтисодиёти. дарслик. “Зиё маатба-нашриёти”, 2022 йил 105- бет.	Давлат аралашуви, қишлоқ хўжалиги, ишлаб чиқариш.	Давлат аралушувисиз қишлоқ хўжалиги ишлаб чиқаришини тўғри даражада ушлаб туриш муаммосини ҳал қилиб бўлмайди [13].

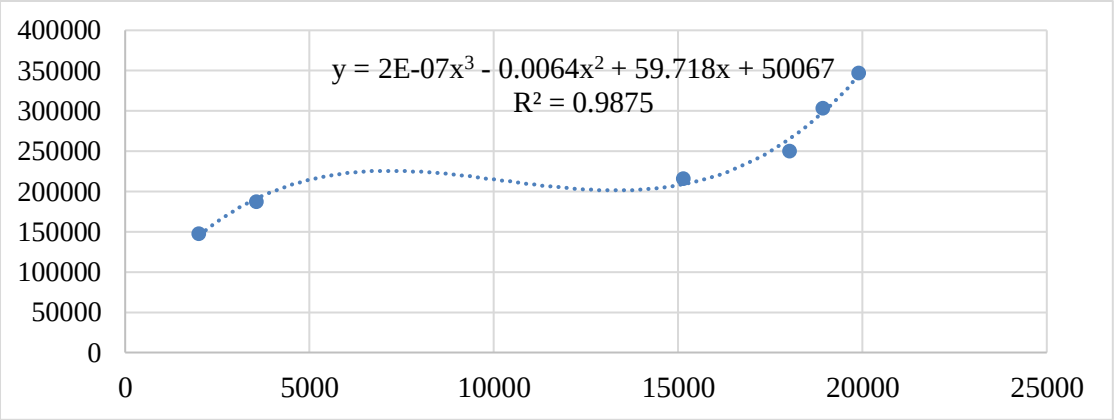
Ҳозиргача иккита муҳим илмий мактаб мавжуд бўлиб, улардан бири йирик қишлоқ хўжалиги ишлаб чиқариши позициясида (академиклар В. Добринин, В. Милосердов, Г. Беспахотний ва бошқалар) [14], иккинчиси самарали деҳқон хўжалиги позициясини ҳимоя қилади (В.Башмачников, В. Узун, В. Тихонов ва бошқалар) [15]. Бу олимлар қишлоқ хўжалиги ўзига хос тармоқда бозор механизмлари иқтисодиёт реал секторининг бошқа тармоқларидаги каби тўлақонли фаолият юрита олмайди, деб ҳақли равишда таъкидлайдилар.

Академик В.В.Милосердов каби олимлар қишлоқ хўжалиги ишлаб чиқаришини давлат томонидан бошқаришнинг кўплаб вариантлари ва механизмларини таклиф қилди, бунда тармоқни бозор ривожланишининг самарали воситаларини инкор этди; маҳаллий қишлоқ хўжалиги ишлаб чиқаришини, агросаноат комплексининг асосий соҳаларини ривожлантиришга давлатнинг ўзига хос аралашуви сифатида баҳолайдилар [16]. А.Бурхановнинг фикрича, давлатнинг иқтисодиётга аралашуви аграр соҳадаги муносабатлар, энг аввало, ишлаб чиқарилаётган маҳсулотларга нарх сиёсатига бозор тамойилларини жорий этишда ўз аксини топиши керак [17] деб ҳисоблайди, ундан ташқари А.Бурханов қишлоқ хўжалигида инновацион фаолиятни ривожлантириш ташкилий масалаларни ривожланган давлатлар даражасида унга мотивация, стимул бериш, давлат томонидан қўллаб қувватлаш, бу борада фермер ва деҳқон хўжаликларини раҳбарлари ва мутахассисларини ўқитиш, малакасини ошириш, субсидия кўринишидаги имтиёзли кредит, солиқ имтиёзлари каби воситалардан фойдаланиб потенциал имкониятларни тўлиқ ишга солиш зарур [18] деб таъкидлайди.

Бозор муносабатлари шароитида 2017-2022-йилларда қишлоқ хўжалигида асосий капиталга қўйилган инвестициялардаги улуши шу даврда 9,9 баробарга ошди. Ушбу даврда қишлоқ хўжалиги ялпи маҳсулотининг умумий ҳажми 2,3 мартага ўсган ва 2022 йилда 347600 млрд. сўмни ташкил этган (1-жадвал).

1-жадвал. Қишлоқ хўжалигига киритилган инвестициялар ва унда яратилган ялпи маҳсулот ҳажми

йиллар	2017	2018	2019	2020	2021	2022
Қишлоқ хўжалигига киритилган инвестициялар, млрд. сўм.	2004,3	3561,1	15141	18025,5	18934,9	19900
Қишлоқ хўжалигида яратилган ялпи маҳсулот, млрд.сўм.	148199,3	187425,6	216283,1	250250,6	303415,5	347600



1-расм. Қишлоқ хўжалигига киритилган инвестицияларнинг яратилган ялпи маҳсулотга боғлиқлигининг иқтисодий модели

1-расмдаги моделдан кўриниб турибдики, P^2=0,9875 қишлоқ хўжалигига киритилган инвестициялар ва қишлоқ хўжалигида яратилган ялпи маҳсулот ўртасида жуда кучли боғлиқликни кўрсатади. Бундан шундай хулоса келиб чиқадики, қишлоқ хўжалигига қанча кўп инвестиция киритилса, унинг самарасини қишлоқ хўжалигида яратилган ялпи маҳсулот ҳажми ўсишида намоён бўлади.

Хулоса

Қишлоқ хўжалиги ишлаб чиқаришини давлат томонидан тартибга солиш концепция сифатида тармоқ хусусиятини акс эттириши, қишлоқ хўжалигининг ўзига хос хусусиятларини – табиий омилларга боғлиқлигини ҳисобга олиши керак. Дала ишларининг мавсумийлиги; меҳнатни тежаш, қишлоқ хўжалиги техникасидан унумли фойдаланиш, ишлаб чиқариш қувватларининг чекланган имкониятлари, қишлоқ хўжалиги меҳнатининг консерватив характери, иқтисодий ва экологик омилларнинг чамбарчас боғлиқлигини кўрсатади.

Қишлоқ хўжалигига субсидиялар, имтиёзли кредитлаш ва солиққа тортиш, божхона ва тарифларни тартибга солиш, меҳнат мотивациясини ошириш ва қишлоқ жойларини ижтимоий ривожлантиришнинг самарали механизмларини излаш орқали давлат томонидан қўллаб-қувватлаш заруриятини келтириб чиқаради. Қишлоқ хўжалигини давлат томонидан тартибга солиш, биринчи навбатда, озиқ-овқат хавфсизлиги тизимининг марказий бўғини ёки агросаноат мажмуасининг ишлаб чиқариш соҳасининг самарали ишлашини таъминлашга қаратилган бўлиши зарур.

Қишлоқ хўжалигига киритилган инвестицияларни кўпайтириши тўғридан-тўғри қишлоқ хўжалигида яратилган ялпи маҳсулот оширишга олиб келади.

Фойдаланилган адабиётлар рўйхати:

1. Ўзбекистон Республикаси Президентининг 11.09.2023 йилдаги ПФ-158-сонли Фармони билан тасдиқланган “ЎЗБЕКИСТОН — 2030” стратегияси. Lex.uz.
2. Адам Смит. «Халқлар бойлиги» (The Wealth of Nations by Adam Smith).
3. Мадвалиев А. таҳрири остида. Ўзбек тилининг изоҳли луғати. www. ziyouzcom. Kutubxonasi.
4. Ўзбекистон Миллий энциклопедияси. 3-жилд. Гидрофилия-Зебралар.Таҳрир ҳайъати: М.Аминов ва бошқалар. – Т.:”Ўзбекистон миллий энциклопедияси” Давлат илмий нашриёти,2002. – 148-бет.
5. Норт Д. Институты, институциональные изменения и функционирование экономики–М.: Фонд экономической книги “Начала”, 1997. –С.54-55.
6. Райзберг, Б. А. Современный экономический словарь. – 5-е изд., перераб. и доп. – [Текст] / Б. А. Райзберг, Л. Ш. Лозовский, Е. Б. Стародубцева – М.: ИНФРА-М, – 2006. – 495 б.
7. Борисов, А.Б. Большой экономический словарь. – М.: Книжный мир, – 2003. – 895 с.

8. Народы и культуры. Оксфордская иллюстрированная энциклопедия. – М.: Инфра-М. Под ред. Р. Хоггарта. 2002.
9. Новый экономический словарь / под ред. А. Н. Азрилияна. – М.: Институт новой экономики, 2006. – 1088с.
10. Беркинов Б.Б.Институционал иқтисодиёт.Ўқув қўлланма.2-нашр, қайта ишланган. – Т.: Иқтисодиёт,2013. – 153-бет.
11. Ҳ.П.Абулқосимов М.Ҳ. Абулқосимов С.Р. Топилдиев. Иқтисодиётни давлат томонидан тартибга солиш Иқтисодиёт, 2019
12. Морозова, Т. Г. Государственное регулирование экономики [Текст] / Т. Г. Морозова, Ю. М. Дурдыев, В. Ф. Тихонов и др.; Под. ред. проф. Т. Г. Морозовой. – М.: ЮНИТИ-ДАНА, – 2002. – 255 с
13. Бурханов А.Х. Қишлоқ хўжалиги иқтисодиёти. дарслик. “Зиё маатба-нашриёти”, 2022 йил 105- бет.
14. Беспахотный,Г.В.Механизмы государственного финансирования инвестиционного развития сельского хозяйства [Текст] / Г. В. Беспахотный // Экономика сельскохозяйственных и перерабатывающих предприятий. – 2015. – № 8. – С. 2-6.
15. Узун, В. Я. Методы оценки влияния аграрной политики на развитие сельского хозяйства [Текст] / В. Я. Узун, Е. А. Гатаулина, В. А. Сарайкин, Н. А. Карлова. – М.: РАНХиГС. – 2014. – 115 с.
16. Милосердов, В. В. Экономические механизмы хозяйствования, обеспечивающие продовольственную безопасность страны [Текст] / В. В. Милосердов // Агропродовольственная политика России. – 2017. – № 12. – С. 2-9.
17. Бурханов А. СУЩНОСТЬ И ОСОБЕННОСТИ НОВЫХ ЭКОНОМИЧЕСКИХ ОТНОШЕНИЙ В СЕЛЬСКОМ ХОЗЯЙСТВЕ //International Journal of Economics and Innovative Technologies. – 2023. – Т. 11. – №. 2. – С. 166-179.
18. Бурханов А. ИННОВАЦИЯ–ГЛАВНЫЙ ФАКТОР ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ И ДОХОДОВ СЕЛЬСКОГО ХОЗЯЙСТВА //Innovatsion texnologiyalar. – 2023. – Т. 50. – №. 02. – С. 121-129.

УДК 616.248-053.2-08.

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ОСНОВНЫЕ ПРОЯВЛЕНИЯ СОСТОЯНИЯ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ ПРИ БРОНХИАЛЬНОЙ ОБСТРУКЦИИ У ДЕТЕЙ

Резюме. В остром периоде бронхиальной обструкции целесообразно проведение серологического и вирусологического обследования, что позволит на ранних этапах заболевания определить вероятность развития сердечно-сосудистых изменений.

Учитывая большой процент развития нарушения адаптации сердечнососудистой системы, приводящей к формированию сердечно-сосудистой патологии в дальнейшем, целесообразна оценка состояния сердечнососудистой системы вч острый период бронхиальной обструкции инфекционного генеза у детей раннего возраста, которая предусматривает определение характера адаптации сердечно-сосудистой системы, по данным клинико-лабораторного и инструментального обследования.

Ключевая слова: сердечно-сосудистая система, бронхиальная обструкция, детской возраст.

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THE MAIN MANIFESTATIONS OF THE STATE OF THE CARDIOVASCULAR SYSTEM IN BRONCHIAL OBSTRUCTION IN CHILDREN

Resume. In the acute period of bronchial obstruction, it is advisable to conduct a serological and virological examination, which will make it possible to determine the likelihood of cardiovascular changes in the early stages of the disease.

Considering the high percentage of development of disorders of adaptation of the cardiovascular system, leading to the formation of cardiovascular pathology in the future, it is advisable to assess the state of the cardiovascular system HF acute period of bronchial obstruction of infectious genesis in young children, which provides for determining the nature of adaptation of the cardiovascular system, according to clinical data. laboratory and instrumental examination.

Key words: cardiovascular system, bronchial obstruction, childhood.

Введение. Острый бронхообструктивный синдром (БОС) вирусной или вирусио-бактериалыюй этиологии имеет наибольшую частоту в детском возрасте [2,3,5].

По данным Таточенко В.К. (2010) у каждого четвертого ребенка при остром респираторном заболевании в воспалительный процесс вовлекаются бронхи с продолжительным бронхо-обструктивным синдромом. Дыхательные расстройства при остром обструктивном синдроме инфекционного генеза имеют разную степень тяжести и сопровождаются гипотонией и метаболическим ацидозом [1,4].

Цель работы: Установить факторы риска и основные патогенетические механизмы поражения сердечно-сосудистой системы при острой бронхиальной обструкции инфекционного генеза у детей раннего возраста для оптимизации дифференцированной терапии и улучшения прогноза сердечно-сосудистых нарушений.

Методы исследования: Настоящая работа выполнена в отделении патологии детей раннего возраста Андижанской детской городской больницы являющейся клинической базой кафедра педиатрии АГМИ.

Результаты исследования: У большинства детей раннего возраста (80%) острые респираторные заболевания, протекающие с обструктивным синдромом, сопровождаются транзиторным повышением уровня антикардиальных антител к проводящей системе, кардиомиоцитам, гладкой мускулатуре миокарда.

Комплексная оценка выраженности клинических симптомов (частота дыхания, степень выраженности гипоксии по данным сатурации кислорода, тахисистолия), электрофизиологических изменений и маркеров поражений миокарда позволяет с вероятностью до 93% прогнозировать развитие нарушений адаптации сердечно-сосудистой системы при бронхиальной обструкции инфекционного генеза у детей раннего возраста.

У детей первого года жизни острые респираторные заболевания с бронхиальной обструкцией сопровождаются снижением в 2,5 раза концентрации общего интерферона в сыворотке крови, а также сниженной способностью лейкоцитов к выработке индуцированных а, и у интерферонов, повышением провоспалительных цитокинов (СЭ25, С071) и активацией апоптоза (С095). Выявленные нарушения в большей степени характерны для детей с нарушением адаптации сердечно-сосудистой системы.

Острый обструктивный синдром при инфекционных респираторных заболеваниях сопровождается активацией процессов перекисного окисления липидов в виде повышения малонового диальдегида, снижения активности супероксидисмутазы и уровня аскорбиновой кислоты в сыворотке крови, выраженность которых коррелирует с тяжестью течения основного заболевания и степенью нарушения адаптации сердечно-сосудистой системы.

Дифференцированная коррекция метаболических и иммунных нарушений в острый период бронхиальной обструкции у детей раннего возраста, наряду с общепринятым лечением острых респираторных

заболеваний, включает применение антиоксидантов и мембраностабилизаторов. Сохраняющееся повышение уровня антикардиальных антител вне обострения острых респираторных заболеваний диктует необходимость длительного диспансерного наблюдения и коррекции иммунных нарушений.

Выводы: Наличие нарушений адаптации сердечно-сосудистой системы у детей с острыми респираторными заболеваниями, протекающими с бронхиальной обструкцией, диктует необходимость их наблюдения в катамнезе, кратность и объем которого определяется длительностью и характером сохраняющихся нарушений сердечно-сосудистой системы. При клиническом выздоровлении рекомендуется наблюдение кардиолога в течение 2-3 лет, с контрольным ЭКГ, на протяжении первого года с контролем ЭКГ 1 раз в 3 -6 мес., далее 1 раз в 6 мес. При неэффективности проводимой терапии или отрицательной динамике по данным ЭКГ показана госпитализация в специализированный кардиологический центр.

Использованные источники:

1.Ахмадеева, Э.Н. Внутриутробная задержка плода и пренатальная гипотрофия новорожденных: учебно методическое пособие / Э.Н. Ахмадеева, В.Р. Амирова. - Уфа, 2013. - 40 с.

2.Грешилов, А.А. Нейроиммунологические критерии диагностики и прогнозирования перинатальных поражений центральной нервной системы у новорожденных и детей раннего возраста: автореф. дис.. канд. мед. наук. Уфа, 2014. - 26 с.

3.Юнкеров, В.И. Математико статистическая обработка данных медицинских исследований / В.И. Юнкеров, С.Г. Григорьев. - СПб.: ВМедА, 2012. - 266 с.

4.Ярцева, И.Н. Клинико метаболические критерии эффективности лечения и прогнозирования ранних исходов респираторного дистресс- синдрома у недоношенных новорожденных: автореф. дис.. канд. мед. наук. Самара, 2018. - 30 с.

5. Goldstein, B. International Consensus Conference on Pediatric sepsis / B. Goldstein, B. Giroir, A. Randolph // Pediatr. Crit. Care Med. 2005. -Vol. 6, № l. – P. 2-8.

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СОЦИАЛЬНЫЕ АСПЕКТЫ СОВЕРШЕНСТВОВАНИЯ УСТНОЙ И ПИСЬМЕННОЙ РЕЧИ СТУДЕНТОВ

Аннотация. Статья посвящена освещению основных социальных и лингвистических аспектов речи, а также совершенствованию культуры устной и письменной речи в будущей профессиональной деятельности студентов.

Ключевые слова: устная речь, письменная речь, культура речи, языковая норма, коммуникативные качества.

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SOCIAL ASPECTS OF IMPROVING STUDENTS' ORAL AND WRITTEN SPEECH

Abstract. The article is devoted to covering the main social and linguistic aspects of speech, as well as improving the culture of oral and written speech in the future professional activities of students.

Key words: oral speech, written speech, speech culture, language norm, communicative qualities.

Речь является неотъемлемым элементом взаимодействия в обществе. Без речи человек не имел бы возможности получать и передавать информацию. Действительно, если человек владеет речью, если умеет говорить доходчиво, логично и убедительно, – он легко устанавливает контакты с людьми, уверенно чувствует себя в жизненных ситуациях, добивается успехов во многих делах. Без письменной речи человек не мог бы узнать, как жили, что думали и делали люди предыдущих поколений.

Звовзников А.А. считает, что в речевой коммуникации реализуется «языковое существование» человека в обществе и люди, которые обладают высоким уровнем языковой компетенции, занимают лидирующие позиции в социуме и оставляют своеобразный центр лингвокультурного сообщества. Личности, у которых компетенции развиты в меньшей степени, образуют «средний уровень» и «периферию» [4].

Безусловно, задачей преподавателей вузов является совершенствование устной и письменной речи студентов с расширения их будущих профессиональных возможностей и обучения ориентации на социокульурный уровень слушателей.

Дылыкова Ц.Д. определяет речь как «средство выражения мыслей и чувств. Это показатель нашего интеллекта, наших способностей, нашей работы над собой. По тому, как мы говорим, наши собеседники делают вывод, кто мы такие, так как речь независимо от воли говорящего создает его портрет, раскрывает его личность» [3].

От степени владения нормами и богатствами языка зависит, насколько точно, грамотно и понятно может говорящий выразить свою мысль, объяснить то или иное жизненное явление, оказать должное влияние на слушателей. Ведь речь может быть доходчивой – неясной, правильной – небрежной, уместной – неуместной, логичной – нелогичной, выразительной – сухой, богатой – бедной, самобытной – штампованной, убедительной – неубедительной.

Основным критерием культуры речи является нормативность. Это умение точно, в соответствии с нормами литературного языка выражать мысли, без употребления жаргонных, диалектных и просторечных слов [1].

Важно ли для студента, а в дальнейшем - и дипломированного специалиста, независимо от его специализации, владеть культурой речи? Безусловно, важно. Для будущего специалиста умение хорошо говорить – это прямая профессиональная необходимость.

Культура речи любого специалиста предполагает, кроме знаний норм официально-делового стиля, письменной речи, также знание норм устных публичных выступлений. Публичная речь требует богатства словаря, так как она обращена непосредственно к живым людям. Поэтому культура публичной речи – это такое мотивированное использование языкового материала, которое является оптимальным для данной ситуации и содержания речи. Речь должна быть такой, чтобы она привлекала внимание, наилучшим образом содействовала убеждению.

Таким образом, специалистам важно понимать, что в настоящее время проблема культуры речи является достаточно серьезной и актуальной, поскольку набирает широкое распространение в последнее время. В связи с постоянными изменениями необходимо безостановочно повышать знания, навыки, самосовершенствоваться. Специалисты в любой области должны развивать в себе все ценные коммуникативные качества, которые помогут им сделать свою речь правильной, доступной, логичной и, что не менее важно, доказательной. Кроме того, в целях повышения культуры речи можно использовать и такие способы, как чтение форумов, прослушивание специальных радио и телепередач, чтение научных и публицистических материалов, работа со словарями, анализ текстов.

Для оформления текстов письменной речи можно следовать нескольким правилам:

• Повторение коротко сформулированной темы предыдущего предложения создает связный текст. Особенно это помогает при работе с предложениями, содержащими развернутые предикативные фразы.

• Чтобы упростить построение логической связи с последующим предложением, в нем следует повторить хотя бы одно слово из предыдущего предложения или включить лексико-семантический заменитель его темы (например, близкий синоним или местоимение).

• Каждое последующее предложение аналогично должно повторять или заменять одно слово из предыдущего предложения, чтобы создать четкую связную цепочку элементов повествования.

Совершенствование устной и письменной речи требует усилий и времени. Студентам не следует ошибочно полагать, что речевые навыки формируются «сами собой». Повышение уровня культуры устной и письменной речи – это одно из главных условий повышения качества профессиональной деятельности будущего специалиста в социуме.

Использованные источники:

1.Аверьянова М.Ю. Культура речи в профессиональной деятельности юриста // Актуальные проблемы права и управления глазами молодежи. – 2014 – С.9-10

2.Абаева Н. Ч., Меденцева Н. П. ЭТАПЫ РАБОТЫ ПРИ СОВЕРШЕНСТВОВАНИИ УСТНОЙ ПОДГОТОВЛЕННОЙ РЕЧИ СТУДЕНТОВ ТЕХНИЧЕСКИХ ВУЗОВ //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 11. – С. 251-254.

3.Дылыкова Ц.Д. К вопросу речевой культуры юриста // Проблемы гражданского общества и правового государства. - 2016. - №1 – С.25-29

4.Звозников А.А. Социальные аспекты речевой коммуникации. https://elib.bsu.by/bitstream/123456789/95961/1/Tereschenko%20p.68-76.pdf

5.Канафина М.А. Профессиональная речь юриста // Наука и современность. - 2015. - №36 – С.154-159

6.Кислякова М.Г., Горелов И.Ю. Культура речи как составная часть профессиональной деятельности юриста. -«Форум молодых ученых», Донецк, 2020

7.Меденцева Н. П. Инфографика на занятиях по культуре речи как инструмент конвергенции информации, полученной из медиаисточников //Инновационные педагогические технологии. – 2017. – С. 74-75

8.Меденцева Н. П. Задачи образовательных учреждений в формировании правового сознания молодежи //Образование и воспитание. – 2015. – №. 5. – С. 4-6.

9.Чурсина Г.В. Основы профессиональной речи юриста // Актуальные проблемы социально-экономической политики на современном этапе. – 2015 – С.33-36.

УДК 681.518.5

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ГЛАЗ РОБОТА ЭТАПЫ СОЗДАНИЯ МЕТОДИКИ ОПРЕДЕЛЕНИЯ ПОДЛИННОСТИ ЛИЦА ЧЕЛОВЕКА В АНАЛИЗАТОРЕ

Аннотация. В данной статье при определении подлинности изображения лица человека в биометрических системах широко анализируются алгоритмы подтверждения изображения лица как реального объекта, выявления всех информативных, переменных и различных параметров лица, а также этапы создания биометрической системы.

Ключевые слова: биометрические технологии, роботизированный глазной анализатор.

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ROBOT EYE STEPS OF CREATING A METHOD FOR DETERMINING THE AUTHENTICITY OF A HUMAN FACE IN AN ANALYZER

Abstract. In this article, when determining the authenticity of an image of a person's face in biometric systems, algorithms for confirming the image of a face as a real object, identifying all informative, variable and various parameters of the face, as well as the stages of creating a biometric system are widely analyzed.

Key words: biometric technologies, robotic eye analyzer.

В настоящее время в процессе выяснения принципов методов подтверждения подлинности изображения лица человека на основе биометрических технологий целесообразно подтверждать только изображение лица как реального объекта [1]. Также в системе некоторых биометрических технологий для определения подлинности изображения лица человека используются движение лица человека, мимика, вход и выход из объекта как переменные параметры в системе биометрической технологии:

- уточнение системы процессов проверки ***личности, где определяется подлинность изображения лица человека как объекта;***

- ***подтвердить подлинность изображения лица человека как предмета*** и рассматривать его результат как практическое доказательство.

В результате проведенного нами анализа источников методы подтверждения подлинности изображения лица человека следующие [2]:

1. Аутентификация по изображению лица – это проверка личности, являющаяся основанием для совершения других процессуальных действий, даже если изображение лица не является подлинным.

2. Объектами являются изображения, отражающие внешнее строение человека, их экстракты, слепки некоторых частей лица и их рентгеновские снимки.

3. Также можно взять живопись, рисунок и коллаж (искусственные портреты). Однако результаты этих исследований несколько ограничены. Исследование фотопортретов начинают с их рассмотрения и отмечания их общих особенностей, определяют форму, размер, характер надписей, пол, примерный возраст изображенных лиц, время обработки изображения и т. д. В процессе контроля объекта необходимость подтверждения личности осуществляется с учетом того, что он зарегистрирован [3].

4. Исследуя изображения, сходные с изображением лица испытуемого или выступающие в качестве образца, метод определения личности одного изображенного на них человека отличается от общего метода исследования некоторыми специфическими особенностями [4]. В частности, сравнительно-методическое моделирование осуществляется путем наложения изображений лица, слияния и других технических методов [5].

Рисунок 1. Определение подлинности изображения лица человека по цветному видеоизображению.

5. Приемы объединения (монтажа) изображений, заключающиеся в сравнении путем приведения их к одному размеру по закрепленным друг к другу признакам внешней структуры [6].

6. Графический метод также эффективен при сравнении изображений лиц одинаковой формы. Выявляются признаки принадлежности к одной группе сравниваемых предметов, а равенство в них треугольников, ромбов, трапеций и других геометрических фигур (совпадение друг с другом) и

изображения лиц лиц на изображении являются изображением лица лицо, о котором идет речь, то есть оно определено точно.

7. Существует также способ создания алгоритмов графической идентификации. Этот метод рекомендуется соблюдать с учетом конкретных мертвых точек исследуемого объекта, системы символов, совместимости с температурой или наоборот [7].

8. При проведении данного типа исследования также могут быть отправлены исходные объекты, содержащие данные. Наиболее распространенным из них является описание образа человека с помощью **слов**. Портреты, созданные с помощью слов, используются в различных процессуальных документах (сообщениях, допросах и **т.п.)**, что отражено в регистрационных карточках и в данных, составленных соответствующим специалистом. Образ, создаваемый с помощью слова, формируется преимущественно на основе анатомических признаков, иногда включает в себя некоторые анатомические и функциональные признаки человека, а также отдельные симптомы (шрамы, симптомы болезней) [8]. Такие сведения содержатся в протоколах следственных действий (допрос, освидетельствование, показания, предъявления для опознания), картах судимости и других документах, которые могут быть широко использованы при проведении исследований.

9. В ходе исследования оно начинается с отдельного изучения изображений, затем определяются внешние особенности каждого исследуемого изображения, сравниваются и анализируются сходные особенности структуры. Объясняются сходства и различия между знаками и объясняются причины сходства или различия. По изображенным лицам делается вывод о том, принадлежит ли изображение лица одному и тому же лицу или разным похожим лицам [9].

Если набор общих и частных символов в проверяемом изображении повторяет друг друга (замечено совпадение), то подтверждается принадлежность изображения на изображениях одному лицу, то есть личности разыскиваемого лица. Некоторые знаки похожи, а некоторые имеют совершенно разную форму, размер и т. д., вопрос идентификации отменяется.

10. Основной этап идентификации – отметить уникальные и неизменные признаки человека на исследуемом изображении, сравнить их и оценить результат. Такие обстоятельства, как то, что изображение не отражает всех особенностей внешнего облика, разные условия освещения при его подготовке, качество фотографии, несколько ограничивают сумму, необходимую для идентификации [10].

По этой причине на этом этапе идентификации используются различные оптические устройства и устройства для регулировки условий освещения. При обследовании также используется рентгеновское изображение головы человека. Лоб, нос, губы и некоторые другие точки четко выражены в форме головы, снятой с правого или левого наклона, особенно в оттенке мягких тканей. Если рентгеновский снимок сделан в правильном (фас) положении

головы, то визуализируются форма и размеры лица, а также форма и размеры черепа [11].

11. Структуру внешнего облика человека можно сохранить в памяти некоторых людей, видевших и знающих его, и восстановить образ его воображаемого лица. Наши исследовательские усилия, особенно признание, основаны на этом образном представлении. В тесте на идентификацию воображаемый рисунок сравнивается с фотографией или другим типом портрета человека.

12. Некоторые исследования, проводимые по внешним признакам лиц, проводятся совместно с судебно-медицинскими экспертами (анатомами, антропологами). Участие и помощь специалиста в обеспечении правильной и четкой структуры вопросов, решаемых исследованием, а также в изготовлении необходимых образцов и копировальных форм бесподобны [12].

В его основе также лежат основные принципы методов подтверждения подлинности лица человека непосредственно в вопросах распознавания, идентификации, обнаружения движений лица, интеллектуального анализа данных на основе биометрических характеристик и параметров человека.

На фотографии, как и другие портреты, преимущественно показано лицо человека. Чаще всего фотографию человека по грудь делают размером 3х4, 9х12 см, а с целью оформления различных документов делают без головы, прямо, сверху и по бокам света. Иногда правый нижний угол такой фотографии остается пустым. Части от груди до талии, **высота** при экстренных и следственных работах широко используются фотографии отдельных лиц и групп людей [13].

Ряд трудностей при идентификационной экспертизе создает тот факт, что подобные фотографии выполнены с большим художественным мастерством, а также то, что уникальный внешний вид человека не полностью отражает некоторые признаки лица. В большинстве случаев для подтверждения личности используются черно - белые фотографии, реже встречаются цветные портреты. Цветная фотография может вызвать некоторые трудности или даже дилеммы при рассмотрении по сравнению с черно - белыми фотографиями, поскольку естественные цветовые характеристики человека могут незначительно меняться на фотографии, а цветные фотографии подвержены воздействию света и темноты, их цвет тускнеет. и изменяется под воздействием световых лучей. Лицо человека, изображенного на фотографиях, его строение, некоторые особенности, в зависимости от направления света во время фотосессии голова держится прямо и наклонено, а по каким-то другим причинам может быть немного изменена, поэтому работа по идентификации человека по фотографии ведется, как правило, по лицу человека, изображенного на фотографии, необходимо обращать внимание на его взгляд, направление света, положение головы и т. Д [14].

Кроме того, **если на фотографии представлен образ женщины,** ее волосы, косметика на лице (накрашенные брови, ресницы, губы) создают трудности для описания реальных особенностей строения лица. Можно различить, какая часть лица (правая, левая, низ-верх) отчетливее отражается на фотографии, наблюдая за общим строением, световые лучи равномерно или частично освещают некоторые участки, и описать симптомы симптомов. в этих точках. На строение лица влияет положение (угол) головы. Поэтому при направлении головы вверх или вниз, влево или вправо необходимо учитывать небольшие изменения строения лица согласно этим условиям. Также художница работала и писала портреты, изображения выполнены на плотных тканевых, бумажно-картонных материалах. Тот, кто готовит портрет (художник), фиксирует внешний вид человека, выслушав его от других людей, сформировав его в своей памяти и наблюдая за собой с натуры. В этих портретах отражены лишь общие формы, облик и особенности внешности человека, которые закрепились в памяти художника, а пропорции и знаки точных измерений опущены **[15].** Такие портреты основаны лишь на общем сходстве с человеком на изображении. Портреты, распространенные на практике, составляются на основе информации о внешности разыскиваемого человека. Внешний облик разыскиваемого сохраняется в памяти видевших его (свидетелей, потерпевших и т. д.), описывается словами, и на основе этих сведений составляется портрет, отражающий основные черты его внешнего строения. В случаях отсутствия фотографий разыскиваемых лиц изготавливаются искусственные синтетические портреты из частей лица разных лиц (составной портрет). Например, свидетелю, увидевшему разыскиваемого, показывают различные фотографии, и из них отделяют схожие части лица (глаза, брови, некоторые приметы): они объединяются для создания композиционного изображения. В настоящее время при подготовке таких фотоизображений используются фотороботы с различными изображениями, отражающими особенности **лица и строения человека, имеющиеся в компьютерных программах.**

Чтобы создать устройство искусственного интеллекта-это создать систему зрительной чувствительности человеческого глаза, прежде всего необходимо определить функции, этапы, схему устройства, работу каждого этапа [16]. Интеграция искусственного интеллекта в процесс распознавания изображений требует применения к сложным задачам и зачастую опасным условиям, например, в жарком и холодном климате, местах с повышенной радиацией, высоким и низким давлением, атмосферами агрессивных паров, сильной запыленностью и экстремальными условиями. в космосе, под водой, на вулканах, в местах с сильным пламенем и т. д.). В таких проблемных процессах необходимо создание мобильного искусственного робота-глазоанализатора на основе троичной системы «рука-нога-глаз» в области искусственного интеллекта.

Основной упор при создании цветочувствительных и различающих адаптивных роботов основан на последовательных командах, для этого

требуется создать программу системы управления посредством пульта дистанционного управления [17]. Для анализа необходимо определить структурные и функциональные схемы, раскрывающие сущность всех основных операций, определяющие ее порядок и условия. Для этого необходимо преобразовать видеоданные, а также установить связи между различными подсистемами и блоками.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.

12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear* Science and its Application.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. Экономика и социум, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).

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СУЩНОСТЬ ПРОБЛЕМНОГО ОБУЧЕНИЯ

Аннотация. В статье представлена сущность проблемного обучения, при использование которого педагогом создаётся проблемные ситуации и в результате разрешения их происходит творческое овладение профессиональными знаниями, навыками, умениями и развитие мыслительных способностей обучающихся.

Ключевые слова: Проблемное обучение, личностно-ориентированная технология обучения, проблемная ситуация, проблемная интерпретация учебного материала.

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THE ESSENCE OF PROBLEM-BASED LEARNING

Abstract. The article presents the essence of problem-based learning, in which the teacher creates problem situations and, as a result of their resolution, creative mastery of professional knowledge, skills, abilities and the development of students' thinking abilities occurs.

Key words: Problem-based learning, personality-oriented learning technology, problem situation, problem interpretation of educational material.

Проблемное обучение основывается на теоретических положениях американского философа, психолога и педагога Дж.Дьюн и получило распространение в 20-30 х годах XX века. Дж.Дьюн выделял 4 инстинкта для обучения: социальный, конструирование, художественное выражение, исследовательский. Для удовлетворения их представлялись в качестве инстинктов познания: слово, произведения искусства, технические устройства, игры и труд.

Сегодня под проблемным обучением понимается – создание педагогом проблемных ситуаций на занятиях и активную самостоятельную деятельность учащихся по их разрешению, в результате чего и происходит творческое овладение профессиональными знаниями, навыками, умениями и развитие мыслительных способностей.

Проблемное обучение относится к личностно-ориентированным технологиям, так как личность здесь является субъектом, а цель проблемных ситуаций – особым видом мотивации в педагогическом процессе.

Оптимальной структурой учебного материала является традиционное изложение с включением проблемных ситуаций.

Педагог создаёт проблемную ситуацию, направляет учащегося на ее решение, организует поиск решения.

Управление проблемным обучением требует педагогического мастерства, так как возникновение проблемной ситуации - акт индивидуальный, поэтому требуется использование дифференцированного и индивидуального подхода.

Проблемное обучение как творческий процесс представляется как решение нестандартных научно-учебных задач нестандартными же методами. Если тренировочные задачи предлагаются учащимся для закрепления знаний и отработки навыков, то проблемные задачи – это всегда поиск нового способа решения.

Суть проблемной интерпретации учебного материала состоит в том, что преподаватель не сообщает знаний в готовом виде, но ставит перед учащимися проблемные задачи, побуждая искать пути и средства их решения. Проблема сама прокладывает путь к новым знаниям и способам действия.

Принципиально важен тот факт, что новые знания даются не для сведений, а для решения проблемы или проблем. При традиционной педагогической стратегии – от знаний к проблеме – учащиеся не могут выработать умений и навыков самостоятельного научного поиска, поскольку им даются для усвоения его готовые результаты. Решение проблемы требует включения творческого мышления. Репродуктивные психические процессы, связанные с воспроизведением усвоенных шаблонов, в проблемной ситуации просто неэффективны.

Если человека постоянно приучить усваивать знания и умения в готовом виде, можно и притупить его природные творческие способности: «разучить» думать самостоятельно. В максимальной степени процесс мышления проявляется и развивается при решении проблемных задач.

Психологический механизм происходящих процессов при проблемном обучении следующий: сталкиваясь с противоречивой, новой, непонятной проблемной (проблема – сложный теоретический или практический вопрос, содержащий в себе скрытое противоречие, вызывающий разные, порой противоположные позиции при его решении), у человека возникает состояние недоумения, удивления, возникает вопрос: в чем суть?

И человек либо самостоятельно осуществляет мыслительный поиск открытия неизвестного, либо с помощью преподавателя. Активизации творческого мышления способствуют субъект-объект-субъектные отношения, возникающие при коллективном решении проблемы.

Важнейшей чертой содержательного аспекта проблемного обучения является отражение объективных противоречий, закономерно возникающих в процессе научного знания, учебной или любой другой деятельности, которые и есть источник движения и развития в любой сфере. Именно в связи с этим проблемное обучение можно назвать развивающим, ибо его цель - формирование знания, гипотез, их разработки и решений. При проблемном обучении процесс мышления включается лишь с целью разрешения проблемной ситуации, оно формирует мышление, необходимое для решения нестандартных задач.

Рассмотрев вышеизложенные основные аспекты проблемного обучения можно сделать следующие выводы:

- В результате добытых в ходе активного поиска и самостоятельного решения проблем усвоение учащимся знаний, умений становится более прочным, чем при традиционном обучении;
- При проблемном обучение развивается мышления, способности, активная творческая личность учащегося, умеющего видеть, ставить и разрешать нестандартные проблемы.

Использованные источники:

1. Авлиякулов Н.Х. Педагогическая технология. Учебное пособие. Т: “Алокачи”, 2009. 147 с.
2. Avliyaquov N.X., Musayeva N.N. Pedagogik texnologiya. Darslik. – T.: Tafakkur Bo`stoni, 2012. – 208s.
3. Мусаева Н.Н. Роль педагогических технологий в развитии современного образования. - Academic research in educational sciences, 2021.
4. Кларин М.В. Педагогическая технология в учебном процессе. - М: Знание, 1989 - 80 с.
5. Сейитхалилов Э.А., Рахимов Б.Х., Маджидов И.Х. Педагогический словарь справочник. – Т.: Согдиана, 2011 – 700 с.
6. Фарберман Б.Л. Прогрессивные педагогические технологии. - Т.: Фан, 2002. - 130 с.

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АНАЛИЗ И УЛУЧШЕНИЕ МАРКЕТИНГОВОЙ СРЕДЫ НА ПРЕДПРИЯТИЯХ «ОПТОВАЯ ТОРГОВЛЯ»

Аннотация. В данной статье рассматриваются понятия маркетинга, оптовой торговой деятельности, укрепления отношений с клиентами, цифрового маркетинга, рекламы через социальные сети, рассматривается разработка маркетингового плана.

Ключевые слова: пространство, маркетинговая среда, концепция, оптовая торговля, рынок, спрос, реклама, бренд.

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ANALYSIS AND IMPROVEMENT OF THE MARKETING ENVIRONMENT AT WHOLESALE TRADE ENTERPRISES

Abstract. This article discusses the concepts of marketing, wholesale trade, strengthening customer relationships, digital marketing, advertising through social networks, and the development of a marketing plan.

Key words: space, marketing environment, concept, wholesale, market, demand, advertising, brand

За годы независимости существует множество задач, которые необходимо реализовать в сфере торговли, особенно в сфере оптовой торговли, несмотря на то, что произошли положительные имущественные и организационные изменения. Основной причиной этого является рыночный механизм деятельности субъектов оптовой торговли в современных условиях, в их деятельности. современный сервис использование экономических рычагов, маркетинговых и рыночных возможностей, объема услуг, коммуникационных связей, отношений с другими отраслями экономики, совершенствование механизмов ее управления и государственного регулирования.

Основываясь на зарубежном опыте, следует отметить, что конкурентоспособность предприятия на рынке определяется эффективностью его рыночной политики. Разработкой маркетинговой деятельности и ее практическим применением занимались многие экономисты, в том числе Ф.

Котлер, М. Портер, Д. Эванс, И. Ансофф, М. Берман, М. Голубков, П. Самуэльсон, Д. Мы можем, включая таких известных ученых, как Маршалл.

Маркетинговая среда – это совокупность участников рынка, внешних сил и процессов, которые действуют на рынке вне компании и влияют на способность компании устанавливать и поддерживать успешные партнерские отношения со своими целевыми клиентами. Любая компания работает и добивается успеха в определенной среде, а не в вакууме.

Маркетинговая средаозначает совокупность субъектов и сил, которые непосредственно влияют на установление хороших отношений сотрудничества с клиентами сотрудников маркетинговой службы компании и поддержание этих отношений. Маркетинговая среда состоит из совокупности сил и факторов, которые непосредственно влияют на рыночную ситуацию в целом и деятельность предприятий в частности, в том числе и других субъектов рынка.

Основной целью анализа внутренней среды предприятия является изучение факторов, определяющих потенциал предприятия и влияющих на него. При изучении деятельности предприятия изучались следующие элементы внутренней среды.

Структура управления организацией, разделение труда, изучение и управление деятельностью клиентов, работа с CRM-системами, функционально и иерархически, централизация, процедуры и методы принятия ключевых решений, контроль реализации решений, информационная система управления, коммуникационные процессы, тип управления, профессиональный характер и уровень высшего руководства, система стратегического планирования.

Производственные подразделения (количество, специалисты, мощность), объем предлагаемой продукции в зависимости от текущего состояния арендованной или собственной производственной базы, тип используемой техники, организация обслуживания клиентов, вместимость склада, контроль качества продукции, изготовление не- угрожающее обеспечение, производственные (упаковочные, упаковочные) мощности, прямые потери в эксплуатации. Также важно оценить уровень полной загрузки производственных мощностей.

В маркетингеиспользуемые стратегии, рынок (большой и малый, положение, конкуренты), клиенты, имидж предприятия, товары предприятия, цена, политика продаж и коммуникаций, ситуация и организация информационного обеспечения, взаимные маркетинговые отношения, внутренний маркетинг, реклама и ее структуры, деятельность по переезду продукты и товары и т.д.

Финансово-экономический отделбизнес-активы, собственный и заемный капитал, кредитные средства, ликвидность бизнеса, оборачиваемость и ликвидность капитала, планирование капитала, валовой доход, прибыль и использование. Одним из важных показателей деятельности предприятия является его рентабельность.

Методология исследования. В процессе исследования использовались системный подход, абстрактно-логическое мышление, группировка, сравнение, факторный анализ, методы выборочного наблюдения.

Таблица 1

Основные показатели оптовой торговли в ООО «Энесс»

Индикаторы	2013	2014 год	2015 год	2016 год	2017 год	2018 год	2019 год	2020 год	2021 год
Оптовый оборот – всего, млрд. руб. сум	22001.6	26749.1	30413.0	38301,6	42185,9	63528.5	93322,8	120451.1	172 790,1
Запасы (на конец года) всего, млрд. руб. сум	5 175,3	6 659,3	7 780,1	9 489,9	10763.3	13166,7	14316,5	22367.4	29 572,5
в дни оборота	85,0	90,0	92,0	89,0	92,0	75,0	55,0	67,0	62,0
Темп роста оборота оптовой торговли, в процентах, к прошлому году	109,1	111,0	107,1	116,5	94,0	126,8	128,6	113,6	128,5

Как видно из этой таблицы, приведены по годам показатели оборота оптовой торговли, товарных запасов и товарооборота.

Анализ и результаты Компания всегда уделяет серьезное внимание маркетингу. Ведь будучи оптовой компанией, она всегда работает с покупателями. Это подразумевает постоянное развитие отношений с маркетингом. Если посмотреть на состояние организации маркетинговой деятельности в деятельности компании, то организация маркетинговой службы используется в компании по 4 основным организационным структурам маркетинга, рыночно-ориентированной и продуктово-ориентированной организационным структурам. А его структура следующая.

Организационная структура службы маркетинга, основанная на производстве товаров, позволяет предприятиям лучше адаптироваться к требованиям рынка по каждому товару и выпускать товары с различными технологиями производства, коротким жизненным циклом и высокими инновационными требованиями (рис. 1).

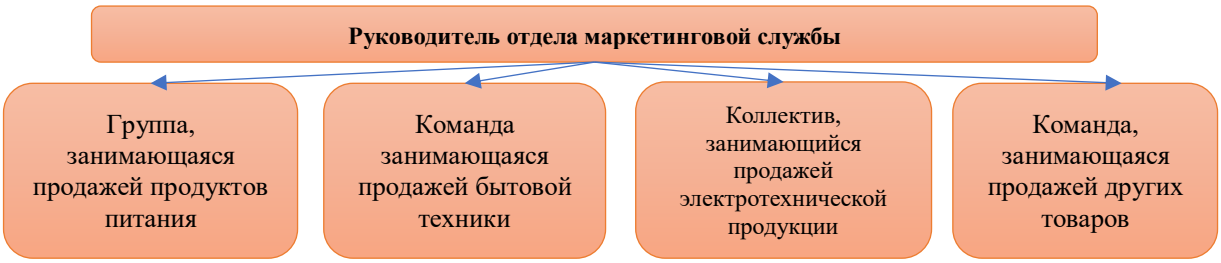

Рисунок 1. Организационная структура службы маркетинга на предприятии, основанном на производстве товаров.

При изучении деятельности предприятия изучалось рабочее состояние маркетинговой концепции и ее наличие. В частности, мое внимание привлекло целенаправленное использование компанией концепции продаж и маркетинга. То есть, пока предприятие сегодня занимается оптовой торговлей, внимание уделяется дальнейшему укреплению отношений с покупателями, полному удовлетворению его возможностей, активизации отношения маркетологов к своей работе. Кроме того, для получения заказов также используются концепции цифрового маркетинга. Реклама и скидки анонсируются через социальные сети.

Сегодня, в результате повышенного внимания к маркетинговой деятельности, компания разработала маркетинговый план, который формулируется следующим образом.

Таблица 2

Маркетинговый план ООО «Энесс»

Отделы	***Содержание***
Входить	Краткие аннотации в разделах плана
1. Ситуация на рынке и ее перспективы	Анализ информации о маркетинговой среде, потребителях, конкурентах и их товарах, каналах продаж.
2. Анализ возможностей предприятия	Способствующие факторы и оценка риска.
3. Финансовые и маркетинговые цели и задачи.	Чистая прибыль, объем продаж, доля рынка, уровень цен, рекламный охват и другие показатели.
4. Реализация маркетинговой стратегии.	Проблемы, пути их решения и варианты.
5. Программа действий	Что делать? Когда? Кто несет за это ответственность? Какой должен быть результат? Сколько это стоит? ответы на вопросы найдены.
6. Бюджеты	Сравнение результатов и затрат
7. Контроль и порядок	Анализ эффективности и проведение мероприятий по изменению действий в плане.

При изучении предпринимательской деятельности я сосредоточился в основном на работе с данными по оптовой торговле продовольственными товарами.

Таблица 3

Информация о реализации продовольственных товаров ООО «Энесс» в 2020-2022 гг.

Нет	Продукты питания	Единица измерения	2021 год	2022 год	2023* год
1.	Мучные изделия	тысяч сумов	12387,4	14682,1	16497.3
2.	Макаронные изделия	тысяч сумов	4387,6	7624,3	10203.5
3.	Мясные и колбасные изделия	тысяч сумов	16348.2	17863,7	18164,8
4.	Переработанные и ферментированные молочные продукты	тысяч сумов	389,2	863,4	1005,4
5.	Мороженое и безалкогольные напитки	тысяч сумов	6892,1	10204.1	10043,6
6.	Карамель и конфетные изделия	тысяч сумов	10657.3	11826,0	9183.2
7.	Другие продукты	тысяч сумов	35683.2	29591,6	33633,9
	Общий	**тысяч сумов**	**86745.0**	**92655.2**	**98731,7**

Как видно из таблицы, в розничном товарообороте ООО «Энесс» из основных продуктов питания мучные изделия составляют 14 682,1 тыс. сум (2022 г.), макаронные изделия - 7 624,3 тыс. сум (2022 г.), мясные и колбасные изделия. Организуется 17 863,7 тыс. сум (2022 год), продукты переработанные и кисломолочные 863,4 тыс. сум (2022 год), карамельно-кондитерские изделия 11 826,0 тыс. сум (2022 год).

Помимо торговли, одним из основных видов деятельности предприятия является оказание бытовых услуг и услуг. Сегодня предприятие оказывает населению следующие услуги:

- парикмахерские, маникюрные услуги;
- пошив и пошив одежды;

Анализ затрат является наиболее важным инструментом управления затратами. Его основная цель – выявление возможностей более рационального использования производственных ресурсов, снижения издержек производства и реализации, обеспечения роста прибыли. Динамический анализ стоимостных показателей позволяет оценить изменения в производственной и финансовой деятельности предприятия, сделать прогноз на будущее.

Группировка затрат по элементам является единой и обязательной и позволяет контролировать формирование, структуру и динамику затрат через системы, описывающие их экономическое содержание. Необходимо изучить соотношение фактического и прошлого труда, стандартизировать и проанализировать материальные запасы, рассчитать удельные показатели оборачиваемости оборотных средств и изучить другие расчеты промышленного и общехозяйственного уровня. Анализ элементного состава

и структуры затрат производства позволяет определить основные направления поиска резервов в зависимости от уровня материалоемкости, трудо- и капиталоемкости производства.

Таблица 6

Затраты на сбытовую деятельность на предприятии в 2021-2022 годах и их динамика

Элементы затрат	2021 год		2022 год	
	Всего, миллион. сум	Специфика торговых издержек, %	Всего, миллион. сум	Специфика торговых издержек, %
Материальные затраты:	35000	73,22	50700	77,29
сырье	31000	64,85	45000	68,60
энергетические ресурсы	4000	8.37	5700	8,69
Затраты на рабочую силу	10000	20,9	11500	17,5
взносы на социальные нужды	3200	6.7	3300	5.0
Амортизация	450	0,9	510	0,8
прочие расходы	1380	2,9	1800 г.	2,7
Торговые расходы, всего	47800	100	65600	100
Товары на продажу	49600		68600	

В большей степени этот показатель обеспечивает четкую корреляцию с прибылью: увеличение затрат приводит к уменьшению прибыли на рубль продукции, и наоборот. Среди недостатков на этот показатель может влиять множество субъективных и объективных факторов, то есть он не зависит от качества работы коллектива предприятия.

Реализация произведенной продукции также считается важным маркетинговым мероприятием. В процессе продаж ассортимент продукции также будет расширяться. При организации сбыта продукции каждое предприятие обязано иметь собственные каналы сбыта. В качестве каналов сбыта в доставке продукции от производителя к потребителю участвуют посредники, приобретающие право собственности на товар.

Сегодня большинство предприятий открывают на своем балансе торговые точки для реализации своей продукции. В целом значение предприятий оптовой торговли в доставке товаров конечному потребителю возрастает. Это предотвращает передачу товара другим лицам. У него будет возможность контролировать конкуренцию и влиять на покупателей.

Таблица 8

Динамика трудовых ресурсов ООО «Энесс»

Нет	Индикаторы	Единица измерения	2021 год	2022 год	2023*	Соотношение 2022 к 2021 году	
						+;-	процент, %
1.	Среднее количество сотрудников	человек	48	56	65	+8	116,6
2.	Среднемесячная заработная плата сотрудников	тысяч сумов	4 966,0	4 771,0	5 309,0	-195	96,0
3.	Производительность труда	тысяч сумов	40585	50789	65888	+10204	125,1

Как видно из таблицы, общая численность работников ООО «Энесс» к концу 2022 года составит 56 человек, что увеличилось на 8 человек по сравнению с 2021 годом. Производительность труда выросла на 125,1 процента, или в 1,25 раза. В 2022 году объем производства на душу населения увеличился с 40 585 000 до 50 789 000 сумов. В 2022 году среднемесячная заработная плата работников снизилась с 4 966 000 сумов до 4 771 000 сумов, то есть увеличилась на 96,0%.

В отделе маркетинговой службы предприятия работают 5 маркетологов и 5 сотрудников отдела продаж. Их доля в общей численности работников также хороша. Ведь в современную стремительно развивающуюся эпоху роль маркетинга бесподобна. По этой причине на этом предприятии также работает отдел маркетинга.

ВЫВОДЫ И ПРЕДЛОЖЕНИЯ

Мы считаем, что в целях совершенствования и развития торговой деятельности на предприятии целесообразно выполнить следующие задачи:

- создание экономической и правовой возможности продавать населению дешевую и качественную продукцию;
- создание механизмов развития процесса интеграции и сотрудничества в сфере производства, торговли и других услуг;
- создание эффективного механизма государственного регулирования производства и торговли;
- активизация и ускорение деятельности производственных организаций по защите прав потребителей;
- совершенствование логистических систем в деятельности предприятия;
- повышение качества сервисного обслуживания и повышение своевременности обслуживания;
- быть активным в социальных сетях и продвигать свой бренд
- обеспечить массовое формирование конкурентной среды в сфере торговли.

Использованные источники:

1.Гэри Армстронг. Филип Котлер. Майкл Маркер. Маркетинг во введении. Англия, 2016 г., мягкая обложка: 720 страниц, Пирсон.
2.Филип Котлер. Кэвин Лейн Кетлер. Управление продажами. Пирсон Эдьюкейшн, Инк. издательство Prestige Hall, США, 2012 г.
3.Котлер Ф., Армстронг Г., Вонг В., Сондерс Дж. Основы маркетинга, 5-е европейское изд. Учебник. – М.: ООО «ИДВильямс», 2013. – 752 с.
4.Солиев А., Вузрукханов С., Маркетинг, рыночные науки. Учебник. – Т.: Экономика-Финансы, 2010. – 424 с.
5.Эргашходжаева Ш.Ж., Касимова М.С., Юсупов М.А. Маркетинг. Учебник. – Т.: ТДИУ, 2011. – 202 с.
6.Мусаева Ш.А. Маркетинговое исследование. Учебник Издательско-творческий отдел ООО «СТАР-СЭЛ». Самарканд-2023
7.Мусаева Ш.А. Интегрированные маркетинговые коммуникации Учебное пособие Издательство «Маарат», Самарканд - 2022
8.Мусаева Ш.А., Усмонова Д.И. Инновационный маркетинг «TURON EDITION» Учебное пособие на 2021 год.

УДК 378

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ВЛИЯНИЕ ПЕДАГОГА НА ФОРМИРОВАНИЕ ЛИЧНОСТИ СТУДЕНТА

Аннотация. В статье рассматривается состояние современного российского образования, формирование положительного образа учителя. Использование интерактивных форм занятий в учебном процессе, внедрение инновационных технологий обучения, создание успешного способа реализации основной задачи компетентного.

Ключевые слова: современные формы обучения студентов требования к педагогу становление личности студента.

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TEACHER'S INFLUENCE ON PERSONALITY FORMATION THE STUDENT

Annotation. The article examines the state of modern Russian education, the formation of a positive image of a teacher. The use of interactive forms of classes in the educational process, the introduction of innovative learning technologies, the creation of a successful way to implement the main task of a competent person.

Keywords: modern forms of student education requirements for a teacher formation of a student's personality.

Педагог должен создавать условия, способствующие саморазвитию и самоопределению студента, а также помогать ему раскрыть свой потенциал и достичь личностного роста. При этом важно учитывать индивидуальные особенности каждого студента и создавать атмосферу взаимного доверия и уважения. Педагог должен быть готовым к тому, чтобы стать наставником и поддержкой для студента, помогая ему осознать свои цели и задачи, развивать свои способности и навыки, а также принимать ответственность за свои решения и поступки. Важно, чтобы педагог был внимательным слушателем и понимал потребности и интересы студента, чтобы адаптировать учебный процесс под его потребности и помочь ему достичь успеха.

Ключевой задачей является не только передача знаний и умений, но и развитие его творческого мышления, самостоятельности и ответственности. Педагог должен быть способен вдохновить студента на поиск новых идей, находить нестандартные подходы к решению проблем, а также помогать развивать его умение анализировать и оценивать информацию. Важно, чтобы студент не только усваивал факты, но и умел применять их на практике, находить связи между различными областями знаний и применять полученные знания в реальной жизни. Педагог должен поощрять студента к самостоятельному мышлению, критическому анализу и поиску новых решений, создавая условия для его творческого развития. 72

Только так можно достичь полноценного формирования личности студента, которая будет готова к самостоятельной жизни и профессиональной деятельности.

Влияние педагога на формирование личности студента является непреложной и важной составляющей образовательного процесса. Педагог, как профессионал в своей области, не только передает знания и навыки, но и играет роль наставника, вдохновителя и воспитателя для своих студентов.

Одним из ключевых аспектов влияния педагога на студента является его способность создавать поддерживающую и благоприятную обстановку в аудитории

или группе. Педагог, который умеет слушать и понимать своих студентов, создает доверительные отношения и способствует развитию их самооценки и уверенности в себе. Кроме того, педагог должен быть готовым к адаптации своего подхода к каждому студенту, учитывая их индивидуальные особенности и потребности.

Еще одним важным аспектом влияния педагога на студента является его способность вдохновлять и мотивировать. Педагог, который умеет пробудить интерес и страсть к изучаемому предмету, способствует развитию у студентов творческого мышления и желания самостоятельно исследовать и узнавать новое. Кроме того, педагог должен уметь поощрять и поддерживать своих студентов, помогая им преодолевать трудности и достигать своих целей.

Также важно отметить, что педагог является примером для студентов. Он должен быть этичным и ответственным, демонстрировать уважение к своим студентам и их мнению. Педагог должен быть готовым к саморазвитию и постоянному обучению, чтобы быть в курсе последних тенденций и методик обучения.

В целом, влияние педагога на формирование личности студента не может быть переоценено. Педагог, который умеет создавать поддерживающую обстановку, вдохновлять и мотивировать, а также быть

Исаева Т.Е. Изменение роли преподавателя высшей школы в современном обществе // Интеграция образования. – Саранск, 2019. – №1. – С.19-22.

примером для своих студентов, способствует их развитию и успеху не только в образовательной сфере, но и в жизни в целом.73

В нашем стремительно меняющемся мире, постоянное развитие и самосовершенствование становятся неотъемлемой частью нашей жизни. И в этом процессе особенно важно не останавливаться на достигнутом, а постоянно стремиться к улучшению версии самого себя.

Как педагог, я всегда стараюсь вдохновить своих студентов на постоянный рост и развитие. Я верю, что каждый из нас обладает огромным потенциалом, который может быть раскрыт и развит при наличии правильного подхода и мотивации.

Одним из ключевых аспектов улучшения версии самого себя является осознание своих сильных и слабых сторон. Необходимо честно оценивать свои навыки и умения, а также определять области, в которых есть потенциал для развития. Это поможет нам сосредоточиться на тех аспектах, которые требуют нашего внимания и улучшения.

Еще одним важным шагом на пути к улучшению версии самого себя является постановка целей. Цели должны быть конкретными, измеримыми и достижимыми. Они должны вдохновлять нас и стимулировать к действию. Каждый новый день дает нам возможность приблизиться к нашим целям и стать лучше, чем мы были вчера.

Также важно не бояться новых вызовов и выходить из зоны комфорта. Именно в новых ситуациях и задачах мы можем раскрыть свой потенциал и обрести новые навыки. Постоянное стремление к самосовершенствованию требует от нас готовности принимать риски и быть готовыми к неудачам. Важно помнить, что каждая неудача — это возможность для улучшения и роста.

Наконец, не забывайте о важности постоянного обучения и самообразования. Мир меняется с каждым днем, и чтобы быть успешным, необходимо быть в курсе последних тенденций и новых знаний в своей области. Чтение книг, посещение семинаров и курсов, общение с экспертами — все это поможет нам расширить свой кругозор и стать более компетентными профессионалами.74

Таким образом, улучшение версии самого себя — это непрерывный процесс, требующий нашего упорства, терпения и самоанализа.

Но результаты этого процесса стоят потраченных усилий. Каждый новый шаг на пути к самосовершенствованию приближает нас к нашему идеалу и помогает стать лучше, сильнее и успешнее.

Каждый из нас имеет потенциал для роста и развития, и важно осознать, что мы сами являемся архитекторами своей судьбы.

Смирнов С.Д. Педагогика и психология высшего образования: от деятельности к личности. – М.: Аспект Пресс, 2020.

Фоминова, А. Н., Шабанова, Т. Н. Педагогическая психология: учеб. пособие М.: ФЛИНТА: НАУКА. 2020. - 320с.

Батышев А.С. Педагогическая система наставничества в трудовом коллективе / А.С. Батышев –М.: Высшая школа, 2020. –272

Один из способов достичь этого - постоянно стремиться к самосовершенствованию. Это может включать в себя приобретение новых знаний и навыков, участие в дополнительных образовательных программах или тренингах, а также активное участие в жизни колледжа и обществе.

Важно также развивать свои личностные качества, такие как настойчивость, ответственность, творческое мышление и коммуникабельность.

Однако, не забывайте о самом главном - о само приятии и самооценке. Верьте в себя и свои возможности, не останавливайтесь на достигнутом, а стремитесь к новым высотам. Ведь только тогда вы сможете стать лучшей версией себя.

Использованные источники:

1. Исаева Т.Е. Изменение роли преподавателя высшей школы в современном обществе // Интеграция образования. – Саранск, 2019. – №1. – С.19-22.
2. Смирнов С.Д. Педагогика и психология высшего образования: от деятельности к личности. – М.: Аспект Пресс, 2020.
3. Фоминова, А. Н., Шабанова, Т. Н. Педагогическая психология: учеб. пособие М.: ФЛИНТА: НАУКА. 2020. - 320с.
4. Батышев А.С. Педагогическая система наставничества в трудовом коллективе / А.С. Батышев –М.: Высшая школа, 2020. –272

УДК 595.7

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БИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ РОДА POLISTES

Аннотация. В статье рассматриваются биологические особенности рода Polistes. Polistes - самый крупный род в семействе Vespidae, насчитывающий более 200 признанных видов, как социальные насекомые широко распространены на планете, заселяя практически все биотопы. Для представителей рода Polistes характерно многообразие гнездостроительных и защитных инстинктов, структуры и организации семей и популяций.

Ключевые слова: род, семейство, вид, самка, самец, фаза, развитие, жизненный цикл, гнездо.

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BIOLOGICAL FEATURES OF THE GENUS POLISTES

Annotation. The article discusses the biological features of the genus Polistes. Polistes is the largest genus in the family Vespidae, numbering more than 200 recognized species. As social insects, they are widespread on the planet, inhabiting almost all biotopes. Representatives of the genus Polistes are characterized by a variety of nest-building and protective instincts, structure and organization of families and populations.

Key words: genus, family, species, female, male, phase, development, life cycle, nest.

Насекомые класс беспозвоночных членистоногих животных. Вместе с многоножками относятся к подтипу трахейных. Известно около 1млн видов насекомых. Обладают наибольшим разнообразием среди всех остальных животных на Земле. В настоящее время насчитывается множество различных видов ос, но все они, так или иначе, принадлежат к одной из двух основных категорий: одиночным и общественным осам. [3].

Polistes - космополитический род бумажных ос и единственный род в трибе Polistini. Народные названия для рода включают зонтичных ос,

придуманных Уолтером Эбелингом в 1975 году, чтобы отличать его от других видов бумажных ос по форме их гнезд, и зонтичных бумажных ос [4].

Polistes - самый крупный род в семействе Vespidae, насчитывающий более 200 признанных видов. Они обычно строят гнезда в местах обитания людей, Осы Polistes покрыты короткой и незаметной шерстью, имеют клипеус или наличник с заостренной вершиной, имеют широкий по всей длине геном, бугорок 1 метасомы в профиль почти прямой или слегка изогнутый, большеберцовая кость средней ноги имеет две шпоры, а ноги заканчиваются простыми предплюсневыми когтями [5].

Осы-полисты представляют собой сравнительно немногочисленную (на Земном шаре известно около 200 видов) группу общественных насекомых, распространенных на всех континентах, кроме Антарктиды. Они населяют преимущественно открытые ландшафты и сооружают картонные гнезда без оболочки, которые прикрепляют с помощью стебелька к субстрату. Эти социальные насекомые широко распространены на планете, заселяя практически все биотопы [7].

Эти насекомые характеризуется многообразием гнездо строительных и защитных инстинктов, структуры и организации семей и популяций. У них имеются две основных способов функционирования семьи и популяции:

✓ ресоциальностъ – семья основывается одиночными самками-основательницами; существование семьи ограничено жизнью одного поколения репродуктивных особей с циклическим повторением одиночной и семейной фаз; отмечается неполное разделение двух сфер функционирования, морфологически обособленные касты отсутствуют

✓ номосоциалъностъ — семья основывается роем, ее существование не ограничено сроками жизни конкретных репродуктивных особей, семья может функционировать без этапа ресоциализации; морфологически обособленные касты отмечаются у видов, для которых характерно полное разделение двух сфер функционирования [8].

У полистеи проявляются половой диморфизм: у самцов семь видимых снаружи метасомных сегментов, а у самок их шесть. У видов полистес есть однослойные гнезда, имеющие форму зонтика, с ячейками, открытыми воздуху снизу, и без слоя, обволакивающего гнездо. Гнезда подвешены к поверхности за черешок и изготовлены из бумагоподобного вещества, состоящего из смеси слюны и древесных волокон, отгрызенных от старой и мягкой древесины или сухих веточек.

Общий жизненный цикл Полистеса можно разделить на четыре фазы:

- фаза основания;
- рабочая фаза;
- репродуктивная фаза;
- промежуточная фаза.

Стадия основания начинается весной, когда одинокая самка "основательница" или небольшая группа родственных самок инициирует строительство гнезда. Осы начинают с формирования черешка, короткого

черенка, который соединит новое гнездо с субстратом и строят на его конце единственную выводковую ячейку. Дополнительные ячейки добавляются сбоку в виде шестиугольного рисунка, каждая ячейка окружена шестью другими. гнезда всегда сохраняют основную форму: черешковые, одночешуйчатые, незащищенные и открытые [6].

Яйца откладываются основательницей непосредственно в выводковые клетки и охраняются основательницей и помогающими самками. После того, как вылупляются первые личинки, основательница кормит их с помощью постепенной подкормки. Каждый из этого первого сезонного выводка новых бумажных ос является исключительно самкой и предназначен для подчиненной рабочей должности внутри гнезда; они не основывают собственных гнезд, а вместо этого помогают своей матери в уходе за будущими сестрами [2].

Некоторые осы-основательницы не строят свои собственные гнезда, а скорее пытаются узурпировать гнезда другой самки. Эти попытки узурпации могут быть успешными, а могут и не быть, но почти всегда приводят к впечатляющим проявлениям агрессии и насилия. Самки также могут избрать более мирную альтернативную стратегию размножения, присоединяясь к гнезду близкого родственника и работая самками-помощницами [5,6].

Фаза размножения обычно начинается в начале лета, примерно через два месяца после зарождения колонии, с появлением первых рабочих. Эти новые самки берут на себя большую часть рабочих обязанностей в колонии: добывание пищи, уход за выводком и поддержание структуры гнезда. Примерно в это же время те самки, которые помогали в создании гнезда, были изгнаны из гнезда агрессивным поведением со стороны основательницы и уходят либо для того, чтобы основать свои собственные гнезда в конце сезона, либо узурпировать чужие [5,6].

Репродуктивная фаза колонии начинается, когда первые самки-репродуктивницы выходят из своих выводковых клеток. Эти репродуктивные особи отличаются от своих сестер-рабочих повышенным уровнем запасов жира и криопротекторных углеводных соединений, которые позволяет им пережить период зимовки. Эти репродуктивные особи передают гены непосредственно следующему поколению, в то время как их рабочие сестры обычно передают свои гены косвенно [5,6].

Как только появляются репродуктивные самцы, самки и самцы покидают родовое гнездо для брачных полетов, начинается так называемая промежуточная фаза. Уход за выводком и добывание пищи снижаются, а численность рабочих сокращается по мере того, как умирающие особи больше не заменяются новыми. Внутри колониальная агрессия усиливается, а социальная сплоченность гнезда снижается [5,6].

Репродуктивное поведение ос Polistes стало одним из первых доказательств теории родственного отбора математика-биолога У. Д. Гамильтона, сформулированной в 1964 году.

Морфологически основательница и подчиненные репродуктивные члены колонии мало отличаются. Однако поведенческая дифференциация происходит среди самок как между поколениями, так и внутри них.

Весь цикл развития с момента откладки яиц до выхода имаго длится в среднем 38 сут. Продолжительность жизни рабочей особи колеблется в пределах 21-40 сут. Интенсивность размножения у ос-полист сильно зависит от погодных условий теплого сезона года [1].

Таким образом, насекомые рода Polistes характеризуется многообразием гнездо строительных и защитных инстинктов, структуры и организации семей и популяций

Использованные источники:

1. Абашеев Р.Ю. Эколого-биологические особенности ос-полист (Hymenoptera, Vespidae, Polistinae) в ЮгоЗападном Забайкалье// Вестник Бурятского государственного университета. Биология. География. – 2010. – С. 162 -169.
2. Кипятков В. Е. Мир общественных насекомых. — Л.: Издательство Ленинградского университета. 1991. 408 — с.
3. Нагашыбаева А. Экологическая роль и значение осы (insecta: hymenoptera) в природе// "Мировая наука" №6(27) 2019. / science-j.com. - С.336-338.
4. Осы бумажные https://ru.wikipedia.org/wiki/
5. Polistes – Polistes https://ru.wikibrief.org/wiki/Polistes
6. Полистес / https://hmong.ru/wiki/Polistes
7. Русина Л.Ю. Структура популяций и социальная организация осполитов (HYMENOPTERA: VESPIDAE) в нижнем Приднепровье // дисс.канд.. биол…наук. 1999- 260с.
8. Русина Л. Ю. Принципы организации популяции ос-полистин (Hymenoptera, vespidae)// Зоологический журнал, 2015, том 94, № 10, с. 1226-1240

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ПРИМЕНЕНИЕ МУЛЬТИСПИРАЛЬНОЙ КОМПЬЮТЕРНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ УРОЛОГИЧЕСКИХ БОЛЕЗНЕЙ

Аннотация. До начала XXI века внутривеноурография (ВВУ) была основным методом визуализации мочевыводящих путей у больных с гематурией, почечной коликой и другими урологическими заболеваниями. Внедрение мультисрезовой компьютерной томографии Мультиспиральная компьютерная томография (МСКТ) оказало значительное влияние на урорадиологическую визуализацию и алгоритмы визуализации. Применение МСКТ, специально разработанное для оценки заболеваний мочевыводящих путей, называется МСКТ-урографией (МСКТ). МСКТ предполагает исследование всего мочевого тракта, а также окружающих анатомических структур во время одного исследования с помощью нескольких тонких перекрывающихся сканирований и постобработки 2D и 3D с использованием специальных пакетов программного обеспечения. Эта процедура обеспечивает изображения с высоким пространственным разрешением, аналогичным Внутривенная урография.

Ключевые слова. Мультиспиральная компьютерная томография, компьютерная томография, урология, почки.

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APPLICATION OF MULTISPIRAL COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF UROLOGICAL DISEASES

Annotation. Until the beginning of the 21st century, intravenourography (IVU) was the main method of imaging the urinary tract in patients with hematuria, renal colic and other urological diseases. Introduction of multislice computed tomography Multislice computed tomography (MSCT) has had a significant impact on uroradiological imaging and imaging algorithms. An application of MSCT specifically designed to evaluate urinary tract diseases is called MSCT urography (MSCT). MSCT involves the examination of the entire urinary tract, as well as surrounding anatomical structures, during a single examination using several thin overlapping scans and 2D and 3D post-processing using special software packages. This procedure provides images with high spatial resolution, similar to intravenous urography.

Keywords. Multislice computed tomography, computed tomography, urology, kidneys.

Актуальность. В литературе нет данных о проспективных исследованиях, сообщающих о том, что МСКТ обладает такой же способностью отображать морфологические детали, как и Внутривенная урография. Хотя клинические сравнительные исследования отсутствуют, ожидается полный переход от Внутривенная урография к МСКТ. Принимая это во внимание, сделать научный шаг в этой области является непростой задачей, которая, вероятно, послужит толчком к дальнейшим исследованиям с целью подтверждения позиции и ценности МСКТ в современной урорадиологической практике.

Материалы и методы исследования. В проспективное исследование вошли 120 пациентов с высоким клиническим подозрением на заболевание мочевыводящих путей: 1) пациенты с макроскопической гематурией, которым было назначено ВВУ: выполнялись как ВВУ, так и МСКТ; 2) пациентам с раком мочевого пузыря, выявленным при цистоскопии или УЗИ (УЗИ), запланированным для ВВУ: проводились как ВВУ, так и MSCTU; 3) больным со злокачественными опухолями органов малого таза, после лучевого и/или оперативного вмешательства, с признаками обструкции мочевыводящих путей: выполнялись как ВВУ, так и МСКТ; 4) больные с подозрением на острую обструкцию мочевыводящих путей (почечная колика): МСКТ выполняли при отсутствии видимых конкрементов на неконтрастном сканировании; 5) пациентам с забрюшинными и злокачественными новообразованиями таза, планирующим проведение КТ перед операцией и/или лучевой терапией: проводили КТ + дополнительное этапное обследование МСКТ; 6) пациентам с осложненным пиелонефритом, планирующимся на КТ-обследование: проведено КТ-обследование + 1 этап с включением МСКТ; 7) пациентам (старше 40 лет) с микроскопической гемаурией: проведено КТ-обследование + дополнительный этап включения МСКТ.

Результаты. Значения знакового рангового теста Вилкоксона (пациенты I группы, первый и второй рентгенолог) для качества визуализации

нарушений мочевыводящих путей (внутрипросветные дефекты, мочевыводящие пути без выделительной функции, внутрипросветные аномалии мягких тканей, конкременты, внемочевые аномалии) по внутривенной урографии и МСКТ были статистически значимыми. Сравнивая значения p для визуализации нарушений мочевыводящих путей (пациенты группы. Значения p-значений знаково-рангового теста Вилкоксона (пациенты II группы, первый и второй рентгенологи) для качества визуализации нарушений мочевыводящих путей (мочевыводящие пути без выделительной функции, конкременты, экстрамочевые аномалии) методами МСКТ и МСКТ не были статистически значимыми. При сравнении значений p для визуализации аномалий мочевыводящих путей (МСКТ), независимо интерпретированных двумя рентгенологами, не было обнаружено статистически значимых различий.

Как и в предыдущих исследованиях, это исследование подтвердило, что МСКТ и МСКТ более чувствительны при выявлении почечно-паренхиматозных нарушений, чем ВВУ. В нашем проспективном исследовании МСКТ оказался более чувствительным к опухолям почек, чем ВИВУ, что было доказано в цитируемой литературе. ВУ и МСКТ были одинаково чувствительны при выявлении опухолей в почечной лоханке у 5 из 6 пациентов I группы. в одном случае они были разными (пациент с мультифокальным ПКР), так как при ВВУ не визуализировалась тазово-лоханочная система (отсутствие функции почек вследствие гидронефроза). В нашем исследовании МСКТУ оказался более чувствительным и специфичным в выявлении мочекаменной болезни, чем ВВУ. Такие результаты были подтверждены в литературе. В нашем исследовании не было статистически значимых различий в нечувствительности между MSCTU и IVU к опухолям мочевого пузыря. ВВУ было недостаточно для выявления очагового утолщения стенки мочевого пузыря у пациентов, ранее перенесших трансуретральную резекцию (ТУР) опухоли мочевого пузыря. При МСКТ наблюдалось утолщение стенки мочевого пузыря и подозрение на рецидив, но цистоскопия показала фиброзные изменения после ТУР. Внутривенная уро и МСКТ были одинаково чувствительны к более крупным полипоидным опухолям мочевого пузыря. Инфильтративные опухоли мочевого пузыря на ВВУ были представлены в виде пальцевидных дефектов наполнения, тогда как в МСТ визуализировались утолщение стенки, а также перивезикальные изменения (инфильтрация жировой ткани, локо-региональная лимфаденопатия, инфильтрация окружающих органов – семенных пузырьков и простаты), при которых ВВУ было недостаточно. У пациента с забрюшинной инфильтрацией, распространяющейся на передне-верхнюю стенку мочевого пузыря, ВВУ показала нормальные результаты, в то время как МСКТ выявила заболевание. В целом МСКТ более чувствительна к опухолям мочевого пузыря с сохраненной формой мочевого пузыря и минимальным утолщением стенки. 9, но в нашем исследовании были

обнаружены более крупные полипоидные опухоли мочевого пузыря, к которым внутривенная урография и МСКТ были одинаково чувствительны.

Вывод. Полученные результаты подтверждают, что МСКТ является методом выбора в диагностическом алгоритме пациентов с макрогематурией, а также при оценке микроскопической гематурии и необъяснимой обструкции мочевыводящих путей. Единственной оставшейся ролью ВВУ в нашем учреждении является визуализация верхних мочевыводящих путей при пациентах с гематурией в возрасте до 40 лет.

Использованные источники:

1. Усманова Д. Д., Наджмитдинов О. Б. Роль нейронспецифических белков в патогенезе развития диабетической полинейропатии у женщин в постклимактерическом периоде //Проблемы биологии и медицины. – 2020. – №. 3. – С. 116-119.
2. Наджмитдинов О.Б. РЕЗУЛЬТАТЫ ЛАБОРАТОРНЫХ ДАННЫХ НЕКОТОРЫХ ЦИТОКИНОВ НА РАЗВИТИЕ ХРОНИЧЕСКОЙ ИШЕМИИ МОЗГА У ПАЦИЕНТОВ С САХАРНЫМ ДИАБЕТОМ 2 ТИПА // Экономика и социум. 2022. №11-2 (102). URL: https://cyberleninka.ru/article/n/rezultaty-laboratornyh-dannyh-nekotoryh-tsitokinov-na-razvitie-hronicheskoy-ishemii-mozga-u-patsientov-s-saharnym-diabetom-2-tipa (дата обращения: 30.01.2024).
3. Мадаминов О.Р., Наджмитдинов О.Б. РОЛЬ РАДИОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ ПРИ ДИАГНОСТИКЕ НАРУШЕНИЙ В БИЛИАРНОМ ТРАКТЕ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/rol-radiologicheskih-issledovaniy-pri-diagnostike-narusheniy-v-biliarnom-trakte (дата обращения: 30.01.2024).
4. Абдиолимов М.Х., Наджмитдинов О.Б. ИСПОЛЬЗОВАНИЕ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ПРОТРУЗИИ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/ispolzovanie-magnitno-rezonansnoy-tomografii-pri-diagnostike-protruzii (дата обращения: 30.01.2024).
5. Наджмитдинов О.Б., Набиев Р.Р., Шокиров Ш.Т. ИСПОЛЬЗОВАНИЕ КОМПЬЮТЕРНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ЗАБОЛЕВАНИЙ СЕЛЕЗЁНКИ // Экономика и социум. 2022. №12-1 (103). URL: https://cyberleninka.ru/article/n/ispolzovanie-kompyuternoy-tomografii-pri-diagnostike-zabolevaniy-selezyonki (дата обращения: 30.01.2024).
6. Усманова Д.Д., Наджмитдинов О.Б. ФАКТОРЫ РИСКА И ОЦЕНКА ПСИХОЛОГИЧЕСКОГО СТАТУСА ЖЕНЩИН С ДИАБЕТИЧЕСКОЙ ПОЛИНЕЙРОПАТИЕЙ В ПОСТКЛИМАКТЕРИЧЕСКОМ ПЕРИОДЕ // Медицинские новости. 2020. №8 (311). URL: https://cyberleninka.ru/article/n/faktory-riska-i-otsenka-psihologicheskogo-statusa-zhenschin-s-diabeticheskoy-polineyropatiey-v-postklimakterichеskom-periode (дата обращения: 30.01.2024).

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РОЛЬ МЕТОДОВ КОЛИЧЕСТВЕННОГО АНАЛИЗА ДАННЫХ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ БОЛЕЗНИ АЛЬЦГЕЙМЕРА НА РАННЕЙ СТАДИИ ЗАБОЛЕВАНИЯ

Аннотация. Болезнь Альцгеймера (БА) занимает ведущие позиции по распространенности в структуре нейродегенеративных заболеваний и является самой частой причиной деменции в популяции. Терапию целесообразно проводить на ранних стадиях болезни, поскольку на терминальной стадии лечение становится неэффективным. В связи с этим первостепенное значение приобретает своевременная и точная диагностика БА на ранних стадиях заболевания. Одно из ключевых мест в ней отводится нейровизуализационным методикам, в часности магнитно-ре- зонансной томографии (МРТ). В представленном систематическом обзоре проведен поиск в электронных базах данных и научных электронных библиотеках Cyberleninka, PubMed, OVID, базе данных Кокрановского сотрудничества. Дана оценка современных аспектов ранней диагностики БА с помощью МРТ. Проанализирован ряд российских и зарубежных статей и метаанализов, посвященных количественной оценке данных МРТ на ранней стадии БА.

Ключевые слова. деменция; болезнь Альцгеймера; магнитно-резонансная томография; постпроцессорная обработка данных; магнитно-резонансная морфометрия; обзор.

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THE ROLE OF QUANTITATIVE ANALYSIS METHODS OF MAGNETIC RESONANCE IMAGRAPHY DATA IN THE DIAGNOSIS OF ALZHEIMER'S DISEASE AT THE EARLY STAGE OF THE DISEASE

Annotation. Alzheimer's disease (AD) occupies a leading position in prevalence among neurodegenerative diseases and is the most common cause of dementia in the population. It is advisable to carry out therapy in the early stages of the disease, since at the terminal stage treatment becomes ineffective. In this regard, timely and accurate diagnosis of asthma in the early stages of the disease is of paramount importance. One of the key places in it is given to neuroimaging techniques, in particular magnetic resonance imaging (MRI). The presented systematic review conducted a search in electronic databases and scientific electronic libraries Cyberleninka, PubMed, OVID, and the Cochrane Collaboration database. An assessment of modern aspects of early diagnosis of asthma using MRI is given. A number of Russian and foreign articles and meta-analyses devoted to the quantitative assessment of MRI data at the early stage of AD were analyzed.

Keywords. Dementia; Alzheimer's disease; Magnetic resonance imaging; post-processing data processing; magnetic resonance morphometry; review.

Актуальность. Болезнь Альцгеймера (БА) – прогрессирующее нейродегенеративное заболевание, проявляющееся неуклонным снижением памяти и других когнитивных функций (праксис, гнозис, речь, интеллект). В соответствии с опубликованными в 2013 г. данными Всемирной организации здравоохранения (ВОЗ), в 2010 г. в мире насчитывалось около 35,6 млн человек с деменцией. По прогнозам ВОЗ к 2030 г. это число достигнет 65,7 млн, а к 2050 г. составит 115,4 млн человек. Примерные совокупные расчетные мировые затраты на лечение больных деменцией в 2010 г. составили 604 млрд долларов США. БА является самой частой причиной деменции в популяции и составляет не менее 35–40% в общей структуре деменций. Диагностика БА базируется на анамнестических, клинических инструментальных данных. Среди последних важнейшее значение имеют нейровизуализационные методики. Методы нейровизуализации включают структурные методы, к которым относятся магнитно-резонансная томография (МРТ), компьютерная томография (КТ), и функциональные– позитронно-эмиссионная томография (ПЭТ), однофотоннаяэмиссионная компьютерная томография (ОФЭКТ) и функциональная магнитно-резонансная томография (ФМРТ). Все они позволяют получить важную информацию. Библиотеке Конгресса, опубликованных в период с января 1966 г. по март 2015 г. (всего 3565 статей на английском языке).

Результаты. В результате строгого отбора в метаанализ были включены 60 когортных исследований, охватывающих 14 821участника из 16 стран, из них для выявления нейровизуализационных маркеров развития БА проанализированы данные 19 исследований, включавших следующие структурные признаки: атрофия гиппокампа, атрофия медиальных отделов

височной доли, атрофия энторинальной коры, гиперинтенсивный сигнал от белого вещества и подкорковые инфаркты. При анализе полученных результатов наиболее сильными факторами риска, ответственными за прогрессирование от стадии УКР до деменции при БА, оказались атрофия гиппокампа, энторинальной коры и других медиальных отделов височной доли.

Также была обнаружена положительная корреляция между риском развития заболевания и объемом гиперинтенсивного белого вещества. Анализ показал, что МРТ является значимым средством диагностики БА на стадии УКР. Медиальная височная доля, включающая гиппокамп и пара гиппокампальную извилину (последняя включает энторинальную кору), поражается наиболее рано. Обнаруживается бóльшая атрофия гиппокампа, преимущественно области CA1 и основания гиппокампа (субикулюме), а также энторинальной коры, особенно в передненижнем полюсе с двух сторон. Более того, у пациентов с УКР увеличение объема желудочков и общее изменение объема вещества головного мозга за год, а также возрастные изменения белого вещества в базальных ганглиях увеличивали риск прогрессирования до БА.

По мнению авторов, предложенный метод обеспечивает высокую точность дифференциальной диагностики УКР сосудистого и дегенеративного генеза. Учитывая малую выборку (58 пациентов), целесообразна дальнейшая оценка метода на большей группе пациентов.

Вывод. Таким образом, приведенные данные показывают важную роль МРТ для диагностики БА и прогнозирования развития деменции на начальных стадиях когнитивных расстройств. Одним из перспективных направлений в диагностике данного заболевания является постпроцессорная обработка результатов МРТ с помощью специального программного обеспечения (МР-морфометрия). Данная методика позволяет проводить точную количественную оценку объемов различных структур и областей головного мозга, а также оценивать их изменение в динамике, что дает возможность не только повысить качество диагностики БА, но и судить о степени прогрессирования атрофического процесса. В настоящее время все большее распространение в клинической практике получают автоматизированные методы количественного анализа объемных характеристик МР-изображений, которые упрощают и объективизируют оценку структур головного мозга посредством минимизации участия человека в данном процессе.

Использованные источники:

1. Усманова Д. Д., Наджмитдинов О. Б. Роль нейронспецифических белков в патогенезе развития диабетической полинейропатии у женщин в постклимактерическом периоде //Проблемы биологии и медицины. – 2020. – №. 3. – С. 116-119.

2. Наджмитдинов О.Б. РЕЗУЛЬТАТЫ ЛАБОРАТОРНЫХ ДАННЫХ НЕКОТОРЫХ ЦИТОКИНОВ НА РАЗВИТИЕ ХРОНИЧЕСКОЙ ИШЕМИИ

МОЗГА У ПАЦИЕНТОВ С САХАРНЫМ ДИАБЕТОМ 2 ТИПА // Экономика и социум. 2022. №11-2 (102). URL: https://cyberleninka.ru/article/n/rezultaty-laboratornyh-dannyh-nekotoryh-tsitokinov-na-razvitie-hronicheskoy-ishemii-mozga-u-patsientov-s-saharnym-diabetom-2-tipa (дата обращения: 30.01.2024).
3. Мадаминов О.Р., Наджмитдинов О.Б. РОЛЬ РАДИОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ ПРИ ДИАГНОСТИКЕ НАРУШЕНИЙ В БИЛИАРНОМ ТРАКТЕ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/rol-radiologicheskih-issledovaniy-pri-diagnostike-narusheniy-v-biliarnom-trakte (дата обращения: 30.01.2024).
4. Абдиолимов М.Х., Наджмитдинов О.Б. ИСПОЛЬЗОВАНИЕ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ПРОТРУЗИИ // Экономика и социум. 2023. №2 (105). URL: https://cyberleninka.ru/article/n/ispolzovanie-magnitno-rezonansnoy-tomografii-pri-diagnostike-protruzii (дата обращения: 30.01.2024).
5. Наджмитдинов О.Б., Набиев Р.Р., Шокиров Ш.Т. ИСПОЛЬЗОВАНИЕ КОМПЬЮТЕРНОЙ ТОМОГРАФИИ ПРИ ДИАГНОСТИКЕ ЗАБОЛЕВАНИЙ СЕЛЕЗЁНКИ // Экономика и социум. 2022. №12-1 (103). URL: https://cyberleninka.ru/article/n/ispolzovanie-kompyuternoy-tomografii-pri-diagnostike-zabolevaniy-selezyonki (дата обращения: 30.01.2024).
6. Усманова Д.Д., Наджмитдинов О.Б. ФАКТОРЫ РИСКА И ОЦЕНКА ПСИХОЛОГИЧЕСКОГО СТАТУСА ЖЕНЩИН С ДИАБЕТИЧЕСКОЙ ПОЛИНЕЙРОПАТИЕЙ В ПОСТКЛИМАКТЕРИЧЕСКОМ ПЕРИОДЕ // Медицинские новости. 2020. №8 (311). URL: https://cyberleninka.ru/article/n/faktory-riska-i-otsenka-psihologicheskogo-statusa-zhenschin-s-diabeticheskoy-polineyropatiey-v-postklimaktericheskom-periode (дата обращения: 30.01.2024).

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ЗНАЧЕНИЕ ИСКУССТВЕННОГО АГРОФИТОЗА В УЛУЧШЕНИИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ ПАСТБИЩА

Аннотация. В данной статье освещены такие вопросы, как негативные факторы, влияющие на экологическое состояние пастбищ и создание агрофитоценозов на пастбищах, повышение продуктивности пастбищ при одновременном обогащении разнообразия численности растений.

Ключевые слова: биосистема, пустынные пастбища, фитомелиорация, деградация растений, агрофитоценоз, ветровая эрозия, опустынивание.

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THE IMPORTANCE OF ARTIFICIAL AGROPHYTOS IN IMPROVING THE CONDITION OF PASTURE ECOLOGY

Abstract. This article covers issues such as negative factors affecting the ecological condition of pastures and creating agrophytocenoses in pastures, increasing the productivity of pastures while enriching the diversity of the number of plants.

Key words: biosystem, desert pasture, phytomelioration, plant degradation, agrophytocenosis, wind erosion, desertification.

Введение. Экологическое равновесие в составе природных компонентов – естественный процесс, происходящий на протяжении нескольких сотен лет и имеющий свои законы развития. Природные комплексы изменились по определенным причинам и сформировались вследствие условий их регенерации.

К 20 веку сильное влияние человека на природу привело к тому, что она подорвала закон естественного возобновления и вызвала негативные изменения. Продуктивные пастбища в нашей стране являются основным источником питания и кормом для скота, однако экологическое равновесие нарушено из-за воздействия человека на флору, фауну и почвенный покров. Быстрое использование пастбищ, т. е. резкое увеличение поголовья овец, и постоянная вырубка на топливо кустарниковых растений, таких как саксаул, черкес, кандым, привели к нарушению баланса экосистем. [3]

В результате наблюдается, что пески нарастают во всех направлениях, образуются песчаные дюны, а места, где оазис встречается с пустыней, заполняются песком. Образование подвижных песков захлестывает плодородные орошаемые земли в оазисах и засыпает их песком. Другой причиной экологического дисбаланса на пастбищах является постоянный выпас скота, который происходит, когда скот выдергивают с корнями полынь, янтак, кейреук, даже некоторые виды эфемеров и эфемероидов. [7]

Это еще больше снижает способность растений к регенерации в песчаных пустынях с суровыми климатическими условиями. В ряде случаев непрекращающийся выпас на одном участке приводит к резкому снижению цветения и засева растений в следующем году. Кроме того, по мере того, как копыта измельчают растительность, песчаные почвы уплотняются, частицы песка в результате ветра начинают перемещаться, а твердый пески при передвижении становятся песчаниками. [9]

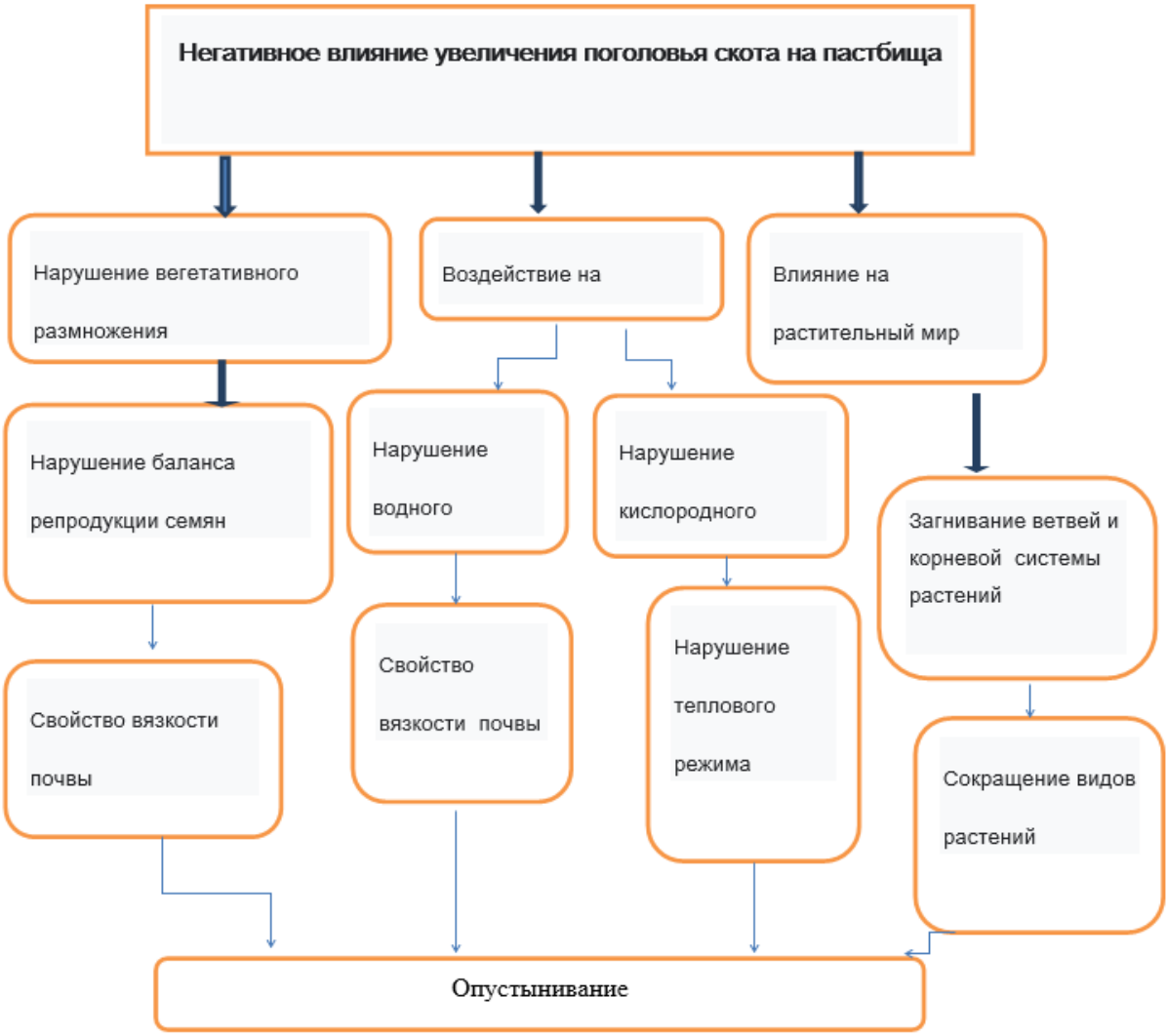
В последние годы песчаные пустыни стали не только пастбищами для каракульских овец, но и из Кызылкумов и других песчаных пустынь добываются различные полезные ископаемые как, газ, нефть, золото и другое минеральное сырье.

А это, с увеличением объемов геологоразведочных работ в регионах, бурения, прокладки магистральных трубопроводов, строительства автомобильных и шоссейных дорог, строительства новых промышленных предприятий, создания промышленно развитых городов, приводит к резкому снижению площадь пустынных пастбищ. Ведутся буровые работы с целью подачи воды промышленным предприятиям и населению. Все это приводит к

резкому нарушению экологического баланса пустыни, вызывая коллапс экологической системы. В результате увеличивается площадь подвижных песков и уменьшается площадь пастбищ. [1;3]

Основная часть. В настоящее время в нашей республике песчаные дюны образовались на площади 1 млн га, и то, что они возникли на границах оазисов и орошаемых земель, увеличивает риск затопления земель песком и ухудшает экологическую ситуацию, а также принятие мер по их прекращению. Это необходимая задача, которую нельзя откладывать. С этой целью необходимо применять фитомелиоративные мероприятия: посадку на территориях саксаулов, черкеса, кандыма и других пустынных кустарниковых и полукустарниковых растений, укрепление подвижных песков. Это дело тоже требует много денег. [4] Однако в связи с практической деятельностью, проведенной в этом отношении в последующие годы, т. е. в результате создания полей саксаулов, черкесов и сахарного тростника, движение 120 000 барханов было остановлено. Кроме того, на пастбищах имеются тысячи колодцев, служащих источником воды для скота. [2;3;6]

Увеличение количества копыт скота не приводит к уменьшению количества растений вокруг колодцев. Потому что овцы приходят к колодцу 1-2 раза в день поливать, и уничтожают растения, в результате чего структура почвы ухудшается. В результате растения вокруг колодца погибнут, а эрозия почвы усилится. Эта ситуация становится более круговой по мере приближения к колодцу. Негативное воздействие геологоразведочных работ на пастбища происходит таким образом. На разбуренной площади затронутость пастбищ очень сильна и по мере удаления от нее уменьшается. [5;6;]



(Х.Т. Назаров. составлено к 2020 году.)

Все вышеперечисленные процессы, то есть воздействие хозяйственной деятельности человека, сегодня постоянно возрастают. Профилактика этого является одной из задач, которую нельзя откладывать, и необходимо разработать план мероприятий по ее устранению. Одной из наиболее важных мер в этом является фитомелиоративное мероприятие, которое считается гарантией улучшения экологического состояния наших пастбищ, а также предотвращения будущих экологических проблем в биосистеме, а продуктивность пастбищ может быть восстановлены и может быть достигнута экологическая стабильность. [2;9]

Наши пастбища делятся на различные типы в зависимости от их естественного географического положения. Большую часть пастбищ составляют пустынные пастбища, в нашей республике их 30 миллионов гектар [4]. Пустынные пастбища имеют уникальный характер, продуктивность которых напрямую зависит от климатических условий и может снижаться до 3-5 т/га в годы с прохладным климатом и до 0,5-1,5 т/га в годы с прохладным климатом. Это, в свою очередь, вызывает ряд проблем в удовлетворении потребности в кормах для скота, выпасаемого на пустынных

пастбищах. Учитывая, что природные условия пустынь Средней Азии являются ксеротермическими, продуктивность пустынных пастбищ нашей республики напрямую зависит от этих природных условий. [1;2;8;11]

В связи с климатическими условиями нашей республики необходимым условием является реализация мер по повышению продуктивности пастбищ для развития пустынно-пастбищного скотоводства. Для этого поиск путей дальнейшего повышения продуктивности пастбищ, то есть реализация фитомелиоративных мероприятий – наиболее оптимальный путь. Наряду с повышением продуктивности пастбищ предотвращается деградация растительности, образование агрофитоценозов останавливается водная и ветровая эрозия, появляются положительные изменения в природном ландшафте. [3] Для этого целесообразно найти подходящие к климатическим условиям кормовые растения и создать из них искусственные агрофитоценозы. В нашей республике ряд научных учреждений проводят исследования в этом направлении. В частности, заслуживают внимания научно-исследовательские работы ученых Научно-исследовательского института животноводства и экологии степи Узбекистана и Ботанического научно-производственного объединения. Для повышения продуктивности пастбищ целесообразно учитывать климатические особенности, подбирать растения, подходящие для этих условий, комплексно изучать их эколого-биологические особенности, создавать агрофитоценозы на основе научных выводов. [5] Для этого необходимо провести глубокий анализ засухо- и жароустойчивости, жизнеспособности, плодовитости и других биологических свойств растений.

Пастбища в нашей республике составляют 30 миллионов гектаров и разделены на разные регионы с разными природными условиями. При выборе растений для каждой местности очень важно учитывать климат, почвенный покров и грунтовые воды.

Растения в условиях предгорных пустынь. Показатели производительности (на основе данных за 6 лет)

Опыт работы в Нурате

№	Тип растения	Урожайность сухих кормов, ц/га	Урожайность семян, ц/га
1	Изен	17,1	3,1
2	Чонгон	17,0	2,8
3	Терескен	9,5	0,8
4	Горькая полынь	10,0	1,0
5	Комфортный	8,0	1,5
6	Куйровук	17,0	4,1

Одной из основных задач является подбор растений, подходящих к природно-географическим особенностям местности, изучение их эколого-биологических особенностей, роста, развития, семенной продуктивности, семенного размножения и, самое главное, ее кормовой продуктивности. С

этой целью целесообразно выделить растения, устойчивые к жаре и засухе, и провести фитомелиоративные мероприятия на участках деградации пастбищ. Для этого необходимо из травянистых пастбищных растений определить наиболее подходящие для данной местности виды. Создание искусственных агрофитоценозов с участием подходящих для территории видов, обогащающих разнообразие численности растений и повышающих продуктивность пастбищ. [1;2;3]

Всестороннее изучение луговых кормовых растений, проведение экспериментов и получение точных научных выводов имеют важное значение при выборе наиболее подходящих для данной местности растений. Для этого необходимо высаживать растения на небольших участках, проводить эксперименты, собирать необходимые данные и проводить научный анализ. [4]

В последние годы экологическое состояние пустынных и полупустынных пастбищ ухудшилось, резко снизилась их продуктивность. На сегодняшний день в нашей республике изучено более 260 кустарников и крымских кустарников. Экологическая характеристика растений полностью изучены, и было обнаружено, что более 30 из них имеют высокую пищевую ценность, продуктивность и адаптацию к сухому климату. [5]

На основе научных угроз из пустынных пастбищных и кормовых растений выбраны наиболее подходящие для данной местности виды. Необходимо выделить перспективные виды, имеющие ценное хозяйственное значение, и создать искусственные агрофитоценозы, улучшить экологическое состояние, предотвратить водную и ветровую эрозию, увеличить количество видов растений, повысить продуктивность пастбищ, а также Обеспечение скота богатыми витаминами и питательными кормами в течение всего года имеет большое значение и позволяет интенсивно использовать пастбища в течение многих лет. В связи с этим научные исследования, проводимые на Нуратинском опытном поле Научно-исследовательского института животноводства и экологии пустынь Узбекистана исследовательская работа заслуживает внимания. Значимость научной работы, выполненной на опытном поле, состоит в том, что улучшение мелиоративного состояния лугов горных районов имеет важное значение для повышения продуктивности лугов за счет создания агрофитоценозов. [3;5;6;9]

В течение следующих 30 лет в экспериментальном направлении был проведен ряд научных исследований. В частности, проведен ряд работ в области сравнительного изучения перспективных кормовых кустовых растений, детально изучены экологические, биологические и физиологические особенности таких растений, как изен, куйровук, терескен, чугон, камфоросма. Научно доказано, что изучение перспективных кормовых растений имеет большое значение в повышении продуктивности горных лугов, обогащает растительность территории, снижает водную и ветровую эрозию почвы и в целом приводит к положительным изменениям в экосистеме... Фитомелиоративные мероприятия, проводимые на горных

пастбищах, позволяют повысить продуктивность пастбищ в несколько раз и использовать их в течение всего года. [2;5]

На основании всей вышеизложенной информации мы рекомендуем использовать вышеперечисленные растения в пустынях с целью изучения ценных хозяйственных свойств и создания высокоурожайных пастбищных агрофитоценозов и использования их в осенне-зимний период, тем самым увеличивая все пастбищные площади. [13] Производительность в 3-5 раз и экологически способствует улучшению ситуации. Созданные агрофитоценозы будут служить для регулярного поддержания продуктивности пастбищ и обогащения их растениями на долгие годы. [4]

Созданные искусственные пастбища обеспечивают экологическую стабильность с возникновением положительных изменений в биологической системе, уменьшают водную и ветровую эрозию территории, увеличивают разнообразие растений. Улучшение экологического состояния пастбищ приводит к положительным изменениям почвенного состояния и водного режима, обеспечивает обогащение агрофитоценозов видами растений из года в год, определяет высокую продуктивность пастбищ на многие годы.

Вывод. Достижение улучшения экологического состояния пастбищ создаст возможности для дальнейшего развития животноводства в нашей республике, особенно пастбищного животноводства, и будет иметь важное

значение в удовлетворении потребностей населения в продукции животноводства. [16;15]

Использованные источники:

1. Максудов М.М. Халилов Х. Научные основы по улучшению Каракулеводческих пастбищ. Зоотеринария, 2015, №10. – С.39-41.
2. Рахматуллаев А. Ландшафты хребта Актау, их рациональное хозяйственной использование и охрана. Ташкент, Издательство "Фан", 1991-108 С.
3. Maxmudov M.M., Sindarov J.Q., Xalilov X.T. Adir mintaqasi yaylovlari holatini yaxshilovchi istiqbolli fitomeliorantlar // Yaylovlardan oqilona foydalanish va muhofaza qilishning institutsionar masalalari. Toshkent. 2013. 275-279 b.
4. Xalilov X.T., Sindarov J.Q., Boboeyva A.S. Yaylov ozuqabop o'simliklari genofondidan tabiiy yaylovlar holatini yaxshilashda foydalanish //Oziq-ovqat xavsizligi: milliy va global omillar II-xalqoro ilmiy nazariy konferintsiya. Samarqand 2020. 546-548 b.
5. Q.S. Yarashev, Samyayev A.Q., Quyi Zarafshon tuproq qoplamining inson ta'sirida o'zgarishi //Quyi Amudaryo regioni ijtimoiy–iqtisodiy muamolarining geografik yechimlari. Respublik ilmiy –amaliy konferensiyasi materiallari. Urganch, 2010 –B. 165-168.
6. Q.S. Yarashev. Adir tog'oldi proyuvial tekislik mikroparagenitek landshaft kompleksi. // O'zbekiston geografiya jamiyati IX sezdi materiallari. – Toshkent, 2014. – B. 128-129. Q.S. Yarashev, Z. Nodirova. Zarafshon botig'ining tabiiy sharoiti va voha landshaftlari. //Ko'hna va novqiron geografiya. Toshkent, 2009. – B. 61-63
7. Q.S. Yarashev, Nazarov X.T., Xolmirzayev J.E.,Tog' yaylovlarini optimallashtirishning ayrim masalalari. //Qishloq xo'jaligiga innavatsion texnologiyalarni joriy qilish muammolari. Xalqaro konferensiya materiallari. T. 2. -Samarqand, 2012.
8. Доспехов Б.А. метод полевого опыта М. «Колос» 1979-416 стр.
9. Гасанов И.А., Гуломов П.Н., Каюмов А.А. «Естественная география Узбекистана» Ташкент-2009. www.ziyouz.com библиотека
10. Байматов С.Б., Раджабов М.Ю. Засоление и осолонение почв. «Засоленные почвы» Среднеазиатский научно-исследовательский журнал междисциплинарных исследований.
11. Джураев. Дж. С. «Значение водных источников в предотвращении проблемы опустынивания ландшафтов Нижне-Зеравшанской долины» Научный вестник. ISSN 2181-1296. 2022, № 5 (135)
12. Фелициант.И.Н. Конобаева. Горбунов В.Б. Абдуллаев М.А. Почвы Узбекистана (Бухарская и Навоийская области) Т. фан 1984г. стр. 119-134.
13. Кимберг. Почва пустынной зоны СССР в 1947 году. стр. 125-127.
14. Максудов Х.М. Одилов А.А. Эрозионная наука (учебное пособие) Т. 1998. стр. 19-25.
16. Фозилов А.С., Жураев Ж.С., Худаярова Ш.Ш. // Использование подземных вод в Средней Зарафшанской долине и влияющие факторы на их качество.

"Экономика и социум" №5 (84), май. 2021 www.iupr.ru" Институт управления и социально-экономического развития", Россия, г. Саратов. ISSN 2225-1545. DOI 10.46566/2225-1545_2021_1_84_883.
17. Fozilov A.S., Kholikulov Sh.T. //The Use Of Water Resources In The Akhangaran Basin In The Almalyk-Akhangaran Industrial Region. Nature and Science 2022;20(3) http://www.sciencepub.net/ nature NSJ. Marsland press.
18. Azamat Fozilov, Shodi Kholikulov. The dynamics of the Akhangaran basin's groundwater level in relation to physical-geographical and anthropogenic factors. E3S Web of Conferences 431, 04016 (2023) ITSE-2023. XI International Scientific and Practical Conference Innovative Technologies in Environmental Science and Education (ITSE-2023). DOI:https://doi.org/10.1051/e3sconf/202343104016

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ВОПРОСЫ УСТОЙЧИВОСТИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ НИЖНЕГО ЗАРАФШАНСКОГО БАССЕЙНА

Аннотация. В данной статье освещены вопросы охраны природы, сохранения природных ресурсов и их рационального использования, а также использования имеющихся ресурсов для рекреационных и туристических ресурсов в бассейне Нижнего Зарафшана.

Ключевые слова: консервирование, мониторинг, экоцентр, заповедники, туристические возможности, лесное хозяйство и долинные заказники.

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SSUES OF STABILIZING THE ECOLOGICAL CONDITION OF THE LOWER ZARAFSHON BASIN

Abstract. This article about issues of nature protection, preservation and rational use of natural resources and the use of recreational and touristic resources in the Lower Zarafshan Basin.

Key words: conservation, monitoring, ecocenter, reserves, ecotourism opportunities, forest farms.

Введение. Охрана природы Зеравшанской долины является одной из важнейших задач в настоящее время. Используя природу, человек создает новые условия, изменяет географическую среду, влияет на происходящий природный круговорот и обмен веществ. Негативные последствия такого влияния вредят равенству в природе. Это может привести к нарушению баланса человека и биосферы. Вот почему остается объективной необходимостью уделять внимание ее охране при природопользовании.

Охрана природы – сознательная и целенаправленная деятельность человека. Это осуществляется посредством системы государственных и социальных мер, направленных на охрану природы, обеспечение надлежащего использования ее ресурсов, улучшение среды обитания и деятельности человека.

Основная часть. Одной из основных форм охраны природы в бассейне Нижнего Зеравшана является ее сохранение, т.е. природных объектов, используемых человеком в хозяйственных или иных целях (памятники природы, тысячелетние клены, различные деревья), их комплексов (заповедников, заказников). Вторая форма – это рациональное обращение с используемыми природными объектами, а третья – охрана, здоровье и улучшение окружающей среды. [3]

Охрана природы считается одной из важных задач жителей нашего региона и граждан Узбекистана. Об этом четко сказано в статье 50 Конституции Республики Узбекистан. Эту задачу следует решать не только исходя из интересов нынешнего поколения, но и исходя из интересов будущих поколений. Человек должен не только беспокоиться о себе, но и думать о тех, кто будет жить после него. [2;3]

При осуществлении природоохранной деятельности в бассейне Нижнего Зеравшана основное внимание уделяется охране природы, повышению эффективности целевого использования земель, водных ресурсов, подземных ресурсов, животного и растительного мира, усилению государственного контроля за природной средой и источники загрязнения, общественные организации и необходимо сосредоточить внимание на расширении форм и методов участия населения. [4;5;11]

Отношения в области сохранения и рационального использования природных ресурсов, их охраны закреплены в Законах Республики Узбекистан **«Об охране природы»,** рациональном использовании земли, воды, леса, подземных ресурсов, охране атмосферного воздуха и ряде законов. Закон об охране природы определяет частные, экономические и

организационные основы сохранения состояния природной среды, рационального использования природных ресурсов. [3;5;6]

Другие законы, направленные на правовую охрану природы, также призваны достичь конкретных целей. В целях сохранения и изучения генетических фондов рядовых, типичных и уникальных природных комплексов, растений и животных, находящихся в государственных заповедниках, создана система мониторинга. В этих заповедниках проводятся природоохранные научные исследования. В экоцентре «Джейран» в Бухарской области сохраняется большое количество животных и природных растений, и это осуществляется в результате государственного природоохранного контроля. [7;10;14;13;]

В этом заповеднике хранятся и размножаются с целью получения потомства животные и растения, занесенные в **«Красную книгу»** Узбекистана.

На территории Навоийской области, на территории государственных национальных парков: вырубка деревьев; эксплуатировать экологически опасные промышленные предприятия; действия, изменяющие гидрологический и гидроэкологический порядок; действия, вызывающие эрозию почвы, а также деградацию флоры и фауны; не допускается захоронение отходов химических и радиоактивных веществ, перемещение живых организмов с целью акклиматизации, а комитет охраны природы Бухары и Навоинской области проводит мониторинговые мероприятия для предотвращения возникновения подобных ситуаций. [1;2;4;12;15]

Сегодня Нижний Зарафшан богат флорой и фауной. Чтобы сохранить, защитить и сохранить их, передать будущим поколениям, в бассейне созданы экоцентр «Джейран», лесхозы, центры порядка.

Туристические базы Нижнего Заравшана и другие непосредственно имеют возможности размещения сезонных курортов в районе с благоприятным климатом, ландшафтом и красивой природой, т.е. возможности экотуризма. В этом месте для кратковременного отдыха жителей региона возможность познакомиться с уникальными природными памятниками природы в горах, особенно в весенние месяцы, и их широкое распространение еще больше увеличивает краткосрочный рекреационный потенциал. этого региона. Потенциал кратковременной рекреации определяется разнообразием ландшафтов и памятников природы. Одной из важных задач является его полное изучение и строительство рекреационных комплексов в разных частях с учетом размеров природных рекреаций. На данный момент необходимо развивать все объекты и сферы обслуживания, удовлетворяющие спрос туристов в этих регионах. [2;] Развитие всех видов рекреационно-туристских ресурсов, являющихся источником экономического роста, с особым акцентом на существующие ресурсы, является вопросом времени. В Бузорском районе важно определить перспективу отдыха и туризма, организовать краткосрочный потенциал городских и сельских жителей, и существуют большие возможности для

развития этого вида сети. Поэтому эффективное использование рекреационных ресурсов важно не только для социально-экономического развития региона, но и для социально-экономического развития нашей страны. [2;3;7;8;10;]

Потенциал кратковременной рекреации определяется разнообразием ландшафтов и памятников природы. Одной из важных задач является его полное изучение и строительство оздоровительных комплексов в разных частях с учетом объемов природного отдыха. На данный момент необходимо развивать все объекты и сферы обслуживания, удовлетворяющие спрос туристов в этих регионах. Развитие всех видов рекреационно-туристских ресурсов, являющихся источником экономического роста, с особым акцентом на существующие ресурсы, является велением времени. В Бухарской области важно определить перспективу отдыха и туризма, организовать краткосрочные поездки городских и сельских жителей, и имеются большие возможности для развития этого вида сети. Поэтому эффективное использование рекреационных ресурсов – это не только социально-экономическое развитие региона. Возможно, это будет иметь значение в социально-экономическом развитии нашей страны. [1;14;17;16]

Вывод. Наряду с развитием экотуризма и агротуризма в бассейне Нижнего Зеравшана важно уделять внимание охране окружающей среды, что, в свою очередь, важно для обеспечения экологической стабильности территории. Обогащение биологического разнообразия в экосистеме региона имеет большое значение для поддержания экологического состояния в чистом виде, стабилизации состояния почвы, воды и подземных вод, при этом улучшение экологического состояния является залогом обеспечения экологической стабильности.

Использованные источники:

1. Максудов М.М. Халилов Х. Научные основы по улучшению Каракулеводческих пастбищ. Зоотеринария, 2015, №10. – С.39-41.
2. Рахматуллаев А. Ландшафты хребта Актау, их рациональное хозяйственной использование и охрана. Ташкент, Издательство "Фан", 1991-108 С.
3. Махмудов М.М., Синдаров Ж.Қ., Халилов Х.Т. Адир минтақаси яйловлари ҳолатини яхшиловчи истиқболли фитомелиорантлар // Яйловлардан оқилона фойдаланиш ва муҳофаза қилишнинг институционар масалалари. Тошкент. 2013. 275-279 б.
4. Халилов Х.Т., Синдаров Ж.Қ., Бобоэйва А.С. Яйлов озуқабоп ўсимликлари генофондидан табиий яйловлар ҳолатини яхшилашда фойдаланиш //Озиқ-овқат хавсизлиги: миллий ва глобал омиллар ИИ-халқоро илмий назарий конференция. Самарқанд 2020. 546-548 б.
5. Q.S. Yarashev, Samyayev A.Q., Quyi Zarafshon tuproq qoplamining inson ta’sirida o’zgarishi //Quyi Amudaryo regioni ijtimoiy–iqtisodiy muamolarining geografik yechimlari. Respublik ilmiy –amaliy konferensiyasi materiallari. Urganch, 2010 –B. 165-168.
6. Q.S. Yarashev. Adir tog’oldi proyuvial tekislik mikroparagenitek landshaft

kompleksi. // O’zbekiston geografiya jamiyati IX sezdi materiallari. –Toshkent, 2014. – B. 128-129. Q.S. Yarashev, Z. Nodirova. Zarafshon botig‘ining tabiiy sharoiti va voha landshaftlari. //Ko‘hna va novqiron geografiya. Toshkent, 2009. B. 61-63
7. Q.S. Yarashev, Nazarov X.T., Xolmirzayev J.E., Tog‘ yaylovlarini optimallashtirishning ayrim masalalari. //Qishloq xo‘jaligiga innavatsion texnologiyalarni joriy qilish muammolari. Xalqaro konferensiya materiallari.
T. 2. -Samarqand, 2012.
8. Доспехов Б.А. метод полевого опыта М. «Колос» 1979-416 стр.
9. Гасанов И.А., Гуломов П.Н., Каюмов А.А. «Естественная география Узбекистана» Ташкент-2009. www.ziyouz.com библиотека
10. Бойматов С.Б., Режабов М.Ю. Засоление и осолонение почв. «Засоленные почвы» Среднеазиатский научно-исследовательский журнал междисциплинарных исследований.
11. Джураев. Дж. С. «Значение водных источников в предотвращении проблемы опустынивания ландшафтов Нижне-Зеравшанской долины» Научный вестник. ISSN 2181-1296. 2022, № 5 (135)
12. Фелициант.И.Н. Конобаева. Горбунов В.Б. Абдуллаев М.А. Почвы Узбекистана (Бухарская и Навоийская области) Т. фан 1984г. стр. 119-134.
13. Кимберг. Почва пустынной зоны СССР в 1947 году. стр. 125-127.
14. Максудов Х.М. Одилов А.А. Эрозионная наука (учебное пособие) Т. 1998. стр. 19-25.
15. Фозилов А.С., Жураев Ж.С., Худаярова Ш.Ш. // Использование подземных вод в Средней Зарафшанской долине и влияющие факторы на их качество. "Экономика и социум" №5 (84), май. 2021 www.iupr.ru "Институт управления и социально-экономического развития", Россия, г. Саратов. ISSN 2225-1545. DOI 10.46566/2225-1545_2021_1_84_883.
16. Fozilov A.S., Kholikulov Sh.T. //The Use Of Water Resources In The Akhangaran Basin In The Almalyk-Akhangaran Industrial Region. Nature and Science 2022;20(3) http://www.sciencepub.net/ nature NSJ. Marsland press.
17. Azamat Fozilov, Shodi Kholikulov. The dynamics of the Akhangaran basin's groundwater level in relation to physical-geographical and anthropogenic factors. E3S Web of Conferences 431, 04016 (2023) ITSE-2023. XI International Scientific and Practical Conference Innovative Technologies in Environmental Science and Education (ITSE-2023). DOI:https://doi.org/10.1051/e3sconf/202343104016

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ЗНАЧЕНИЕ АГРОФИТОЦЕНОЗОВ В ОПТИМИЗАЦИИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ ПАСТБИЩА

Аннотация. В данной статье представлена информация о формировании пустынных пастбищных экосистем, условиях рационального использования пастбищ и их экологическом состоянии.

Ключевые слова: песчаные пустынные луга, факторы внешней среды, подвижность субстрата, эфемерно-травяные серые и серо-бурые почвы пустынных лугов.

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THE IMPORTANCE OF AGROPHYTOCENOSES IN OPTIMIZING THE ECOLOGICAL STATUS OF PASTURES

Abstract. This article provides information on the formation of desert pasture ecosystems and the conditions of rational use of pastures and their ecological status.

Key words: sandy desert grasslands, ecological factors, substrate mobility, ephemeral grass gray and gray-brown soil desert grasslands.

Введение. «Пустынный регион нашей страны – это большой регион, где развивается пустынное и пастбищное скотоводство. Наиболее положительной характеристикой пустынных пастбищ является то, что растительный покров пастбища богат жизненными формами и биологическим разнообразием, обеспечивает богатство и относительное плодородие пастбищных кормов. Рациональное и продуктивное использование пустынных пастбищ, сохранение биологического разнообразия и повышение продуктивности пастбищ, безусловно, требуют их поэтапной фитомелиорации. Крупные песчаные массивы занимают большие площади в пустыне Кызылкум, древней дельте Амударьи и Сурхандарьинской области. [1;4;] Песчаные почвы обладают высокой водопроницаемостью, вода просачивается в глубокие слои. На поверхности почвы поток не образуется. Небольшое количество поливов увлажняет песок на глубину 100-150 см. Практически отсутствие капиллярности в песчаных почвах обеспечивает минимальное физическое испарение и эффективное использование растениями доступной влаги. [4;10;]

Основная часть. Пустыня Кызылкум представляет собой крупный песчаный массив, занимающий большие площади. Песчаные почвы обладают высокой водопроницаемостью, вода просачивается в глубокие слои. На поверхности почвы ток не образуется. Небольшой полив также увлажняет песок на глубину 100-150 см. Практически отсутствие капиллярности в песчаных почвах обеспечивает эффективное использование растениями доступной влаги, обеспечивая минимальное физическое испарение. Огромный запас влаги в песке не превышает 1 процента. Песчаные почвы имеют очень благоприятные условия для развития растений. Распределение осадков в пустынной и полупустынной зоне сильно варьирует по регионам и этот процесс тесно связан с направлением движения влажного воздуха. Для пустыни Кызылкум характерен очень низкий уровень земледелия. Среднегодовое количество осадков в этом регионе составляет 103-146 мм. К востоку, с повышением над уровнем моря, и особенно в северо-восточном направлении, количество осадков постепенно увеличивается. Среднегодовое количество осадков в предгорном полупустынном районе достигает 289-325 мм. [8;9;] Относительная влажность воздуха также влияет на продуктивность пастбищ. В зимнее время года, обычно утром и ночью, а частично и вечером, относительная влажность воздуха достигает самых высоких значений 70-90%, днем - 55-75%. [2] Относительная влажность воздуха в Кызылкуме в летний сезон (июль-август) очень низкий, т.е. всего 15-20 процентов. Таким образом, пустынные и полупустынные регионы считаются богатыми уникальными и быстро меняющимися условиями для жизни растений как экологическая

среда. Здесь одни факторы окружающей среды в избытке (жара, солнечная радиация), а некоторые в дефиците. (Вода, плодородие почвы) и т.д. [3;6;7;]

В таких условиях всегда существует ряд факторов, отрицательно влияющих на быстрый рост и развитие растений. Эти факторы могут включать следующее;

- Сухой климат (интенсивность сжигания жира).
- Высокая летняя температура и холодная зима;
- Очень глубокое просачивание воды и очень незначительное смачивание поверхностного слоя почвы;
- Перегрев почвы;
- Мобильность субстрата;
- Высокая соленость.

Пустынные пастбища Узбекистана можно разделить на 4 основных типа:

- Песчаные пустынные луга с кустарниковой травой;
- Полукустарниковые - пустынные пастбища с серой и серо-бурой почвой с эфемерной травой;
- Засоленные травяные луга;
- Эфемерово-эфемероидные полупустынные (заболоченные и сероземные) холмистые пастбища. [5;6;7;11;12;]

Для пустынных экосистем наличие животных-фитофагов, т. е. поедание растений травоядными животными, было естественным явлением как в современном развитии, так и до антропогенного периода. В силу своего места в природе и степени влияния на нее скотоводство представляет собой глобальную среду, в которой трудно понять законы формирования, жизни и динамики развития многих экосистем.

Установлено, что значение крупных травоядных животных в формировании пустынных экосистем очень велико (Жерихин, 1993).До антропогенного периода эту функцию выполняли дикие животные, сейчас ее выполняет разнообразный домашний скот. Было проведено множество исследований по изучению влияния выпаса скота на пастбищную систему. (Андреев 1968, Горшкова 1978, Евсеев 1949, Морозова 1938, Тишков 1993, Нечаева 1954; Семенов-Тян-Шанский 1966, Шенников, 1941) отсутствие выпаса на пастбищах, рост мхов и лишайников в растительном покрове, показано, что многие виды растений исчезнут и в конечном итоге приведут к пастбищному кризису. Б. Д. Абатуров (2006), подробно изучивший эти проблемы, приходит к выводу, что «Выращивание крупного рогатого скота на пастбищах является необходимой деятельностью для устойчивого функционирования экосистем засушливого региона». [4;9;10;]

В природе, в природных экосистемах существуют механизмы, смягчающие давление животных-фитофагов на растительный покров (Абатуров, 1979). Чтобы использовать такие механизмы управления в пастбищном хозяйстве, необходимо, чтобы им управлял человек, знающий законы развития растительного покрова и оптимальные нормы выпаса.

Реальная суть концепции «рационального использования пастбищ» состоит в том, что наряду с максимальным использованием растений в пищу они должны сохранять их самовосстановительные, способности к повторному прорастанию, бедные по видам и жизненным формам экосистемы., предотвращение ржавчины, достижение устойчивой производительности. [7;8;]

На основе многолетних исследований Л.С. Гаев1971) — главная и решающая проверка рационального пути:

❖ сезонное и межгодовое использование пастбищ;

❖ использование 65-75% годовой массы пастбищных кормов, - пишет он.

Это признано оптимальной нормой использования пастбищ. Наши предки использовали пустынные пастбища с незапамятных времен. Использование пастбищ в те времена было основано на кочевничестве, пастбища сменялись сезонами и годами, сохранялась их способность к самовосстановлению. Таким образом минимизируется антропогенное воздействие на пастбищную экосистему и сохраняется естественный баланс, то есть, как было сказано выше, естественные механизмы баланса имеют приоритет. В современных условиях пастбищного хозяйства, основанных на формировании крупных животноводческих ферм в пустыне и преимущественно оседлом использовании пастбищ, существуют определенные закономерности рационального использования экосистем и разработаны его научные основы. [10;13;]

При рациональном использовании пастбищ необходимо опираться на следующие условия.

- Продуктивность пастбищ;
- Эластичность и сытость корма,
- Норма использования пастбищных кормов,
- Овцеёмкость пастбищ в зависимости от интенсивности использования,
- Их продолжительность при сезонном использовании,

При использовании песчаных пастбищ наиболее сильная нагрузка на растительный покров приходится на весенний период. Если одну и ту же площадь использовать весной в течение 2-3 лет непрерывно, продуктивность пастбища резко снизится. В таких условиях пастбище некоторое время отдыхают, позволяя растениям прорасти и восстановить способность к регенерации. Разумеется, при определении пастбищных участков можно учитывать такие их характеристики, как густота растительного покрова и продуктивность состава. В весенне-летний период целесообразно использовать пастбища, богатые эфемерными и однолетними растениями, а в осенне-зимний период — пастбища, богатые кустарниками. [2;5;7;]

В пустыне Кызылкум широко распространены полынно-эфемеровые пастбища. Наиболее оптимальная система использования таких пастбищ Л.С.Гаевская и Е.С. Разработан Краснополиным (1956-1957). Установлено,

что скармливание 65-75% годового урожая пастбищ этого типа весной или осенью, а также в два сезона, т.е. (весна-осень) непрерывно в течение 3 лет, не оказывает отрицательного влияния на пастбище. растительный покров. Поэтому рекомендуется менять пастбищные участки, используемые в весенний сезон, на полынные эфемерные пастбища каждые 4-5 лет.

Наиболее эффективной системой использования таких пастбищ является двух сезонная (попеременная) система использования, позволяющая значительно увеличить емкость пастбищ и требующая замены пастбищ, используемых только в весенний сезон. [4;5;6;]

Чтобы эффективно использовать улучшенные пастбища в различных экологических условиях Кызылкума в течение длительного времени, необходимо соблюдать определенные процедуры и правила. Среди них вопрос правильного определения срока использования после завершения мероприятий. Например, если скот выращивается на пустынных пастбищах со 2-го года, для песчаных пустынь такой период следует осуществлять с осенне-зимних месяцев 3- го года. [3]

Еще одним важным условием является то, что улучшенные пастбища требуют периодического дополнительного ухода, независимо от того, проводятся ли поверхностные или глубокие мероприятия по улучшению. Такая деятельность, в свою очередь, создает возможность более длительного использования улучшенных пастбищ и способствует эффективному управлению. [11]

Мероприятия, проводимые на фундаментально и поверхностно улучшенных пастбищах, включают методы борьбы с вредителями и болезнями и другие необходимые агротехнические обработки (подкормки, подкормки). Наибольший вред фитомелиорантным газонам может нанести ряд вредителей – золотистый жук, длинноклюв, черный жук и др. Разрабатываются необходимые меры по предотвращению сильного повреждения молодых насаждений в годы, когда фиксируются такие случаи. К числу болезней, более распространенных в пустынных районах, в том числе на пастбищах Кызылкума, следует отнести болезни мучнистой росы и ржавчины. Эти болезни наносят значительный ущерб природным и посаженным белым и черным саксофонам, чугунам и их молодым сеянцам. Выбирать этот период необходимо с учетом того, что наиболее эффективным периодом применения мер против вредителей, обитающих на пастбищах, является их личиночный возраст. [1;2;3;4;]

При использовании химического метода рекомендуется использовать современные препараты, эффективные и на других культурах; против расовой болезни эффективно опрыскивание его 40-50 кг измельченной серы на гектар.

При работе с токсичными веществами необходимо полностью соблюдать существующие санитарные требования и принимать все необходимые меры безопасности. В результате длительного хронического выпаса скота на пастбищах и массивах в улучшенном состоянии ухудшаются водно-физические свойства поверхности почвы. В результате возникнет

весьма неблагоприятная ситуация для восстановления и нормального роста большинства питательных видов. Именно на участках, неблагоприятных для развития таких растений, прежде всего в сложных условиях по механическому составу поверхности почвы, через 5-6 лет улучшают состояние пастбищ, вспахивая их на глубину. 8-10 см необходима для роста эфемеровых, эфемероидных и других важных видов растений. Улучшает развитие. [4;9;]

В случае, если посевные площади, используемые в течение многих лет (например, 8-10 лет), становятся разреженными и менее продуктивными, такие площади ремонтируют на поверхности подпосадок. Если такое мероприятие сократить на 60-65% по сравнению с первоначальной толщиной растений, то достаточно высеять семена в количестве 30-35% от предыдущей нормы посева в ноябре-декабре. Даже если растительный покров изрежен в результате нерегулярного использования пастбищ и беден ботанический вид, растительный покров хорошо восстановится, даже если пастбища оставят на определенный период (1-2 года) без выпаса скота. [9;10;11]

В настоящее время фактическая численность паршивых овец, пасущихся на пастбищах Кызылкума, в несколько раз меньше. Кроме того, на пастбищах Кызылкума имеются большие возможности для развития разведения верблюдов и годовалых верблюдов. В отличие от песчаной пустыни, в холмистых и гипсовых пустынных районах поголовье скота значительно больше, и на одну голову овец в большинстве хозяйств приходится менее 1 га пастбищ. Это, в свою очередь, привело к увеличению количества кормов на пастбищах в 3-4 раза, усилению деградации пастбищ и дальнейшему обеднению биологического разнообразия. Прискорбно, что наряду с шириной пастбищ и малочисленностью поголовья, вес кризисных пастбищ самый высокий в Бухарской и Навоийской областях. [3;4;7;8]

Выводы. Кроме того, на всех типах пастбищ урожайность резко колеблется в зависимости от сезона. Причиной этого может быть изменчивость климатических условий в разные сезоны года и биологические особенности видов растений. Установлено, что максимальная продуктивность кустарниковых растений проявляется в два периода, максимальная урожайность полыни летом, т.е. летом и осенью, а максимальная продуктивность эфемерных и эфемероидных видов проявляется в весенний сезон. [8]

Растительный покров пустынных и полупустынных пастбищ представлен кустарниково-барровым, полукустарниково-эфемерово-травным, соляным и эфемерово-травным типами и характеризуется резкой изменчивостью в разные годы и сезоны; Различные типы пастбищ имеют свои недостатки: кустарниково-барровые пастбища малоурожайны и пастбищная кормовая продуктивность очень низка; Урожайность полукустарниково-эфемеровых пастбищ летом и зимой очень низкая, а питательность кормов неудовлетворительна; Хотя пастбища с эфемерной травой считаются очень хорошими пастбищами весной, они не пригодны для использования в осеннее и зимнее время года; Пастбища шалфея пригодны к использованию только

осенью, в короткое лето урожайность пастбищной травы и ее пищевая ценность невысоки; Неудовлетворительное состояние пастбищ требует создания многокомпонентных и высокопродуктивных искусственных агрофитоценозов путем их фитомелиорации и проведения мероприятий по эффективному использованию таких пастбищ. По сезонному использованию пастбищ пастбища республики распределены неравномерно: 50 процентов от общего количества пастбищ пригодны для круглогодичного использования, 20 процентов - пастбища весенне-летнего сезона, остальные - пастбища, пригодные для кратковременное сезонное использование; Средняя продуктивность пастбищ республики составляет 1,21 кормовой единицы на гектар. Установлено, что количество осадков составляет 80% в средние годы, 55-60% в малоурожайные годы, 30-40% в очень малоурожайные годы; Рациональное использование пастбищ включает их строгое сезонное использование и соблюдение ежегодной системы пастбищного оборота. Он заключается в том, чтобы скормить 65-70 процентов корма. [5;6;10;12]

Теперь жизненная необходимость рекомендаций по Кызылкуму заключается в том, что в силу разнообразия и многообразия экологической среды этой огромной территории, система реализуемых на ней мер также по-своему сложна, и их применение также отражает эти многообразия. Учет, прежде всего, состояния растительного покрова каждой конкретной экологической среды, особенностей почвенных условий, агробиологических и хозяйственных свойств, используемых фитомелиорантов, требует творческого подхода. Реализуемые меры могут дать хороший эффект только при условии полного соблюдения этих условий. Реализация вышеперечисленных мероприятий поможет предотвратить оползни, повысить продуктивность пастбищ, то есть поспособствует распространению экологической устойчивости. [1;7]

Использованные источники:

1. Аббасов С.Б. Вопросы классификации пустынных ландшафтов Кызылкумов. Развитие науки и техники и географии. Материалы научно-практической конференции Самарканд-2007.
2. Shamsutdinov Z.SH., Chalbash R.M. Agrotexnicheskiye ukazaniya po uluchsheniyu pustinnix i polupustinnix pastbish Uzbekistana Tashkent, 1969, 38 s.
3. Najmitdinov J.N. Biologo-xozyaystvennoye znacheniye solyanki pochechkonosnoy dlya vvedeniya v kulturu v usloviyax Yugo-Zapadnogo Kizilkuma. Avtoref.diss. kand. biol. nauk, Leningrad, 1992, 19
4. Nazarov X. Sravnitelnaya otsenka vidov pustinnix kormovix vvodimix v kulturu v usloviyax predgornoy polupustini Avtoref.diss. kand. biol. nauk, Leningrad, 1993. 17 s.
5. Узоков П., Ш. Холикулов., Бобоходжаев И. "Почвоведение" Ташкент – 2010
6. С.А. Азимбоев. «Основы земледелия, почвоведения и агрохимии» Ташкент «Экономика-финансы» 2006г.
7. Номозов Ш.К., Ш.М. Турдиметов "Почвы Узбекистана и их эволюция" Ташкент - 2016г.

8. Бадалова М.Ф., "Актуальные проблемы решения проблем засоленных почв в сельском хозяйстве" Международный междисциплинарный научноисследовательский журнал "Галактика" (ГИИРЖ)ISSN(E): 2347-6915Том. 10, выпуск 10, октябрь (2022 г.) 186
9. И.Дж. Сулайманов, А.Р. Баташов, М.Х. Эгамбердиев, И.К. Одилов «Почвоведение и агрохимия».
10. Юлдошев С.Т., Якубов Ю.С., «Центральная Азия против опустынивания» Journal of new century innovations. Volume–17_Issue-4_November_2022.
11. Гасанов И.А., Гуломов П.Н., Каюмов А.А. «Естественная география Узбекистана» Ташкент-2009. www.ziyouz.com библиотека
12. Бойматов С.Б., Режабов М.Ю. Засоление и осолонение почв. «Засоленные почвы» Среднеазиатский научно-исследовательский журнал междисциплинарных исследований.
13. Фозилов А.С., Жураев Ж.С., Худаярова Ш.Ш. // Использование подземных вод в Средней Зарафшанской долине и влияющие факторы на их качество. "Экономика и социум" №5 (84), май. 2021 www.iupr.ru "Институт управления и социально-экономического развития", Россия, г. Саратов. ISSN 2225-1545. DOI 10.46566/2225-1545_2021_1_84_883.
14. Fozilov A.S., Kholikulov Sh.T. //The Use Of Water Resources In The Akhangaran Basin In The Almalyk-Akhangaran Industrial Region. Nature and Science 2022;20(3) http://www.sciencepub.net/ nature NSJ. Marsland press.
15. Azamat Fozilov, Shodi Kholikulov. The dynamics of the Akhangaran basin's groundwater level in relation to physical-geographical and anthropogenic factors. E3S Web of Conferences 431, 04016 (2023) ITSE-2023. XI International Scientific and Practical Conference Innovative Technologies in Environmental Science and Education (ITSE-2023). DOI:https://doi.org/10.1051/e3sconf/202343104016

УДК 616.12+616.12-005.4]-089-053.9

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ЛЕЧЕНИЕ И ПРОФИЛАКТИКА КОРОНАРНОЙ НЕДОСТАТОЧНОСТИ У ПОЖИЛЫХ ПАЦИЕНТОВ С ИНФАРКТОМ МИОКАРДА

Резюме. Известно, что сердечная недостаточность в остром периоде ИМ повышает риск развития госпитальной летальности в 3–4 раза и на 55% – в первые 30 дней после острого коронарного синдрома (ОКС).

Профилактика и коррекция клинических проявлений сердечной недостаточности у этой группы больных носит обязательный, жизнеспасающий характер, применение лекарственных препаратов с этой целью может значительно снизить раннюю и отдаленную смертность от ИМ. Особенно актуален подбор медикаментозной терапии у пациентов уязвимой группы – пожилого и старческого возраста.

Представленный в статье клинический случай являет пример реальной клинической практики, когда доступная медикаментозная терапия, улучшающая прогноз пожилых пациентов с ОКС, не всегда используется практическими врачами.

Ключевые слова: коронарная недостаточность, миокард инфаркт, пожилой возраст, коррекция.

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TREATMENT AND PREVENTION OF CORONARY INSUFFICIENCY IN ELDERLY PATIENTS WITH MYOCARDIAL INFARCTION

Resume. It is known that heart failure in the acute period of myocardial infarction increases the risk of hospital mortality 3-4 times and by 55% in the first 30 days after acute coronary syndrome (ACS).

Prevention and correction of clinical manifestations of heart failure in this group of patients is mandatory, life-saving, the use of drugs for this purpose can significantly reduce the early and long-term mortality from myocardial infarction. The selection of drug therapy in patients of a vulnerable group - elderly and senile age - is especially relevant.

The clinical case presented in the article is an example of real clinical practice, when available drug therapy that improves the prognosis of elderly patients with ACS is not always used by practitioners.

Key words: coronary insufficiency, myocardial infarction, old age, correction.

Актуальность. По данным отечественных и зарубежных авторов, за последние 10-15 лет отмечается увеличение продолжительности жизни населения, и, соответственно, возрастает доля больных старше 60 лет [3,6]. Согласно геронтологической классификации всемирной организации здравоохранения (ВОЗ) к пожилому возрасту относят пациентов от 60 до 74 лет, к старческому -от 75 до 89 лет [1,5].

Лечение лиц пожилого и старческого возраста является сложной и важной проблемой. Важность ее определяется тем, что сердечно сосудистые болезни занимают первое место в структуре заболеваемости, а у людей пожилого возраста они протекают тяжелее, чаще ведут к осложнениям, смертельным исходам, причем, в каждом последующем 5-летии жизни смертность на 100 тыс. населения увеличивается в 2-2,5 раза [2,7,9].

Существует тесная взаимосвязь между старением и сердечно-сосудистыми заболеваниями: к физиологическим возрастным изменениям у лиц пожилого и старческого возраста часто присоединяются нарушения, связанные с заболеванием; среди лиц старших возрастных групп резко увеличивается распространенность атеросклероза, ишемической болезни сердца (ИБС), артериальной гипертензии (АГ), сосудистых заболеваний мозга [4,8]. Все это иногда кардинально влияет на тактику ведения больных, лимитируя объем вмешательств, заставляя отказываться от радикальных методов лечения, сводя их к симптоматической терапии.

Цель исследования. Изучить возможности медикаментозной и эндоваскулярной коррекции коронарной, миокардиальной и цереброваскулярной недостаточности у больных инфарктом миокарда (ИМ) пожилого возраста.

Материал и методы исследования. Результаты стационарного этапа оценивали у 137 пациентов с вышеуказанной сопутствующей патологией. Средний возраст пациентов составил 68,03 (медиана 67, интерквартельный размах 64-71) лет. Все пациенты были доставлены бригадами скорой медицинской помощи в среднем через 8,8 часов от начала ангинозного приступа. Среди поступивших пациентов пожилого возраста преобладали мужчины - 84 (61,3 %), количество женщин составило 53 (38,7%) соответственно.

Результаты исследования. У больных пожилого возраста с манифестирующими клиническими, ЭКГ и лабораторными признаками ИМ в 84,6 % случаев регистрируется предшествующая длительная АГ, в 62 % случаев стенозирующий атеросклероз ВСА с малосимптомными клиническими проявлениями. У 85 % больных данной категории острый

период ИМ протекает с осложнениями, в том числе - сердечной недостаточностью более I класса по КлШр -19,2%, желудочковыми аритмиями выше II класса по Лауну-55,4%, стационарная летальность при этом составляет 16,01% и статистически превышает таковую у пациентов до 60 лет.

У больных пожилого возраста определена сильная корелляционная зависимость между суммарным индексом поражения КА и миокардиальной сердечной недостаточностью, прямая непрерывная зависимость между продолжительностью анамнеза АГ и наличием стенозирования ВСА с клиническими проявлениями хронической ишемии головного мозга. У больных пожилого возраста с признаками хронической ЦВН назначение антагониста кальция III поколения амлодипина в первые 24 часов от начала развития симптомов ИМ в составе комбинированной консервативной терапии безопасно, не вызывает нарастания сердечной, коронарной и цереброваскулярной недостаточности, способствует стойкой нормализации систолического и диастолического АД.

Инотропная стимуляция кальциевым сенситизатором левосименданом в сочетании с миокардиальной разгрузкой у больных ИМ пожилого возраста с признаками дисфункции ЛЖ способствует регрессу СН, увеличению скорости кровотока по ВСА, клиническому улучшению мозгового кровообращения, в том числе у больных с признаками многососудистого протяженного стенозирующего атеросклероза коронарных артерий, не подлежащего эндоваскулярной реваскуляризации.

У больных ИМ пожилого возраста с признаками локального стеноза коронарных артерий, ХИГМ эндоваскулярная реваскуляризация симптом - связанной артерии в первые 12 часов от начала острого коронарного события безопасна, не вызывает больших геморрагических осложнений, способствует восстановлению перфузии миокарда, увеличению скорости по ЭКА, уменьшению признаков церебральной ишемии. В течение 12 месяцев постгоспитального наблюдения у этой категории больных достоверно реже регистрируются смертельные исходы (10,65% против 21,9%), частота обострений ИБС (29,8% против 63,6%), ЦВБ (8,5% против 24,4%) по сравнению с группой без эндоваскулярных методов лечения, что обусловлено исходно более тяжелым поражением коронарного и церебрального бассейнов у таких больных.

Вывод. Результаты выполненной работы позволят при остром коронарном синдроме у больных пожилого и старческого возраста с учетом клинических особенностей течения заболевания, показателей внутрисердечной гемодинамики, проводить дифференцированную терапию, включающую ферментативную и эндоваскулярную реваскуляризацию миокарда. Применение негликозидного инотропного стимулятора левосимендана с бета-блокатором карведилолом после эндоваскулярной реваскуляризации симптом-зависимой артерии (СЗА) при ИМ с признаками сердечной недостаточности у пациентов пожилого и старческого возраста

безопасно, способствует регрессу сердечной недостаточности, что позволяет рекомендовать эту комбинацию у данной категории больных. Повышение выживаемости пациентов в течение 12 месяцев наблюдения после эндоваскулярной реваскуляризации миокарда дает возможность более широко рекомендовать этот метод лечения у больных ОКС с подъемом сегмента ST пожилого и старческого возраста в максимально ранние сроки заболевания.

Использованные источники:

1.Белал Мохамед Радван Мохамед Газал Оценка результатов хирургического лечения аортальных пороков в сочетании с ишемической болезнью сердца: автореф. дис.... канд. мед. наук / Белал Мохамед Радван Мохамед Газал. — 2010. — 24 с.

2.Бокерия Л. А. Непосредственные результаты и факторы риска ранней смертности при операциях протезирования АК и реваскуляризации миокарда / Л. А. Бокерия // Грудная и сердечно-сосудистая хирургия. — 2008. — № 6. — С. 41–46.

3.Бокерия Л. А. Непосредственные результаты гибридных операций у пациентов с сочетанным поражением клапанов сердца и коронарных артерий / Л. А. Бокерия, И. И. Скопин, В. Ю. Мерзляков [и др.] // Бюллетень НЦССХ им. А. Н. Бакулева. — 2009. — Т. 10, № 9. — С. 22.

4.Бокерия Л. А. Сочетанная патология аортального клапана с ишемической болезнью сердца: современное состояние вопроса — обзор литературы / Л. А. Бокерия // Бюллетень НЦССХ им. А. Н. Бакулева РАМН. — 2009. — Т. 10, № 4. — С. 22–32.

5.Караськов А. М. Анализ результатов сочетанных операций при поражении аортального клапана и коронарных артерий / А. М. Караськов, С. И. Железнев, В. М. Назаров [и др.] // Патология кровообращения и кардиохирургия. — 2009. — № 2. — С. 10–12.

6.Медведев А. П. Наш опыт хирургического лечения больных с клапанной патологией сердца и ИБС / А. П. Медведев, В. А. Чигинев, П. Н. Кордатов [и др.] // Бюллетень НЦССХ им. А. Н. Бакулева. — 2009. — Т. 10, № 9. — С. 25.

7.Семеновский М. Л. Предварительная коронарная баллонная ангиопластика в лечении сочетанной патологии (ИБС и пороков сердца) у больных старше 70-ти лет. Гибридный метод лечения / М. Л. Семеновский, П. А. Вавилов, В. В. Честухин [и др.] // Бюллетень НЦССХ им. А. Н. Бакулева. — 2009. — Т. 10, № 9. — С. 185.

8.Hwang M. H. Preoperative identification of patients likely to have left ventricular dysfunction after aortic valve replacement. Participants in the Veterans Administration Cooperative Study on Valvular Heart Disease / M. N. Hwang, K. E. Hamermeister, C. Oprian [et al.] // Circulation. — 2009. — Vol. 80. — P. 165–76.

9.Lung B. Prognosis of valve replacement for aortic stenosis with or without coexisting coronary heart disease: a comparative study / B. Lung [et al.] // J. Heart Valve Dis. — 2010. — Vol. 2. — P. 430–439.

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КОММУНИКАТИВНО-ПРАГМАТИЧЕСКИЕ ОСОБЕННОСТИ АНГЛОЯЗЫЧНОГО И РУССКОЯЗЫЧНОГО РЕКЛАМНОГО ТЕКСТА (НА ОСНОВЕ СОЦИАЛЬНОГО ДИСКУРСА)

Аннотация. Привлекательность нашей статьи к анализу на английском языке определяется тем, что все виды медиатекстов на английском языке, включая рекламу, занимают лидирующие позиции в мировом информационном потоке как по объему, так и по воздействию. Многие исследователи считают молчаливость одной из универсальных характеристик языка, однако до сих пор не существует единой и полной концепции молчаливости, включающей систематическое описание неявных языковых конструкций на разных уровнях. Выбор темы данной диссертации обусловлен тем, что в современных англоязычных рекламных текстах мало изучены особенности получения секретной информации, ориентированной на мужскую и женскую аудиторию. Актуальность работы заключается в использовании когнитивно-дискурсивного подхода к изучению особенностей получения скрытой информации в современных английских рекламных текстах, ситуации и особенностей получения скрытой информации посредством многоуровневых языковых средств, способных передавать такую информацию.

С появлением разнообразной продукции усиливается мощное влияние рекламы на общество. Людям и компаниям стало очень удобно продавать свою продукцию посредством хорошей рекламы. Целью данной статьи является определение особенностей лингвистического аспекта рекламных слоганов, а также роли и особенностей рекламной коммуникации в функционально-эмоциональной системе узбекского, русского и английского языков.

Ключевые слова: медиа, реклама, смысловая, прагматическая, когнитивно-дискурсивная, социокультурная, коммуникативная, научная, художественная, глобальная информация, лингвистическая.

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COMMUNICATIVE AND PRAGMATIC FEATURES ENGLISH AND RUSSIAN ADVERTISING TEXT (BASED ON SOCIAL DISCOURSE)

Annotation. The attraction of our article to the analysis in English is determined by the fact that all types of media texts in English, including advertising, occupy a leading position in the global information flow, both in terms of volume

and impact. Many researchers consider tacitness to be one of the universals characteristic of language, but there is still no single and complete concept of tacitness, which includes a systematic description of tacit language constructions at different levels. The choice of the topic of this dissertation is due to the fact that the features of obtaining secret information aimed at male and female viewers in modern English language advertising texts have been understudied. The relevance of the work is the use of a cognitive-discursive approach to the study of the peculiarities of obtaining hidden information in modern English advertising texts, the situation and characteristics of obtaining hidden information through multi-level language tools capable of transmitting such information.

With the emergence of a variety of products, the powerful influence of advertising on society is increasing. It has become very convenient for people and companies to sell their products through good advertising. This article is aimed at determining the specific characteristics of the linguistic aspects of advertising slogans, as well as the role and characteristics of advertising communication in the functional and emotional system in Uzbek, Russian and English languages.

Key words: media, advertising, semantic, pragmatic, cognitive-discursive, social-cultural, communication, scientific, artistic, global information, linguistic.

Введение. Реклама в наши дни занимает все больше места в жизни людей. Реклама, повлиявшая на мировоззрение людей и ставшая едва ли не основной формой современного делового общения, стала известной частью массовой культуры, изучается многими учеными как секретный агент. Мы не ошибемся, если скажем, что одним из важнейших структурных элементов основного направления рекламной программы является слоган рекламы, то есть ее лицо. Потому что эти лозунги – это послание, которое легко и быстро сохраняется в памяти людей и содержит основной смысл текста.

Реклама в современном мире представляется исследователям как многогранное явление. Ее изучение предполагает ряд дисциплин: журналистику, социологию, психологию, экономику, историю, право и др. Различные подходы и методы изучения феномена рекламы доказывают его многогранность и в то же время сложность изучения. Как сложное социокультурное явление, затрагивающее все сферы общественной жизни, реклама в последнее время все больше оказывается в центре научного понимания. Вопрос ее изучения становится актуальным для широкого круга гуманитарных наук. В настоящее время лингвистические исследования рекламы приобретают все большее значение. Рекламный текст привлекает внимание исследователей. В лингвистике интерес к нему не утихает, а рекламный текст определяется тем, что он является полем реализации и формой существования языка. Исследователи рекламы подчеркивают ее большое значение в жизни современного человека. Например, Р. Маршан реклама пишет нашу жизнь в газетах и журналах, реклама существует ради будущего [1]. Он также считает, что реклама внесла большой вклад в формирование общественного дискурса, который является общим

объединяющим языком для различных аудиторий, где реклама сыграла важную роль в формировании мнения и восприятия действительности [1].

Методология исследования. В наше время реклама предстает как особое социокультурное явление, определяющее нравственные и социальные установки целевой аудитории: Реклама неизбежно влияет на наши взгляды, наше отношение к себе и окружающему миру, дает нам ощущение поведения в определенную ситуацию, показывает готовые формы, определяет, что хорошо, а что плохо, придаёт смысл. Рекламный текст относится к средствам массовой информации, что отличает его от других текстов (научных или художественных). Определение текста, данное в лингвистическом энциклопедическом словаре, выходит за рамки вербального уровня как единая смысловая связь последовательности знаковых единиц, основными признаками которой являются связь и целостность. Т.Г. Добросклонская утверждает, что «уровень массовой коммуникации дает новые смысловые представления о понимании текста, основанные на медийных свойствах средств массовой информации» [4].

По Годдарду, термин «текст» применительно к рекламе используется в СМИ, включая речевую часть и аудиовизуальную составляющую [9]. В коллективной монографии «Рекламная речь и рекламный текст» печатный рекламный текст определяется Н.А.Красавским как системно развитое, содержательное, функционально организованное сообщение, которое осуществляется различными вербальными и невербальными средствами до адресата. Конкретная коммуникативная стратегия оказывает психологическое воздействие на принимающего и ставит перед собой цель, используя тактику. [10]. Реклама также представляет собой особый прагматический тип текста. Рекламные тексты создаются для воздействия на разные аудитории: рекламу для детей, подростков, мужчин и женщин. Целевая аудитория может различаться по возрасту, полу и другим характеристикам. Тот факт, что реклама ориентирована на определенный сегмент аудитории, влияет на вербальное содержание рекламного текста. Коммуникативная природа рекламы определяет специфические характеристики этого явления. Для описания конкретной целевой группы могут иметь значение следующие социально-демографические характеристики: возраст, пол, образование, религия, семейное положение, финансовое положение, социальная принадлежность, территориальная принадлежность; психологические характеристики - мотивация, репрезентация, а также потребительское поведение. Реклама – это промежуточный результат деятельности, состоящей из создания текста копирайтером и его интерпретации читателем. В то же время мы согласны с важным замечанием Е.А.Турпуговой о том, что «Интерпретация рекламного текста задерживается и его реципиент лишь гипотетически присутствует в ситуации» [11]. Важно различать такие понятия, как «Реклама», «Реклама». текст» и «Рекламная речь». Вопрос о языковой составляющей рекламы до сих пор остается открытым для ученых. По мнению В.М.Лейчика, «язык (речь, речевая деятельность) является

незаменимым инструментом на всех этапах рекламной деятельности, а «науки и научные дисциплины, связанные с языкознанием и «встроенные в жизнь», работают не с языком как системой, а с рабочим языком». [12] мы рассматриваем рекламную деятельность как дискурсивный процесс с неизбежными остановками - остановками, т. е. рекламными текстами. Анализ литературы по теме. Массовая коммуникация является одним из центральных компонентов современного общества. Исследование массовой коммуникации в последнее время стало популярной областью многих дисциплин. «Философская энциклопедия» определяет массовую коммуникацию как «систематическое распространение сообщений среди больших, рассредоточенных аудиторий в цифровом формате с целью влияния на суждения, мнения и поведение людей» [2]. Многие исследователи согласны с мнением В.В.Миронова, который считает, что «система массовых коммуникаций становится доминирующим фактором современной культуры». [3] Материализация рекламы, а также других средств массовой информации – газет, журналов, телепрограмм, радиопередач. Реклама включает в себя не только слова, но и графику, изображения, звуки. «Понятие многомерного медиатекста важно для изучения любых медиатекстов, в том числе рекламных, поскольку позволяет получить объемное изображение изображаемого объекта, лучше понять свойства слов и образов в массовой коммуникации. дает» [4]. По мнению Т.Г. Добросклонской, реклама должна быть связана с массовой коммуникацией. Среди различных типов текстов, относящихся к сфере массовой коммуникации, особого внимания заслуживают рекламные тексты как пример специфической функциональной интенсивности и, следовательно, целенаправленного использования языка. К.Л.Бове и В.Ф.Аренс заявили, что «Он эффективно сочетает информацию и знания из гуманитарных наук (науки о человеческом поведении) с навыками и творчеством коммуникативных искусств (литературы, драмы, театра, графики, фотографии и т. д.), объединяет Научный подход к изучению рекламы требует определения самого понятия. Давайте посмотрим определения рекламы в научных источниках разных направлений. Следует отметить, что существует несколько десятков определений рекламы. Такое разнообразие определяется, прежде всего, сложностью этого явления. В узком смысле под понятием реклама понимается особая форма общения между рекламодателем и потребителем, предполагающая распространение информации о товарах и услугах по различным каналам, включая традиционные средства массовой информации и специализированные рекламные каналы. К.Л.Бове и В.Ф.Аренс определяют рекламу как «обезличенную передачу информации» [5]. Это определение ориентирует рекламу на массовую аудиторию. В свою очередь, Дж. Ламбен определяет рекламу как «одностороннюю коммуникацию со стороны спонсора, желающего прямо или косвенно поддержать действия фирмы» [6]. Односторонний характер коммуникации указывает на отсутствие конкретного получателя – он определяется только аудиторной ориентацией

рекламодателя. Поэтому реклама как информация о товарах или услугах представляет собой особый вид информации, целью которой является не только ознакомление с рекламируемым объектом, но и побуждение к его покупке. Реклама разнообразна по своей природе и этот факт не остался незамеченным исследователями. Т. Г. Добросклонская предлагает три метода классификации рекламных текстов по таким критериям, как рекламируемый объект, целевая аудитория и средство массовой информации - рекламодатель [4]. Д. Денисон и Л. Тоби предлагают классификацию рекламы, основанную на объективном факторе. Они делят тексты на три большие группы: 1) имиджевые; рекламные; 2) поощрительная реклама; 3) продвижение устойчивости (сохранение имиджа) [8]. Существует еще одна классификация рекламных сообщений. КЛБове и ВФАренс определяют семь критериев различения видов рекламы: «по целевой аудитории; деловая реклама; по охвату территории; классификация по средствам передачи рекламы; по функциям и целям; коммерческие и некоммерческие; прямая посылка и косвенная реклама» [5]. Необходимо обратить внимание на существующие основные подходы в изучении феномена рекламы. Мы определяем два из них: прагматический (маркетинговый) и социокультурный. Прагматический подход направлен на рассмотрение экономической эффективности рекламы и роли последней в обеспечении роста продаж. В данном случае реклама определяется как «платное присутствие информации о товаре или услуге в средствах массовой информации, направленное на повышение репутации компании и ее оборота» [8]. Анализ и результаты. При анализе рекламного текста особое внимание следует уделять особенностям его структуры. Структура рекламного текста фактически определяет его основные языковые особенности. Как отмечала Ю.С.Бернадская, «Чтобы создать эффективный рекламный текст, необходимо знать и применять правила оформления текста, виды его композиции» [13]. По мнению Л.Г.Фещенко, рекламный текст «представляет собой сложное смысловое целое, в котором нет места случайным, коммуникативно нагруженным компонентам, поскольку в таком тексте решение прагматической, коммерческой задачи всегда является главным. А это означает равное внимание к ее вербальной и невербальной составляющей» [14]. Поэтому при анализе рекламных текстов необходимо учитывать специфику невербальной составляющей рекламного сообщения и ее роль в передаче информации путем создания образа рекламируемого продукта. К основным вербальным компонентам рекламного текста относятся заголовок, подзаголовок, основной текст, слоган. Многие исследователи дополнительно дезагрегируют данные о рекламе. Заголовок – один из важнейших вербальных элементов рекламы. О важности заголовка пишет Е.В.Медведева: «В заголовке заключено главное рекламное обращение и главный рекламный аргумент». В свою очередь, В. Аренс и К. Бове подчеркивают, что заголовок выполняет шесть основных функций:» 1) он должен привлекать внимание; 2) заголовок должен выбирать свою целевую аудиторию, то есть содержать то, что интересует того или иного потребителя;

3) заголовок должен знакомить читателя с основной частью текста; 4) коммерческая идея должна быть полностью отражена в названии; 5) право собственности должно обещать покупателю прибыль от покупки; 6) заголовок должен отражать новые моменты в произведении, которые интересуют читателя» [15]. В данном исследовании отдельные компоненты рекламного текста (слоган, заголовок, основной рекламный текст) не являются материалом для изучения. Под рекламным текстом понимается единство всех речевых компонентов рекламы. Рекламный текст выполняет ряд функций. Среди них сложно выделить главное. Функция сообщения играет ключевую роль в рекламном тексте, поскольку реклама информирует аудиторию о наличии товара, его основных особенностях и преимуществах перед конкурентами. Не менее важна функция влияния и в рекламном тексте, поскольку основная задача рекламодателя – воздействие на потребителя посредством рекламного сообщения. Уникальность рекламного текста связана с его направленностью на воздействие; в этом случае функция воздействия осуществляется на разных уровнях текста: используются все возможные семитические системы и инструменты. Прагматическая направленность текстов главным образом определяет специфические особенности языка и является решающим фактором для формирования других специфических черт, например, креолизации (семитической сложности), стилистической неоднородности, выразительности, оценочности, диалогичности, композиционных и структурных особенностей». Т. Г. Добросклонская отмечала: «С функциональной точки зрения рекламные тексты полностью сочетают в себе реализацию двух функций воздействия: функции воздействия как функции языка, осуществляемой с использованием всего арсенала языковых выразительных средств, и как функции Влияние на средства массовой информации – это обмен информацией как функция массовой коммуникации, который осуществляется с помощью специальных медиатехнологий. Это связано с тем, что основная цель рекламного текста – убедить массовую аудиторию в необходимости покупки определённого товара или услуги» [4] Выводы и предложения. В заключение хотелось бы подчеркнуть, что научный диапазон рекламной речи широк, так как охватывает многие сферы жизни современного общества. Прежде чем приступить к изучению особенностей воздействия информации в современных англоязычных рекламных текстах, необходимо систематизировать имеющийся сегодня опыт изучения рекламных текстов. В следующей части нашей статьи мы рассмотрим когнитивно-дискурсивный подход к исследованию рекламных текстов как подход, сочетающий в себе изучение всех уровней языка.

Использованные источники:

1. Марша, Р. Реклама американской мечты: путь современности, 1920-1940 гг. Р. Маршан. – Беркли Лос-Анджелес; Лондон: Калифорнийский университет Press, 1985. – 448 стр.

2. Философский энциклопедический словарь [ФЭС] под ред. SS. Аверинцева. - М.: Сов. энциклопедия, 1989. – 814 с.
3. Миронов, В. В. Средства массовой коммуникации как зеркало поп-культуры В. В. Миронов Язык СМИ как объект междисциплинарного исследования: учёб. пособие. - М.: Изд-во МГУ, 2003. - С. 237–258.
4. Добросклонская Т. Г. Вопросы изучения медиатекстов: опыт исследования современной английской медиаречи Т. Г. Добросклонская. – 3-е изд., стер. – М.: УРСС, 2010. – 286 с.
5. Бове, К. Л. Современная реклама [Текст]: пер. Английский / К. Л. Бове, Ю. Ф. Аренс; общественный ред. О. А. Феофанова; Предисл. Русский. изд. М. А. Назарушкина. - Тольятти: Довгань, 1995. - 661 с.
6. Ламбен, Ж. – Ж. Стратегический маркетинг. Европейская перспектива: пер. французский. Ж. – Ж. Ламбен. – СПб.: Наука, 1996. – 589 с.
7. Сердобинцева, Е. Н. Структура и язык рекламных текстов: учеб. пособие Э. Н. Сердобинцева. – 3-е изд., стер. – М.: Флинта: Наука, 2015. – 159 с.
8. Денисон, Д. Учебник по рекламе: Как стать известным, не тратя денег на рекламу Д. Денисон, Л. Тоби; пер. Английский Н. Бабина. – Минск: СЛК, 1996. – 320 с.
9. Годдард А. Язык рекламы. Письменные тексты А. Годдард. - 2-е изд. – Лондон, 2002. – 133 стр.
10. Рекламный дискурс и рекламный текст: коллективная монография [Т. Н. Колокольцева и др; Науч. ред. Т. Н. Колокольцева]. – М.: Флинта: Наука, 2011. – 296 с.
11. Терпугова, Е. А. Рекламный текст как особый совет императивного дискурса: канд. Филол. Наук: 10.02.01 / 2000. – 181с.
12. Лейчик В. М. Реклама: язык, речь, общение: учебное пособие / Под. Эд. Гойхмана О. Я., Лейчика В. М. - М., 2008. - 288 с.
13. Бернадская, Ю. С. Текст и реклама: учеб. псобие для студ. выше летать фабрика Ю. С. Бернадская. – М.: ЮНИТИ-ДАНА, 2012. – 288 с. 14. Фещенко, Л. Г. Структура рекламного текста [Текст]: дис... канд. Филол. Наук: 10.01.10 Фещенко Лариса Георгиевна. – СПб., 2002. – 224 с. 15. Бове, К. Л. Современная реклама [Текст]: пер. Английский / К. Л. Бове, Ю. Ф. Аренс; общественный ред. О. А. Феофанова; Предисл. Русский. изд. М. А. Назарушкина. - Тольятти: Довгань, 1995. - 661 с.
16. Анисимова, Е. Э. Лингвистический текст и культурная коммуникация (на материалах креолизованных текстов): учеб. пособие для шпильки. факт. иность. лето Вузов / Е. Э. Анисимова. М: Академия, 2003. – 128 с.

УДК 00 – 748

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ПРОБЛЕМЫ ФОРМИРОВАНИЯ ПРАВОВОЙ ГРАММОТНОСТИ У ПОДРОСТКОВ, ПРОЖИВАЮЩИХ В НЕПОЛНЫХ СЕМЬЯХ

Аннотация. В статье поднимается вопрос о проблемах формирования правовой грамотности у подростков, проживающих в неполных семьях. Рассмотрен процесс формирования правовой грамотности у подростков, проживающих в неполных семьях.

Ключевые слова: Грамотность, личность, несвобода, неполная семья, образовательное учреждение, подростки, право, правовое образование, профилактика, студенты.

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PROLEMS OF LEGAL LITERACY FORMATION AMONG TEENAGERS LIVING IN SINGLE-PARENT FAMILIES

Annotation. The article raises the issue of the problems of legal literacy formation among adolescents living in single-parent families. The process of formation of legal literacy among adolescents living in single-parent families is considered.

Keywords: Literacy, personality, lack of freedom, incomplete family, educational institutional, teenagers, law, legal education, prevention, students.

Актуальность. Особенностью сегодняшней структуры семьи является постоянное увеличение количества неполных семей (чаще материнских), источником которых являются, как правило, разводы и внебрачные рождения. Специфический образ жизни с одним родителем ощутимо отражается на воспитательном процессе подростка. Поскольку у учащихся колледжа личность и гражданская позиция еще не сформированы, то процесс воспитания и образования в правовом поле для них особенно важен, а для подростков из неполных семей данный процесс важен вдвойне.

Работа по формированию правовой грамотности и профилактике девиантного поведения предполагает целый комплекс социально-правовых мер, которые направлены на правовое просвещение родителей и обучающихся, также мер по восстановлению социального статуса, обучающегося в коллективе сверстников. Но решать эти задачи в одиночку

невозможно. Необходимо объединить усилия классных руководителей, учителей, социально-психологической службы школы, колледжа, родителей, работников ПДН и КДН, учреждений дополнительного образования.

Прежде чем рассматривать понятие правовой грамотности, следует определить общее значение понятия «грамотность». Согласно Словарю педагогического обихода, грамотность - это уровень образованности, характеризующийся способностью использовать основные способы познавательной деятельности [3, с. 1012].

В современном мире понятие грамотности вышло за рамки классического значения. Появился термин «новая грамотность», в который входят [2, с. 324]:

- ✓ компьютерная и технологическая грамотность,
- ✓ информационная грамотность,
- ✓ социальная грамотность,
- ✓ духовная и религиозная грамотность,
- ✓ экологическая грамотность,
- ✓ экономическая грамотность,
- ✓ правовая грамотность.

Согласно словарному определению, «право - совокупность установленных или санкционированных государством общеобязательных правил поведения (норм), соблюдение которых обеспечивается мерами государственного воздействия [5, с. 34]». Таким образом, правовая грамотность - знание совокупности установленных государством общеобязательных норм поведения и умение руководствоваться ими в социальной жизни на основе своей гражданской позиции.

Формирование начального уровня правовой грамотности человека приходится на период обучения в школе. Но поскольку в это время личность еще до конца не сформирована, а ответственность за ребенка еще в большей мере несут родители, а не он сам, то и знания в области права на данном этапе поверхностные и неглубокие.

Окончание школы и поступление в средние профессиональные образовательные учреждения - период перехода от старшего подросткового к юношескому возрасту. В возрасте до 16-17 лет старшие подростки еще не имеют четко сформированной гражданской позиции, их мировоззрение отличается незрелостью и юношеским максимализмом. Понимание своих прав у студентов 1-2 курсов колледжей, как правило, сводится к ошибочным знаниям о том, что они могут делать с наступлением определенного возраста [4, с. 12].

В период 16-18 лет происходит развитие самосознания, самоопределения в профессиональной сфере. В этом возрасте формируются интересы, способность строить дальнейшие жизненные планы, нравственные установки и характер человека в целом.

Семья выступает как первый воспитательный институт, связь с которым человек ощущает на протяжении всей своей жизни. Именно в семье

закладываются основы нравственности человека, формируются нормы поведения, раскрываются внутренний мир и индивидуальные качества личности. Семья способствует не только формированию личности, но и самоутверждения человека, стимулирует его социальную, творческую активность, раскрывает индивидуальность. Особенностью сегодняшней структуры семьи является постоянное увеличение количества неполных семей (чаще материнских), источником которых являются, как правило, разводы и внебрачные рождения. Неполные семьи - это семьи с одним родителем и детьми [7, с. 91]. В целом по России показатель роста доли неполных семей увеличивается. В неполных семьях воспитывается каждый седьмой российский ребенок, не достигший 18 лет.

Специфический образ жизни с одним родителем ощутимо отражается на воспитательном процессе. Жизнь в неполной семье - источник многочисленных психолого-педагогических, медико-социальных, социально-правовых и материально-бытовых проблем. Особенно остро эти трудности могут проявляться в период вступления ребенка в подростковый возраст, который знаменуются качественным сдвигом в развитии, происходят глубокие физиологические, психологические и нравственные преобразования, меняется социальная ситуация развития, статусная структура взаимоотношений с окружающими.

На одном из первых мест в работе с этими семьями и детьми стоит проблема низкого уровня правовой компетентности и правовой культуры общества, которые, в свою очередь, формируются в процессе правового образования. Правовая культура личности определяется знаниями в области права, уважением к закону, сознательным соблюдением правовых норм, пониманием юридической ответственности, непримиримостью к правонарушениям.

Низкий уровень правовой грамотности семьи подростка может поставить молодого человека в условия социальной незащищённости, сложной адаптации к дальнейшей профессиональной деятельности, тем самым лишая его фундаментальной основы для полноценного и гармоничного развития личности.

Дети в неполных семьях зачастую становятся участниками и свидетелями событий психотравмирующего характера. «Битва» родителей в доразводный и послеразводный период приводит к тому, что у 37,7% детей снижается успеваемость, у 19,6% страдает дисциплина, 17,4% требуют особого внимания, 8,7% убегают из дома, у 6,5% возникают конфликты с друзьями [6, с. 423-424]. Эти трудности становятся причиной асоциального поведения несовершеннолетних подростков. По экспертной оценке, более половины несовершеннолетних правонарушителей воспитываются в неполной семье, в их числе 30-40% подростков, употребляющие алкоголь или наркотики, 53% занимающихся проституцией. Эти и другие негативные последствия (отклонение в психическом и соматическом здоровье, снижение социальной активности ребенка (заниженная самооценка, чувство

собственной неполноценности), оказывают серьезное влияние на дальнейшую личную и общественную жизнь ребенка. Отсутствие полноценного образца для внутрисемейной социализации почти всегда ведет к определенным нарушениям в психическом и личностном развитии ребенка, что оказывает серьезное влияние не дальнейшую личную и общественную жизнь ребенка. Поэтому данная категория детей нуждается в поддержке и защите как со стороны государства, так и со стороны квалифицированных в данной области людей.

Семья – важнейший институт социализации подрастающего поколения. Она являет собой персональную среду жизни и развития детей, подростков, юношей. Какую бы сторону жизни ребенка мы не взяли, всегда окажется, что решающую роль в эффективности на том или ином возрастном этапе развития личности не может сыграть ни одно общественное или государственное учреждение, как бы ни было оно совершенно. Отсутствие родительской семьи или семейное неблагополучие, напротив, почти всегда создает реальные сложности в формировании детей и подростков, преодолеть которые обществу до сегодняшнего дня не удается.

Неблагоприятное бытовое окружение - одна из распространенных причин правонарушений среди подростков. Превращение большой семьи в малую, рост числа однодетных и неполных семей, дезорганизация семьи повысили необходимость для детей искать общения вне дома как своеобразную компенсацию дефицита эмоциональных контактов с родителями. В школе, где он успевал, ему тоже плохо. Таким образом, из трех основных сфер жизнедеятельности подростка: семья, образовательное учреждение, досуг - в двух ему плохо.

Уходя от несвободы семьи и образовательного учреждения, подросток попадает в несвободу неформальной группировки. И что печальнее всего, многие из них не хотят разрывать с такой группой. Она гармонизирует его бытие - обеспечивает видимость порядка, защиту, престижность положения.

Таким образом, у подростков из неполных семей отмечается низкий уровень правовой компетентности и правовой культуры, который может поставить молодого человека в условия социальной незащищённости, сложной адаптации к дальнейшей профессиональной деятельности, тем самым лишая его фундаментальной основы для полноценного и гармоничного развития личности. Для формирования правовой грамотности подростков из неполных семей необходимо организовать работу с обучающимися, семьей, педагогами, досуг детей.

Для поддержки подростков из неполных семей существуют следующие педагогические направления работы [1, с. 15-16]:

- ✓ работа с обучающимися;
- ✓ работа с семьей;
- ✓ работа с педагогами;
- ✓ организация досуга детей.

Использованные источники:

1. Иванова Е.А. Условия преодоления правового нигилизма подрастающего поколения / Е.А. Иванова // Педагогика и психология: актуальные вопросы теории и практики. - 2016. - № 3(8). - С. 15-17.
2.Миронова, М.Т. Формирование правосознания и правовой культуры учащейся молодежи / М.Т. Миронова // Молодой ученый. - 2021. - № 15 (357). - С. 324-326
3.Наумова, Н. В. Правовая культура как «правовой иммунитет» общества / Н.В. Наумова, П.А. Позднякова // Молодой ученый. - 2016. - № 10 (114). - С. 1012-1015.
4.Правовой навигатор подростка. Методические рекомендации. Под ред. Василенко Н.В., Галстян М.Н., Голубевой Н.Т., Зеленикиной Н.Г., Севастеевой Н.В., Старкова А.Н., Шибанова А.С., Шмакова А.В.Иркутск: - ЦПРК, 2019. - 31 с.
5. Правоведение: учеб. пособие / Е. Г. Шаблова, О.В. Жевняк, Т.П. Шишулина; под общ. ред. д ра юрид. наук, проф. Е.Г. Шабловой.— Екатеринбург: Изд-во Урал. Ун-та, 2016. — 192 с.
6.Чепуркова, Е.И. Некоторые размышления о состоянии правосознания в современной России / Е. И. Чепуркова, И. Ю. Гнатышин // Молодой ученый. - 2017. - № 2 (136). - С. 339-341.
7. Черткоева Д.Н., Хадикова И.М. Роль семьи в воспитании ценностных ориентаций детей // Материалы Всероссийской научно-практической конференции «Педагогическая деятельность как творческий процесс». Грозный, 2016. - С. 423-429.

УДК 631.674

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УСЛОВИЯ ФОРМИРОВАНИЕ ПОЧВЫ В ЕСТЕСТВЕННЫХ УСЛОВИЯХ

Аннотация. В работе рассмотрены процессы почвообразования с учетом местных условий. При оценке мелиоративных особенностей почв ограничивается рассмотрением водного и солевого режимов и балансов, а также не учитывается процессы почвообразования. Установлено, что процесс выветривания напрямую зависит от уровня залегания грунтовых вод и их гидротермического режима, а также дисперсности почвы.

Ключевые слова: режимы, гидротермический фактор, процесс почвообразование, содержание гумуса, уровень грунтовых вод, процесс выветривания.

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CONDITIONS FOR SOIL FORMATION IN NATURAL CONDITIONS

Abstract. The work examines soil formation processes taking into account local conditions. When assessing the reclamation characteristics of soils, it is limited to consideration of water and salt regimes and balances, and soil formation processes are not taken into account. It has been established that the weathering process directly depends on the level of groundwater and its hydrothermal regime, as well as the dispersion of the soil.

Key words: regimes, hydrothermal factor, soil formation process, humus content, groundwater level, weathering process.

При оценке мелиоративных особенностей различных почв, обычно ограничиваются рассмотрением водного и солевого режимов и балансов, и не касаются процессов почвообразования. Вместе с тем анализ основных процессов почвообразования исключительно важен, особенно при решении мелиоративных задачу устранения лимитирующих факторов и повышения плодородия почв [1, 3].

Среди факторов, определяющих особенности различных типов почв, а также направленность и интенсивность почвенно–мелиоративных процессов. Здесь большую роль играют гидротермические и биологические режимы, проявляющиеся через использование и изучение влияния факторов на

процессы почвообразования к крупным природным зонам (здесь имеется в виду баланс веществе и энергии) [8].

Вместе с тем, при рассмотрении почвенного покрова в пределах одной природной зоны необходимо учитывать, что формирование разновидностей почв зависит не только от общих зональных факторов, но и от местных факторов внешней среды. В первую очередь, от гидрогеологических и гидрохимических условий. Они оказывает воздействие на почвы, формируя их водно – солевой режим и процессы почвообразования, который включает в себя механическое и физико – химическое выветривание горных пород, гумусонакопление, превращение и миграцию минеральных и органических продуктов почвообразования [2].

Для выявления общих закономерностей, характеризующих направленность и интенсивность почвенно – мелиоративных процессов в сазовых почвах Ферганской долины необходимо рассмотреть указанные выше явления и зависимрсть их от природных условий.

Связь почвооброзования с процессами выветривания считается как продукт преобразования горных пород в результате совместного воздействия биологических и климатических факторов [7].

В процессе выветривание происходит механическое раздробление и увеличение дисперсности горных пород, растворение и обогащение растворов солями Ca, Ma, Na, K и др., что сопровождается уменьшением внутренней энергии и резким увеличением свободной энергии минеральной части пород. Эти процессы играют большую роль в почвообразовании, определяя такие важные свойства, как способность к ионообменной сорбции и образованию агрегатов [6]. Следовательно, в качестве критерия для оценки интенсивность выветривания горных пород как первой стадии почвообразования, целесообразно использовать показатели, показывающие внутренней энергии минеральной части, и сопоставить их с гидрометрическим режимом территории и степенью дисперсности почв.

Анализ величин внутренней энергии минеральной части различных почв показывает, что основная часть ее приходится на долю SiO_2 (до 85 %) [5]. Поэтому для общей оценки процесса выветривания обычно принимают отношение $\frac{SiO_2}{R_2O_3}$. На рис.1 приведена зависимость отношения $\frac{SiO_2}{\tilde{R}_2O_3}$ от гидротермического режима (*R/LOc)*. Приведенные данные показывают, что минимальные значения $\frac{SiO_2}{R_2\tilde{O}_3}$ характерны для скомпенсированного гидрометрического режима (луговые почвы) - близкое залегание грунтовых вод ($\frac{R}{L(Oc+E_2}\tilde{}$=1,0). По мере увеличения засушливости величина $\frac{SiO_2}{R_2O_3}$ возрастает и при *R/LOc = 3* достигает максимума.

Процесс выветривания - первая стадия почвообразования в естественных условиях. Он протекает наиболее интенсивно при близком залегании грунтовых вод и скомпенсированном гидрометрическом режиме.

Это подтверждается данными по содержанию в почвах илистой фракции (d<0,001мм) (рис. 1).

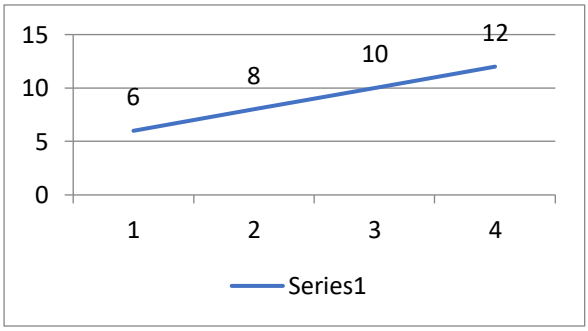

Рис 1. Содержание влаги в почве с близким залением грунтовых вод

С гидротермическими и гидрохимическими условиями тесно связан процесс накопления в почвах органического вещества. Накопление гумуса в почвах Ферганской длины становится ведущим процессом только в гидроморфных условиях когда имеем случай с луговыми почвами ($\frac{R}{L(Oc+E_2}$~=1,0) (в случае снижения уровня грунтовых вод и ухудшение водного режима, что влечет за собой снижение содержания гумуса в лугово–сероземных почвах) [4] (рис.2.).

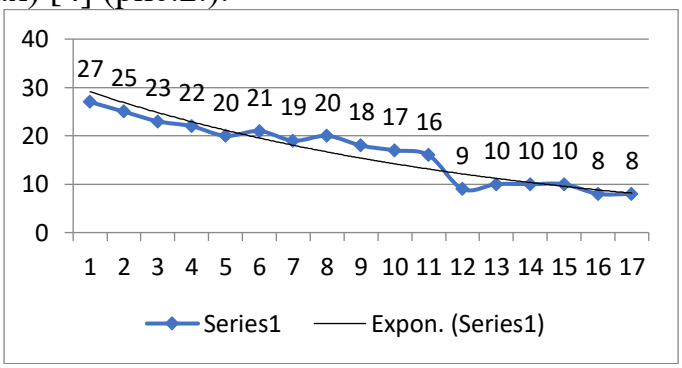

Рис.2. Содержание илистой частиц в луговых почвах с близким залеганием груновых вод

Для луговых почв характерно наиболее значительное содержание гуминовых кислот и пониженное содержание фульвокислот, что определяет и большую ценность гумуса этих почв, по сравнению с другими (рис. 3.).

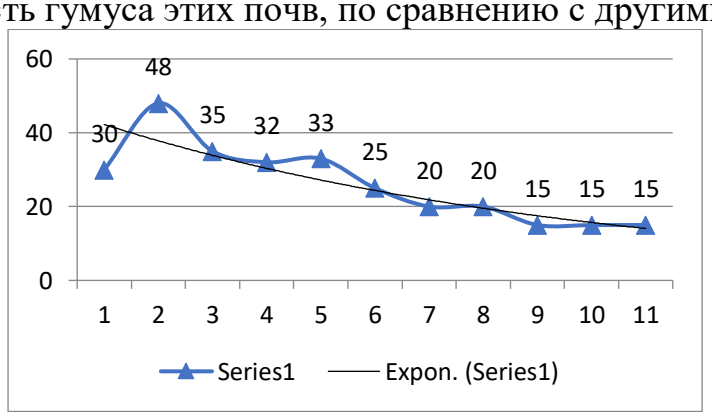

Рис 3. Зависимость уровня грунтовых вод от содержания гумуса

Высота залегания грунтовых вод сильно зависит от содержания гумуса в почве, так как от этого фактор зависит пролодородие почвенного слоя. Чем выше содержание гумуса, тем ближе залегание грунтовых вод к поверхности почвы. Это приводит к уменьшению расхода воды для полива.

В целом, рассмотрение общих вопросов почвообразования и природными условиями при решении вопросов мелиорации почв сазавой зоны, необходимо учитывать единство почвенного покрова, условия среды и факторов почвообразования.

Использованные источники:

1. Айдаров И.П., Каримов Э. Некоторые вопросы обоснования мелиоративных режимов орошаемых земель при проектировании оросительных систем /Водные ресурсы, 1974. № 2, стр 105 – 113.
2. Айдаров И.П. Методы изучения о оценка почвенное мелиоративных условий мелиорируемых земель. – В кн.: Материалы межведомственного совещания по вопросам прогнозирования гидрогеологических, инженерно – геологических и почвенно – мелиоративных условий, вып.1,М,1976.
3. Аманов Х. Суммарный расход воды на испарение и транспирацию на люцерновом поле при близком залегания грунтовых вод. – Научные труды САНИИРИ. вып.133, 1972. с. 271 – 278.
4. Каримов Э.К. Вопросы обоснования промывного режима орошения на засоленных дренированных землях (на примере Канибадамского массива). Дисс. на соискание ученой степени...канд. тех.наук. М.,1973. 245 стр.
5. Голованов А.И., Новиков О.С. Математическая модель переноса влаги и растворов солей в грунтах на орошаемых землях. - Научные труды МГМИ, т.36, 1974. с. 87-94.
6. Карабаев А.Н., Сабитов А.У. Мураккаб рельефли ерларда ресурстежамкор суғориш техникаси ва технологиясининг қўллаш асослари /Academic research in educational sciences. – 2021. №2(11). – С.145-149.
7. Ваксман Э.Г. Мелиорация засоленных почв юго-западного Таджикистана. Душанбе: Дониш, 1976. - 198 с.
8. Хакимов А., Сабитов А., Саттиев Ю. Определение влагообмена между почвенными и грунтовыми водами //Актуальные научные исследования в современном мире. – 2020. – №2-2. С.86-89.

УДК. 579.262-25

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О МУТАЦИЯХ ДРОЖЖЕПОДОБНЫХ ГРИБОВ РОДА КАНДИДА

Исследования, проводимые на грибах рода Кандида, от-получением ауксотрофных мутантов или получением резистентных к полиеновым антибиотикам штаммов грибов. В доступной литературе отсутствуют данные о ферментативных мутантах грибов

Целью настоящей работы являлось получение ферментативных мутантов грибов рода Кандида, а также изучение количественной стороны этого явления. Исходными штаммами в работе являлись: штамм 32 C. stellatuidea, выделенный от здорового студента Самаркандского медицинского университета и штамм 10 C. pseudotropicalis, выделенный от больного дизентерией, вызванной Sh sonnei.

Ключевые слова: Кандида, акрифлавин, штамм, лактоза, грибы.

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ABOUT MUTATIONS OF YEAST-LIKE FUNGI OF THE GENUS CANDIDA

Studies conducted on fungi of the genus Candida, producing auxotrophic mutants or obtaining strains of fungi resistant to polyene antibiotics. There is no data on enzymatic mutants of fungi in the available literature

The purpose of this work was to obtain enzymatic mutants of fungi of the genus Candida, as well as to study the quantitative side of this phenomenon. The initial strains in the work were: strain 32 C. stellatuidea, isolated from a healthy student of Samarkand Medical University and strain 10 C. pseudotropicalis, isolated from a patient with dysentery caused by Sh sonnei.

Key words: Candida, acriflavine, strain, lactose, mushrooms.

Введение. Исследования, проводимые на грибах рода Кандида [1], отполучением ауксотрофных мутантов или получением резистентных к полиеновым антибиотикам штаммов грибов [2]. В доступной литературе имеется данные о мутантах грибов Кандида [3], как спонтанных, так и индуцированных [4]. В то же время имеется большое количество данных о том [5], что сочетание кандидоз с другими инфекциями приводит к тяжелым течением заболеванию [6]. Результат нашего исследования показал, что в ассоциациях с грибами Кандида резко понижается чувствительность патогенных бактерий к антибиотикам [7]. Наличие генетически маркированных штаммов грибов позволит изучить это явление на генетическом уровне [8].

Целью настоящей работы являлось получение ферментативных мутантов грибов рода Кандида, а также изучение количественной стороны этого явления.

Материалы и методы. Исходными штаммами в работе являлись: штамм 32 *C. stellatuidea,* выделенный от здорового студента Самаркандского медицинского университета и штамм 10 *C. pseudotropicalis,* выделенный от больного дизентерией, вызванной *Sh sonnei*. В качестве мутагена применялся препарат акридинового ряда - акрифлавин. Спонтанная и индуцированная изменчивость изучалась у 4-часовых культур грибов. После обработки мутагеном материал высевался на специально созданные индикаторные среды, приготовленные на основе среды Сабуро с добавлением индикатора. Штамм 32 высевался на среду с сахарозой, штамм 10-на среду с мальтозой. Учет посевов проводился через 3 -5 суток инкубации в термостате.

Результаты и их обсуждение. Под действием акрифлавина у штамма 32 получен мутант разлагающий сахарозу. Параллельно с этим у мутанта изменились морфологические и культурные свойства. Мутантные клетки были вытянутыми с заостренными концами, одновременно в большом количестве обнаруживались короткие нити псевдомицелия. На плотной индикаторной среде мутант образовывал колонии, превосходящие по своим размерам колонии исходного штамма в 2-3 раза. Морфология колоний была резко отличной: шероховатая поверхность, зазубренные края. Колонии напоминали плотную и прочную пленку, которая снималась со среды целиком. Индуцированные акрифлавином мутанты возникали с частотой 0,86-10^4, в то время как спонтанные мутации не наблюдались при анализе 6-10^5 клеток.

При анализе стабильности мутационных изменений было установлено, что спонтанные реверсии происходят с большой частотой: 56,18% изученных клеток теряли все приобретенные признаки, 26,96% - давали секторные колонии и лишь 16,86% сохраняли вновь приобретенные свойства.

Индуцированные реверсии вызывались также акрифлавином. При этом потеря приобретенных свойств отмечалась у 38,5% исследованных клеток,

секторные колонии встречались в 1,8%. 59,7% изученных клеток сохраняли вновь приобретенные признаки. Таким образом, спонтанная реверсия наблюдается чаще чем индуцированная акрифлавином (достоверность>99,9%, P<0,01).

При исследовании действия акрифлавина на другой штамм гриба Кандида (№ 10) получен мутант, который приобрел способность разлагать мальтозу. Кроме того, у мутанта изменились культуральные и биохимические свойства: на индикаторной среде с мальтозой мутант образовывал очень мелкие колонии с гладкой поверхностью и типичной консистентностью. Приобретение способности разлагать мальтозу сопровождалось потерей способности сбраживать лактозу.

Таким образом, у штамма 10 под влиянием акрифлавина мутант, отличающийся от дикого типа по биохимическим и культуральным свойствам. Индуцированные мутации наблюдались у этого штамма с частотой $0{,}623\text{-}10^{4}$ -Спонтанные мутанты у этого штамма возникают с частотой $0{,}058\text{-}10^{-4}$

Выводы. При исследовании реверсии индуцированных мутантов штамма 10 установлено, что эти мутанты стабильны: спонтанная реверсия к дикому типу отсутствовала, при анализе $0{,}77\text{-}10^{6}$ клеток.

Установленные факты могут быть использованы для улучшения диагностики кандидозов, а также будут способствовать расшифровке механизма влияния грибов рода Кандида на бактериальные инфекции.

Под действием акрифлавина у штаммов *C. stellatoidea* и *C. pseudotropicalis* получены мутанты, характеризующиеся изменениями морфологических культуральных и биохимических свойств. Частота возникновения индуцированных мутантов у указанных штаммов была приблизительно одинаковой (соответственно $0{,}86\text{-}10^{4}$ и $0{,}623\text{-}16^{4}$). Выявленные мутации были стабильны у *C. pseudotiopicalis* и быстро реверсировали у *C. stellatoidea*.

Использованные источники:

1.Беженар М.Б., Плахова К.И. // Механизмы развития резистентности к противогрибковым препаратам грибов рода candida при рецидивирующем течении урогенитального кандидоза / Молекулярная генетика, микробиология и вирусология. 2020. №1. URL: https://cyberleninka.ru/article/n/mehanizmy-razvitiya-rezistentnosti-k-protivogribkovym-preparatam-gribov-roda-cand

2.Bondii E.M.Логвйненко, Г.М.Шавловский, Л.В.Колтун, Г.П.Кшеминская //Природа предшественников рибофлавина у дрожжей Pichia guilliar- / Микробиология. – 1975. – 44, в. I. – С. 48-54.

3.Шайкулов Х. Ш., Одилова Г. М. ЧУВСТВИТЕЛЬНОСТЬ К АНТИМИКОТИКАМ ДРОЖЖЕПОДОБНЫХ ГРИБОВ РОДА CANDIDA, ВЫДЕЛЕННЫХ ИЗ ВЛАГАЛИЩА У БЕРЕМЕННЫХ ЖЕНЩИН В АМБУЛАТОРНЫХ УСЛОВИЯХ //Молодежь и медицинская наука в XXI веке. – 2017. – С. 169-170.Полищук Е. Н., Колтукова Н. В. Сравнительная идентификация штаммов возбудителей кандидозов человека с помощью тест-

систем методом ферментации-ассимиляции углеводов // Лабор. диагн. – 1999. – № 2 – С. 32-36.
4.Одилова Г.М. Частота обнаружения грибов рода Candida при хроническом тонзиллите у детей. Бактериология. 2022; 7(4): 40–43. DOI: 10.20953/2500-1027-2022-4-40-43
5.Одилова Г. М., Шайкулов Х. Ш., Хусанов Э. У. Ультраструктура слизистой толстой кишки у больных острой дизентерией //Астана медициналық журналы. – 2022. – №. S1. – С. 62-68. Шавловский Г.М., Логвиненко Е.М., Трач В.М. Изменение активности рибофлавин синтетазы при различных уровнях флавиногенеза у некоторых видов дрожжей Candida // Докл. АН СССР. – 1972. – 203, Jí I. – С. 241-244.
6.Мамедов А., Одилова Г. Частота обнаружения дрожжеподобные гриби рода candida с ассоциаций стафилококков //Eurasian Journal of Academic Research. – 2022. – Т. 2. – №. 11. – С. 1098-1102.
7. Одилова Гулноза Махсудовна О ЧУВСТВИТЕЛЬНОСТИ К ДЕКАМИНУ КИШЕЧНЫХ БАКТЕРИЙ ГРИБОВ CANDIDA ALBICANS // Talqin va tadqiqotlar ilmiy-uslubiy jurnali. 2023. №17. URL: https://cyberleninka.ru/article/n/o-chuvstvitelnosti-k-dekaminu-kishechnyh-bakteriy-gribov-candida-albicans (дата обращения: 20.02.2023).

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СРЕДСТВА ОБУЧЕНИЕ КАК ФАКТОР РАЗВИТИЯ ПОЗНАВАТЕЛЬНОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ

Аннотация. В данной статье рассмотрены роль и значение средств обучения в развитии познавательной деятельности студентов, а также виды и классификация средств обучения, теоретические и методические аспекты их использования в образовательном процессе.

Ключевые слова. Студент, учебная деятельность, средство, процесс обучения, средства обучения, виды средств обучения, технические средства.

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LEARNING TOOLS AS THE BASIS FOR THE DEVELOPMENT OF STUDENTS' COGNITIVE ACTIVITY

Annotation. This article discusses the role and importance of teaching aids in the development of students' cognitive activity, as well as the types and classification of teaching aids, theoretical and methodological aspects of their use in the educational process.

Key words. Student, educational activity, means, learning process, teaching aids, types of teaching aids, technical means.

Каждый педагог непосредственно внедряет в своей педагогической деятельности новые инновационные подходы образовательного содержания студентам. Педагогу важно знать составляющие компоненты образовательного процесса. Кроме того:

- обладая опытом проектирования учебных ситуаций, педагог приобретает и средства эффективного руководства педагогическим процессом;

- чувствует потребность в приобретении педагогических и психологических знаний, направленных на развитие учащихся, и применении их на собственном опыте;

- улучшается способность учителей подходить к педагогическому процессу на основе творчества;

- совершенствуется педагогический опыт;

- будет усовершенствована система инновационных, методических работ, повысится их эффективность [4].

Такие ситуации выступают как совокупность условий, обеспечивающих успешность познавательной деятельности студентов. Их успех является результатом таких обстоятельств.

В качестве методов и ситуаций, расширяющих учебные способности учащихся, можно ввести новое в содержание обучения, прием содержательного обогащения учебного материала, создание проблемных ситуаций путем постановки перед учащимися проблемных вопросов, ситуации получение новых знаний.

Развитие логического и критического мышления учащихся приобретает особое значение в условиях реализации образования, ориентированного на личность обучающегося. Потому что развитие логического и критического мышления у учащихся оказывает особое влияние на обеспечение у них познавательной деятельности.

В словаре педагогических терминов термин знания определяется следующим образом: «Знания – это уровень усвоения учебного материала, предъявляемого обучающимся в образовательном процессе» [1].

Учебные средства, разработанные по научным темам, играют важную роль в совершенствовании познавательной деятельности учащихся. Учебные пособия служат всем конкретным дидактическим целям обучения.

Понятие «средство обучения» используется в дидактике для определения одного из компонентов учебного процесса среди других компонентов. Следовательно, средства обучения взаимосвязаны со всеми компонентами дидактической системы.

С педагогической точки зрения взаимодействие средств обучения с другими компонентами отличается следующими специфическими, важнейшими особенностями:

а) для педагога средство обучения – это инструмент педагогической работы, позволяющий усилить реализацию его задач;

б) средство обучения обучающихся является одним из средств обучения и реализации учебных задач;

в) средство обучения по отношению к содержанию образования – это способ передачи содержания и организации его усвоения;

ж) средства обучения применительно к методам образовательного процесса и формам организации обучения - их разновидности и способы совершенствования, один из вариантов разработки и использования новых сочетаний компонентов педагогического общения;

г) по отношению к средствам обучения цель имеет общее целенаправленное значение при их создании и использовании, при котором средство обучения взаимодействует с достижением результата и, в свою очередь, определяется им [2].

Прежде чем говорить о роли и значении средств в учебном процессе и общей методике их использования на практике, следует разобраться в их словарном значении. Так что же представляет значение средство? Если обратиться к анализу педагогической литературы и энциклопедической литературы, то можно встретить разные взгляды и определения по поводу «средство».

Например, средство – это набор оборудования, обеспечивающий наглядность донесения информации преподавателем учащемуся.

Средство – совокупность приспособлений, оружия, приспособлений, используемых при выполнении определенной работы или деятельности.

Средство – это оружие, которое служит рычагом для достижения цели или совершения чего-либо. Рычаг - что-либо, воспринимаемое как опора для движения или служащее опорой [5].

Из приведенных выше мнений можно сделать вывод, что средство – это дополнительное устройство, используемое преподавателем для донесения до обучающихся определенной информации, относящейся к определенной области, и нечто, обеспечивающее демонстрацию преподавания.

Ученые-педагоги и преподаватели-практики могут использовать словосочетание «средство» в образовательном процессе, поскольку в терминах используются «Образовательные средства», «Учебные средства», или «Технические средства».

Сегодня в педагогической литературе и других источниках нет однозначного определения понятия «средства обучения». Одна категория авторов употребляет его в узком смысле и называет средства, служащие для достижения общеобразовательных и воспитательных целей обучения, другая называет средства обучения как обеспечивающие человеку объективную реальность в дополнение к материальным средствам… они добавляют умственные средства реализации знаний.

Третья категория делит средства обучения на средства, используемые для усвоения учебного материала.

Четвертая категория рассматривает средства обучения в широком смысле и определяет средства обучения этим термином.

Если средствами обучения считаются любые носители информации, дающие знания, которые следует преподавать и усваивать, то средства обучения имеют важное значение для получения информации в образовательном процессе, в деятельности педагогов и учителей. и развитие.

Учебные средства делятся на три типа в зависимости от их использования, а по своим характеристикам они подразделяются на следующие [3]:

Распечатать: а) текстовый; б) живописный. Технический: а) аудиовизуальный; б) дополнительный). Реальний: модель; б) настоящий.

На теоретических уроках преподаватели в основном используют текстовые и вспомогательные средства, например, учебники и раздаточные материалы, а также технические средства. На практических занятиях они используют более наглядные и реалистичные инструменты, то есть эскизы, рисунки, инструменты.

При использовании образовательных средств важно выбирать их в соответствии с конкретной целью, целевой группой, специальной областью и методами. Кроме того, учитель должен уметь пользоваться учебными и наглядными пособиями, правильно и рационально использовать их. Должен уметь решать технические задачи, возникающие при использовании технических средств.

Поэтому средства обучения – это более широкое понятие, и если рассматривать инструменты, используемые во всем образовании, то средства обучения используются в более узком смысле и представляют собой инструменты, используемые в определенном образовательном процессе.

Использованию учебных средств в развитии познавательной активности студентов способствует длительному сохранению ими знаний по предметам.

Использованные источники:

1. Джураев Р.Х. ва б. Педагогик атамалар луғати. -Тошкент: Фан, 2008, 197 б.
2. Коджаспирова Г.М., Петров К.В. Технические средства обучения и методика их использования. – М.:Академия, 2001. – 254 с.
3. Рашидов Х.Ф., Хабиб Х., Елдашева Г., Закиров А. “Касбий педагогика” блокини ўқитиш методикаси. Ўқув-услубий қўлланма. Т. ЎМКҲТТКМО ва УҚТИ – 2007. 182 б.
4. Сафарова Р., Ф.Юсупова ва бошқалар. Ўқувчиларнинг билиш фаолиятини кенгайтиришга йўналтирилган ўқув вазиятларини фанлар кесимида лойиҳалаш. -Т.: “Fan va texnologiya”, 2013,148 бет.
5. Ходжабоев А. Р., Аноркулова Г. М., Парпиев О. Т. Методика использования средств обучения в профессиональном образовании //Методическое пособие. – 2011. – 2011. – 2011.

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ИССИҚХОНАЛАРДАГИ ТЕШИЛГАН ИССИҚ ҲАВО ТАРҚАТУВЧИ ҚУВУР(ПОЛИЭТИЛЕНХЛОРИД) ИЧИДАГИ ИССИҚ ҲАВОНИНГ БОСИМ ЎЗГАРИШ ВА ГИДРАВЛИК ҚАРШИЛИКНИ ҲИСОБЛАШ

Аннотация. Жаҳонда иссиқхона комплексларининг иссиқлик таъминоти ва вентилясия тизимларини такомиллаштириш, қайта тикланадиган енергия манбаларини қўллаш ва иссиқлик-техник параметрларини оптималлаштириш орқали енергия самарадорлигини ошириш ҳамда анъанавий енергия ресурсларини сарфини камайтиришга қаратилган илмий тадқиқотлар олиб борилмоқда.

Калит сўзлар: оптимал, полиетиленхлорид, тадқиқот, аккумулятор, гелиоқиздириш, вентилятсия, утилизация.

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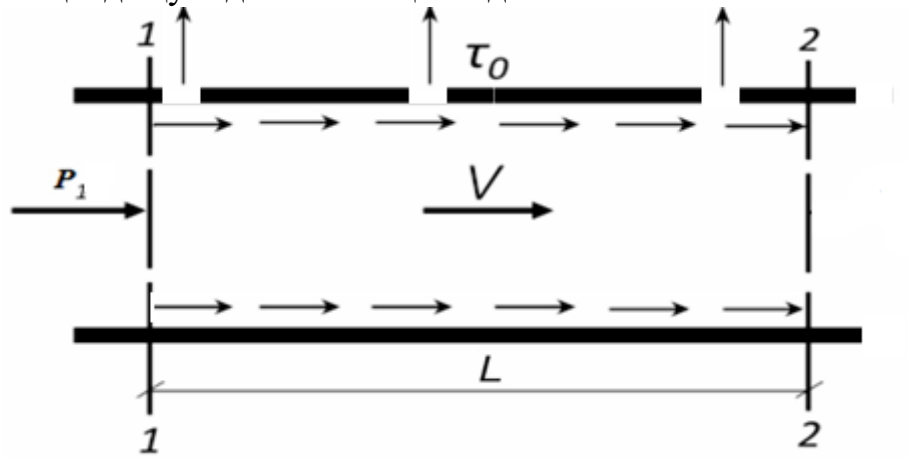
CALCULATION OF HOT AIR PRESSURE CHANGE AND HYDRAULIC RESISTANCE IN A PERFORATED HOT AIR DISTRIBUTION PIPE (POLYETHYLENE CHLORIDE) IN GREENHOUSES

Annotation. Scientific research is being conducted around the world aimed at improving the heat supply and ventilation systems of greenhouse complexes, increasing energy efficiency and reducing the consumption of traditional energy resources through the use of renewable energy sources and optimization of thermal parameters.

Key words: optimal, polyethylene chloride, research, battery, solar heating, ventilation, disposal.

Ўзгармас кесимга эга бўлган тирқишли ўтказувчи қувурдаги ишқаланиш натижасида босим йўқолиши Бернулли тенгламасидан фойдаланган ҳолда қуйидагича аниқланади.



1-расм. Иссиқхонадаги энерготежамкор иссиқ ҳаво ўтказувчи қувурлар кесими.

Бернулли тенгламасини ёзамиз, у ҳолда

$$p_1 = p_2 + \Delta p$$

Бу ердан ишқаланиш натижасидаги босим йўқолишини аниқлаймиз:

$$\Delta p = p_1 - p_2$$

Кесмалар орасидаги ёпиқ ҳаво ҳажмини танлаб, импульснинг тенгламасини қувурнинг ўқига проекциялар бўйича ёзамиз

$$(p_1 - p_2)\frac{\pi D^2}{4} - \tau_0 \pi dl = 0$$

Охирги тенгламадан қуйидаги ифода келиб чиқади:

$$(p_1 - p_2) = \frac{\pi D^2}{4} 4\tau_o \frac{L}{D} = 0$$

Ушбу ифодани юқоридаги тенгламага қўйиб, босимлар орасидаги фарқни қуйидагича аниқлаймиз:

$$\Delta p = 4\tau_o \frac{L}{D}$$

Тажрибалар асосида қувур канали деворидаги силжиш кучланиши ўртача тезликдан ҳисобланган тезлик босимига мутаносиб эканлиги қайд этилди.

Тажрибалар асосида қувур деворидаги кесиш кучланиши ўртача тезликдан ҳисобланган тезлик босимига мутаносиб эканлиги қайд этилди.

$$\tau_o = \Psi \frac{\rho \upsilon^2}{2}$$

Бу ерда Ψ – пропорционаллик коэффициенти.

Юқоридаги формуладаги τ_o нинг ўрнига қўйиб қуйидаги ифодага эга бўламиз:

$$\Delta p = 4\ \Psi \frac{L}{D} \frac{\rho \upsilon^2}{2}$$

$4\ \Psi = \lambda$ белгилаб, ифода қуйидаги кўринишга эга бўлади:

$$\Delta p = \lambda \frac{L}{D} \frac{\rho \upsilon^2}{2}$$

Бу ерда λ – ишқаланиш қаршилик коэффициенти.

$$\lambda = 64/R_e$$

Энерготежамкор қишлоқ хўжалиги иссиқхоналари қувурларида босим йўқолиши ва қаршилик коэффициентини аниқлаймиз. Ламинар оқимдан турбулент оқимга ўтиш чегарасида R_e= 2320 га тенг.

$\lambda = 64/R_e = 64/2320 = 0{,}0276$

$\Delta p = \lambda \frac{L}{D} \frac{\rho \upsilon^2}{2} = 0{,}0276 * \frac{8{,}2}{0{,}52} * \frac{0{,}846 * 15{,}8^2}{2} = 45{,}9$ Па

Ўзгармас кўндаланг кесим юзали пневмоўтказгичдаги босимнинг йўқолиши қуйидагича:

$\Delta p_{пн} = \Delta p\ (1 + k\mu_{пр}) = 45{,}9\ (1 + 0{,}8 * 1{,}1) = 133{,}1$ Па

k – пропорционаллик коэффициенти, 0,8

$\mu_{пр}$ – чанг аралашмасининг оғирлик сиғими

$\mu_{пр} = G_т/G = 580{,}3/526{,}6 = 1{,}1$

$G_т$ – аралашманинг оғирлик сиғими, G – ҳавонинг оғирлик сиғими.

Маҳаллий қаршилик ҳисобига босимнинг йўқолиши қуйидагича аниқланди:

$\Delta p = \xi \frac{\rho \upsilon^2}{2} = 0{,}82 * \frac{0{,}64 * 15{,}4^2}{2} = 62{,}2$ Па

Ҳаво сўргичга киришдаги босимнинг йўқолиши

$\Delta p = \xi \frac{\rho \upsilon^2}{2} = 1\ \frac{0{,}64 * 14{,}8^2}{2} = 70{,}1$ Па

$\xi = \frac{\Delta p}{\rho \upsilon^2/2} = 1$

Кўндаланг кесим ўзгарганда кенгайишдаги босимнинг йўқолиши

$\Delta p = \eta \frac{\rho}{2} (\upsilon_1 - \upsilon_2) = 0{,}92 \frac{0{,}64}{2} (15{,}5 - 3{,}64) = 3{,}4$ Па

Кўндаланг кесим ўзгарганда торайишдаги босимнинг йўқолиши

$\Delta p = \eta_в \frac{\rho}{2} \upsilon_2 (\upsilon_2 - \upsilon_1) = 0{,}9 \frac{0{,}64}{2} 14{,}6(14{,}6 - 3{,}44) = 46{,}9$ Па

Маҳаллий қаршилик коэффициентлари

Ўтказувчи қувурлардаги маҳаллий қаршилик коэффициенти

$$\xi = \frac{\Delta p_a}{\rho w^2/2} = \frac{45,9}{0,64*15,8^2/2} = 0,57$$

Пневмоўтказгичдаги маҳаллий қаршилик

$$\xi = \frac{\Delta p_a}{\rho w^2/2} = \frac{133,1}{0,64*15,4/2} = 1,75$$

Ҳаво сўргичга киришда кенгайишдаги маҳаллий қаршилик

$$\xi = \frac{\Delta p_a}{\rho w^2/2} = \frac{62,2}{0,64*14,8^2/2} = 0,88$$

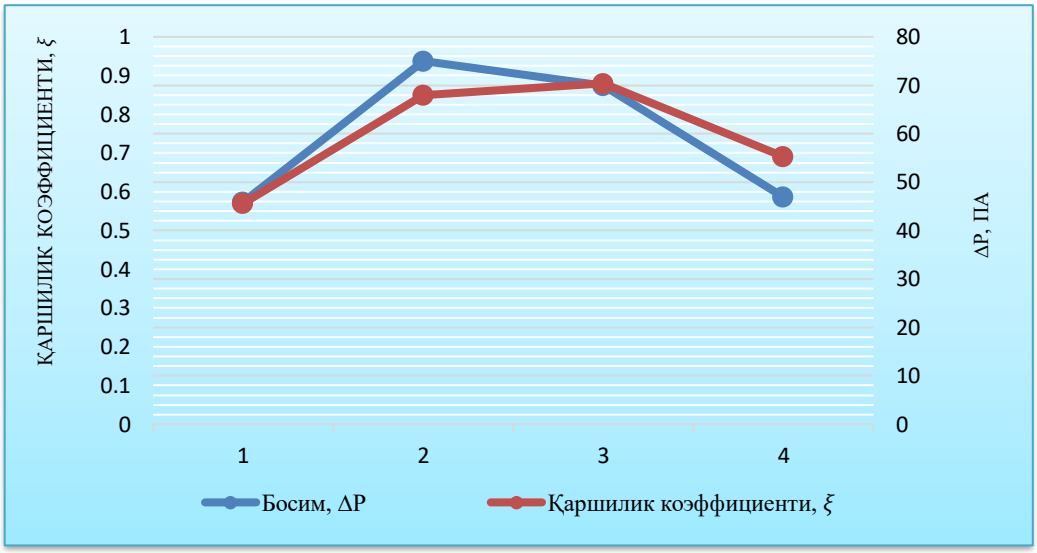
Ҳаво сўргичга киришда торайишдаги маҳаллий қаршилик

$$\xi = \frac{\Delta p_a}{\rho w^2/2} = \frac{46,9}{0,64*14,6^2/2} = 0,69$$

Босим йўқолишининг қаршилик коэффициентига боғлиқлиги

1-жадвал

Кўрсатгичлар	1	2	3	4
Босим, ΔР, Па	45,9	75	70	46,9
Қаршилик коэффициенти, ξ	0,57	0,85	0,88	0,69



2-расм. Босим йўқолишининг маҳаллий қаршилик коэффициентига боғлиқлик графиги.

Хулоса қилиб айтадиган бўлсак, ПВХ қувурларининг бутун узунлиги бўйлаб перфоратсияларни мунтазам равишда стратегик жойлаштириш иссиқхона поллари бўйлаб барқарор ва тартибга солинадиган иссиқлик тақсимотига еришиш, ўсимликларнинг соғлом ўсиши учун мақбул муҳитни яратишда муҳим аҳамиятга ега.

Фойдаланилган адабиётлар:

1. К вопросу о выборе оптимальных и допустимых параметров воздуха при комфортном кондиционировании в помещениях. Н Тошматов, М Аҳмедова, И.И Пирназаров - Me′ morchilik va qurilish muammolari, 2016

2. Issiqxonalarda optimal mikroiqlimni hosil qilish tizimlari tahlili. P.I. Islamovich, B.S.Murodullaevich, D.S.Oltinbek o`g`li. Journal of engineering, mechanics and modern architecture, 44-47

3. Qishda zamonaviy issiqxonalarni shamollatishning asosiy roli. I.I.Pirnazarov. "Scientific Journal, December 2020, 219-222.

4. Пирназаров, И.И, 2019. Обеспечение экологической безопасности: единство национального, регионального и глобального аспектов. Fuqarolik jamiyati. Гражданское общество. 78-81.
6. THE ROLE OF GEOTHERMAL ENERGY IN THE NATIONAL ECONOMY PI Islamovich. Galaxy International Interdisciplinary Research Journal. (GIIRJ) An International Interdisciplinary Monthly Journal Volume 10, Issue 1, January, 2022. Part, 114-117.
7. The Soil of the Seedlings in Greenhouses Heating by Geothermal Energy PI Islamovich, Texas Journal of multi disciplinary Studies volume 4, january, 2022, Part 20-24.
8.Условия приема производственных сточных вод в коммунальную канализационную сеть городов и других населенных пунктов.
Н.Ю. Арипов, И.И. Пирназаров. Электронный сетевой политематический журнал" Научные труды КубГТУ", 438-443
9. Микроклимат и вентиляции промышленных предприятий Н.Ю. Арипов, И.И. Пирназаров. Электронный сетевой политематический журнал" Научные труды КубГТУ", 443-451
10. Heating System of Greenhouses Through Perforated Air Pipe BS Murodullaevich, PI Islamovich. The Peerian Journal 18, 41-43
11. Practice of permanent presence and equipment of Karshi main canal O Glovatskiy, R Ergashev, I Kurbonov, B Kholbutaev, I Pirnazarov, E3S Web of Conferences 401, 01022
12. Formation of a geographic information system in the reliable management of water resources of the Southern Mirzachul channel U Sadiev, I Makhmudov, D Makhmudov, S Rustamov, I Pirnazarov, E3S Web of Conferences 410, 04015
13. Система отопления теплиц через перфорированную воздушную трубу Б.С. Муродуллаевич, П.И. Исламович Пирианский журнал 18, 41-43
14. Mansurova Sh. P. (2023). ISSUES OF PRESSURE REGULATION IN HEATING NETWORKS. B INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY (Volume 3, Issue 10, October. 510–516).
15. Tashmatov, N.U., & Mansurova, S.P. (2022). Some Features of Heat and Moisture Exchange in Direct Contact of Air with a Surface of a Heated Liquid. International Journal of Innovative Analyses and Emerging Technology, 2(1),
16. Karimovich, T. M., & Obidovich, S. A. (2021). To increase the effectiveness of the use of Information Systems in the use of water. Development issues of innovative economy in the agricultural sector, 222-225.

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ОЦЕНКА ФИНАНСОВОГО СОСТОЯНИЯ ПРЕДПРИЯТИЯ (ИЛИ ОРГАНИЗАЦИИ) И НАПРАВЛЕНИЯ ПО ЕГО УЛУЧШЕНИЮ

Аннотация. Актуальность исследования данной темы обусловлена необходимостью совершенствования и постоянной оценки финансового состояния предприятий. Оценка финансового состояния предприятия или организации является критическим аспектом стратегического управления. Он дает представление об общем здоровье и эффективности организации, что позволяет лицам, принимающим решения, определять области силы и слабости. Эта научная статья направлена на то, чтобы углубиться в оценку финансового состояния предприятия или организации и изучить потенциальные направления для его улучшения.

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ASSESSMENT OF THE FINANCIAL CONDITION OF THE ENTERPRISE (OR ORGANIZATION) AND DIRECTIONS FOR ITS IMPROVEMENT

Annotation. The relevance of the research of this topic is due to the need to improve and constantly assess the financial condition of enterprises. Assessment of the financial condition of an enterprise or organization is a critical aspect of strategic management. It provides insight into the overall health and effectiveness of the organization, which allows decision makers to identify areas of strength and weakness. This scientific article aims to delve into the assessment of the financial condition of an enterprise or organization and explore potential areas for its improvement.

ВВЕДЕНИЕ

В сегодняшней высоко конкурентной и динамичной бизнес - среде понимание финансового состояния предприятия важно для его выживания и роста. Финансовое состояние относится к общему финансовому здоровью и стабильности организации, которая охватывает различные аспекты, такие как ликвидность, прибыльность, платёжеспособность и эффективность. Оценивая эти ключевые показатели, заинтересованные стороны могут принимать обоснованные решения, разработать эффективные стратегии и снижать потенциальные риски.

Оценка финансового состояния включает в себя всесторонний анализ финансовой отчетности, включая баланс, отчет о прибылях и убытках и отчет о денежном потоке. Эти финансовые отчеты обеспечивают снимок финансового положения, эффективности и денежного потока организации в течение определенного периода. [2] Изучив эти заявления, финансовые аналитики могут оценить способность компании получать прибыль, выполнять свои финансовые обязательства, эффективно управлять своими ресурсами и адаптироваться к изменяющимся рыночным условиям.

Кроме того, финансовые отношения играют решающую роль в оценке финансового состояния предприятия. Коэффициенты являются количественными показателями, которые дают представление о различных аспектах финансовых показателей организации. Обычно используемые соотношения включают коэффициенты ликвидности (например, коэффициент тока, быстрый коэффициент), коэффициенты прибыльности (например, валовая маржа прибыли, доходность активов), коэффициенты платежеспособности (например, соотношение долга к коэффициенту, коэффициент процентного покрытия) и коэффициенты эффективности (например, оборот инвентаря, оборот дебиторской задолженности). Эти соотношения позволяют значительно сравниваться между различными организациями, отраслевыми показателями и историческими показателями.

Оценка финансового состояния предприятия не только обеспечивает снимок его текущего состояния, но и служит основой для определения областей для улучшения. [1] Выявляя слабости и неэффективность, лица, принимающие решения, могут разрабатывать стратегии и планы действий по повышению финансовых показателей. Это может включать в себя реализацию мер по сокращению затрат, улучшение получения доходов, оптимизацию распределения ресурсов или изучение новых возможностей для бизнеса. Кроме того, понимание финансового состояния может помочь организациям принимать обоснованные решения относительно инвестиций, вариантов финансирования и управления рисками.

Улучшение финансового состояния предприятия требует целостного подхода, который охватывает различные аспекты, включая операционную эффективность, финансовое управление и стратегическое планирование. Крайне важно установить эффективный финансовый контроль, реализовать надежные процессы бюджетирования и прогнозирования, а также постоянно

контролировать и оценивать финансовые показатели. [3] Кроме того, организации должны сосредоточиться на повышении потоков доходов, снижении затрат, эффективном управлении оборотным капиталом и оптимизации структуры капитала.

Более того, использование технологических достижений и использование аналитики данных может значительно способствовать улучшению финансового состояния предприятия. Использование передовых систем управления финансами, инструментов автоматизации и прогнозной аналитики может оптимизировать процессы, повысить точность и предоставлять информацию в реальном времени для принятия решений. Используя мощность технологий, организации могут получить конкурентное преимущество и стимулировать устойчивый рост.

В заключение оценка финансового состояния предприятия или организации жизненно важна для принятия стратегических решений и устойчивого роста. Изучение различных аспектов, связанных с оценкой финансового состояния, включая анализ финансовой отчетности и использование финансовых соотношений. Кроме того, он будет углубляться в потенциальные направления для улучшения финансового состояния, таких как операционная эффективность, финансовое управление и технологические достижения. Понимая и решая финансовые проблемы, с которыми сталкиваются предприятия, лица, принимающие решения, могут ориентироваться в сложностях бизнес-ландшафта и добиться долгосрочного успеха.

Понимание и оценка финансового здоровья компании имеет решающее значение для принятия обоснованных решений, выявления областей улучшения и обеспечения долгосрочной устойчивости. [2] Анализируя такие статьи, профессионалы могут получить ценную информацию о финансовых показателях, показателях эффективности и стратегиях повышения прибыльности, эффективности и общего финансового благополучия. Эти знания могут помочь предприятиям процветать, адаптироваться к изменяющимся рыночным условиям и принимать обоснованные финансовые решения, которые способствуют росту и успеху.

Введение в оценку финансового состояния предприятия: основные концепции и методы анализа

Финансовое состояние предприятия играет решающую роль в определении его долгого времени термин устойчивость и успех. Оценка финансового состояния включает анализ различных финансовых показателей и коэффициентов, чтобы получить представление об общем финансовом здоровье организации. В этом разделе введено введение в оценку финансового состояния предприятия, сосредоточенное на основных понятиях и методах анализа.

2. Финансовое условие: определение и важность

Финансовое состояние предприятия относится к его способности выполнять свои финансовые обязательства и получать прибыль с течением

времени. Он включает в себя финансовое положение, производительность и денежный поток организации. Оценка финансового состояния необходима по нескольким причинам. Во -первых, это помогает заинтересованным сторонам, таким как инвесторы, кредиторы и менеджеры, принимать обоснованные решения относительно их участия в предприятии. Во -вторых, это позволяет предприятию выявлять области улучшения и разрабатывать стратегии для повышения его финансовой стабильности и роста. [4] Наконец, это позволяет сравнительному анализу против сверстников промышленности и конкурентов оценить относительную эффективность организации.

3. Основные понятия финансового анализа

Финансовый анализ - это систематический процесс оценки финансового состояния предприятия путем изучения ее финансовой отчетности и связанной с ним информации. Он включает в себя интерпретацию финансовых данных для определения тенденций, моделей, сильных сторон, слабостей и потенциальных рисков. Ниже приведены некоторые основные понятия финансового анализа:

а. Финансовая отчетность. Финансовая отчетность, включая баланс, отчет о прибылях и убытках денежных средств, предоставляют всесторонний обзор финансовых показателей и позиции предприятия. Эти заявления служат основой для финансового анализа.

б. Финансовые коэффициенты: финансовые коэффициенты являются количественными мерами, полученными из финансовой отчетности. Они помогают оценить ликвидность, платежеспособность и эффективность предприятия. Общие финансовые коэффициенты включают текущее соотношение, соотношение долга к собственному капиталу, доходность активов и валовую прибыль.

с. Анализ тенденций: анализ тенденций включает в себя сравнение финансовых данных в течение нескольких периодов для определения закономерностей и изменений. Это помогает определить, улучшается ли финансовое состояние предприятия или ухудшается с течением времени.

d. Вертикальный и горизонтальный анализ: Вертикальный анализ включает в себя выражение каждого элемента в финансовой отчетности в процентах от базовой суммы, обычно общие активы или общие продажи. Горизонтальный анализ сравнивает финансовые данные в разные периоды, чтобы определить изменения в абсолютных суммах или процентах. [5]

4. Методы финансового анализа

Несколько методов используются для оценки финансового состояния предприятия. Эти методы дают различные взгляды и понимание финансового здоровья организации. Ниже приведены некоторые часто используемые методы финансового анализа:

а. Анализ соотношения: анализ коэффициентов включает в себя расчет и интерпретацию различных финансовых соотношений для оценки ликвидности, платежеспособности, прибыльности и эффективности

предприятия. Это обеспечивает полное представление о финансовом состоянии организации и помогает определить области силы и слабости.

б. Анализ DuPont: Анализ DuPont - это метод, который разбивает доходность капитала (ROE) на свои компоненты, а именно маржи прибыли, оборот активов и финансовый рычаг. Это помогает определить драйверы ROE и дает представление о операционной и финансовой эффективности предприятия.

с. Анализ денежных потоков: Анализ денежных потоков фокусируется на способности организации генерировать и управлять денежными потоками. Он включает в себя анализ отчета о денежных потоках для оценки ликвидности предприятия, генерации денежных потоков и адекватности денежных потоков.

d. Сравнительный анализ: сравнительный анализ включает в себя сравнительный анализ финансовых показателей предприятия по сравнению с сверстниками или конкурентами отрасли. Это помогает определить относительные сильные и слабые стороны и дает представление о конкурентной позиции организации. [3]

ЗАКЛЮЧЕНИЕ

В заключение, оценка финансового состояния предприятия или организации является критическим аспектом стратегического управления. Он дает ценную информацию об общем здоровье и эффективности организации, что позволяет лицам, принимающим решения, определять области силы и слабости. Оценивая финансовую отчетность и используя финансовые коэффициенты, заинтересованные стороны могут принимать обоснованные решения, разработать эффективные стратегии и снижать потенциальные риски. Оценка финансового состояния не только обеспечивает снимок текущего состояния предприятия, но также служит основой для определения областей для улучшения. Понимая и решая финансовые проблемы, лица, принимающие решения, могут ориентироваться в сложностях бизнес-ландшафта и добиться долгосрочного успеха. Улучшение финансового состояния требует целостного подхода, который охватывает оперативную эффективность, финансовое управление и стратегическое планирование. [1] Перенимания технологических достижений и использование аналитики данных может значительно способствовать улучшению финансового состояния предприятия. Изучая научные статьи о финансовой оценке и улучшении, профессионалы могут получить ценную информацию и практическое руководство по эффективному управлению и улучшению финансового здоровья предприятия или организации. Эти знания могут помочь предприятиям процветать, адаптироваться к изменяющимся рыночным условиям и принимать обоснованные финансовые решения, которые способствуют росту и успеху.

Использованные источники:

1. Бегишев Дмитрий Юрьевич Оценка финансового состояния предприятия//E-Scio.2019. №4(31).URL:

https://cyberleninka.ru/article/n/otsenka-finansovogo-sostoyaniya-predpriyatiya-2 (дата обращения: 27.10.2023).
2. Захарова Ю.Н., Мартынов Д.И. Анализ финансового состояния организации // Инновационная наука. 2017. №4-1. URL: https://cyberleninka.ru/article/n/analiz-finansovogo-sostoyaniya-organizatsii (дата обращения: 27.10.2023).
3. Захарян А.В., Шевченко Ю.С., Величко Н.К. ОЦЕНКА КЛЮЧЕВЫХ ФИНАНСОВЫХ ПОКАЗАТЕЛЕЙ ДЕЯТЕЛЬНОСТИ ОРГАНИЗАЦИИ С ЦЕЛЬЮ ПОВЫШЕНИЯ ЕЕ ФИНАНСОВОЙ СТАБИЛЬНОСТИ // Деловой вестник предпринимателя. 2022. №1 (7). URL: https://cyberleninka.ru/article/n/otsenka-klyuchevyh-finansovyh-pokazateley-deyatelnosti-organizatsii-s-tselyu-povysheniya-ee-finansovoy-stabilnosti (дата обращения: 27.10.2023).
4. Курлеев Владимир Александрович Анализ финансового состояния предприятия: сущность, значение // КНЖ. 2015. №4 (13). URL: https://cyberleninka.ru/article/n/analiz-finansovogo-sostoyaniya-predpriyatiya-suschnost-znachenie (дата обращения: 27.10.2023).
5. Натырова К.А. Методики анализа финансового состояния предприятия: достоинства и недостатки // Вестник ИКИАТ. 2009. №2 (19). URL: https://cyberleninka.ru/article/n/metodiki-analiza-finansovogo-sostoyaniya-predpriyatiya-dostoinstva-i-nedostatki.

УДК 621.383

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ЭЛЕКТРОННАЯ СТРУКТУРА И ОПТИЧЕСКИЕ СВОЙСТВА ПЛЕНОК CaF2, ИМПЛАНТИРОВАННЫХ НИЗКОЭНЕРГЕТИЧЕСКИМИ ИОНАМИ Ba+

Аннотация. При использовании монокристаллических пленок CaF2 возникает необходимость контролируемого изменения электронной структуры, параметра кристаллической решетки и других свойств поверхностных слоев. Наши исследования показали, что для этого можно использовать имплантацию низкоэнергетических ионов Ba^+ в сочетании с отжигом. Результаты исследований могут быть полезны для получения оптических резонаторов в УФ-диапазоне с изменяемой частотой (7,8 эВ ≤ hy ≤ 9,2 эВ).

Ключевые слова: ионная имплантация, нанопленки, эпитаксиальных пленок, гетероэпитаксиальных систем, фотон, концентрация.

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ELECTRONIC STRUCTURE AND OPTICAL PROPERTIES OF CaF2 FILMS IMPLANTED WITH LOW-ENERGY Ba+ IONS

Abstract. The using of monocrystalline CaF2 films the necessity of the inspected alteration of the electron structure, crystalline lattice parameter and other surface layers` properties appears. Our investigations have showed that the low energy Ba^+ ion implantation combined with annealing can be employed to this effect. The research results can be useful to get optical resonators in UV region with the changeable frequency (7,8 eV ≤ hy ≤ 9,2 eV)

Key words: ion implantation, nanofilms, epitaxial films, heteroepitaxial systems, photon, concentration.

Известно, что метод низкоэнергетической ионной имплантации является одним из эффективных методов направленного изменения состояния и свойств приповерхностных слоев различных материалов и тонких пленок [1-3]. В последние годы метод ионной имплантации в сочетании с другими видами технологических обработок широко

используется в создании многослойных гетеро эпитаксиальных систем, необходимых для больших и ультрабольших интегральных схем, оптоэлектронных приборов, солнечных элементов, запоминающих устройств [4]. В указанных системах наряду с Si, GaAs и CoSi2, имеют большие перспективы пленок CaF2 [5]. Однако при использовании этих пленок во многих случаях возникает необходимость контролируемого изменения параметров решетки, электронной структуры и других свойств их поверхности. Для этих целей мы использовали метод ионной имплантации в сочетании с отжигом.

По этому, целью работы являлось исследование влияния имплантации ионов активных металлов и последующего отжига на элементный и химический состав, электронную и кристаллическую структур приповерхностных слоев эпитаксиальных пленок $CaF_2/Si(100)$. Исследования проводились в пленках CaF_2 толщиной ~100 A^o.

Технологические обработки (ионная имплантация, отжиг) и исследования структуры и свойств образцов проводились в универсальном экспериментальном приборе [6]. Источниками ионов служили таблетки титаната бария. Ионная пушка формировала моноэнергетический ионный пучок с плотностью тока J=0,5÷20 мкА $см^{-2}$ в области энергий E_0=0,5÷5 кэВ. Диаметр пучка на мишень составлял 4 мм. Прогрев при каждой температуре продолжался в течение 30 мин. Измерения проводилось после остывания мишени до комнатной температуры. Элементный и химический состав определялся методом ожеэлектронной спектроскопии (ЭОС) [7]. Фотоэмиссионные характеристики измерялись при фиксированных значениях энергии фотонов в интервале $\hbar\omega$=4÷11эВ. Источниками фотонов служили стандартные газоразрядные лампы линейчатого спектра КрР, КсР, ВмФ. На мишень кванты излучения попадали через магний фторидовое окошко, которое является прозрачным для фотонов до энергий 12 эВ. Диаметр пучка фотонов на мишень составлял ~ 1мм.При этом число фотонов, падающих в одну секунду, было равно $1* 10^{14}$.

Степень разупорядочения поверхности CaF_2 при ионной имплантации и его кристаллизация при отжиге, типы и параметры решетки изучались методом дифракции быстрых электронов (ДБЭ) на стандартной установке. При снятии картины ДБЭ (электронограмм) пучок электронов с энергией 75 кэВ направлялся на поверхность мишени под углом~ 1градус [8].

Динамика изменения кривой энергетического распределения (КЭР) фотоэлектронов, снятых при h=10,8 эВ в зависимости от дозы облучения для CaF_2, легированного ионами Ba^+ с E_o=0,5 кэВ, приведена на рис.1.

По оси абсцисс отложена энергия связи Есв электронов. На всех КЭВ фотоэлектронов использован один и тот же масштаб по вертикали, выбранный таким образом, что площадь под кривой пропорциональна величине квантового выхода электронов из образцов. Видно, что ионная имплантация

приводит к изменению структуры спектра фотоэлектронов. С ростом дозы ионов происходит уширение спектра, увеличение площади под КЭР (увеличение квантового выхода), изменения интенсивности и смещения положения основных пиков матрицы, появление новых пиков. Эти изменения происходит до дозы $(5\div8)10^{16}$ $см^{-2}$. Анализ структуры и спектров фотоэлектронов, совместно с данными ОЭС и ДБЭ, показали, что в процессе имплантации ионов Ba^{+} в пленке CaF_2 сопровождается разупорядочением приповерхностного слоя, образованием новых соединений (примерно 15-20% атомов Ba внедренных в приповерхностные слои образуют соединения типа Ba+F,Ba+Ca+F) и обогащением поверхности несвязанными атомами бария. Отметим, что в запрещенной зоне нелегированного CaF2 на расстоянии 2,5 эВ от верхнего края валентной зоны содержатся глубокие уровни дырочного типа. Наличие этих уровней может быть связано с некоторой дефектностью кристаллической структуры [9]. После имплантации ионов Ba^{+} с достаточно высокой дозой ($Д\geq5*10^{15}см^{-2}$), начало спектра фотоэлектронов смещается примерно до этого уровня, т.е. на 2,5 эВ (рис.1).

Мы предполагаем, что изменение положения верхнего края валентной зоны после ионной имплантации связано с разупорядочением приповерхностного слоя. Аналогичные разрешенные уровни появляются и вблизи дна зоны проводимости, что приводит к увеличению кажущей величины электронного сродства. Появление в спектре новых пиков, нами объясняется обогащением поверхности атомами Ba, а сдвиг пиков матрицы образованием новых соединений.

Во всех случаях доза ионов составляла $8*10^{16}см^{-2}$. Видно, что при низких энергиях ионов ($E0\leq$ 1 кэВ) C_{Ba} (d) имеет ступенчатый вид, а при энергиях $E0\geq1$кэВ представляет собой кривую с максимумом. С ростом энергии ионов наблюдается уменьшение концентрации бария вблизи поверхности, уширение максимума распределения ионов и сдвиг его в сторону больших глубин. В области энергией ионов $E0 = 3 \div 5$ кэВ доля атомов легирующего элемента, входящих в химическую связь с атомами матрицы, может увеличиваться до 20 ÷ 30 ат.% (здесь за 100 ат.% принимается общая концентрация внедренной примеси). Однако с ростом E0 содержание внедренной примеси в приповерхностном слое быстро убывает (рис.2), что приводит к уменьшению концентрации новых соединений в этих слоях [10].

Ba^{+} e CaF_2

E_O =0,5 кэВ

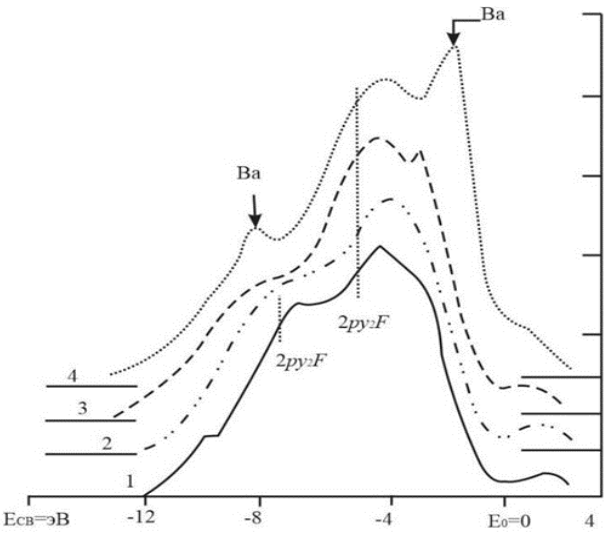

Рис. 1. Спектры фотоэлектронов для CaF2, легированного ионами Ba^+ с Eo=0,5 кэВ при дозах D, $см^{-2}$ 1-0; 2-6 $*10^{14}$; 3-6 $*10^{15}$; 4-8 $*10^{16}$

Таким образом, в процессеионной имплантации при поверхностном слое происходит интенсивное разложение CaF2 на составляющие. Небольшая часть этих компонентов может распылиться с поверхности. В силу большой химической активности почти все освободившиеся атомы фтора вновь входит в химическую связь как атомами кальция. Следовательно, в приповерхностном слое образуются и трехкомпонентные системы. Как следует из экспериментов [11], при E0 ≤ 1кэВ, одновременно с образованием различных соединений возникают “избыточные” атомы легирующего элемента, концентрация которого с ростом дозы увеличивается. При высоких энергиях ионов (E0 ≥ 3 кэВ) происходит заметная десорбция фтора с поверхности, что приводит к накоплению атомов Ca вблизи поверхности. Наибольшая концентрация последнего составляет 40 ÷ 45 ат.%.

Для направленной модификации физико-химических свойств поверхности ионно-легированной пленки CaF2 можно применять постимлантационный высокотемпературный отжиг [12]. При этом меняя температуру прогрева можно создавать слои с монотонно изменяющейся концентрацией активного элемента. Наши исследования показали, что до T=600 K не происходит заметное изменение состава и свойства поверхности ионно-легированного CaF2.

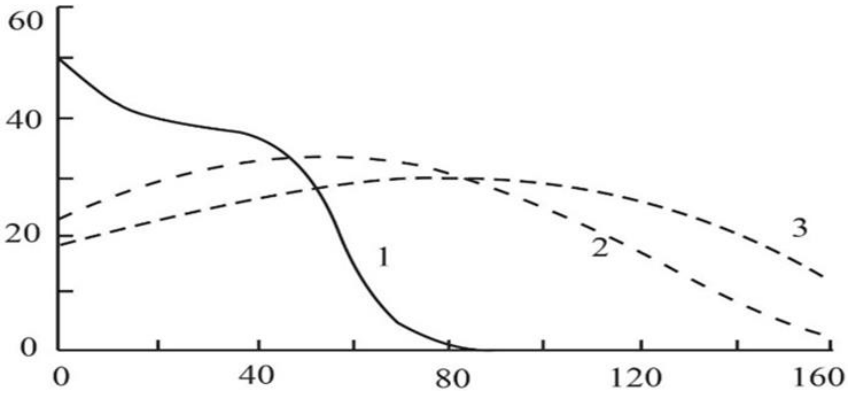

Рис. 2. Концентрационные профили распределения бария по глубине для CaF2 легированного ионами Ba^+ с Eo, кэВ ($D=8*10^{16}см^{-2}$)1-0.5; 2-3; 3-5.

При температуре T=1000 K все атомы бария входят в химическую связь с атомами матрицы и образуется эпитаксиальная пленка Ba1-x CaxF2 с перестраиваемой постоянной решетки. При этом, на поверхности образуют соединение типа Ba o.6Cao,4 F2 с постоянной решетки ~5,73A^0. При одинаковой температуре отжига соотношение концентрации атомов Ba и Ca на поверхности для разных доз легирования будет разным. Во всех случаях с ростом глубины концентрация бария и следовательно, значение постоянной решетки, монотонно уменьшается [13]. На рис2. приведены концентрационные профили распределения атомов бария по глубине для пленок CaF2, легированного ионами Ba+ с энергиями 0,5; 3 и 5 кэВ.

Ионная имплантация также приводила к существенному изменению значения оптических параметров пленок CaF2 (таб.1.) Значения n и r определялись в области УФ – излучения (1050 A^o). Видно, что после ионной имплантации величина показателя преломления и коэффициента отражения света увеличивается, что объясняется изменением оптической прозрачности пленки, вследствие частичной металлизации ее приповерхностной области. Прогрев ионно-легированного образца приводит к уменьшению показателя преломления и коэффициента отражения света, однако их значения остаются несколько большими, чем для чистой пленки CaF2. Эффект резкого увеличения отражательной способности пленки после высокодозной имплантации (металлизация поверхности и ее избирательность к частоте света) может применятся при разработке и создании оптических резонаторов, запоминающих устройств, лазерных источников и волноводов. Возможность управления величиной n пленок в широких пределах с помощью ионной имплантации и последующего отжига очень важны для создания оптических приборов с переменной диэлектрической проницаемостью, светофильтров, преобразователей световой энергии и элементов связи [14].

Выводы

1. Впервые определены профили распределения примесных атомов Ba по глубине ионно- легированной пленки CaF2**.** Показано, что в процессе ионной имплантации только небольшая часть (15- 20 ат.%) атомов бария входит в химическую связь с атомами матрицы.

2. Впервые получена информация о распределении плотности электронных состояний и о параметрах энергетических зон ионно-легированной пленки CaF2.В частности, показано, что после ионной имплантации ширина запрещенной зоны уменьшается в 2,5 раза.

3. Постимплантационный температурный прогрев способствует увеличению концентрации атомов Ba, входящих в химическую связь, и уменьшению дефектности решетки. При T=1000 K вблизи поверхности формируется монокристаллическая система Ca0,4 Ca0,6F2 с постоянной решетки 5,73 A^0.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
5. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
6. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
7. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
8. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
9. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.

11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
13. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
14. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

УДК 699.841

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ОЦЕНКА СЕЙСМИЧЕСКОЙ БЕЗОПАСНОСТИ ТЕРРИТОРИИ ФЕРГАНСКОЙ ДОЛИНЫ

Анотация. В статье приведены текущая ситуация по вопросам уровня сейсмической интенсивности и сейсмической безопасности территории Ферганской долины, а также общие выводы научных исследований авторов.

Ключевые слова. Ферганская долина, землетрясение, интенсивность, эпицентр, сейсмичность территории, безопасность, сейсмическая безопасность, инженерный анализ, общая оценка.

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ASSESSMENT OF SEISMIC SAFETY OF THE TERRITORY OF THE FERGHANA VALLEY

Abstract. The article presents the current situation regarding the level of seismic intensity and seismic safety of the Fergana Valley territory, as well as the general conclusions of the authors' scientific research.

Keywords. Fergana Valley, earthquake, intensity, epicenter, seismicity of the territory, safety, seismic safety, engineering analysis, general assessment.

По действующим картам сейсмического районирования более 2/3 территории Узбекистана являются сейсмоактивными (от 6 до 9 баллов). Этот факт отражен в государственных нормативах в области строительства в сейсмических районах, которыми в настоящее время являются КМК 2.01.03-96 «Строительство в сейсмических районах» [6]. Для оценки сейсмичности района строительства используется «Карта общего сейсмического районирования», являющаяся составной частью данной нормы.

Главной информационной составляющей карты являются выделенные территории с возможной интенсивностью сотрясений при землетрясениях в 5, 6, 7, 8 и 9 баллов. Дополнительно в КМК приводится список населенных пунктов Республики Узбекистан, расположенных в сейсмических районах, с указанием для них сейсмичности в баллах и повторяемости сейсмического воздействия. Судя по этим материалам, сейсмические колебания интенсивностью 6 и более баллов можно ожидать на юге-востоке и востоке

Узбекистана. Особенно можно отметить территорию Ферганской долины как наиболее сейсмоактивную (см. рис.1 и рис.2).

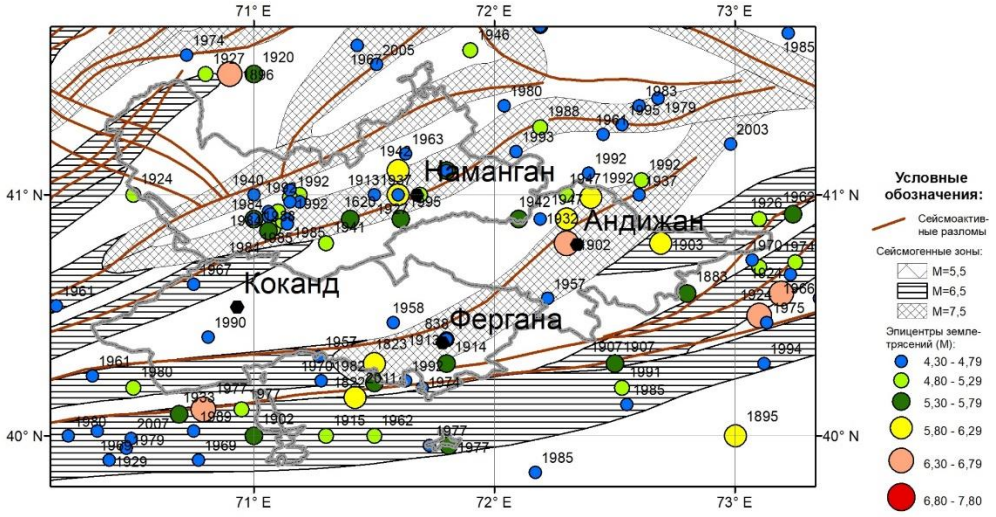

Рис. 1. Карта исторических эпицентров землетрясений, активных тектонических разломов и сейсмогенных зон Ферганской долины

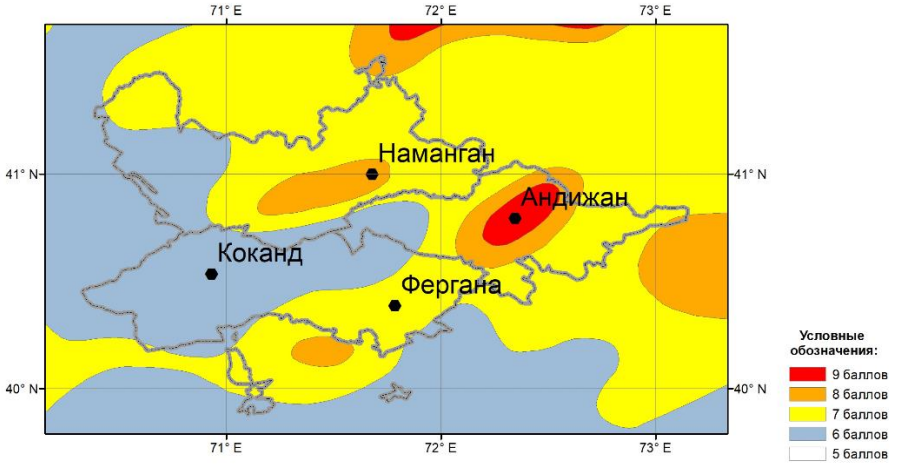

Рис. 2. Карта максимальной наблюдаемой сейсмической интенсивности в Ферганской долине

Территория Ферганской долины является одной из наиболее сейсмопасных в Узбекистане. На территории Ферганской долины 6,7, 8, 9 балльные землетрясения возникают часто. По историческим данным, за последние 100 лет здесь произошло более 30 таких толчков, два из которых были 9-балльными. Большинство очагов неглубокие, однако некоторые из них расположены на глубине около 30 км. Практически все землетрясения связаны с глубинными тектоническими структурами, а их гипоцентр имеет различную энергию и интенсивность проявления [7].

Согласно имеющимся сведениям, по землетрясениям, произошедшим до 1960 г., макросейсмическое обследование проведено только для Андижанского (1902 г.) землетрясения, для которого была построена детальная карта изосейст, где четко охарактеризовано влияние грунтовых

условий и уровня грунтовых вод [1].

На основе сопоставления данных о землетрясениях, были изучены зависимости балльности в эпицентре от величины магнитуды землетрясения и характера спада балльности с расстоянием для районов с различным тектоническим строением. Было выявлено, что большинство землетрясений Тянь-Шаньского региона характеризуется медленным спадом балльности, а землетрясения Ферганской долины чаще носят локальный характер. Также отмечается, что расположение изосейст землетрясений Ферганской долины связано с грунтовыми условиями, уровнем грунтовых вод, расположением рек и их притоков в пределах долины [2].

В [1] приводятся ценные данные и информация по анализу характера, изосейст землетрясений, произошедших в пределах Ферганской долины и ее горного обрамления. В частности, отмечается, что почти круглую форму имеют изосейсты Джалалкудукского землетрясения (21 февраля 1971 г.), проявившегося в восточной части долины. В отличие от него, практически одинаковый характер изосейст имеют Кадамжайское и Куршабское землетрясения, произошедшие в различных районах долины.

По данным [1], ниже приведены сведения о наиболее сильных из произошедших в исследуемом регионе землетрясений:

Ферганское **землетрясение** в 838 году (8 баллов, *М*=5, Н=10 *км*), **Ахсынскоев 1620 г. (**вблизи Намангана, *(М≈6, Н≈7 км))* [38; с.144, 39], *В* Южно-Ферганской зоне в **1822 г.** (М≈6,2*; Н≈10 км)*, **Андижанское в 1902 г..** (М≈6,4; Н≈10 *км)* [18; с15-19, 25], **Аимское в 1903 г. 28 марта (8 баллов,** М=6,4; Н=20 *км),* **Кырккольское в 1907 г.** (в Фергане и в Андижане - 5; в Намангане - 4 балла, М=5,7, Н=10 *км), з***емлетрясение в 1908 г. 24 марта (**6-7 баллов, М=5,5, Н=26 *км),* **Куршабское в 1924 г.** (разрушено село Куршаб, пострадали города Узген и Яссы, М=6,5, Н=25 *км),* **Маракайское в 1962 г. 3 августа (8** баллов, М=5,4, Н=18 *км),* **Супетауское землетрясение в 1967 г.18 мая (**7 баллов, М=4,2, Н=5 *км),* **Кадамжайское землетрясение в 1974 г. 20 февраля (**7 баллов, М=5,1, Н=15 *км)* [5].

Приведенные сведения об исторической сейсмичности свидетельствуют о том, что все известные разрушительные землетрясения приурочены к зонам активных разломов, как новейших, так и активизированных древних [3,4].

Карта общего сейсмического районирования территории Узбекистана, составленная в Институте сейсмологии АН РУз и Институте геологии и геофизики АН РУз [8] по результатам комплексного анализа сейсмологических и геолого-геофизических материалов, свидетельствует о том, что сейсмичность основной части исследуемой территории Ферганского региона составляет 8 баллов. Наряду с этим, имеются территории с сейсмичностью 9 баллов.

При этом следует отметить, что оценка интенсивности по карте общего сейсмического районирования соответствует средним грунтовым условиям, представленным песчано-глинистыми грунтами при глубине залегания

грунтовых вод ниже 8 м. Карты сейсмического районирования, используемые в настоящее время при расчетах возводимых зданий и сооружений, осреднены и поэтому недостаточны для оценки возможных сотрясений в конкретных условиях. Возрастающие объёмы и темпы строительства в сейсмоактивных районах Узбекистана требуют от сейсмологов надежных сведений о сейсмической опасности отдельных районов и строительных площадок [7, 9].

Выводы

1. По результатам оценок исторической сейсмичности установлено, что на территории Ферганской долины, являющейся одной из наиболее сейсмичных областей в Узбекистане, сильные землетрясения возникают довольно часто. Подавляющее число землетрясений, произошедших в Ферганской долине, имело интенсивность 7-8 баллов. Очаги произошедших в Наманганском регионе землетрясений в большинстве случаев размещены в земной коре. Преобладающая глубина составляет 5-15 км.

2. Наиболее потенциально опасной к Намангану, является Северо-Ферганская тектоническая зона, которая выделяется на фоне остальных зон Ферганской впадины относительно высокой сейсмической активностью и по расположению она находится вблизи отмеченных городов. Максимально возможное землетрясение этой зоны может вызвать сотрясение в Намангане и Андижане равное 8-9 баллам. Интенсивность проявления происшедших разрушительных землетрясений в Наманганском регионе не превышала 8 баллов.

Использованные источники:

1. Бутовская Е.М. Сейсмичность Узбекистана [Текст] / Е.М.Бутовская, А.М.Коньков, И.Л.Нерсесов, В.А.Пак, Г.Р.Тростянский, В.И.Уломов // Изд. АН Уз. Ферганская Долина, 1961. -вып. 1.
2. Введенская Н.А. К вопросу об использовании инструментальных данных о ссыльных землетрясениях Средней Азии при сейсморайонировании [Текст] / Н.А.Введенская // Вопросы инженерной сейсмологии. 1961. – Вып. 5.
3. Ибрагимов Р.Н. Сейсмогенные зоны Среднего Тянь-Шаня [Текст] / Р.Н.Ибрагимов / Фан. -Ташкент, 1978. - 144 с.
4. Ибрагимов Р.Н. Сейсмотектоника Ферганской впадины [Текст] / Р.Н.Ибрагимов // Фан. -Ташкент, 1970.
5. Корчинский И.Л. Сейсмостойкое строительство зданий [Текст]: учеб. пособие для вузов / И.Л.Корчинский [и др.]. М., Высшая школа, 1971. - 319 с
6. КМК 2.01.03-96. Строительство в сейсмических районах. - Т.: Госкомархитектстрой, 1996. -С. 65.
7. Оценка технического состояния объектов частной жилой застройки Ферганской долины и разработка рекомендаций по обеспечению и повышению их сейсмостойкости (по последствиям прошедших и Ферганского 2011 г. землетрясений) [Текст]: Отчет НИР (промежуточный за 2013 г.): ГНТП-А14-ФА-Ф052 / С.Ж.Раззаков // ИМ и СС. -Ташкент, 2014. -202 с.

8. Составить карту сейсмического микрорайонирования территории городов Алмалык, Наманган и Фергана. Гл. Сейсмическое микрорайони-рование г. Намангана [Текст]: Отчет (заключительный) // АН УзР. Институт сейсмологии. -Ташкент, 1978. - 139 с.
9. Razzakov S.J. Investigation of stress-strain state of a two-storey building with internal partitions under static pulls load [Text] / S.J.Razzakov A.A.Holmirzaev, S.E.Abdurakhmonov, R.A.Mavlonov // 55th Annual Science Conference of Ruse University Smart specialization – innovative strategy for regional economic transformation / Ruse, Bulgaria, 2016. - P. 287-291.

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МОДЕЛЬ ФОРМИРОВАНИЯ И РАЗВИТИЯ ТВОРЧЕСТВА БУДУЩИХ УЧИТЕЛЕЙ МЕДИЦИНСКОГО ОБРАЗОВАНИЯ

Аннотация. Возникающие на основе новых педагогических теорий сосредоточить внимание на повышении эффективности обучения на основе использования существующих образовательных моделей и технологий, целей и задач молодежных организаций, а также возникает необходимость определения содержания их деятельности. Разрабатывать новые проекты на современном этапе системы образования рассматривается и широко внедряется на практике. Инновации одна из важных задач современного профессионального образования как теоретическое и практическое мировоззрение и самостоятельно и творчески решать исследовательские задачи уровень знаний будущего специалиста достаточен Развитие и совершенствование научно-исследовательской деятельности учащихся профессиональных учебных заведений является одной из важнейших задач педагогической педагогики и психологии как обязательного компонента системы обучения. Эта форма организации обучения в учебных заведениях, активизировать познавательную деятельность учащихся, сделать их творческими с формированием мышления и исследовательских навыков органически зависимы.

Ключевые слова: факты, характер, актуальность и масштабы событий; гипотеза, исследовательская задача, исследовательская цель и задачу, теоретическое обоснование, доказательство гипотезы, претворение в практику.

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MODEL OF FORMATION AND DEVELOPMENT OF CREATIVITY OF FUTURE TEACHERS OF MEDICAL EDUCATION

Abstract. In this article is written about the ways, forms and means of rational use of scientific methods related to the planning of students' research work. The formation and development of research skills among teachers of vocational education today is very relevant. The development and improvement of the research

activities of students of professional educational institutions is one of the most important tasks of pedagogical pedagogy and psychology as an obligatory component of the education system. On the basis of the conducted social surveys, their analyzes, the authors describe the principles, the time of conducting independent, as well as classroom studies in order to form and develop research skills in making an independent decision in the process of working on a task. The results of diagnostic studies, including psychological observations, are clearly and concretely shown in graphical tables. The literature review includes the scientific works of leading experts.

Key words: facts, nature, actual and scale of events; hypothesis, research task, research goal and task, theoretical substantiation, proof of the hypothesis, implementation in practice.

ВВЕДЕНИЕ

Бурное развитие науки, техники и технологий в стране играет важную роль в реформировании системы образования на основе современных требований, повсеместном внедрении передовых инноваций и практических разработок в профессиональном образовании. Стратегия действий по дальнейшему развитию Республики Узбекистан определяет в качестве приоритета «дальнейшее совершенствование системы непрерывного образования, повышение потенциала качественных образовательных услуг, продолжение политики подготовки высококвалифицированных кадров в соответствии с современными потребностями рабочей силы»75. Следовательно, необходимо совершенствовать процесс подготовки будущих специалистов к исследовательской деятельности через формирование практических навыков на основе сравнительного сопоставления педагогических задач, критического анализа, обобщения и выбора оптимальных методов обучения.Процесс создания и совершенствования продолжается. Современный научно-технический прогресс вносит существенные изменения не только в сферу материального производства, но и во все сферы деятельности. Современный рынок труда требует не только высокого уровня общего образования, профессиональных знаний по специальностям, но и навыков исследований и развития, требующих хорошей специальной подготовки и гибкости мышления.

Постоянное развитие производства требовало и требует от специалиста самостоятельного мышления, умения систематически обновлять и углублять свои знания в соответствии с потребностями производства. Поэтому развитие науки и техники существенно меняет характер производственной деятельности человека, тем самым создавая благоприятные условия для развития его исследовательских навыков, а также формирования личности исследователя.

Президент Республики Узбекистан «О дальнейшем развитии Республики Узбекистан Постановление «О стратегии действий»./-Т., 2017. – 39-б.

ЛИТЕРАТУРНЫЙ ОБЗОР

Исследуемая проблема нашла свое отражение в трудах ряда зарубежных и отечественных педагогов, психологов: С. И. Архангельский, В. И. Андреев, Ю. К. Бабанский, В. В. Давыдов, В. А. Крутецкий, Н. А. Муслимов [3] и другие.

И. Я. Лернер, П. И. Пидкасистый и другие занимались проблемами организации научно-исследовательской и учебно-методической работы студентов. Развитие и совершенствование исследовательской деятельности студентов как обязательного компонента системы подготовки кадров является одной из важных проблем педагогики и психологии высшей школы.

Данная форма организации обучения в высшей школе неразрывно связана с активизацией познавательной деятельности студентов, формированием у них творческого мышления и исследовательских умений. Научным исследованиям посвятили себя Г.С.Альтшуллер, Б.Г.Ананев, В.И.Андреев, В.П.Беспалько, В.В.Давыдов, В.И.Загвязинский [3].

МЕТОДОЛОГИЯ ИССЛЕДОВАНИЯ

По нашему мнению, научные мысли О.И. Митроша, В.Н. Литовченко, В.П.Бударкевича, могут быть использованы при организации и проведении профессиональной научно-исследовательской деятельности наших студентов, преимущественно теоретической деятельности и в мелкомасштабных научных исследованиях практического характера, которые мы непременно будем использовать в экспериментальных работах. Однако для нашего исследования необходимо определить уровни сформированности исследовательских умений, наиболее полно отражающие деятельность учащихся по изучению различных объектов и процессов, от простого до сложного.

Мы определили уровни исследовательских заданий и решения проблем следующим образом:

- Уровень 1–микроисследования;
- Уровень 2 – небольшие исследования;
- Уровень 3 – средние исследования;
- Уровень 4 – крупные исследоввания;
- Уровень 5 —макроисследования.

Содержание каждого из них мы рекомендуем переработать и градуировать следующим образом, применив его к научно-исследовательской деятельности будущего педагога профессионального образования.

Первый уровень – это самое маленькое исследование.

Внешний вид предмета (предмета, процесса, события в зависимости от задачи) изучается без вмешательства в его структуру, т. е. путем визуального наблюдения (смотрит, выявляет недостатки, неточности, сравнивает с подобным предметом и определяет различие между ними). На этом уровне используются знания в области науки, знания о составе, строении объекта. Этот уровень помогает в формировании основных исследовательских навыков: сравнение, анализ, выбор наилучшего варианта.

Второй уровень – небольшое исследование.

Для проведения исследований на этом уровне необходимы не только знания конструкции одного объекта, его состава, но и дополнительные знания из различных дисциплин. Для этого уровня недостаточно посмотреть на объект, необходимо потрогать его часть или разработать для него устройство с помощью дополнительных знаний.

Эта степень помогает развивать исследовательские навыки, такие как использование знаний в других областях науки.

Например, для этого уровня необходимо выбрать возможные варианты его решения.

Третий уровень – средние исследования.

Для проведения исследования на этом уровне анализируется весь объект или процесс в его структуре. При обнаружении того, что какая-либо часть объекта плохо выполняет свою функцию, ее следует заменить новым, более совершенным устройством, используя твердые знания о его аналогах. Если нет устройства, необходимого для выполнения задачи, то предполагается его разработка на этом уровне.

Например, учащимся необходимы технические знания для самостоятельного решения этих задач. Здесь с помощью наводящих вопросов педагога учащимся предлагаются новые варианты конструкции механизма или устройства.

Этот уровень помогает развить исследовательский навык анализа объекта не только по частям, но и в целом.

Четвертый уровень –крупные исследования.

Для проведения исследований на этом уровне используются глубокие знания различных областей науки. Студент должен либо разработать такой вариант устройства, конструкция которого еще не известна, либо предложить решить задачу каким-то другим, неординарным способом.

Данная степень позволяет формировать и развивать исследовательские навыки и трансформировать знания из одной области науки в другую, а также формировать исследовательские навыки в других областях науки, результаты которых могут быть использованы для выполнения исходных задач или заданий.

Пятый уровень — макроисследования.

Этот уровень можно выразить следующим образом: учащийся ищет проблему без помощи преподавателя и оформляет работу и сам предлагает варианты ее решения. Но исследования должны быть крупномасштабными. Вариантов решения задач может быть множество, от простых до сложных (подготовка объектов, объектов, оборудования).

Этот уровень позволяет развивать умение видеть и формулировать исследовательскую проблему, намечать пути ее решения.

Также были разработаны ориентировочные критерии оценки успеваемости студентов в лабораторных исследованиях по 5-балльной шкале.

Если студент проводит исследование самостоятельно, без помощи преподавателя, используя знания по различным дисциплинам, предлагает другой вариант исследования, если работа выполнена в срок, качественно, на высоком уровне, оценка «5».

Если преподаватель оказывал небольшую помощь в виде наводящих вопросов, и студент применил знания одной области науки, работа выполнена качественно и в срок, оценка «4».

Если учитель оказывает большую помощь учащемуся в виде наводящих вопросов и советов, учащегося необходимо поощрять к проведению исследования; если она не столь высока, как научно-исследовательская работа и не выполнена в срок, то она оценивается на «3».

Вышеуказанные критерии и уровни послужили основой для изучения эффективности методики формирования и развития исследовательских умений у студентов направлений профессионального образования, предложенной нами в ходе экспериментальной работы. Для оценки уровня сформированности исследовательских умений используются задачи и вопросы исследовательского характера, требующие (решения) демонстрации соответствующей исследовательской деятельности, а также анкетирование, интервью и т.д.

На наш взгляд, педагог профессионального образования, занимающийся исследовательской деятельностью должен обладать следующими исследовательскими навыками:

- ставить перед учащимися теоретические исследовательские задачи и подводить учащихся к правильному ответу с помощью различных методов;
- организация научно-исследовательской работы на лабораторно-практических занятиях по преподаваемому предмету;
- привлекать студентов к исследовательской деятельности во внеучебное время (клубы, лаборатории и т.п.);
- научить студентов находить выходы из сложных ситуаций не только на уроке, но и вне его;
- научить студентов применять полученные исследовательские навыки и умения и в других ситуациях.

Материально-техническая база играет важную роль в успешном и эффективном обучении студентов исследовательским навыкам.

Необходимо создать материально-педагогические условия для организации и проведения научно-исследовательской работы, эффективного использования имеющегося оборудования и средств для учебной деятельности научно-исследовательского характера, а также рациональной организации рабочего места студента и преподавателя. Эффективная организация научно-исследовательской деятельности будущих педагогов профессионального образования включает в себя создание технической базы материальных знаний.

Поэтому указанные выше дидактические требования должны быть соблюдены при разработке методик формирования и развития

исследовательских умений у будущих студентов профессионального образования.

Цель и задача ее решения в любом творчестве состоит примерно из следующих этапов:

- определить понятие, определяющее общее направление достижения искомого решения;
- сбор информации для определения условий и решения проблемы;
- выбрать способ решения задачи и проверить его.

Из них предоставление информации является важнейшим этапом, который является основой для выработки адекватных и правильных стратегий и тактик решения творческих задач, и основывается на следующих принципах.

Эффективность процесса подготовки учащихся к творческой деятельности во многом требует планомерного и непрерывного направления его информационного обеспечения и целенаправленного педагогического управления. Отчет детализирует мнения каждого компонента информационного обеспечения.

Важны теоретическое и образное мышление, воображение, глубина и широта восприятия, самостоятельность и критическая оценка поведения. При этом требуется наличие больших объемов информации. Следует отметить, что недостаток информации негативно сказывается на темпах творческой деятельности.

Важным условием формирования исследовательских умений является активность. Поэтому главная задача педагога - дать необходимую информацию, определяющую форму, метод, средства и направления организации этой деятельности.

Избыточное информационное обеспечение также не решает задачи положительно, в связи с этим целесообразно управлять информационным обеспечением с педагогической точки зрения, при этом стоит учитывать, что они обогащаются передовыми методиками и техническими достижениями.

Предметом педагогического управления процессом достижения творческих способностей является человеческий фактор, что предполагает изучение конкретной учебной работы, методов и алгоритмов решения творческих задач.

Система педагогического подхода к процессу подготовки и организации исследовательской деятельности является одним из основных вопросов в управлении творчеством и креативностью личности, включает в себя сбор необходимой информации, анализ, обработку, определение цели, развитие плана достижения цели, контроля роста, упорядоченной работы этой системы и принятия конкретных решений.

В общем подходе к формированию профессиональных знаний, умений и компетенций важно правильно спроектировать модель применения выбранных основ исследования событий специализации и соответственно определить конкретные задачи модели.

Точные цели этой модели примерно следующие:

- выявить внешние признаки изучаемого явления;
- установить обстоятельства;
- лабораторное наблюдение за событием (по возможности);
- объяснить основной механизм явления, его сущность на основе современных научных теорий;
- изучить связь этого события с другими;
- определить количественные характеристики явлений, величин, связи между ними;
- ознакомиться с наиболее важными приложениями явления на практике, наблюдать явление на природе (по возможности), описать условия, при которых происходило наблюдение;
- ознакомиться с негативными последствиями мероприятия и способами их предотвращения.

Данную модель можно назвать обобщенной, поскольку она является общей для изучения всех явлений.

Задачи данной модели заключаются в совершенствовании метода формирования исследовательских знаний, умений и компетенций при обобщенном описании.

Эффективность такой модели методологического совершенствования определяет:

- уровень материально-технической базы учебного заведения;
- квалификационный уровень преподавательского состава;
- уровень подготовки студентов;
- оценка ожидаемых результатов;
- разработка дидактических материалов;
- анализ результатов и оптимизация модулей.

В процессе обучения формирование и развитие исследовательских умений студентов не генерируется автоматически или добровольно, а формируется и развивается на основе целенаправленной деятельности.

В целом процесс обучения должен быть как бы зеркальным отражением работы специалиста. Уровень их соответствия определяет качество подготовки специалистов.

ВЫВОДЫ

Предлагаемая программа формирования и развития исследовательских умений у учащихся отражает взаимосвязь между отдельными этапами деятельности учителя в целом процессе обучения и условиями, соответствующими уровню сформированности учебно-исследовательских умений и навыков у учащихся. Также эта программа определяет последовательность этапов ее реализации.

Дидактическая основа формирования и развития исследовательских умений учащихся была представлена как последовательная система взаимосвязанных действий учащихся и педагогов на основе инструментально-дидактических средств.

В программе конкретно указана педагогическая деятельность, построение педагогического процесса, мониторинг состояния педагогических и исследовательских способностей и навыков студентов. Далее, представлен анализ и подбор программного обеспечения и дополнительного научного материала. На уровне представлена организация обучения, как исследования с использованием активных форм и методов внеучебной деятельности, что позволить учащимся самостоятельно выбирать исследовательскую задачу или проблему. Кроме этого, сделан особый акцент на обучение технологиям научных и педагогических исследований и, также на обеспечение исследовательского процесса дидактическими и методическими средствами, что, несомненно, явится подспорьем для обучаемых в планировании, исследовании и оценке результатов.

Использованные источники:

1.Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисидаги Фармони// Ўзбекистон Республикаси Қонун ҳужжатлари тўплами. – Т., 2017. – 39-б.

2.Рубинштейн С.Л. Основы общей психологии. Учпедгиз, 1996. – 642 б.

3.Разыкова Л.Т. Талабаларда тадқиқотчилик кўникмаларини шакллантириш ва ривожлантиришнинг илмий-педагогик асослари// монография, Ташкент 2021 С 17-19

4.Успанова В.В. Сохранение психологического здоровья детей как условие развития творческого мышления в образовательном пространстве // Международная научно-практическая конференция, посвященная 50-летию основания КазГАТУ им. С.Сейфуллина. Астана-2007. – С. 239-241.

5.Разыкова Л.Т. General issues of career choice// Psychology and education 2021 58(02) С5056-5058

6.Тигров В.П. Развитие технического творчества студентов индустриально-педагогических факультетов: Дис. канд. пед. наук. - М., 1988. -174 с.

7.Разыкова Л.Т и другие. Педагогическая практика»// Учебник Самарканд, 2014 С-152.

8. D. – J. W.M. Mulders Инженерное образование на примере технологического университета Эйндховена // Инженерное образование, №13, 2013. – 115-123-с.

9. Батышев, С.Я. Актуальные проблемы подготовки рабочих в средних профтехучилищах / С.Я. Батышев. – М.: Педагогика, 1970. – 215-с.

10. Герасимов, И.Г. Структура научного исследования / И.Г. Герасимов. – М.: Мысль, 1985. –213-с.

11. Зиновкина М.М. Креативное инженерное образование. Теория и инновационные креативные педагогические технологии: Монография. – М.; МГИУ, 2003. – 372-с.

12. Злыднева, Т. П. Организация исследовательской деятельности студентов университета в процессе профессиональной подготовки: дис.... канд. пед. наук: 13.00.08 / Злыднева Татьяна Павловна. – Магнитогорск, 2006. – 204-с.

13. Зиятдинова, Ю.Н. Реформирование систем ВПО Китая и России: конец XX – начало XXI вв. / Ю.Н. Зиятдинова, Р.С. Валеева // Высшее образование в России. – 2012. №5. – 96-101-с.

УДК: 618.3-06

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ФАКТОРЫ РИСКА РАЗВИТИЯ СИНДРОМА ОГРАНИЧЕНИЯ РОСТА ПЛОДА

Резюме. Здоровье человека закладывается в период антенатального развития и обусловливается рядом факторов. Задержка внутриутробного развития является фактором риска заболеваний центральной нервной, сердечно-сосудистой систем и болезней обмена веществ.

Факторы, приводящие к дефициту массы тела при рождении, способны стойко изменять структуру тела, нарушать метаболическую стабильность, снижать уровень адаптационных возможностей организма, реализующихся через деятельность эндокринной, иммунной, нервной и сердечно-сосудистой систем.

Ключевая слова: рост плода, ограничения, фактор риска.

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RISK FACTORS FOR THE DEVELOPMENT OF FETAL GROWTH RESTRICTION SYNDROME

Resume. Human health is established during the period of antenatal development and is determined by a number of factors. Intrauterine growth retardation is a risk factor for diseases of the central nervous system, cardiovascular system and metabolic diseases. Factors leading to a body weight deficit at birth can persistently change the structure of the body, disrupt metabolic stability, and reduce the level of adaptive capabilities of the body, realized through the activity of the endocrine, immune, nervous and cardiovascular systems.

Keywords: fetal growth, limitations, risk factors.

Актуальность. Своевременная диагностика и адекватная терапия различных осложнений течения беременности, нарушений внутриутробного развития плода, поиск рациональных методов ведения беременных и тактики родоразрешения становятся одной из ведущих тенденций современного акушерства и перинатологии, важным аспектом медико-социальной проблемы и привлекают внимание ученых всего мира.

По данным Всемирной организации здравоохранения, частота встречаемости у новорожденных признаков задержки внутриутробного роста колеблется от 6,5% в развитых странах Европы до 31,1% в Центральной Азии. В России частота встречаемости синдрома задержки роста плода (СЗРП) составляет от 2,4 до 17,0% [2,5]. СЗРП - имеет большой удельный вес в структуре причин перинатальной заболеваемости и смертности, а репродуктивные потери и затраты на комплексное лечение детей с СЗРП причиняют значительный социальный и экономический ущерб. Кроме того, в структуре перинатальных потерь около 20% составляют нераспознанные случаи СЗРП [7].

СЗРП — нередко встречается у недоношенных детей: у 23% детей с очень низкой массой тела и у 38% - с экстремально низкой массой тела. У недоношенных с СЗРП в раннем неонатальном периоде часто встречаются респираторный дистресс-синдром, сепсис, бронхолегочная дисплазия, внутрижелудочковые кровоизлияния [1]. В дальнейшем у 60% детей отмечается отставание в физическом развитии, его дисгармоничность — в 80%, задержка темпов психомоторного развития в 42%. Стойкие тяжелые поражения ЦНС, такие как детский церебральный паралич, прогрессирующая гидроцефалия, олигофрения отмечаются у 12% детей [6].

Одним из важнейших параметров, определяющих степень нарушений функции ЦНС и паренхиматозных органов, является степень тяжести СЗРП. Есть доказательства отсроченного риска развития сердечно-сосудистой патологии, ассоциированной с малой массой тела при рождении.

Таким образом, длительное воздействие неблагоприятных факторов создает в конечном итоге суммарное нарушение общего развития и изменение качества всей последующей жизни. Большинство исследователей связывают СЗРП с плацентарной недостаточностью, частота которой при экстрагенитальной патологии матери достигает 80-90%. К наиболее значимым факторам риска развития СЗРП относят артериальную гипертензию матери, системные заболевания соединительной ткани, пороки сердца с нарушением кровообращения, острые инфекционные заболевания при беременности.

Все перечисленные заболевания у беременных почти всегда сопровождаются возникновением гиперкоагуляции, а в ряде случаев - и тромбофилией. Кроме того, в настоящее время диагностируются случаи врожденной и приобретенной тромбофилии без тяжелой экстрагенитальной патологии [3].

В литературе появились сведения о связи тромбофилии с развитием СЗРП. Авторы считают, что СЗРП значительно чаще развивается у беременных имеющих генетическую патологию системы гемостаза (Лейденовскую мутацию, мутации в гене протромбина, фермента метилентетрагидрофолатредуктазы, мутации гена антитромбина Ш, других антикоагулянтов, компонентов фибринолитического звена гемостаза) и/или антифосфолипидный синдром [4].

Одним из вариантов приобретенной тромбофилии является гипергомоцистеинемия, которая может быть и врожденной. Вместе с тем, есть мнение, что различные тромбофилии не приводят к увеличению частоты СЗРП.

Таким образом, до настоящего времени значение тромбофилии в развитии синдрома задержки роста плода изучено недостаточно, не выработана единая позиция в отношении значимости определения показателей коагулофаммы при беременности. Нунены новые проспективные исследования матерей и новорожденных с СЗРП.

Цель исследования: изучить факторы риска и исходы беременности у женщин с синдромом задержки роста плода.

Материал и методы исследования: под наблюдением находились 66 женщин, у которых во время беременности диагностирована задержка роста плода.

Результаты исследования. Проведенный анализ показал, что первородящие составили 62,1% случаев, из них 22,7% женщин были повторнобеременные. Из вредных привычек в 6% случаев отмечено табакокурение. Из перенесенных гинекологических заболеваний в анамнезе у пациенток с ЗРП в 13,7% случаев выявлены воспалительные заболевания органов малого таза, инфекции, передаваемые половым путем (ИППП) в 19,7% случаев, кандидозный вульвовагинит в 19,7%, эктопия шейки матки имела место у 21,2%, в 3% случаев отмечено бесплодие и у 1,5% наблюдаемых женщин встретился синдром поликистозных яичников. Среди соматической патологии в 16,7% случаев выявлена хроническая герпетическая инфекция, вегето-сосудистая дистония отмечена у 12,2% женщин.

В течении первой половины беременности угроза прерывания была выявлена у 63% пациенток с ЗРП, инфекции передаваемые половым путем были диагностированы в 33% случаев, в 13% случаев встретился кандидозный вагинит. Во второй половине беременности в 22% случаев были угрожающие преждевременные роды, в 32% случаев во время беременности пациентки перенесли ОРВИ, в 19% случаев беременность осложнилась преэклампсией, в 7% случаев многоводие.

Диагностирована ЗРП у 11,8% беременных с 20 до 31 недели гестации, из них в 7,6% случаев во время 2-го УЗИ скрининга, у 46,5% человек в сроке после 32 недель гестации, в 21,2% случаев во время 3-го УЗИ скрининга. У 31,8% беременных ЗРП была диагностирована после рождения.

Симметричная форма ЗРП была выявлена у 52,2% беременных, у остальных ассиметричная форма. ЗРП 1-й степени имела место у 82,5% женщин, 2-й степени – у 12,5% и в 5% случаев 3-й степени.

Все беременные получали этиотропную терапию.

Срочные роды произошли у 77,2% женщин, преждевременные роды составили 19,8% случаев, в 1 случае роды были запоздалые. Операцией кесарева сечения завершились роды у 18,1% женщин, в одном случае была

выполнена вакуум-экстракция плода. В 3% случаев беременность была двойней.

Все дети родились живыми, без асфиксии. В 42,4% случаев без признаков ЗРП.

Вывод. По результатам нашего исследования половина беременных с синдромом ЗРП была в возрасте от 26 до 35 лет. В 62,1% случаев ЗРП встретилась у первородящих. Высока частота в анамнезе перенесенных гинекологических заболеваний воспалительного генеза.

Основными этиологическими факторами во время беременности были угроза прерывания беременности (угроза выкидыша в 63% случаев, угрожающие преждевременные роды в 22% случаев), инфекционные заболевания (ИППП в 33% случаев и ОРВИ – в 32%) и преэклампсия в 19% случаев.

Таким образом, своевременная диагностика и лечение осложнений беременности позволили избежать неблагоприятных исходов и перинатальных потерь у беременных с синдромом задержки роста плода.

Использованные источники:

1. Акушерство и гинекология: клинические рекомендации / под ред. Г. М. Савельевой – М., 2008. – Вып. 3 – 506 с.
2. Акушерство: национальное руководство / под ред. Э. К. Айламазяна, В. И. Кулакова, В. Е. Радзинского, Г. М. Савельевой. – М.: ГЭОТАР-Медиа, 2007. – 1200 с. (Серия «Национальные руководства»).
3. Бушуева Э. В. Мониторинг физического развития детей раннего возраста в зависимости от массы тела при рождении / Э.В. Бушуева, Л. И. Герасимова, Т. Г. Денисова // Общественное здоровье и здравоохранение. – Казань. – 2010. –№ 1. – С. 40–43.
4. К вопросу о курабельности синдрома задержки роста плода / З. С. Крымшокалова [и др.] // Российский вестник акушера-гинеколога. – 2008. – Т. 8. – № 3. – С. 59–61.
5. Мониторинг факторов риска рождения детей с синдромом задержки внутриутробного развития / Т. Н. Сидорова [и др.] // Общественное здоровье и здравоохранение. – Казань. –2010. – № 2. – С. 73–74.
6. Оразмурадов А. А. Плацентарная недостаточность: реалии и перспективы: информационное письмо / А. А. Оразмурадов, С. В. Апресян. – М., 2009. – 32 с.
7. Педиатрия: национальное руководство / под ред. А. А. Баранова. – М.: ГЭОТАР-Медиа, 2009. – 1024 с.

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АХОЛИ БАНДЛИГИНИ ТАЪМИНЛАШ АХОЛИ ТУРМУШ ДАРАЖАСИНИ ОШИРИШНИНГ МУХИМ ОМИЛИ СИФАТИДА

Аннотация. Мақолада бандлик сиёсати, ишсизлик тушунчаси, аҳоли бандлигини таъминлаш бўйича амалга оширилаётган ислоҳотлар ёритилган.
Калит сўзлар: аҳоли, бандлик, меҳнат бозори, ишсизлик, микроиқтисодиёт, ялпи миллий маҳсулот, меҳнат ресурслари, кадрлар.

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PROVIDING EMPLOYMENT OF THE POPULATION AS AN IMPORTANT FACTOR OF INCREASE OF THE STANDARD OF LIVING OF THE POPULATION

Abstract. The article covers the employment policy, the concept of unemployment, and the reforms being implemented to ensure the employment of the population.
Key words: population, employment, labor market, unemployment, microeconomics, gross national product, labor resources, personnel.

Жамият аъзоларининг эҳтиёжлари юксалиб борар экан, ана шу эҳтиёжларни қондиришнинг ягона йўли иқтисодий ўсишдир. Иқтисодий ўсиш туфайлигина ижтимоий тараққиётга эришилади. Иқтисодий ўсиш мамлакатнинг куч-қудрати ўсаётганини кўрсатади. Микроиқтисодий ўсиш фирма, корхона ва айрим сектор (тармоқ) миқёсидаги ривожланишни ифода этади ва уларда ўсиш яратилган товарлар ва хизматларнинг бозор нархида ҳисобланган ҳажмига қараб аниқланади. Микроиқтисодий миқёсда тадбиркорлар ўз олдиларига иқтисодий ўсиш орқали максимал даражада фойда олишни қўядилар. Макроиқтисодий ўсиш миллий иқтисодиёт, яъни муайян мамлакат миқёсидаги иқтисодий тараққиётни ифода этади ва ялпи миллий маҳсулотнинг (ЯММ) кўпайишини билдиради. Макромиқёсда иқтисодий ўсишга эришишнинг оптимал мақсади барча аҳолини ҳаёт кечиришини яхшилаш, турмуш даражасини кўтаришдир. Экстенсив иқтисодий ўсишга ишлаб чиқаришнинг аввалги техникавий асоси сақланиб қолган ҳолда ишлаб чиқариш омиллари миқдорининг кўпайиши туфайли эришилади. Экстенсив ривожланишда, агар у соф ҳолда амалга оширилса, ишлаб чиқариш самарадорлиги ўзгармай қолади, чунки ҳар бир ишловчига

тўғри келадиган маҳсулот миқдори, яъни меҳнат унумдорлиги аввалгича қолади. Экстенсив ўсишнинг афзаллиги шундаки, у иқтисодий ўсишни таъминлашнинг энг осон йўли. Бунда табиий ресурсларни тезда ўзлаштириш ҳамда нисбатан тез фурсатда ишсизликни қисқартириш мумкин.Иқтисодий ўсишнинг интенсив тури янада прогрессивроқ ишлаб чиқариш воситаларини ва янги техникани қўллаш, ишчи кучи малакасини ошириш, шунингдек мавжуд ишлаб чиқариш потенсиалидан яхшироқ фойдаланиш йўли билан эришилади. Реал ҳаётда экстенсив ва интенсив омиллар соф ҳолда, алоҳида-алоҳида мавжуд бўлмайди, балки бир-бири билан қўшилган тарзда бўлади.

Мамлакатимиз томонидан сиёсий, иқтисодий, маънавий ислоҳотлар амалга ошириш учун, аҳоли бандлигини йўлга қўйишнинг назарий ва амалий механизмларини ишлаб чиқилмоқда. Бу борада Ўзбекистон Республикасида минтақалар бўйича меҳнат бозорини шакллантиришда самарали сиёсатни амалга ошириш, аҳолини ўсиши омилларини, иқтисодиёт тармоқларини ривожлантириш ва таркибий қайта ташкил этишнинг истиқбол йўналишларини эътиборга олган ҳолда бандликнинг янги шаклларини кенг тадбиқ этиш орқали аҳоли бандлигининг ўсишини таъминлаш каби вазифаларни бажарилишига алоҳида эътибор қаратилган.

Аҳоли бандлигини ўсишида корхоналарнинг самарали фаолияти жамият иқтисодий ривожининг муҳим омили ҳисобланади. Иқтисодиётни модернизация қилиш ва диверсификациялаш шароитида корхоналардаги кадрлар сиёсатини инсон омилига қаратилган стратегиясида меҳнатга қодир ҳар бир инсон ўз қобилиятларини ўстириш ва ўз меҳнат тарзини таъминлаши учун шароитлар яратиши назарда тутилади.

Ишсизлик - аҳолининг иқтисодий фаол қисмининг иш тополмагани сабали мамлакатнинг иқтисодиётида туғуладиган муаммодир. Аҳолининг ишга қобилиятли сонидан 6,5-7,5 % ишсизлик табиий ҳисобланади.

Ишсизлик - бир қисм иқтисодий фаол аҳолининг ўзига лойиқ иш топа олмасдан қолиши ва меҳнат захирасига айланиши. Ўзбекистонда ишсизлик тушунчаси расман 1992 й. "Аҳолини иш билан таъминлаш тўғрисида"ги қонунининг қабул қилиниши билан меъёрий кучга эга бўлди (1998 й. 1 майда ушбу қонуннинг янги таҳрири қабул қилинди).

Ҳозирги замон ривожланган бозор иқтисодиётининг энг катта муаммоларидан бири – табиатда энг ноёб бўлган инсон ресурсидан самарали фойдалана олмасликдир. Оддийроқ қилиб айтганда, ишлаш қобилиятига эга кишиларнинг иш билан таъминланмаслиги ишсизлик деб юритилади.

Ишсизлик бир неча сабабларнинг оқибати сифатида вужудга келади. Уларнинг баъзиларини келтириб ўтамиз:

1. Маълум бир даврда аҳоли сонининг кескин ортиб кетиши. Туғилиш вафот этишга нисбатан анча юқори бўлган мамлакатларда бўшаётган иш ўринларига нисбатан меҳнат бозорига янги кириб келаётган ёшларнинг кўплиги ушбу муаммога сабаб бўлади.

2. Иқтисодий тизимнинг ўзгариши ёки инқироз. Бозор иқтисодиётига ўтиш жараёнида давлат мулкининг хусусийлаштирилиши натижасида бир

нечта йирик корхоналар ёпилганини барчамиз яхши биламиз. Натижада ушбу корхоналарда иш билан банд бўлган кўп сонли инсонлар иш жойларидан ажралишган. Иқтисодий инқироз даврида ҳам деярли шундай, унда ҳам ишлаб чиқариш обектларининг ёпилиши натижасида ишсизлик кузатилади.

3. Илғор технологиялар. Илм – фаннинг ривожи ва бу соҳа ютуқларининг ишлаб чиқаришга татбиқ этилиши натижасида ҳам ишсизлик вужудга келиши мумкин., Минг дона ғиштни 10 – қаватга олиб чиқиш учун ўнта ишчи ҳам ишлатиш мумкин, битта ишчи ва битта кран ҳам ишлатиш мумкин.

Ишсизликнинг натижасида инсонларнинг даромад олиш манбалари йўқолади ва бу аҳоли турмуш даражасининг пастлашига олиб келади. Бундан ташқари даромадга эга бўлмаган аҳоли бозордаги маҳсулот ва хизматларга талабгор бўла олмайди. Талабнинг йўқолиши эса ўша соҳаларнинг касод бўлишига олиб келади. Масалан, тўқимачилик маҳсулотлари ишлаб чиқарувчи корхонанинг беркилиши натижасида ишсиз қолган одамлар аввалгидек, озиқ – овқат, кийим – кечак маҳсулотлари ва турли хил жиҳозлар сотиб ололмайди. Натижада ушбу маҳсулотларни ишлаб чиқарувчи ва сотувчи одамларнинг даромадлари ҳам пасаяди, бу жараён занжир шаклида давом этади.

Бундан ташқари ишсизлик ижтимоий салбий оқибатларни ҳам келтириб чиқаради. Етарли таъминотга эга бўлмаган кишилар ўғрилик, талончилик орқали пул топишга ўтадилар. Баъзилар эса, сиёсий ва иқтисодий тузумдан нолишни бошлашади ва бу оммавий норозиликларни келтириб чиқариши мумкин. Аҳолининг маълум бир қисми эса мўмай даромад мақсадида турли хил радикал экстремистик оқимларнинг таъсирига тушиб қолиши мумкин.

Ишсизлик коррупцияга йўл очиб беради. Яхши даромадли ишга жойлашиш мақсадида одамлар пора беришга ҳам рози бўлишади ва бундан баъзилар ўз манфаати йўлида фойдаланади. Ишсизлик натижасида ўртача иш ҳақининг пастлаши ҳам кузатилиши мумкин. Бир иш жойига бир нечта талабгорнинг мавжудлиги натижасида, иш берувчи ўз шартларини қўйиш имкониятига эга бўлади ва кўп ҳолларда улар ким энг оз иш ҳақига рози бўлса, ўша номзодни ишга қабул қилишади.

Фойдаланилган адабиётлар рўйхати:

1. Gaybullayevna, R. S.., & Musurmangulov. (2024). THE IMPORTANCE OF TIME MANAGEMENT IN ENSURING EFFICIENCY IN CONSTRUCTION. *JOURNAL OF ECONOMY, TOURISM AND SERVICE*, *3*(1), 28–31.

2. Gaybullayevna, R. S. (2023). THE STATE OF THE DIGITAL ECONOMY TODAY: PROBLEMS AND SOLUTIONS. *JOURNAL OF ECONOMY, TOURISM AND SERVICE*, *2*(12), 38-42.

3. Ilyos, T. & Sharifa, R., (2023). PRINCIPLES OF SCIENTIFIC MANAGEMENT IN MANAGEMENT. *Новости образования: исследование в XXI веке*, *2*(16), 1097-1100.

4. Sayyora, M. & Sharifa, R., (2023). HISTORY OF EMERGENCE OF MANAGEMENT AND ITS PLACE TODAY. *Новости образования: исследование в XXI веке*, *2*(16), 1093-1096.
5. Sharifa, R. (2023). DIRECTIONS FOR INCREASING INVESTMENT ATTRACTIVENESS IN REGIONS. *Новости образования: исследование в XXI веке*, *2*(16), 1088-1092.
6. Nozima, T. & Sharifa, R., (2023). QUALITY MANAGEMENT IN COMPETITIVE CONDITIONS IS THE MAIN FACTOR OF ENTERPRISE SUCCESS. *SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM*, *2*(20), 200-203.
7. Sharifa, R., & Mahliyo, K. (2023). ORGANIZATIONAL STRUCTURE OF ENTERPRISES AND THEIR APPEARANCES. *JOURNAL OF ECONOMY, TOURISM AND SERVICE*, *2*(5), 77-83.
8. Gaybullayevna, R. S. (2023). WOMEN'S ENTREPRENEURSHIP IS A FACTOR OF INCREASE IN OUR COUNTRY'S ECONOMIC WELFARE AND SOCIAL DEVELOPMENT. *JOURNAL OF ECONOMY, TOURISM AND SERVICE*, *2*(5), 73-76.

УДК.501.3(075)

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БИОЛОГИК РЕСУРСЛАРДАН ФОЙДАЛАНИШ ИҚТИСОДИЙ БАРҚАРОРЛИК ГАРОВИДИР

Аннотация. Биохилма-хиллик-бу тирик организмнинг мураккаблигини, унинг ўз функцияларини ўз-ўзини тартибга солиш қобилиятини ва улардан ҳар томонлама фойдаланиш имкониятини акс еттирувчи биологик объектларнинг ҳар хил турлари ёки ҳодисалари сони ва уларнинг пайдо бўлишининг белгиланган макон ва вақт оралиғида такрорланиши. Биологик хилма-хилликка барча ҳайвонлар, ўсимликлар, замбуруғлар, микроорганизмлар ва екотизимлар ҳамда уларда содир бўладиган жараёнлар киради.

Калит сўзлар: биохилма-хиллик, ўрмонлар, авлодлар, екотизим, чўл, дашт, ўсимлик, хайвонот.

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USE OF BIOLOGICAL RESOURCES IS A GUARANTEE OF ECONOMIC STABILITY

Abstract. Biodiversity is the number of different types or phenomena of biological objects reflecting the complexity of a living organism, its ability to self-regulate its own functions and the possibility of their comprehensive use, as well as the repetition of their occurrence in a given space and time frame. Biological diversity includes all animals, plants, fungi, microorganisms and ecosystems, as well as the processes that occur in them.

Keywords: biodiversity, forests, generations, ecosystem, desert, steppe, vegetation, pagans.

Биохилма ернинг биосфера қобиғида яшовчи флора ва фаунанинг турли шакллари, кўриниши ва хилма-хиллиги экотизимларга қараганда анча хилма-хилдир. Чунки экологик тизимда организмлар нафақат хилма-хиллиги, балки катталиги, муайян функцияларни бажариш қобилияти ва муайян табиий жараёнларда иштирок этиши билан ҳам фарқланади. Уларнинг ҳар бири, рангидан қатий назар, биосферада маълум бир экологик функцияни бажаради.

Тупроқдаги азотли бирикмаларни (нитратларни) парчалайдиган микроорганизмлар бактериялар вазифасини тупроқда яшовчи бошқа микроорганизмлар бажара олмайди. Худди шундай, йиртқичлар озиқ-овқат занжиридаги ўлжани алмаштира олмайди. Сайёрада 500000 дан ортиқ ўсимлик турлари мавжуд ва одамлар улардан фақат 6000 тасини кундалик ҳаётларида ишлатишади. 1500 турдаги ўсимликлар доривор ўсимликлар тоифасига киради. Ўзбекистондаги 4148 ўсимлик туридан 577 таси доривор, 103 таси бўёқ ва 560 таси эфир мойларидир. Ўрмонлар мамлакат умумий майдонининг 5,1 фоизини эгаллайди, аммо уларнинг ер қоплами 0,3-0,4% ни ташкил қилади. Сўнгги 20 йил ичида экологик вазиятнинг ёмонлашувига Ўзбекистон қизил китобига флоранинг 147 тури киритилгани сабаб бўлмоқда. Ер юзида фаунанинг 2 миллиондан ортиқ турлари мавжуд бўлиб, уларнинг ҳар бири экотизимларда ўз ўрнига ва фойдали экологик хусусиятларга эга. Ерда яшайдиган ва ўсадиган ноёб, йўқолиб кетиш хавфи остида бўлган тирик ва тирик организмларнинг бир тури ҳар куни мамлакатлар ёки дунёнинг қизил китобларига киритилган.

Шунинг учун одамлар хилма-хилликни сақлашлари керак. 156 мамлакат раҳбарлари томонидан 1992 йилда Рио-де-Жанейрода (Бразилия) имзоланган биологик хилма-хиллик тўғрисидаги Конвенцияга Қўшилган Ўзбекистон Республикасида 1995 йилда олий Мажлис томонидан ратификация қилинган. Биологик хилма-хиллик тўғрисидаги халқаро Конвенциянинг мақсадлари қуйидагилардан иборат: - ердаги биологик ресурсларнинг хилма-хиллигини сақлаш; миллий иқтисодиётда (қишлоқ, ўрмон ва балиқчилик) биологик ресурслардан фойдаланишда табиий ресурсларга ва миллий иқтисодиётга зарар етказмайдиган усуллардан фойдаланиш; генетик ресурслардан фойдаланиш ва улардан фойдаланишда адолатли ва адолатли усуллардан фойдаланишни рағбатлантириш. Биохилма-хиллик ҳар бир мамлакатнинг ҳаётий манбаидир. Бу иқтисодий фаолиятнинг асосини ташкил этади ва яшаш воситасидир. Уни сақлаб қолиш ва ундан оқилона фойдаланиш ҳар қандай давлатнинг ривожланишига эришиш учун жуда муҳимдир.

Биохилма-хилликни ҳимоя қилиш ва таъминлаш суғурта учун ноёб ҳисса ҳисобланади келажак авлодлар фонди, чунки ҳатто одамларга умуман фойда келтирмайдиган ҳаёт шакллари ҳам табиатда муҳим аҳамиятга эга. "Биологик хилма-хиллик" ёки "биологик хилма-хиллик" атамаси нисбатан янги ва кам маълум. Бу ерда мавжуд бўлган барча тирик мавжудотлар -

ҳайвонлар, ўсимликлар, замбуруғлар ва бактерияларнинг хилма-хиллигини ифодалайди. "Биологик хилма-хиллик" атамаси биологик дунёнинг барча қисмларининг ўзаро боғлиқлигини англатади. Биохилма-хиллик кўпинча учта даражада кўриб чиқилади: 1. Турларнинг хилма - хиллиги-яъни барча ўсимликлар ва ҳайвонларнинг, шу жумладан замбуруғлар ва микроорганизмларнинг хилма-хиллиги; 2.Генетик хилма-хиллик-тур ичидаги генетик материалнинг хилма-хиллиги; 3.Экотизим хилма-хиллиги-бу экотизимларнинг хилма-хиллиги (масалан, ўрмонлар, тоғлар, даштлар ёки саванналар,чўллар ва бошқалар).).

Ҳайвонлар ва ўсимликларнинг ёввойи ва хонакилаштирилган (маданий) турлари озиқ-овқатнинг ягона манбаи ва кўплаб дори-дармонларнинг асоси ва кўплаб саноат маҳсулотларининг ажралмас қисмидир. Қўшма Штатлар каби саноати ривожланган мамлакатларда ялпи миллий маҳсулотнинг (ЯИМ) тахминан 4,5% фақат ўсимлик ва ҳайвонот дунёсининг ёввойи турларидан фойдаланиш натижасида ҳосил бўлади. Кам ривожланган мамлакатлар учун бу миқдор анча юқори бўлиши мумкин. Маданий ўсимликлар ва уй ҳайвонларининг ҳозирги тижорат аҳамияти жуда катта. Масалан, Ўзбекистонда қишлоқ хўжалиги ишлаб чиқариши Яимнинг қарийб 45 фоизини ташкил этади. Биохилма-хиллик биосферани ташкил қилади, инсон бошқа биологик турлар билан бир қаторда биосферада яшайди ва инсоннинг омон қолиши ва фаровонлиги унинг ҳолатига боғлиқ. Илгари, инсон фаолияти кўлами уларга таъсир қилмаган бўлар эди, чунки улар табиий ресурслар миқдорига нисбатан жуда кичик эди. Энди, инсоният21-асрга кириб борар экан, иқлим ўзгариши, чўлланиш, биохилма-хилликни йўқотиш ва ҳоказолар таҳдиди инсон ўзининг келажакдаги мавжудлиги пойдеворига путур етказаётганини кўрсатмоқда.

Марказий Осиё минтақасини иқтисодий ривожлантиришни ўйланмаган режалаштириш натижасида юзага келган Орол денгизи муаммоси бундай ривожланиш алоҳида минтақалар учун қанчалик хавфли бўлиши мумкинлигига яққол мисолдир. Ўзбекистон асосан аграр мамлакат бўлгани учун бу табиий муҳит сифатига боғлиқ. Илгари биологик ресурсларнинг атроф-муҳитни таъминлашда бевосита фойдаларижараёнлар ва уларнинг мамлакатни барқарорлаштириш ва ривожлантиришдаги алоҳида роли ҳисобга олинмади. Ҳозирги кунда Ўзбекистонда овчиликни бошқариш, доривор ўсимликларни йиғиш ва биохилма-хиллик ресурсларидан барқарор фойдаланишнинг шу каби механизмлари ишлаб чиқилган бўлса-да, барча иқтисодий ва экологик манфаатларни ҳисобга оладиган умумий ёндашув нисбатан янги. Халқаро тажриба шуни кўрсатадики, ушбу сектор мувозанатли бўлганда катта иқтисодий фойда келтириши ва мамлакат ривожланишини тезлаштириши мумкин. Биоресурслардан барқарор фойдаланиш уч тоифага бўлинади: барқарор иқтисодий фойдаланиш; илмий ва маърифий мақсадларда фойдаланиш; маданий ва рекреацион (рекреацион) мақсадларда фойдаланиш. Биологик хилма-хилликдан иқтисодий мақсадларда фойдаланиш ов, туризм

ва маълум бир иқтисодий қийматга эга маҳсулотларни сотиб олиш каби фаолиятни ўз ичига олади.

Шунингдек, уни пул кўринишида баҳолаш қийин, аммо у сув ҳавзаларини муҳофаза қилиш ва чўлланишнинг олдини олиш каби республика

учун барқарорлаштирувчи ва иқтисодий аҳамиятга эга бўлган жиҳатларни ҳам қамраб олади. Биохилма-хилликдан барқарор иқтисодий фойдаланиш алоҳида муҳофаза этиладиган табиий ҳудудлар тизимида биохилма-хилликни сақлаш, имтиёзларнинг адолатли тақсимланиши, айниқса қишлоқ (маҳаллий) аҳоли манфаатларини кўзлаб, Ўзбекистонда биохилма-хиллик ресурсларидан барқарор иқтисодий ва экологик фойдаланишни ривожлантириш, назорат ва ҳисобдорликни қайта кўриб чиқиш учун зарур бўлган махсус механизм ва усуллардан фойдаланиш талаб этилади.

Табиий ҳудудлардан илмий тадқиқотлар учун тирик лабораториялар сифатида фойдаланиш биологик хилма-хилликни сақлаш ва ундан фойдаланишни яхшироқ тушуниш учун асосдир.

Табиий ҳудудлар экологик таълим учун асосий ресурс материалидир. Табиий ҳудудда бўлгандагина жонли ва жонсиз табиатнинг мураккаб ўзаро боғлиқлиги ва уйғун ўзаро таъсирини кўриш ва ҳис қилиш мумкин. Фақат табиий муҳит билан бевосита алоқада бўлган одам (айниқса болалар) ўзи учун кўп нарсаларни кашф этади, масалан, кирпи нима учун тиканли, қушлар нима учун илонларни ёқтирмайди ва қўрқади, нега ҳайвонлар ҳимоя соясига муҳтож ва бошқалар. Сайёра жонзотларининг "ёввойи" ҳаётини кузатиш орқали инсон ўз соғлиғини сақлаш учун айниқса зарур бўлган жуда кўп фойдали маълумотларни олади, чунки ҳайвонлар томонидан кўплаб доривор маҳсулотлар (ёки заҳарлар) аниқланган. "Ўзгармаган" табиий ҳудудлар ва шаҳарларни ёки саноат агломератларини таққослашда сезиларли фарқлар одамни беихтиёр табиат мўрт ва инсоннинг бехосдан фаолияти салбий таъсир кўрсатиши мумкин деб ўйлайди. Илмий ва таълим мақсадларида барқарор фойдаланиш қуйидагиларни ўз ичига олади: тадқиқот мақсадларида биологик хилма-хилликдан фойдаланишнинг афзалликларини максимал даражада ошириш; Ўзбекистонда ўсимликларнинг биохилма-хиллигини сақлаш ва улардан оқилона фойдаланиш (масалан, жаҳон аҳамиятига эга ёввойи олмалардан); иқтисодий фойда олиш учун мўлжалланган биотехнология ва биофармацевтикаларни ривожлантириш энг муҳим вазифалардан биридир.

Хулоса қилиб айтганда афсуски, сўнгги уч ярим аср давомида 60 дан ортиқ турдаги ҳайвонлар ва 100 га яқин қуш турлари ер юзидан ғойиб бўлди. Бундай ҳалокатли жараён XX аср охирида ўзини янада кучлироқ намоён қила бошлади. Афсуски, бу ҳали ҳам давом этмоқда. Йўқолиб кетиш сутемизувчиларнинг 120 турига ва қушларнинг 187 турига таҳдид солмоқда. Ўсимлик ва ҳайвонот дунёсининг қашшоқлашувини тўхтатиш ва ҳайвонот дунёсининг хилма-хиллигини сақлаш энг устувор вазифадир. Ҳар бир биологик тур ўзига хос хусусиятларга эга ва ҳимояга лойиқдир. Қўриқхоналар, миллий боғлар, қўриқхоналар ва бошқа қўриқланадиган ҳудудларда ўсимлик ва ҳайвонот дунёсининг барча хилма-хиллигини сақлаш ҳар бир фуқаронинг энг муҳим вазифаси ва вазифаси эканлигини унутмаслигимиз керак.

Фойдаланилган адабиётлар рўйхати:

[1]. Valijonovich, R. S., Axmadjanovich, T. A., & Khoshimjon, Y. S. (2021). Causes and Consequences of Floods and Floods in The Safety of Life, Measures to Protect the Population and The Territory. International Journal of Progressive Sciences and Technologies, 25(1), 83- 86.

[2]. Valijonovich, R. S., Axmadjanovich, T. A., & Khoshimjon, Y. S. (2021). Causes and Consequences of Floods and Floods in The Safety of Life. Measures to Protect the.

[3]. Рахманов, Ш. В., Игамбердиева, Д. А., & Рахимов, У. Ю. (2017). Пути повышения плодородия эродированных почв в Наманганской области. Молодой ученый, (20), 226- 228.

[4]. Рахманов, Ш. В., & Рахимов, Х. М. (2020). Система методов обучения безопасности жизнедеятельности. Вестник науки и образования, (2-2 (80)), 67-69.

[5]. Рахманов, Ш. В. (2023). ХАНИЗМ ОБРАЗОВАНИЯ МОЧЕВИНОФОРМАЛЬДЕГИДНОЙ СМОЛЫ НА ОСНОВЕ МОЧЕВИНЫ И ФОРМАЛЬДЕГИДА. Scientific Impulse, 1(9), 719-726.

[6]. Рахманов, Ш. В., Игамбердиева, Д. А., & Рахимов, У. Ю. (2017). Пути повышения плодородия эродированных почв в Наманганской области. Молодой ученый, (20), 226- 228.

[7]. Ахмедов, Б., & Рахманов, Ш. В. Тупроқ эрозияси ва унга қарши кураш чоралари. ФарПИ илмий техника журнали. Фарғона-2013 йил, 3.

[8]. Rakmanov, S. V. (2023). GRANULOMETRIC OF GOVASOI CLAYS ANXIOUS RESULTS. Scientific Impulse, 1(9), 727-734.

[9]. Мамадалиев, Ш. М., & Рахмонов, Ш. В. (2023). ПРОБЛЕМЫ АРАЛЬСКОГО МОРЯ И ВОДНЫЕ РЕСУРСЫ ЦЕНТРАЛЬНОЙ АЗИИ. Экономика и социум, (5-2 (108)), 899-903.

[10]. Исабоева Д. Рахмонов Ш.В. Атроф муҳит ва сув ҳавзаларининг ифлосланиши ҳамда уларни тозалаш усуллари. «Экономика и социум» 1 (10), 101-108

[11]. Валижонова Наргиза., Ш.Рахманов. ЧИҚИНДИЛАРНИ ҚАЙТА ИШЛАШ ИСТИҚБОЛЛАРИTEXNIKA VA TEXNOLOGIYALAR RIVOJINING ISTIQBOLLARI: Конференция.НамМКИ.2023й

УДК 616.62–003.7–073.43 (045)

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ЭФФЕКТИВНОСТЬ УЛЬТРАЗВУКОВОГО ИССЛЕДОВАНИЯ ПРИ ДИАГНОСТИКЕ УРЕТЕРОЛИТИАЗА

Резюме. Работа показывает принципиальную возможность визуализации мочеточника при синдроме почечной колики. Разработанная схема протокола ультразвукового исследования мочеточников позволяет более достоверно диагностировать конкремент в мочеточниках. Предложенная модификация ультразвукового метода исследования расширяет возможности УЗИ при синдроме почечной колики, вызванном конкрементом в мочеточнике.

Метод позволяет определить степень дилатации мочевыводящих путей, изучить структуру стенки мочеточника, размеры конкрементов.

Описанные ультразвуковые критерии и оценка обструкции позволяют в короткие сроки выбрать тактику и метод лечения пациентов.

Ключевые слова: уретролитиаз, ультразвуковая диагностика.

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THE EFFECTIVENESS OF ULTRASOUND IN THE DIAGNOSIS OF URETEROLITHIASIS

Resume. The work shows the fundamental possibility of visualizing the ureter in renal colic syndrome. The developed scheme of the protocol for ultrasound examination of the ureters allows more reliable diagnosis of calculus in the ureters. The proposed modification of the ultrasound research method expands the capabilities of ultrasound in renal colic syndrome caused by calculus in the ureter.

The method allows to determine the degree of dilatation of the urinary tract, to study the structure of the ureteral wall, the size of calculi.

The described ultrasound criteria and the assessment of obstruction make it possible to select the tactics and method of treatment of patients in a short time.

Key words: urethrolithiasis, ultrasound diagnostics.

Актуальность. Мочекаменная болезнь является одним из распространенных урологических заболеваний. По данным медицинской статистики, нефролитиазом страдает 10-15% жителей мире, преимущественно это лица в возрасте от 20 до 50 лет [3].

Больные с различными формами этой патологии занимают 35 – 50% коечного фонда урологических стационаров. Из всех больных, страдающих мочекаменной болезнью, на камни мочеточников приходится около 50% [5]. По мнению многих авторов, в связи с ухудшением экологической ситуации, это заболевание имеет тенденцию к росту.

Помимо высокой заболеваемости населения уролитиазом, актуальность проблемы состоит и в том, что болезнь имеет длительное, часто рецидивирующее течение с прогрессирующим нарушением анатомического и функционального состояния почек и мочевыводящих путей, заканчивающимся хронической почечной недостаточностью [1].

Все это значительно ограничивает работоспособность больных [4]. Среди причин инвалидности, вследствие урологических заболеваний, мочекаменная болезнь занимает третье место вслед за злокачественными новообразованиями и пиелонефритом. Социальную значимость этих больных подчеркивают данные первичной инвалидности по основным группам урологических заболеваний, где доля мочекаменной болезни составляет от 6,0 до 14,4% [6].

Опасность быстрого развития инфекционно-токсических осложнений у больных МКБ с окклюзией верхних мочевых путей требует применения неотложных лечебных мероприятий, что выдвигает вопросы диагностики уретеролитиаза и его осложнений на первый план. До настоящего времени диагностика уретеролитиаза в основном базируется на результатах рентгенологического исследования, но его эффективность недостаточна. Для улучшения диагностики рекомендуется комплексное применение лучевых методов, включая УЗИ, КТ. При этом большинство авторов предлагают шире использовать КТ, как более информативный метод.

Несмотря на углубленные работы ведущих специалистов в области ультразвукового исследования мочевыделительной системы, вопросы диагностики уретеролитиаза к настоящему времени изучены недостаточно. Роль ультразвукового исследования при уретеролитиазе сводится к оценке состояния лоханки и к исследованию нижнего отдела мочеточника.

Возможности УЗИ в диагностике конкрементов, локализованных в других отделах мочеточника, а в равной степени выявление изменений в мочеточниках и прилежащих к нему тканях, при уретеролитиазе изучены недостаточно [2].

Так, отсутствует единый подход к методике проведения УЗИ различных отделов мочеточника при уретеролитиазе, недостаточно определена ультразвуковая семиотика в зависимости от локализации конкремента, не определена диагностическая значимость отдельных ультразвуковых симптомов уретеролитиаза.

Недостаточно используется метод ультразвукового исследования для изучения транспортной функции мочевых путей, в выявлении нарушения уродинамики. Для определения места УЗИ в комплексной лучевой диагностике уретеролитиаза важно провести сравнение возможностей УЗИ и

рентгенологических методов исследования. Решению этих вопросов посвящено настоящее исследование.

Цель исследования. Обоснование возможностей широкого применения ультразвукового метода исследования для диагностики уретеролитиаза и контроля его лечения на различных этапах.

Материалы и методы исследования. Ретроспективному анализу подвергнуты результаты 64 исследования клинических ситуаций острых болей в подвздошной области в сочетании с дизурией и эритроцитурией у пациентов, направленных на обследование в экстренном порядке.

Результаты исследования. Усовершенствована методика УЗИ мочеточников при уретеролитиазе посредством применения ЦДК и допплерометрии. Асимметрия потоков мочи при ЦДК является признаком обструкции мочевыводящих путей. Допплерометрия позволяет выявить степень расстройства уродинамики.

ЦДК и допплерометрия в сочетании с В-режимом являются эффективными методами в оценке сократительной функции мочеточников при уретеролитиазе. Точность исследования составляет 97,5%, чувствительность 98,5%, специфичность 96,5%.

Спектр потока мочи может быть представлен кривой с различным количеством пиков отличающихся по амплитуде, продолжительности и максимальной скорости потока или вовсе не содержать пиков, такая кривая напоминает кривую ламинарного течение крови по венам, а ее спектр называется «венозным».

Наличие на допплерограмме коротких или продолжительных пиков с различной амплитудой свидетельствует о сохранении способности к самостоятельному изгнанию конкремента или его фрагментов после ДУВЛТ. Появление «венозного спектра» является отражением исчерпанных возможностей мочеточника для изгнания конкремента.

Наличие на допплерограмме коротких или продолжительных пиков с различной амплитудой свидетельствует о сохранении тонуса и сократительной способности мочевыводящих путей и может определять дальнейшую тактику ведения больного в пользу ДУВЛТ.

Появление «венозного спектра» является отражением исчерпанных возможностей мочеточника для изгнания конкремента и может послужить одним из оснований для инструментального вмешательства.

Использованные источники:

1. Аляев, Ю.Г. Клиническое значение комплексного исследования мочевых камней / Ю.Г. Аляев, Г.М. Кузьмичева, В.И. Руденко, Л.М. Раппорт // Материалы Пленума правления Российского общества урологов. М., 2013. - С. 58-59.

2.Белый, Л.Е. Ультразвуковые диагностические критерии почечной колики / Л.Е. Белый // Сборник тезисов I съезда врачей ультразвуковой диагностики Центрального федерального округа. М., 2015. - С. 4850.

3.Кармазановский, Г.Г. О некоторых проблемах отечественной лучевой диагностики / Г.Г. Кармазановский // Материалы конференции «Лучевая диагностика на Кубани». Краснодар, 2014. - С. 14—22.
4.Лопаткин, Н.А. 15-летний опыт применения ДЛТ в лечении МКБ / Н.А Лопаткин, Н.К. Дзеранов // Материалы Пленума правления Российского общества урологов: тезисы докл. науч. конф. М., 2013. -С. 5-25.
5.Ege G, Akman H, Kuzucu K, and Yildiz S Can computed tomography scout radiography replace plain film in the evaluation of patients with acute urinary tract colic? Acta Radiol, Jul 2014; 45(4): 469-73.
6.Katsaros V.K., Koelliker S.L. Cronan J.J. Acute urinary tract obstruction. Imaging update. //Urol. Clin. North. Am. 2012. - Aug; 24(3). - p. 57182.

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НЕКОТОРЫЕ АСПЕКТЫ КАРТОГРАФИРОВАНИЯ УСТОЙЧИВОСТИ ЭКОСИСТЕМ ДЕЛЬТЫ АМУДАРЬИ НА ПРИМЕРЕ АНАЛИЗА ТЕМПЕРАТУРЫ ПОВЕРХНОСТИ ЗЕМЛИ ПО ДАННЫМ ДИСТАНЦИОННОГО ЗОНДИРОВАНИЯ

Аннотация. В данной статье на основе анализа температур поверхности земли, полученных со спутниковых данных и применением геоинформационных технологий сделана попытка картографирования устойчивости экосистем дельты Амударьи.

Ключевые слова: картография, дистанционное зондирование, геоинфомационные системы, дельта Амударьи температура поверхности суши (LST), нормализованный индекс растительности (NDVI), LANDSAT 8.

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SOME ASPECTS OF MAPPING THE SUSTAINABILITY OF ECOSYSTEMS IN THE AMUDARYA DELTA USING THE EXAMPLE OF ANALYSIS OF EARTH SURFACE TEMPERATURE BASED ON REMOTE SENSING DATA

Abstract. In this article, based on an analysis of earth surface temperatures obtained from satellite data and the use of geographic information technologies, an attempt is made to map the sustainability of the ecosystems of the Amudarya delta.

Keywords: Cartography, Remote Sensing, Geoinformation Systems, Amu Darya Delta Land Surface Temperature (LST), Normalized Vegetation Index (NDVI), LANDSAT 8.

Сегодня потребность и спрос на картографические работы, отражающие меняющиеся условия окружающей среды, несколько изменились. Сейчас при картографировании регионов насущной потребностью становится создание баз данных на основе данных ГИС и ДЗЗ и обогащение карт на основе представленной в них информации. Создание климатических карт и экологической оценки изменений климата дают возможность отдельно работать и оценивать большое количество данных. В нашем научном исследовании мы рассматриваем вопросы температуры поверхности суши в регионе и ее роль в изучении экологических и природных условий.

Температура является одним из наиболее важных факторов, которое следует учитывать при исследовании местности. Он считается наиболее актуальным при изучении ранней ландшафтной и экологической структуры. Это означает, что «Температура является важным параметром окружающей среды, который прямо или косвенно контролирует микроклимат и экологические процессы на земле в глобальном и локальном масштабе [1].

Картографические работы, сформированные на основе температурного анализа, представляют собой преимущественно особый подход к оценке экологического ландшафта, сложившегося на территории. Сегодня, когда на нашей планете происходят глобальные климатические изменения, необходимость такой оценки возрастает.

Данные о температуре поверхности земли (LST) относятся к температуре земной поверхности, которая в основном измеряется с помощью спутниковых наблюдений или специального оборудования, размещенного на земле. Температура поверхности земли играет важную роль в процессе обмена явным и скрытым тепловым потоком [2;3;4]. Он представляет фактическую температуру поверхности земли, включая природные и искусственные объекты, такие как растительность, водоемы и поселения. «Температура поверхности земли (LST) известна как температура земной поверхности и используется для анализа энергетического баланса и теплового потока земной поверхности». Пункты, упомянутые в [1], показывают, насколько разумен наш научный подход.

Здесь следует сказать, что LST важен в исследованиях климата, городском планировании, сельском хозяйстве и мониторинге окружающей среды. Кроме того, анализ LST используется во многих других областях. К ним относятся лесные пожары и их распространение [5;6], засуха и опустынивание [7], эффекты городского острова тепла и микроклимат [8;9;10], вулканическое и геотермическое картирование, землепользование и изменение земного покрова [9;11] и такие, как исследования изменения климата [11].

Он предоставляет важную информацию о теплообмене между поверхностью земли и атмосферой и может использоваться для анализа показаний температуры, обнаружения аномалий и изучения взаимодействия суши и атмосферы. Это означает, что температура поверхности является важным параметром модели поверхности суши [12;13; 14]. Индикаторы LST разрабатываются по специальному алгоритму, основанному преимущественно на спутниковых метаданных. Это позволяет проводить анализ во многих аспектах. Среди них продукт температуры поверхности земли (LST) с высоким пространственным разрешением находит широкое применение для мониторинга водного стресса, поверхностной энергии и водного баланса в региональном масштабе [15].

Показатели температуры формируются на основе показателей излучательной способности земной поверхности и значений доли растительности. Это означает, что в формировании LST данные индекса NDVI также играют определенную роль.

Район исследования: Нижне-Амударьинский природно-географический регион включает дельту Амударьи. Регион граничит с равниной Устюрт на западе, Туркменистаном на юго-западе, пустыней Кызылкум на востоке и Аральским морем на севере. Общая площадь природного региона составляет около 50 000 квадратных километров.

Нижне-Амударьинская природно-географический регион простирается с юго-востока на северо-запад, ареал уменьшается к северо-западу. Территория начинается от пролива Туямуйин на юго-востоке и продолжается до Аральского моря. Ее длина в этом интервале составляет 400 км, а ширина, по данным сайта geografiya.uz, неодинакова. [16].

Выбранная нами территория – это территория Нукусского, Караузякского и Амударьинского районов Республики Каракалпакстан, расположенные в реке Амударья. Часть этой территории, где мы провели геопространственный анализ, включает территорию от 59°10′ восточной долготы до 60°50′ восточной долготы и от 41°50′ северной широты до 43°50′ северной широты. (Рисунок 1)

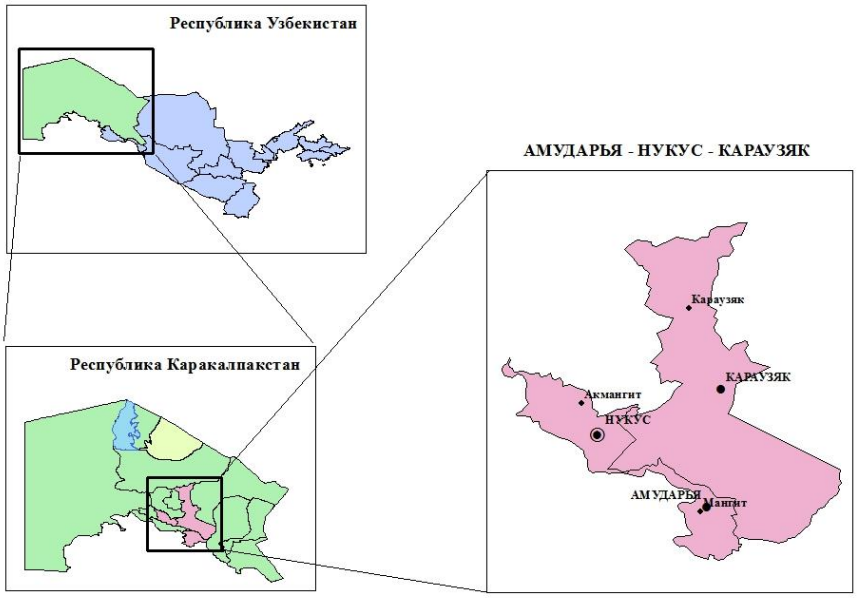

Рисунок 1. Область исследования.

Общая площадь выделенного участка составляет 8,07 тысяч квадратных километров [17].

Особенности выбранной территории: Здесь можно наблюдать разнообразие природного ландшафта. Включение в территорию исследований гидрографических объектов и находящихся под их влиянием, сельскохозяйственных территорий и пустынных зон позволило провести анализ приземной температуры на различных описательных территориях. Немаловажно и то, что выбранные нами районы имеют хороший показатель в Республике Каракалпакстан по численности и плотности населения на территории [18].

Это полезно при изучении места анализа LST и анализе условий жизни населения, сельского хозяйства.

Исследования, в основном, проводились в регионе в период с 2013 по 2023 годы для наблюдения за динамикой изменения результатов приземной температуры и ее влияния на растительность и другие показатели. По результатам исследований составлены карты.

Анализ LST проводится посредством ряда спектральных анализов. Были проанализированы спектральный уровень освещенности, световая температура, анализ уровня растительности и уровни излучательной способности. На основе этих результатов были созданы карты анализа температуры поверхности и проведены соответствующие сравнения.

Анализ показал, что по итогам июля 2013 г. на исследуемой территории зафиксирован самый низкий показатель приземной температуры 59,3°C, а самый высокий показатель составил 75,3°C (рисунок 2а). К 2018 году этот показатель составил 46,01°C и 76,2°C соответственно (рисунок 2б). Наконец, к 2023 году мы снова увидим увеличение этой цифры. Самая низкая

температура составила 50,2°C, а самая высокая температура — 76,93°C (рис. 2в).

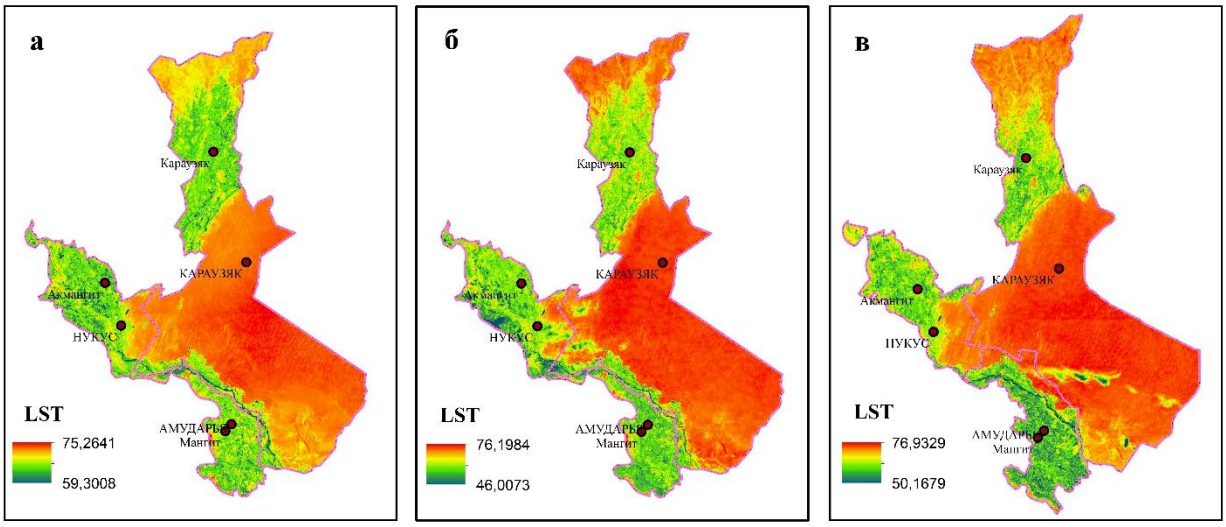

Рисунок 2. Аналитические карты приземной температуры: а) по данным на 07.02.2013 г.; б) по данным на 16.07.2018; в) Сформировано на основании данных от 14.07.2023.

Хорошо известно, что температура земной поверхности отражает различные температурные результаты в зависимости от типа земного покрова. Благодаря этому свойству можно изучить тип почвенного покрова местности и процесс его формирования. Максимальное повышение температуры мы можем наблюдать в бесплодных и пустынных зонах. На обводненных участках и участках с хорошим развитием растительности, наоборот, наблюдалось понижение температуры. Благодаря этому анализу можно провести анализ изменений ландшафтного покрова в регионах.

Температурный анализ показывает, что температура поверхности в регионе постоянно повышается. Индекс средней температуры также зафиксировал нестабильные цифры роста. (Рисунок 3).

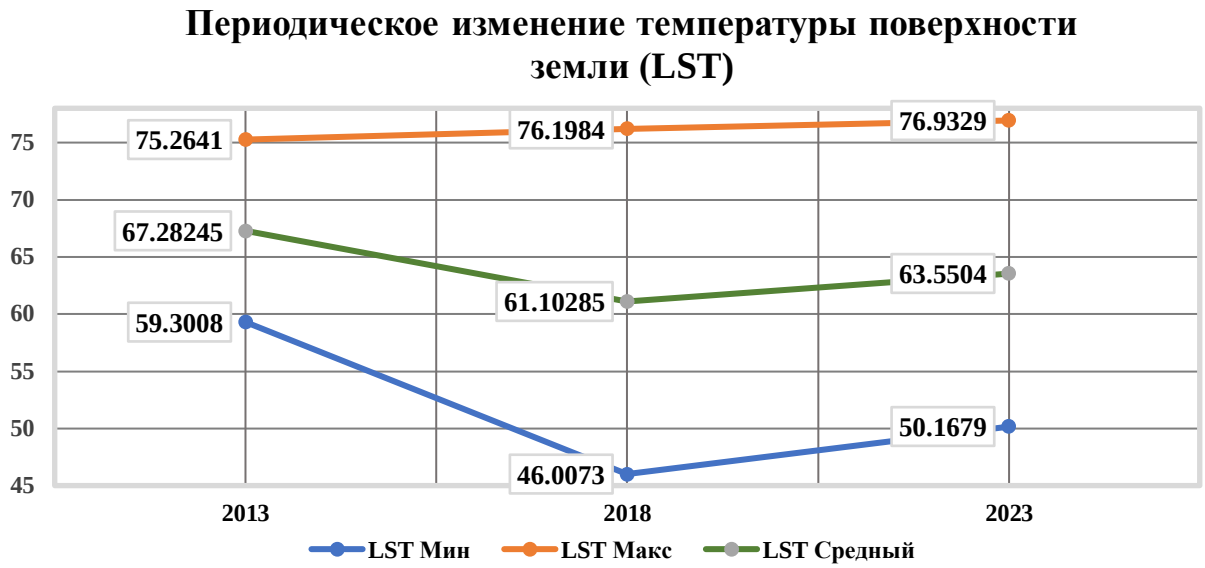

Рисунок 3. Индикатор периодических изменений температуры поверхности земли (LST). мин, макс, средний

Естественно, на изменения приземной температуры влияют такие факторы, как растительный покров, заболоченные территории, искусственные покрытия поверхности (бетонные поверхности и поверхности зданий, дорожные покрытия, населенные пункты). Таким образом, мы также можем получить представление о расположении естественных и искусственных покрытий, таких как вышеуказанные, с помощью анализа температуры поверхности.

Также был проведен анализ состояния растительности для проверки анализа изменений температуры на территории. В ходе этих анализов было изучено расположение растительного ландшафта в Нукусском, Караузякском и Амударьинском районах.

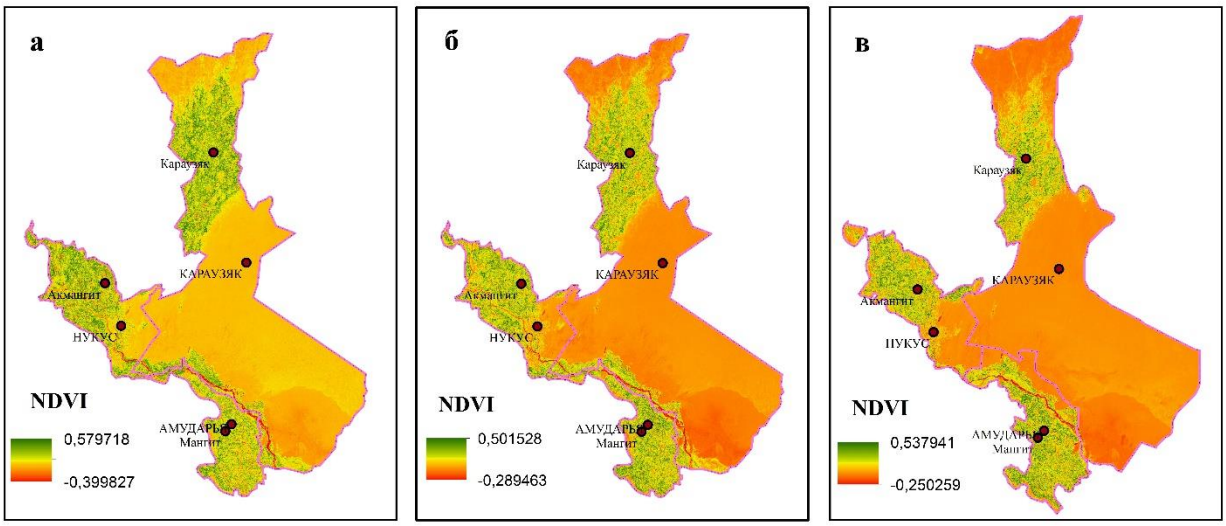

Рисунок 4. Карты анализа нормализованного растительного индекса (NDVI): а) по данным на 07.02.2013; б) по данным на 16.07.2018; в) Сформировано на основании данных от 14.07.2023.

Анализ растительности проводился на основе нормализованного индекса растительности (NDVI) (рис. 4). По результатам NDVI, повышение температуры в регионе привело к снижению уровня воды Амударьи и площади гидрографических объектов. При этом наблюдалось увеличение площадей бесплодных земель, уменьшение площадей с низкой растительностью и незначительное увеличение средней растительности (табл. 1).

Одной из основных причин непропорциональных изменений показателей уровня растительности являются постоянные изменения уровня воды Амударьи, которая является основным источником для организации оросительных и мелиоративных сетей на этом участке. Исходя из данных, мы видим, что количество водно-болотных угодий в регионе по итогам 2023 года значительно сократилось по сравнению с результатами 2013 года.

Это автоматически вызывает уменьшение количества земель, выделяемых под сельское хозяйство в регионе. В результате за последнее десятилетие в регионе произошло значительное увеличение количества бесплодных земель. Увеличение площади бесплодных земель повлияло на величину температуры, зарегистрированной в этом районе, и, таким образом, в этом районе наблюдалось увеличение высокой температуры.

Таблица 1. Показатели NDVI (результаты приведены в значениях кв. км.)

	2013	**2018**	**2023**
Гидрографические объекты	134,27	52,4	56,7
Бесплодная земля	4442,85	4541,55	5692,04
Очень низкая растительность	1460,53	1414,15	1168,36
Низкая растительность	1217,75	1249,27	1079,05
Средняя растительность	11,48	7,95	23,35
Высокая степень растительности	-	-	-

Сокращение зон растительности привело к увеличению площади опустыненных и засушливых земель. В настоящее время площади, на которых не отмечена бесплодная растительность, составляют 5,69 тысяч квадратных километров от общей площади (более 70%).

Краткое содержание: в результате развития возможностей дистанционного получения и передачи данных сегодня исследование территорий осуществляется с использованием новых методов в области дистанционного зондирования Земли. Это создает множество удобств. Вот мнения некоторых исследователей о данных станций и информации, полученной с помощью современной области дистанционного зондирования:

«Традиционный метод станционного измерения температуры имеет ограничение, поскольку он не способен получать крупномасштабные непрерывные данные» [19];

«Технологии дистанционного зондирования LST может измерять пространственные и временные данные высокого разрешения на основе пикселей, а не точек» [20, 21].

О роли спектрального анализа индекса оценки приземной температуры в анализе погоды Н. Сахани сказал: «Очень сложно развивать метеостанции и собирать непрерывные данные о погоде в труднодоступных горных районах.

Чтобы решить эту проблему, оценка температуры поверхности по спутниковым данным вошла в научную область в 1970-х годах и с тех пор стала популярной среди исследовательских сообществ по всему миру [1]». Фактически, именно, возможности зондирования наиболее полезны при оценке условий, когда нет возможности выехать на изучаемые территории.

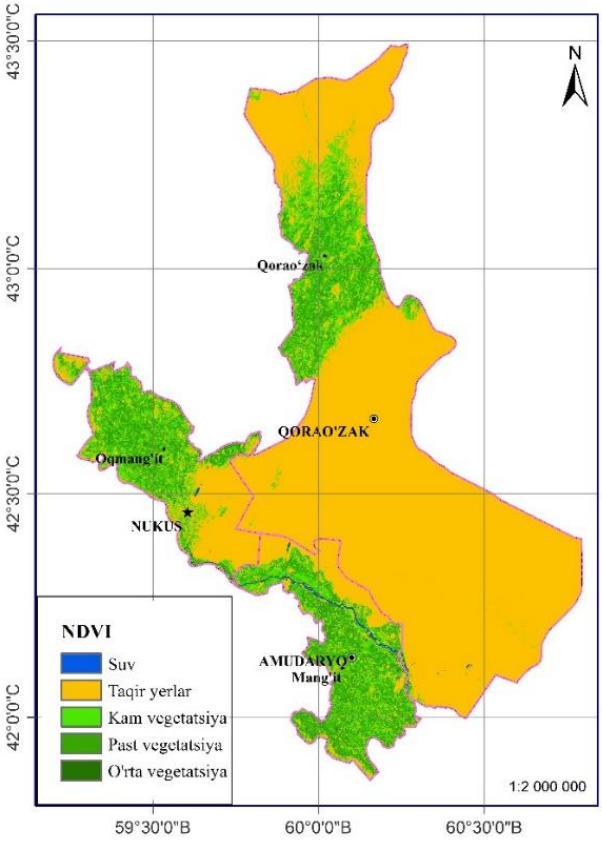

Рисунок 5. Карта на основе нормализованного индекса растительности (NDVI) в Нукусском, Караузякском и Амударьинском районах Республики Каракалпакстан (14.07.2023)

Проанализированные нами Нукусский, Караузякский и Амударьинский районы Республики Каракалпакстан имеют высокую плотность населения. Изучено состояние вегетационных процессов и роль этих процессов в повышении температуры на основе влияния реки Амударья. Еще одной причиной выбора этих территорий является разнообразие ландшафта выбранных районов.

Бурное развитие вегетационных процессов наблюдалось преимущественно в северной и юго-западной частях изучаемой территории. Хороший показатель растительности наблюдался преимущественно в Амударьинском районе (рис. 5).

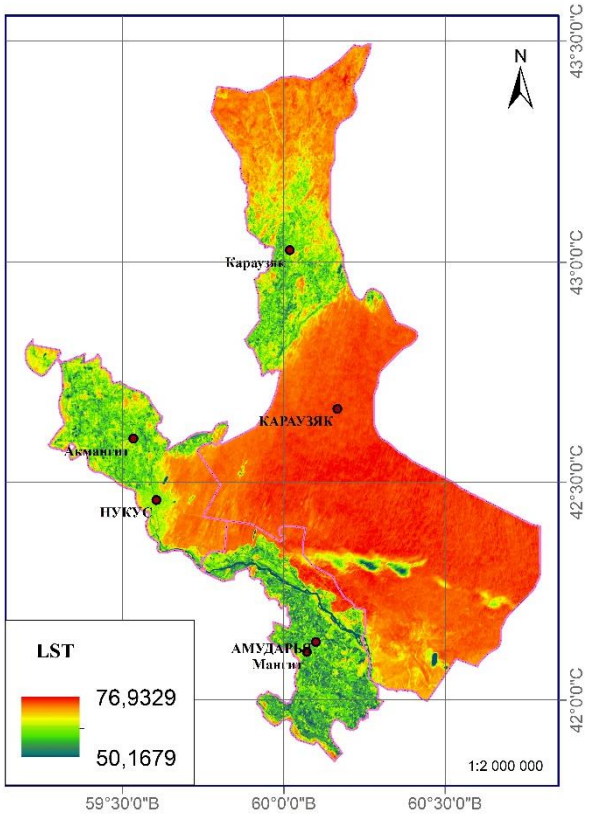

Рисунок 6. Карта на основе Индекса температуры поверхности суши (ИПТ) в Нукусском, Караузякском и Амударьинском районах Республики Каракалпакстан (14.07.2023)

Большую часть площади (5692,04 кв.км.), то есть 70,98% ее территории составляли бесплодные земли. Если оценивать в разрезе районов, то зоной с меньшим количеством растительности оказалась территория Караузякского района, 85% ее территории составляли бесплодные земли и пустынные территории. В Амударьинском районе, районе с более густой и большей площадью растительности по сравнению с другими регионами, общий уровень растительности составил 68,3%, а бесплодных земель - 28,6%. 41,3% территории Нукусского района занимали земли без растительности, а 56,9% - земли с зафиксированной растительностью.

Как видно из карты приземной температуры, северная часть Караузякского района, северо-западная часть Нукусского района и южное побережье Амударьинского района имеют более низкие температурные показатели. Эти результаты показывают, что местами существуют территории с высоким влиянием растительности и гидрографических объектов (рис. 6).

Среди регионов самая высокая температура наблюдалась в песчаных барханах Ташкудук в южной части Караузякского района. Здесь температура

составила 76,9°C и это была самая высокая температура среди районов, расположенных на этой территории. Основной причиной высокой температуры в регионе является тот факт, что большая часть Караузякского района покрыта песчаными дюнами.

Проведение LST-анализа в регионах позволяет не только изучить состояние региона и оценить будущие проблемы. Изменения температуры представляют собой анализ, который может быть широко использован не только при изучении растительности, ирригационных и мелиоративных систем, но и при анализе засоления почв и состава поверхности ландшафта.

Использованные источники:

1.Nemai Sahani. “Assessment of spatio-temporal changes of land surface temperature (LST) in Kanchenjunga Biosphere Reserve (KBR), India using Landsat satellite image and single channel algorithm” Remote Sensing Applications: Society and Environment27 October 2021

2. F. Aires et al. “A new neural network approach including first-guess for retrieval of atmospheric water vapor, cloud liquid water path, surface temperature and emissivities over land from satellite microwave observations” J. Geophys. Res. (2001)

3. Donglian Sun and Rachel Pinker. “Estimation of land surface temperature from Geostationary Operational Environmental Satellite (GOES-8)” Jun 2003

4. Malik, M.S. and Shukla, J.P. A GIS-based morphometric analysis of Kandaihimmat watershed, Hoshangabad district, M.P. India Indian Jour. Geo Marine Sci., v.47(10), pp.1980–1985. (2018)

5. Mario Mhawej, Ghaleb Faour, Chadi Abdallah, Jocelyne Adjizian-Gerard. “Towards an establishment of a wildfire risk system in a Mediterranean country” Ecological Informatics Volume 32, March 2016, Pages 167-184

6. Carmen Quintano Alfonso Fernandez - MansoDar A. Roberts. “Burn severity mapping from Landsat MESMA fraction images and Land Surface Temperature” Remote Sensing of Environment 1 March 2017

7. Yunfeng Hu, Yueqi Han, Yunzhi Zhang. "Land desertification and its influencing factors in Kazakhstan" Journal of Arid Environments22 May 2020

8. Yaser Abunnasr, Mario Mhawej, Nektarios Chrysoulakis. “SEBU: A novel fully automated Google Earth Engine surface energy balance model for urban areas” Urban Climate Volume 44, July 2022, 101187

9. Duy X. Tran, Filiberto Pla, Pedro Latorre-Carmona, Soe W. Myint, Mario Caetano, Hoan V. Kieu. “Characterizing the relationship between land use land cover change and land surface temperature” ISPRS Journal of Photogrammetry and Remote Sensing Volume 124, February 2017, Pages 119-132

10. Jian Peng, Jinglei Jia, Yanxu Liu, Huilei Li, Jiansheng Wu. “Seasonal contrast of the dominant factors for spatial distribution of land surface temperature in urban areas” Remote Sensing of Environment Volume 215, 15 September 2018, Pages 255-267

11. Yaser Abunnasr, Mario Mhawej. “Downscaled night air temperatures between 2030 and 2070: The case of cities with a complex- and heterogeneous-topography”Urban Climate12 October 2021
12. Nathaniel A. Brunsell, Robert R. Gillies. “Scale issues in land–atmosphere interactions: implications for remote sensing of the surface energy balance” Agricultural and Forest Meteorology 30 July 2003
13. Anderson, B.T., A.C. Ruane, J.O. Roads, M. Kanamitsu, and G. Salvucci. A new metric for estimating local moisture cycling and its influence upon seasonal precipitation rates. J. Hydrometeorol., 9, 576-588, doi:10.1175/2007JHM968.1. 2008:
14. William Kustas, Martha Anderson. “Advances in thermal infrared remote sensing for land surface modeling” Agricultural and Forest Meteorology Volume 149, Issue 12, 4 December 2009, Pages 2071-2081
15. Jie Cheng, Xiangchen Meng, Shengyue Dong, Shunlin Liang. “Generating the 30-m land surface temperature product over continental China and USA from landsat 5/7/8 data” Science of Remote Sensing Volume 4, December 2021, 100032
16. http://geografiya.uz/ozbekiston-tabiiy-geografiyasi/11582-quyi-amudaryo-tabiiy-geografik-okrugi.html
18. Sh. K. Matjanova, A. M. Davletov va Z. R. Amanbaev. “RESEARCH AND MAPPING THE STATE OF POPULATION DENSITY OF THE REPUBLIC OF KARAKALPAKSTAN (Based on demographic indicators between 2014-2021)” Web of scientist: international scientific research journal ISSN: 2776-0979, Volume 4, Issue 3, Mar., 2023
19. Yang Bai, Weifeng Li, Qiuwen Chen, Kate He, Xiaohua Ji, Chunmeng Han. “Discrepant impacts of land use and land cover on urban heat islands: A case study of Shanghai, China.” Ecological Indicators Volume 47, December 2014, Pages 171-178
20. Zhao-Liang Li, Bo-Hui Tang, Hua Wu, Huazhong Ren, Guangjian Yan, Zhengming Wan, Isabel F. Trigo, José A. Sobrino. “Satellite-derived land surface temperature: Current status and perspectives” Remote Sensing of Environment Volume 131, 15 April 2013, Pages 14-37
21. Xiaoma Li, Weiqi Zhou, Zhiyun Ouyang. “Relationship between land surface temperature and spatial pattern of greenspace: What are the effects of spatial resolution?” Landscape and Urban Planning Volume 114, June 2013, Pages 1-8

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ФИНАНСОВЫЕ ОТНОШЕНИЯ ЭКОНОМИЧЕСКИХ СУБЪЕКТОВ В СИСТЕМЕ ФИНАНСОВОГО МЕНЕДЖМЕНТА

Аннотация. В статье рассматриваются финансовые отношения экономических субъектов в системе финансового менеджмента. Дается определение финансовых отношений, их сущность и виды. Анализируются основные направления управления финансовыми отношениями в рамках финансового менеджмента. Рассматривается финансовый анализ как инструмент управления финансовыми отношениями.

Ключевые слова. финансовые отношения, финансовый менеджмент, планирование финансовых отношений, организация финансовых отношений, контроль финансовых отношений, финансовый анализ.

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FINANCIAL RELATIONS OF ECONOMIC ENTITIES IN THE FINANCIAL MANAGEMENT SYSTEM

Annotation. The article examines the financial relations of economic entities in the financial management system. A definition of financial relations, their essence and types is given. The main directions of managing financial relations within the framework of financial management are analyzed. Financial analysis is considered as a tool for managing financial relations.

Keywords. financial relations, financial management, planning of financial relations, organization of financial relations, control of financial relations, financial analysis.

Введение

Финансовые отношения являются неотъемлемой частью хозяйственной деятельности экономических субъектов. Они возникают в процессе формирования, распределения и использования денежных средств. Финансовые отношения играют важную роль в развитии экономики, обеспечивая ее эффективное функционирование и устойчивое развитие.

В современных условиях хозяйствования роль финансовых отношений возрастает. Это обусловлено рядом факторов, в том числе:

- глобализацией и интернационализацией экономических отношений;
- развитием новых финансовых инструментов и технологий;
- возрастанием роли финансового капитала в экономике.

В связи с этим возрастает роль финансового менеджмента, который представляет собой систему управления финансовыми ресурсами экономических субъектов. Финансовый менеджмент призван обеспечить эффективное использование финансовых ресурсов для достижения целей экономического субъекта.

Сущность и виды финансовых отношений

Финансовые отношения представляют собой отношения, возникающие в процессе движения денежных средств. Они возникают между различными субъектами экономической системы, в том числе между:

- хозяйствующими субъектами;
- хозяйствующими субъектами и государством;
- хозяйствующими субъектами и населением.

Финансовые отношения могут быть классифицированы по различным основаниям. По субъекту отношений выделяют:

- отношения между хозяйствующими субъектами;
- отношения между хозяйствующими субъектами и государством;
- отношения между хозяйствующими субъектами и населением.

По характеру движения денежных средств выделяют:

- отношения по формированию денежных средств;
- отношения по распределению денежных средств;
- отношения по использованию денежных средств.

По содержанию выделяют:

- отношения по обмену товарами и услугами;
- отношения по распределению доходов;
- отношения по аккумуляции и инвестированию капитала;
- отношения по страхованию;
- отношения по кредитованию;
- отношения по финансированию государственных расходов.

Финансовые отношения в системе финансового менеджмента

Финансовые отношения являются объектом управления в системе финансового менеджмента. Финансовый менеджмент призван обеспечить эффективное формирование, распределение и использование денежных средств экономических субъектов.

В рамках финансового менеджмента выделяют следующие основные направления управления финансовыми отношениями:

- планирование финансовых отношений;
- организация финансовых отношений;
- контроль финансовых отношений.

Планирование финансовых отношений заключается в разработке планов формирования, распределения и использования денежных средств. Планирование финансовых отношений позволяет обеспечить эффективное использование финансовых ресурсов и достижение целей экономического субъекта.

Организация финансовых отношений заключается в создании системы управления финансовыми ресурсами. Организация финансовых отношений включает в себя создание системы учета, отчетности, внутреннего контроля и других элементов системы управления финансами.

Контроль финансовых отношений заключается в проверке соблюдения плановых показателей и установленных процедур управления финансовыми ресурсами. Контроль финансовых отношений позволяет своевременно выявлять и устранять отклонения от плановых показателей, а также обеспечивать эффективное функционирование системы управления финансами.

Финансовый анализ как инструмент управления финансовыми отношениями

Финансовый анализ представляет собой процесс сбора, обработки и интерпретации финансовой информации для принятия решений. Финансовый анализ является важнейшим инструментом финансового менеджмента. Он позволяет оценить финансовое состояние и результаты деятельности экономического субъекта, а также выявить тенденции его развития.

В рамках финансового анализа используются различные методы и показатели. Наиболее распространенными методами финансового анализа являются:

- горизонтальный анализ;
- вертикальный анализ;
- трендовый анализ;
- сравнительный анализ;
- факторный анализ.

Горизонтальный анализ заключается в сравнении показателей за ряд периодов времени. Вертикальный анализ заключается в сопоставлении показателей с итогом баланса. Трендовый анализ заключается в исследовании изменения показателей во времени. Сравнительный анализ заключается в сравнении показателей экономического субъекта с показателями других экономических субъектов. Факторный анализ заключается в исследовании влияния различных факторов на изменение показателей.

Финансовый анализ позволяет получить информацию, необходимую для принятия управленческих решений по управлению финансовыми

отношениями. Например, на основе анализа финансовой отчетности можно принять решение о целесообразности привлечения заемных средств, инвестировании в новые проекты, изменении структуры капитала и т.д.

Заключение

Финансовые отношения являются неотъемлемой частью хозяйственной деятельности экономических субъектов. Они играют важную роль в развитии экономики, обеспечивая ее эффективное функционирование и устойчивое развитие.

В современных условиях хозяйствования роль финансовых отношений возрастает. Это обусловлено рядом факторов, в том числе глобализацией и интернационализацией экономических отношений, развитием новых финансовых инструментов и технологий, возрастанием роли финансового капитала в экономике.

Финансовый менеджмент призван обеспечить эффективное использование финансовых ресурсов экономических субъектов. В рамках финансового менеджмента выделяют следующие основные направления управления финансовыми отношениями: планирование, организация и контроль.

Финансовый анализ является важнейшим инструментом финансового менеджмента. Он позволяет оценить финансовое состояние и результаты деятельности экономического субъекта, а также выявить тенденции его развития.

Использованные источники:

1. 2017-2021-yillarda O‘zbekiston Respublikasini rivojlantirishning beshta ustuvor yo‘nalishi bo‘yicha Harakatlar strategiyasini “Xalq bilan muloqot va inson mafaatlari yili”da amalga oshirishga oid davlat dasturini o‘rganish bo‘yicha ilmiy-uslubiy qo‘llanma. Toshkent-2017.
2. http://www.mf.uz - O‘zbekiston Respublikasi Moliya vazirligi rasmiy Sayt "Экономика и социум" №10(113) 2023 www.iupr.ru
3. O‘zbekiston Respublikasi Prezidentining 2017-yil 29-sentabrdagi PF- 5197-sonli Farmoni asosida tayyorlandi.
4. O‘zbekiston Respublikasi Prezidentining 2019 yil 2 avgustdagi “O‘zbekiston Respublikasining sug’urta bozorini isloh qilish va uning jadal rivojlanishini ta`minlash chora-tadbirlari to‘g’risida” PQ-4412-son qarori
5. https://www.senat.uz/ - O‘zbekiston Respublikasi Oliy Majlisi Senatning rasmiy sayti
6. Mirziyoyev Sh., 2019 yil 10 iyuldagi sug’urta xizmatlari bozorini rivojlantirish masalalari bo ‘yicha yig’ilish. https://sputniknews-uz.com/
7. Жиянова Н.Э., Управление финансовыми рисками предприятия в современных условиях //«ИНТЕРНАУКА» Научный журнал №16(145) Май 2020 Часть 2. Б.82-84
8. Anvarova, M., Kungratov, I. (2023). Foreign experiences in the development of the digital education system. Yangi O'zbekiston taraqqiyot strategiyasi talabalar nigohida, *1*(1), 731-733.

9. Anvarova, M. (2023). Improving media literacy using digital technologies in professional education. Raqamli iqtisodiyot va axborot texnologiyalari, *1*(1), 311-317.
10. Anvarova, M. (2023). Raqamli transformatsiya jarayonining kichik va o‘rta biznes korxonalariga asosiy ta’siri. Raqamli iqtisodiyot va axborot texnologiyalari, *1*(1), 305-310.
11. Anvarova, M. (2023). Development of the digital economy in the republic of Uzbekistan. *Экономика и социум*, (6-1 (109)), 54-58.
12. Анварова, М. М. (2023). Инфраструктура информационных систем в эпоху Moren. *Экономика и социум*, (4-1 (107)), 1112-1119.
13. Anvarova, M. M. (2023). The information systems infrastructure in modern era. *Science and Education*, *4*(3), 237-241.
14. Samiyeva, M. (2023). RAQAMLI IQTISODIYOT SHAROITIDA SOLIQLAR VA BOSHQA MAJBURIY TO ‘LOVLARNI AMALGA OSHIRISHDA RAQAMLI TEXNOLOGIYALARDAN FOYDALANISH. *YASHIL IQTISODIYOT VA TARAQQIYOT*, *1*(10), 284-287.
15. Самиева, М. Парпиева, Р. (2023). Зарубежный опыт развития системы системы цифрового образования. Ta’lim tizimida zamonaviy axborot texnologiyalari resurslaridan foydalanish istiqbollar, 356-358.
16. Самиева, М. (2023). BARQAROR XIZMAT KO ‘RSATISHGA ASOSLANGAN SANOAT KORXONALARIDA RAQAMLI TEXNOLOGIYALARNI SAMARALI QO ‘LLASH. *International Journal of Economics and Innovative Technologies*, *11*(2), 353-359.
17. qizi Samiyeva, M. F., & qizi Madyarova, M. A. (2023). Text mining and it is development stages. *Science and Education*, *4*(4), 1346-1352.
18. Sadinov, A., Rajabov, S., & Samieva, M. (2023). Improving waste recycling in Uzbekistan in digital technologies. In *E3S Web of Conferences* (Vol. 452, p. 05023). EDP Sciences.
19. Samiyeva, M. F. Q. (2023). Barqaror xizmat ko’rsatishga asoslangan biznes modellari sanoat kompaniyalarida raqamli texnologiyalar salohiyatini o’rganish. *Science and Education*, *4*(3), 823-828.
20. Samieva, M., & Madyarova, M. (2022). The Growth of ICT indicators in the Digital Economy of Uzbekistan. *Eurasian Research Bulletin*, *15*, 178-184.
21. Narzullaeva, M., Nabieva, F., & Samieva, M. (2022, December). A DATA ANALYTICS APPROACH FOR ASSESSING THE ROLE OF CHAIN SUPERMARKETS IN THE ECONOMY. In *Proceedings of the 6th International Conference on Future Networks & Distributed Systems* (pp. 387-394).

UDK:321

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ЯНГИ ЎЗБЕКИСТОНДА МИЛЛИЙ ЎЗЛИКНИ АНГЛАШ ВА ТАРИХИМИЗНИ ЎРГАНИШДА МУТАФАККИРЛАРИМИЗНИНГ МАЪНАВИЙ МЕРОСИНИНГ АҲАМИЯТИ

Аннотация. Мақолада аждодларимиз мероси ва унинг энг ёрқин дурдоналарининг моҳияти ҳамда уларнинг ёшларимизни миллий руҳиятига тарғиб-ташвиқ қилиш масалалари ёритилган.

Таянч иборалар: тарих, миллий ўзликни англаш, ёшлар, тарихий дунёқараш, маънавий таҳдид, миллий тараққиёт, аждодлар мероси, жамият.

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THE SIGNIFICANCE OF THE SPIRITUAL HERITAGE OF OUR THINKERS IN UNDERSTANDING NATIONAL IDENTITY AND STUDYING OUR HISTORY IN THE NEW UZBEKISTAN

Abstract. The article describes the heritage of our ancestors and the essence of their brightest masterpieces, as well as the issues of promoting the national spirit of our youth.

Key words: history, national identity, youth, historical outlook, moral threat, national development, ancestral heritage, society.

Кўҳна тарихимизни кўз ўнгимиздан ўтказиб, таҳлил қиладиган бўлсак, муҳим ва ибратли бир фикрни англаган бўламиз яъни, ота-боболаримиз руҳий оламининг томир-илдизлари айнан биз ўсиб улғаяётган маънавий замин билан ҳамнафас ҳолда тарихда ҳам, ҳозирда ҳам барчанинг ҳавасини тортиб келаётган олижаноб фазилатларда шаклланганлигини кўрамиз. Шу нуқтаи назардан қараганда, заминимизда яшаб ўтган буюк алломаларимиз, мутафаккирларимизнинг ибратли ҳаёти ва фаолияти, бемисл илмий-ижодий кашфиётлари ўтган замонларда ва бугунда ҳам жаҳон аҳлини ҳайратга солаётганини ғурур билан таъкидлаш лозим. Бироқ, ёшларнинг ўз салоҳиятини намоён қилиши учун зарур шароитлар яратиш, зўравонлик ғояси "вируси" тарқалишининг олдини олиш-Бизнинг асосий вазифамиздир”-деб таъкидлайди Президентимиз Ш.М.Мирзиёев.

Глобаллашув ва маънавий ҳуруж ҳамда инсоннинг онги-қалби учун кураш кетаётган ҳозирги шароитда ворисийлик асосида миллий тафаккуримизни аждодларимизнинг асарлари ва уларда илгари сурилган ноёб ғоялар билан тўлдириш ҳар қандай ижтимоий муаммоларга нисбатан муносиб қалқон вазифасини ўташи табиий. Бу борада айрим мутафаккирларимизнинг илмий ижод намуналаридан лавҳалар келтириб, уларнинг бугунги кун учун нечоғли аҳамиятли эканлигини кўриб чиқамиз. Жумладан, Муҳаммад Мусо Хоразмийнинг ўнлик саноқ системасини, алгоритм ва алгебра тушунчаларини дунёда биринчи бўлиб илм-фан соҳасига жорий этгани ва шу асосда аниқ фанлар ривожи учун ўз вақтида мустаҳкам асос яратгани умуминсоний тараққиёт ривожида қандай катта аҳамиятга эга бўлганини барчамиз яхши биламиз. Мусо Хоразмий ҳақида гап кетар экан мамлакатимиз Биринчи Президенти И.А.Каримов “Одамзотнинг илм-фан ва замонавий технологиялар борасида эришаётган улкан ютуқларини кўз олдимизга келтирар эканмиз, беихтиёр ана шу буюк бобомиз мисолида бундай юксак марраларга эришишда ўзбек халқининг ҳам муносиб ҳиссаси борлигидан қалбимиз ифтихорга тўлади”-деб таъкидлаган эди.

Яна бир улуғ аждодимиз-Аҳмад Фарғоний инсоният тарихидаги илк Уйғониш даврининг энг забардаст ва кучли намоёндаси, ўз замонасининг фундаментал фан асосчиларидан бири сифатида башарият дунёқараши ва маънавиятининг ривожланишига шу билан бир қаторда ўз даврида астраномия фанинг ривожига беқиёс таъсир кўрсатган. Шуни алоҳида таъкидлаш жоизки, “Аҳмад Фарғонийнинг бебаҳо мероси ўз даври олимлари учун дастур амал бўлиб хизмат қилгани тарихий манбалар орқали яхши маълум. Алломанинг «Астрономия асослари ҳақида китоб» номли асари XII-асрдаёқ лотин ва иврит тилларига таржима этилгани ҳам бу фикрнинг исботидир”.

Аҳмад Фарғоний бутун Шарқ дунёсида астрономия фанинг устози бўлиш билан бир қаторда, Европада Аль-Фраганус номи билан машҳур бўлган бу алломанинг илм-фан ривожидаги нуфузи шу қадар юксак эдики, унинг исми шарифи ер куррасидагина эмас, балки самода ҳам шуҳрат топди. Миллий тарихимизнинг яна бир ёрқин юлдузи, бутун Шарқ оламининг алломаси, бу Абу Райҳон Берунийдир. Унинг илмий масалаларда ҳам, тарихий воқеа ҳодисаларга, ўз замондошларига баҳо беришда ҳам ўта холислик ва ҳаққонийлик билан фикр юритган. Ана шундай ноёб фазилатлар соҳиби бўлмиш машҳур аллома, табобат оламининг султони Абу Али Ибн Синонинг «Тиб қонунлари» асари неча асрлар давомида Европанинг энг нуфузли олий ўқув юртларида асосий тиббиёт дарсликларидан бири сифатида ўқитиб келингани, дунё миқёсида «Медицина», «Соғлом турмуш тарзи» деган тушунчаларнинг фундаментал асоси бўлиб хизмат қилгани, албатта, чуқур ҳаётий ва илмий заминга эга. Аниқроқ қилиб айтганда, “Абу Али Ибн Синонинг бутун илмий фаолияти дунё тараққиётини инсонпарварлик руҳида, яъни, маънавий негизда ривожлантиришга улкан таъсир ўтказди, деб айтишга барча асослар бор”.

Шу ўринда буюк боболаримизнинг маънавий олами ва шахси хусусида фикр юритар эканмиз, Соҳибқирон Амир Темур ҳақида алоҳида тўхталишимиз табиий ҳолдир. Чунки тенгсиз азму шижоат, мардлик ва донишмандлик рамзи бўлган бу буюк сиймо, буюк салтанат барпо этиб қолмай, балки, давлатчилик борасида ўзидан улкан ҳам амалий, ҳам назарий мерос қолдирди, илму фан, маданият, бунёдкорлик, дин ва маънавият ривожига кенг йўл очди. Фикримизнинг исботи сифатида муҳтарам юртбошимизнинг Амир Темур шахси хусусида қуйидаги фикрларини келтиришни жоиз деб ўйлайман, “Шахсан мен «Темур тузуклари»ни ҳар гал ўқир эканман, худдики ўзимга қандайдир руҳий куч-қувват топгандек бўламан. Ўз иш фаолиятимда бу китобга такрор-такрор мурожаат қилиб, ундаги ҳеч қачон эскирмайдиган, инсон маънавияти учун бугун ҳам озиқ бўладиган ҳикматли фикрларнинг қанчалик ҳаётий эканига кўп бор ишонч ҳосил қилганман. Масалан, «Тажрибамда кўрилганким, азми қатъий, тадбиркор, ҳушёр, мард ва шижоатли бир киши мингта тадбирсиз, лоқайд кишидан яхшироқдир», деган сўзлар бугунги кунда ҳам маънавий жиҳатдан нақадар долзарб аҳамиятга эга экани барчамизга аён”.

Юқорида зикр этилган мисолларни умумлаштирган ҳолда, муҳим бир фикрни хулоса тариқасида таъкидлаш зарурки, бизнинг ҳар биримиз буюк тарихимиз, буюк маънавий меросимиз, айни чоғда жаҳон маънавий тамаддунига улкан ҳисса қўшган, бир-биридан улуғ мутафаккир олим фузалоларимиз билан ҳақли равишда фахрланамиз ва уларга муносиб бўлишни ўзимизнинг муқаддас бурчимиз, деб билмоғимиз зарур.

Зеро, ҳар қандай дарахтнинг қандай гуллаши ва қандай мева бериши унинг илдизлари туташган тупроққа боғлиқ. Бўш жойда ҳеч нарса унмайди. Шундай экан, бизнинг ижтимоий-маънавий тараққиётга ва улкан ғалабаларга эришмоғимиз учун албатта, катта маданий анъана ва маданий мерос керак. Мана шундай тарихий дунёқарашга асос бўладиган маънавий мероснинг бизга қолдирганлар эса бизнинг бобокалонларимиз бўлади.

Адабиётлар:

1. Ruziev, A. J. (2019). ИЗУЧЕНИЕ МИРОВОЗЗРЕНИЯ И ДЕЯТЕЛЬНОСТИ МЫСЛИТЕЛЕЙ КАК ИСТОРИЧЕСКОГО КРИТЕРИЯ. Theoretical & Applied Science, (11), 166-169.
2. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
3. Ruziyev, A. (2021). ДУНЁҚАРАШДА ТАРИХИЙ ХОТИРА ВА ОНГНИНГ ЎЗАРО ДЕАЛЕКТИКАСИ. Научно-просветительский журнал" Наставник", (2), 187-193.
4. Рўзиев, А. (2020). АМИР ТЕМУР ҚАРАШЛАРИДА СИЁСИЙ-ҲУҚУҚИЙ ҒОЯЛАРНИНГ АКС ЭТИШИ. Научно-просветительский журнал" Наставник".

5. Kulmatov, P. M., & Tajibaev, M. A. (2022). SYNERGETIC AAS A FACTOR FOR THE DEVELOPMENT OF MODERN SCIENCE. *Scientific progress*, *3*(3), 925-929.
6. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. *Scientific progress*, *3*(3), 934-937.
7. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. *INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL*, *3*(3), 203-207.
8. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. *FAN, TA'LIM, MADANIYAT VA INNOVATSIYA*, *1*(2), 69-73.
9. Azimova, S. Y., & Tojiboev, M. A. (2021). IMPROVEMENT OF SPIRITUAL AND EDUCATIONAL WORK IT IS OUR IMPORTANT TASK. *Scientific progress*, *2*(5), 544-548.
10. Melikuziyevich, K. P., & Abdurashidovich, T. M. (2021). State and community management-as a priority task in the appeal. *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, *2*(2), 133-136.
11. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.

УДК 608.2

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СОВЕРШЕНСТВОВАНИЕ ДЕЯТЕЛЬНОСТИ ТРАНСПОРТНОЙ КОМПАНИИ ЗА СЧЕТ АВТОМАТИЗАЦИИ ПРОЦЕССОВ

Аннотация. В данной статье авторами рассматривается деятельность транспортной компании, и выявляются достоинства и недостатки для последующей автоматизации.

Ключевые слова: проектирование, транспортная компания, автоматизация.

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IMPROVING THE ACTIVITIES OF A TRANSPORT COMPANY THROUGH PROCESS AUTOMATION

Abstract. In this article, the authors examine the activities of a transport company and identify advantages and disadvantages for subsequent automation.

Keywords: design, transport company, automation.

Актуальность выбранной темы работы определяется тем, что в текущий момент происходит стремительное развитие информационных систем. Данные системы внедрены в практически любой вид деятельности человека, облегчая ему доступ к получению и обработке информации.

С каждым годом сфера транспортных перевозок пассажиров развивается: ведётся мониторинг транспорта с помощью ГЛОНАСС GPS, автоматизируется управление автопарком, контролируется техническое состояние индивидуально на каждую транспортную единицу (в данном случае – автобус), составляются сводные ведомости сотрудников и транспортных средств предприятия. Для решения этих задач, в транспортные компании внедряются информационные системы.

Целью данной работы является разработка информационной системы для транспортной компании, которая сможет автоматизировать основные процессы предприятия, такие как учёт сотрудников, учёт транспортных средств и контроль за их состоянием. Ниже представлена контекстная диаграмма рассматриваемого процесса (Рис. 1.).

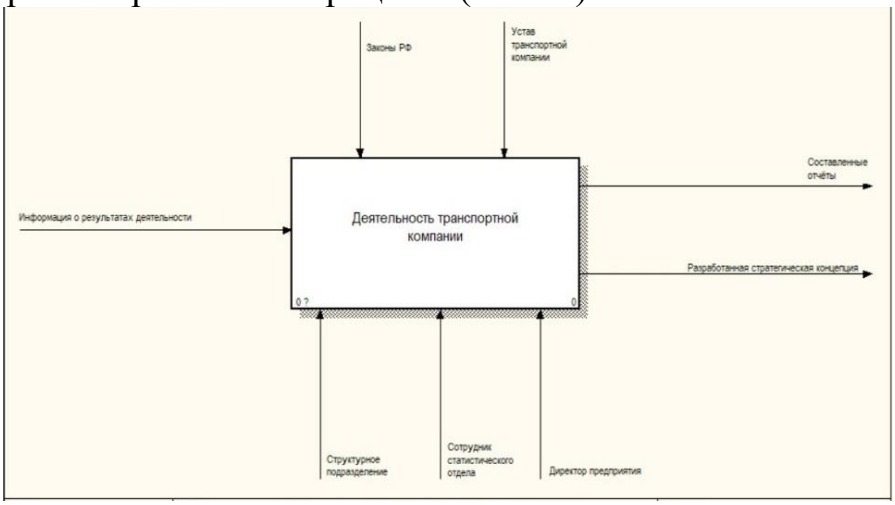

Рис. 1. Контекстная диаграмма «КАК ЕСТЬ» для анализа общих бизнес – процессов транспортной компании

Чтобы подробно рассмотреть деятельность транспортной компании, применяется диаграмма декомпозиции. На этой диаграмме выделены четыре функциональных блока (А1 – А4). Эти блоки выполняются последовательно:

– в блоке А1 информация принимается;

– в блоке А2 полученная информация обрабатывается;

– в блоке А3 на основе обработанной информации сотрудником статистического отдела составляются отчёты по каждому структурному подразделению;

– в блоке А4 на основе составленных отчётов директор предприятия принимает решение о дальнейшем стратегическом планировании (Рис. 2.).

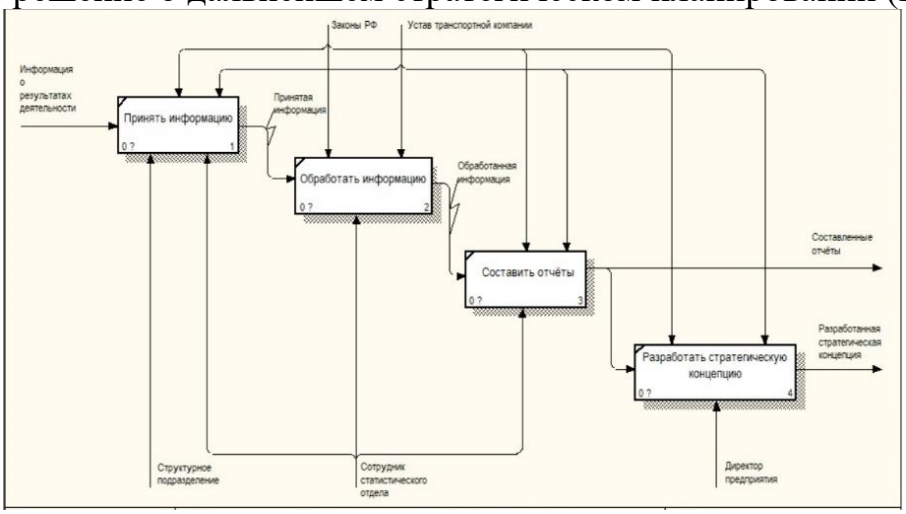

Рис. 2. Диаграмма декомпозиции «КАК ЕСТЬ» для анализа общих бизнес – процессов транспортной компании

При построении диаграммы для оптимизации и реинжиниринга предприятия применяется модель «КАК БУДЕТ». На созданной контекстной диаграмме зеленым цветом показаны новые объекты. На контекстной диаграмме входной информацией является:

– информация о результатах деятельности.

Выходной информацией являются:

– электронные отчёты;

– разработанная стратегическая концепция (Рис. 3.).

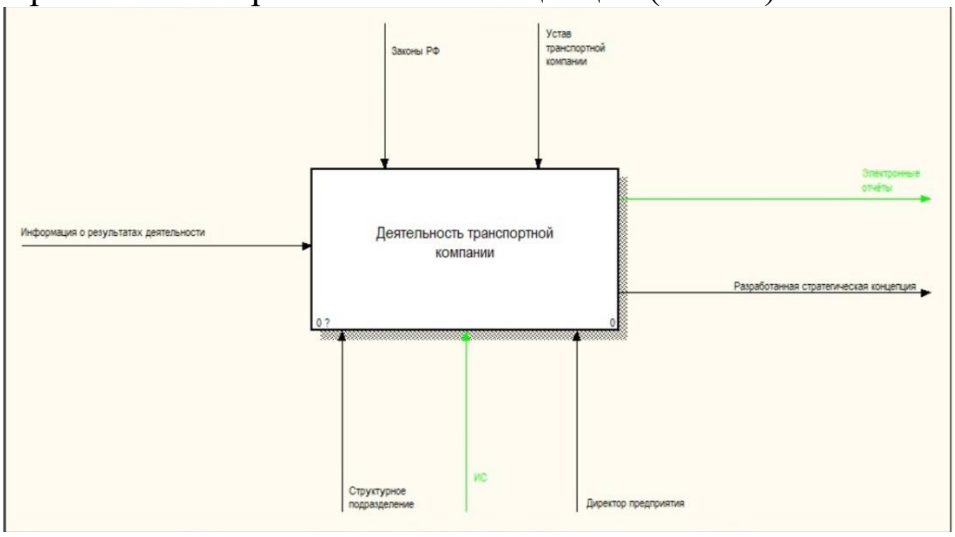

Рис. 3. Контекстная диаграмма «КАК БУДЕТ» для улучшения общих бизнес – процессов транспортной компании

В результате внедрения нового объекта – ИС – потребность в наличии сотрудника статистического отдела отпала. Бумажные отчёты сменились на электронные, и информационная система на основе анализа данных разрабатывает рекомендации по стратегической концепции. Далее, рекомендации направляются директору предприятия, и уже он принимает решение, как в дальнейшем развивать транспортную компанию и какие действия предпринимать для дальнейшего развития (Рис. 4.).

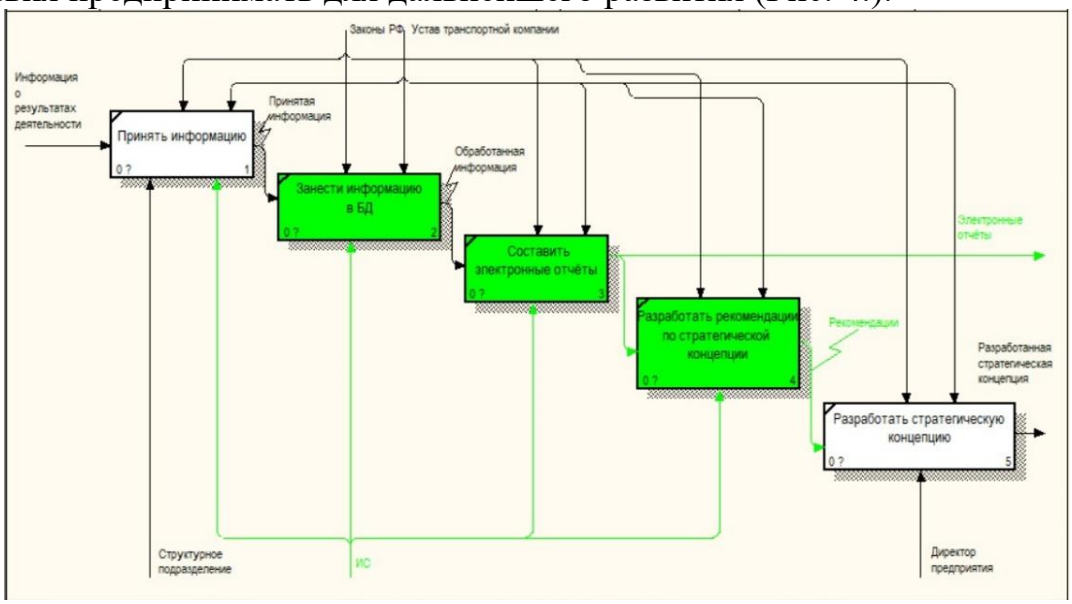

Рис. 4. Диаграмма декомпозиции «КАК БУДЕТ» для улучшения общих бизнес – процессов транспортной компании

На основе выявленных проблем, было принято решение создать информационную систему, учитывающие эти недостатки и решающие их.

В результате проделанной работы был сделан вывод, что актуальность данной темы находится на высоком уровне. Данный вывод был сделан на основе того, что разработанная информационная система упрощает процесс предоставления информации о сотрудниках и транспортных средствах предприятия. Теперь, чтобы получить информацию, не требуется наличие персонала, ответственного за передачу данных. Эти процессы автоматизировала и упростила разработанная информационная система.

Разработанная информационная система призвана упростить процесс получения информации о сотрудниках и автопарке. За счёт систематизации данных, система позволяет увеличить скорость их обработки. Данная разработанная система рассчитана на уровень пользователей, обладающих низкими навыками для работы с ПК. Это позволяет сделать вывод, что разработанная система является простой и удобной в освоении.

Использованные источники:

1. Казанский, А. А. Объектно-ориентированный анализ и программирование на Visual Basic 2013: учебник для вузов / А. А. Казанский. — Москва: Издательство Юрайт, 2023. — 290 с. — (Высшее образование). — ISBN 978-5-534-01122-7. — Текст: электронный // Образовательная платформа Юрайт

[сайт]. — URL: https://urait.ru/bcode/512345.
2. Кравченко, Т. К. Системы поддержки принятия решений: учебник и практикум для вузов / Т. К. Кравченко, Д. В. Исаев. — Москва: Издательство Юрайт, 2022. — 292 с. — (Высшее образование). — ISBN 978-5-9916-8563-4. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/489756.
3. Лаврищева, Е. М. Программная инженерия. Парадигмы, технологии и CASE-средства: учебник для вузов / Е. М. Лаврищева. — 2-е изд., испр. — Москва: Издательство Юрайт, 2023. — 280 с. — (Высшее образование). — ISBN 978-5-534-01056-5. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/513086.

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АНАЛИЗ СОВРЕМЕННЫХ МОДЕЛЕЙ КОРПОРАТИВНОЙ КУЛЬТУРЫ

Аннотация. Корпоративная культура способствует долгосрочному развитию и повышению эффективности управления предприятием, а также определяет миссию и долгосрочные стратегии компании. В настоящее время в мире наряду с современными моделями корпоративного управления изучаются особенности корпоративной культуры как отдельной сферы. Растущее ускорение процесса глобализации, расширение масштабов и развитие интеграции между странами и компаниями требуют более широкого и глубокого изучения корпоративной культуры. Поэтому этому направлению уделяется большое внимание учеными в области управления. В данной исследовательской работе были проанализированы современные модели корпоративной культуры и некоторые их аспекты в масштабах страны и компании.

Ключевые слова: корпоративная культура, модель корпоративного управления, компания, Англосаксонская модель, японская модель, европейская модель.

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ANALYSIS OF MODERN MODELS OF CORPORATE CULTURE

Abstract. Corporate culture contributes to the long-term development and improvement of the efficiency of enterprise management, as well as defines the mission and long-term strategies of the company. Currently, in the world, along with modern models of corporate governance, the peculiarities of corporate culture as a separate sphere are being studied. The increasing acceleration of the globalization process, the expansion of the scale and the development of integration between countries and companies require a broader and deeper study of corporate culture. Therefore, this area is given great attention by scientists in the field of management. In this research paper, modern models of corporate culture and some of their aspects across the country and the company were analyzed.

Keywords: corporate culture, corporate governance model, company, Anglo-Saxon model, Japanese model, European model.

Введение.

Формирование и развитие корпоративной культуры в компаниях определяется многими факторами: национально-культурными аспектами, менталитетом, законодательством и идеологией государства, конкурентной средой, стилем работы и др. Исследователи отмечают, что корпоративная культура в разных государствах формируется под влиянием ряда социальных факторов, отражающих национальные и духовные различия в культуре этих стран. Они:

- нормы социального взаимодействия субъектов хозяйственной деятельности;
- предпочтительные организационные формы хозяйственной деятельности;
- мотивация и отношение к труду;
- отношение к собственности и богатству;
- а нормы и отношение общественности к предпринимательской деятельности;
- а степень склонности к внешнеэкономическому опыту;
- предпочтение групповой или индивидуальной деятельности.

Акцент на социально-экономических национальных особенностях, менталитете с практической точки зрения проявляется в усилении учета культурных факторов в практике управления предприятием. Во многих развитых странах признается особая роль национальной культуры в формировании устойчивых моделей поведения работников и развитии человеческого капитала, прежде всего его инновационной составляющей. По мнению экспертов, эффективная корпоративная культура не может существенно противоречить экономической культуре, сложившейся в стране, чем и объясняется популярность прикладных социологических и антропологических исследований этнических особенностей человеческих ресурсов в современной научной практике [1].

Литературный обзор

Несколько зарубежных и отечественных ученых проводили свои исследования на тему корпоративной культуры. Дил и Кеннеди подчеркивают, что организационная культура должна отвечать на вопрос "как все здесь происходит" (the way things get done around here). Они определили два внешних фактора, которые оказывают наибольшее влияние на корпоративную культуру компании:

1.Уровень риска основной деятельности организации.

2.Внешняя среда (рынок) позволяет оценить выбранную стратегию организации с точки зрения возможности получения прибыли, т. е. скорости получения организацией отчетности с рынка. Дил и Кеннеди изучали корпоративные культуры в четырех группах. [2]:

1. Культура мачо
2. Инвестиционная культура

3. Культура прилежной работы

4. Культура процесса

От западных ученых Э.Шейн определяет корпоративную культуру как совокупность фундаментальных действий, которые спонтанно формируются, изучаются или разрабатываются определенной группой при изучении адаптации к внешней среде и решении проблем внутренней интеграции [3].

Голландский исследователь Герт Хофштеде решил изучить, насколько похожи или различаются культуры в разных странах. Он разработал методологию исследования и внедрил ее в офисах IBM 40 раз. В общей сложности он обработал 116 000 анкет. Первоначальные результаты привели к четырем аспектам, описывающим сходство и различие культур. [4]:

♦ героизм, женственность;

♦ желание избежать неопределенности;

♦ индивидуальность-коллективность;

♦ расстояние между людьми с разным статусом.

Российские ученые Г.В.Королев и А.В.Бутовы считают, что плохо организованная корпоративная культура резко увеличивает текучесть кадров и снижает уровень конкурентоспособности компании. Из-за этого корпоративные конфликты могут увеличиваться, а эффективность управления также снижаться [5].

Российский ученый И.Грошев считает, что понятие “организационная культура” применимо к предприятиям локальной отрасьли, в то время как “корпоративная культура” подходит для международных корпораций, а понятие “предпринимательская культура” - для малого бизнеса и частного предпринимательства [6].

От отечественных ученых своей исследовательской работе Д.Бегматова интерпретировала корпоративную культуру как компонент, повышающий эффективность корпоративного управления [7].

В научных работах Б.Уринова корпоративный метод управления персоналом был описан как инновационный метод управления, в котором применялось ноу-хау [8].

Методология исследования

В данной исследовательской работе широко использованы методы сравнительного сопоставления моделей корпоративной культуры, статистического исследования, логического мышления, научной абстракции, группировки данных, анализа и синтеза, индукции и дедукции.

Анализ и результаты

В настоящее время в современном корпоративном управлении выделяют три основные модели корпоративной культуры. Это: англо-американская (англосаксонская), немецкая модель или западноевропейская модель, а также японская модель [9].

В англо-американской (англосаксонской) модели корпоративная культура направлена на развитие личности сотрудников. Большинство американских корпораций позволяют своим сотрудникам работать

независимо, поощряя лидерство и способствуя разнообразию труда. Американские корпорации поощряют сотрудников вносить свой вклад в постоянный личностный рост, предоставлять финансовое образование и использовать "оплату знаний" - не только за выполненную работу, но и за потенциальные знания сотрудника.

Программы гуманизации и обогащения труда также являются важной составляющей корпоративной культуры американских компаний. Цель этих программ-избавиться от однообразия и бессмысленности труда и перейти на работу, отвечающую требованиям высокоразвитой личности. Переход от жестких авторитарных форм управления к гибким методам управления трудом способствует развитию промышленной демократии и расширению прав каждого работника на проявление своей индивидуальности. В целом американский подход основан на убеждении, что эффективность организации в большей степени зависит от ознакомления сотрудников организации с ее стратегическими целями, а не от сосредоточения внимания на финансовых результатах [10].

В американских компаниях часто проводится реорганизация с целью повышения содержания работы, что способствует устранению однообразия и расширению функций, ответственности и творческих способностей сотрудников. Современные исследователи выделяют три основные формы моделирования современной корпоративной культуры на основе моделей корпоративного управления (табл.1).

1-таблица. Современные модели корпоративной культуры76

Модель корпоративной культуры	**Особенности и принципы рассматриваемой модели**
Европейские страны	- социальный статус, установленная жесткая генеалогия (иерархия) в Британии - в Италии, напротив, укоренился дух свободы, и в результате дисциплина низкая, трудно контролировать - во Франции царит высокомерие и классическая система правления - в целом европейская корпоративная культура воспринимается как наиболее бюрократическая. - вертикальная система принятия решений, существующая в европейских компаниях, затрудняет выражение личных инициатив.
Англо-Американская модель (Великобритания, США, Канада, Новая Зеландия, Австралия)	- ориентация на качественное удовлетворение потребностей потребителей; - здоровая внутренняя конкуренция; - организационная мобильность; свобода неформального общения в деловом общении; - поощрение творческого и предпринимательского подхода; - долгосрочные отношения между сотрудниками и компанией;

76Разработка автора

Модель корпоративной культуры	Особенности и принципы рассматриваемой модели
	- мотивация к успеху путем формирования внутренней системы ценностей, разделяемых большинством сотрудников; -ценность обучения, развития и самоконтроля личности; - сбалансированность жесткой стратегической структуры высшего руководства и максимальная автономия отделов в выборе методов ее реализации.
Япония	- найм на долгий год или на всю жизнь - увольнение-редкость - наставничество. Опытные и более трудолюбивые сотрудники занимают руководящие должности. - принятие решений происходит коллективно - заработная плата держится в секрете (определяется на основе опыта работы) - оценка сотрудника-оценивается конфиденциально и не разглашается. - ошибка, с другой стороны, рассматривается как системная ошибка – карьера сотрудника-медленный рост, постоянная ротация

Как видно из приведенного выше анализа, эти три модели корпоративной культуры отличаются друг от друга. Большинство западноевропейских компаний придерживаются консервативной корпоративной культуры по сравнению с американскими организациями. Личная ответственность и стремление к личной карьере, аккуратность и педантичность, совершенная дисциплина, четкие границы ответственности и соблюдение подчиненности отличают межличностные и трудовые отношения сотрудников компаний с континентальной корпоративной моделью.

Несмотря на то, что западноевропейские компании приветствуют формальное и неформальное общение, дружелюбие и наличие собственных личностных качеств, в общении между коллегами, в отличие от американских компаний, принято сохранять эмоциональную дистанцию (субординацию), признавать практику непосредственного общения руководителей и всех сотрудников.

На формирование японской модели корпоративной культуры особое влияние оказали национальные традиции государства, а также геополитические особенности. Главный девиз японской модели - "мы-семья". Эта философия нашла свое выражение в стратегических целях корпораций - повышение уровня жизни работников за счет обеспечения пожизненной занятости, стабильности и принципа выравнивания заработной платы работников являются ведущими ценностями для японских компаний.

В Японии существует понятие "гири" - "долг чести", который формирует определенные правила поведения, определяемые ролью сотрудника в компании. Отсюда японцы понимают высокую значимость группы, ее вклад и приверженность своему предприятию. Система

взаимоотношений в японских организациях сочетает в себе формальные и межличностные отношения. Поскольку крупнейшими предприятиями Японии с довоенных времен управляли семьи, семейные модели легли в основу корпоративной культуры, где босс воспринимается как отец и наставник. Концепция семьи проявляется в том, что каждый сотрудник пытается скорректировать свои действия в интересах организации; принятие решений всегда исходит от группы заинтересованных сторон, и группа также берет на себя ответственность за принятые действия.

Для японских организаций характерно размещение контроллера непосредственно на производстве, которое направлено на оперативное содействие решению всех проблем и постоянное внедрение инноваций. В целом взаимодействие всех уровней в организации индивидуально и основано на взаимопомощи, уважении. Таким образом, японская корпоративная модель строится на верности сотрудника компании, чувстве принадлежности к большой семье, которая в свою очередь делится на более мелкие группы.

В частности, в японских компаниях ошибки, допущенные сотрудниками в процессе работы, рассматриваются как ошибки в системе. Увольнения происходят сверху вниз, даже если кредиторская задолженность компании увеличивается, ее финансовое положение ухудшается и приближается к банкротству. То есть на первом месте находится руководство, за ним следуют высшие управленческие подразделения (Топ-менеджмент) и, в самом конце, персонал, рабочие и служащие. То есть, по подходу японцев, не будет плохого солдата, но, скорее всего, генерал будет плохим.

Южнокорейская модель корпоративной культуры имеет некоторое сходство с японской моделью. В Южной Корее корпоративные структуры называются “chaebol”. Chaebol - это небольшие семейные компании. [11].

Анализ подходов современных исследователей показал необходимость учета национально-культурных аспектов, менталитета, а также государственного законодательства и идеологии при формировании и оценке корпоративной культуры на российских предприятиях. Как и культура в общем смысле этого слова, корпоративная культура формируется в процессе совместной деятельности людей, но в организациях она сознательно разрабатывается и создается людьми, которые затем направляют ее развитие.

Это способствовало возникновению двух операционных состояний системы управления крупными предприятиями. Устойчивое управление приводит к неэффективности, сложной бюрократии, необходимости постоянной координации и завышенным затратам, усложняет взаимодействие между различными группами. Институт управления перестает себя оправдывать, и начинается конкуренция между людьми за право владеть и распоряжаться ресурсами и местами в системе управления. После структурных изменений Новые лидеры достигают более высоких результатов, используя все ранее накопленные ресурсы, но эта модель не обеспечивает долгосрочного устойчивого развития. Поэтому исследователи отмечают, что

российская корпоративная модель склонна к различным крайностям и находится в постоянном развитии.

В отличие от японского восприятия группы как семьи, в Узбекистане рассматривается как временное явление, позволяющее компании выполнять индивидуальные задачи и защищать их. Система управления в Узбекистане строится в двух направлениях: Во – первых, сверху вниз, во-вторых, кластеры-замкнутые группы. Узбекская корпоративная культура представлена следующими особенностями:

решающая роль высшего руководства в распределении ресурсов, его предпочтения, желания и амбиции;

 концентрация контроля в руках крупных (мажоритарных) акционеров;

 обеспечение роста прибыли за счет изменения структуры рынка - перераспределение и приобретение;

 стремление компаний сохранять постоянство в динамике развития;

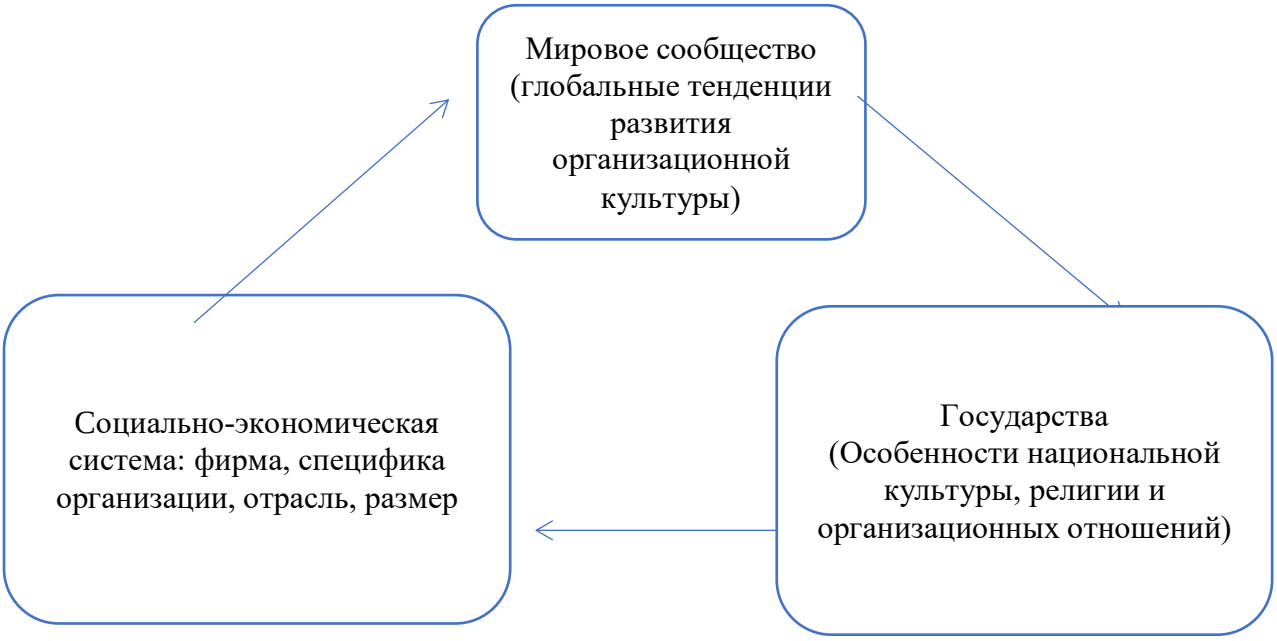
о высокая роль государственных банков и участие государства.

Большинство предприятий Узбекистана высоко централизованы, и руководящая роль директоров, директивное руководство, планирование и строгий контроль сохранились как наследие советской системы. Описанный как “отец” корпоративного управления, Боб Трикер проанализировал как с научной, так и с практической точки зрения, что азиатская модель корпоративного управления основана на "родственных и знакомых отношениях" (brotherhood Relations) [10]. В частности, эти аспекты касаются узбекской модели корпоративной культуры.

Обсуждение результатов исследования

Общим направлением корпоративной культуры является установление эффективных межличностных отношений у сотрудников, которые способствуют повышению качества работы и стоимости труда в соответствии с достоинством и репутацией каждого сотрудника. Основное внимание в эффективном межличностном общении уделяется умелому использованию вербального и невербального общения.

Существенными факторами формирования эффективной корпоративной культуры могут стать рост общего благосостояния страны, развитие духовных составляющих мотивации сотрудников в сочетании с достаточным материальным стимулированием, акцент на личностном потенциале и развитии сотрудников вместо доминирования иерархии, основанной на личных отношениях. Взаимосвязь корпоративной культуры отдельных организаций (микроуровень) и государств (макроуровень) показана на 1 рисунке.



1-Рисунок. Взаимосвязь культуры на уровне мирового сообщества, государства и отдельной организации77

Таким образом, на уровне мирового сообщества возникают глобальные тенденции развития корпоративной культуры, определяющие направление развития культуры на уровне отдельных государств. Общие тенденции развития корпоративной культуры в каждом государстве изменяются с учетом национальных особенностей, истории, религии и особенностей развития. Это, в свою очередь, влияет на корпоративную культуру отдельных фирм, организаций, предприятий страны. Важную роль на микроуровне внутри штата играет вид деятельности компании, особенности сферы деятельности, особенности организации - размер, численность и структура персонала, этап жизненного цикла и др.

Выводы и предложения

Корпоративная культура является неотъемлемой частью жизни компании и оказывает значительное влияние на ее эффективность. Осознавая это, сегодня руководство компаний стремится создать сильную корпоративную культуру, основанную на ином, чем раньше, понимании личности и ее роли в системе общественного разделения труда.

В целом эффективная корпоративная культура должна охватывать следующие аспекты:

1.Гармония, взаимодействие, командный дух;

2. Удовлетворенность работой и гордость за ее результаты;

3.Лояльность к организации и готовность к ее высоким стандартам;

4. Высокие требования к качеству работ;

5.Несмотря на трудности и бюрократические препятствия, прогресс и готовность к изменениям, вытекающим из требований конкуренции.

77 Разработка автора

Корпоративная культура-одно из самых эффективных средств вовлечения и мотивации сотрудников. Как только человек удовлетворяет потребности первого уровня (условно говоря, материальные), он испытывает потребность в другом: положении в коллективе, общих ценностях, нематериальной мотивации, и здесь на первое место выходит корпоративная культура. Об этом свидетельствует пирамида потребностей (иэрархия) Абрама Маслоу.

Использованные источники:

1. M.A. Sadikova, M.G. Umarxodjayeva, N.I. Akramova, and A.R. Yusupov – "The transformation of organizational culture to corporate culture in joint stock companies"- E3S Web of Conferences 401, 03055 (2023) CONMECHYDRO – 2023(Scopus)
2. Deal T. E. and Kennedy, A. A. (1982, 2000) Corporate Cultures: The Rites and Rituals of Corporate Life, Harmondsworth, Penguin Books, 1982; reissue Perseus Books;2000. P.17- 40. 10.
3. Шейн Э. Корпоративная культура и лидерство. – СПб: Питер, 2011. 248
4. Смирнов Э. А. Основы теории организации М.: ЮНИТИ, 2008. 211 с.
5. Insights, Hofstede. "National cultures". hi.hofstede-insights.com. Retrieved 28 February 2022.
6. Королев Г.В. Организационная культура компании в эпоху цифровизации / Г.В. Королев, А.В. Бутов // Бюллетень науки и практики. 2019. Т. 5. № 5. С. 276–284
7. Ершова К.Н., Вихорева М.В. Соотношение понятий организационной и корпоративной культуры // Journal of Economy and Business, vol. 10-1 (80), 2021. С. 129.
8. Бегматова Д.Б. - «Совершенствование методов оценки эффективности корпоративного управления в акционерных обществах"-диссертация-2018
9. B.N. Urinov -"Theoritical aspects of organizational behavior and corporate culture" Economics and innovative technologies-2020
10. Harvard business Review 10 лучшых статей Корпоративная культура А Диджитал 118с
11. Corporate governance: Principles, Policies, and practices. – book by Bob (Robert Ian) Tricker 2019. Testyn Craidd - Core Text

DOI 10.5281/zenodo.10724542
УДК 336.719.2

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АКТУАЛЬНОСТЬ И ПРОБЛЕМЫ ОБЕСПЕЧЕНИЯ ИНФОРМАЦИОННОЙ БЕЗОПАСНОСТИ БАНКОВСКИХ СИСТЕМ

Аннотация. Рассмотрена и проанализирована важность обеспечения информационной безопасности банковских систем. Излагается авторский взгляд на проблемы данной области.

Ключевые слова: информация, информационная безопасность банков, защита информации.

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RELEVANCE AND PROBLEMS OF ENSURING INFORMATION SECURITY OF BANKING SYSTEMS

Annotation. Relevance and problems of providing information security of banking systems. Annotation. The importance of ensuring information security of banking systems is considered and analyzed. The author's view on the problems in this area is presented.

Key words: information, information security of banks, information protection. Information security in banking systems plays a critical role in protecting the confidentiality, integrity and availability of financial information.

Информационная безопасность в банковских системах играет критически важную роль для защиты конфиденциальности, целостности и доступности финансовой информации.

Актуальность информационной безопасности в банковских системах подтверждается следующими аспектами:

1. Конфиденциальность данных: Банковские системы содержат конфиденциальную информацию о клиентах, включая персональные данные, финансовые счета, транзакции и другие чувствительные сведения. Защита

этой информации от доступа несанкционированных лиц является критической задачей для обеспечения доверия клиентов и соответствия нормативным требованиям.

2. Целостность данных: Банковские системы должны обеспечивать целостность данных, чтобы предотвратить искажение или модификацию информации несанкционированными лицами. Целостность данных необходима для сохранения точности финансовой информации и идентификации несанкционированных изменений.

3. Непрерывность бизнес-процессов: Банкировская деятельность зависит от непрерывности и доступности систем. Нарушения информационной безопасности, такие как кибератаки или вирусные атаки, могут привести к простоям или временной недоступности банковских услуг, что приводит к финансовым потерям и утрате клиентского доверия.

4. Соответствие нормативным требованиям: Банковские институты обязаны соблюдать строгие нормы безопасности и конфиденциальности, установленные компетентными органами и законодательством. Нарушение нормативных требований может привести к финансовым штрафам, утрате лицензии или судебным преследованиям.

5. Защита от киберугроз: Банковские системы являются привлекательной целью для киберпреступников, которые стремятся получить доступ к финансовым ресурсам и скрыть свою активность. Защита от мошенничества, вредоносных программ и других киберугроз является необходимой для минимизации рисков финансовых потерь и сохранения репутации банка.

6. Защита от внутренних угроз: Банковские системы также нуждаются в защите от внутренних угроз, таких как несанкционированный доступ к данным со стороны сотрудников, конфликты интересов и злоупотребление привилегиями доступа. Эффективные механизмы аутентификации, авторизации и мониторинга должны быть введены, чтобы уменьшить подобные угрозы.

В информационной безопасности банков можно выделить несколько основных проблем:

1. Финансовые мошенничества: банки сталкиваются с угрозой мошенничества и кражи денег. К таким проблемам относятся фишинг, вредоносные программы, кража идентификационных данных клиентов и прочие финансовые атаки.

2. Компрометация данных клиентов: хакеры могут пытаться получить доступ к личной информации клиентов, такой как имена, адреса, номера социального страхования, номера кредитных карт и другие данные. Кража такой информации может привести к финансовым потерям и нанести серьезный ущерб репутации банка.

3. Недостаточная защита данных: банки могут столкнуться с проблемой слабой защиты данных, что может привести к утечке конфиденциальной информации или несанкционированному доступу к системам. Недостаточное

обновление программного и аппаратного обеспечения, уязвимости в системах и отсутствие механизмов обнаружения инцидентов также являются проблемами.

4. Социальная инженерия: хакеры могут использовать методы социальной инженерии для обмана сотрудников банка и получения несанкционированного доступа к системам или информации. Например, они могут представиться важным сотрудником банка и попросить отправить им конфиденциальную информацию.

5. Внутренние угрозы: иногда угрозы информационной безопасности могут исходить от сотрудников банка, намеренно или ненамеренно нарушающих политику безопасности. Недостаточное обучение сотрудников может способствовать подобным инцидентам.

6. Соответствие требованиям регуляторов: банки должны соблюдать строгие нормы безопасности и требования регуляторов в отношении защиты данных. Несоблюдение требований может повлечь за собой штрафы и снижение доверия со стороны клиентов.

Говоря об информационной безопасности банковской сферы невозможно не вспомнить о “Carbank”.

Вирус carbank является вредоносной программой, которая злоупотребляет финансовыми данными пользователей. Он предназначен для кражи информации о банковских счетах и кредитных карт, а также для осуществления незаконных финансовых транзакций.

Он занимает особое место в этой сфере, предполагаемый ущерб оценивается в 1 миллиард долларов. Можно сказать, что с момента начала активности этого вируса можно говорить о новой эпохе цифровых преступлений, в которой мошенники стали красть деньги не у клиентов, а у самих банков. Вирус затронул более 100 организаций. Первые случаи были обнаружены в конце 2013 года, однако пик активности вируса пришелся на середину 2014 года. Считается, что в половине случаев мошенникам удавалось выводить до 10 миллионов долларов из одного банка.

Еще можно вспомнить несколько известных хакерских атак на банки, которые оставили глубокий след в истории кибербезопасности.

Некоторые из них включают:

1. Центральный банк Бангладеш, 2016 год: Киберпреступники взломали серверы банка и украли около 81 миллиона долларов. Они использовали уязвимость в программном обеспечении, чтобы перевести деньги на различные банковские счета в разных странах. Попытка перевести еще 850 миллионов долларов была блокирована.

2. JP Morgan Chase, 2014 год: Группа киберпреступников смогла взломать серверы банка JP Morgan Chase и получить доступ к личной информации около 76 миллионов клиентов. Эта кибератака была одной из самых масштабных атак на банки когда-либо зафиксированных.

3. Тайваньский банк Far Eastern, 2015 год: Киберпреступники использовали вредоносное программное обеспечение, чтобы получить доступ

к хранилищам данных и системам платежей банка. Они украли около 60 миллионов долларов.

4. Banco del Austro, 2015 год: Киберпреступники использовали фальшивые банковские карты и уязвимости в программном обеспечении банка, чтобы перевести более 12 миллионов долларов на счета в разных странах.

5. Банк Банг MetBank, 2019 год: Киберпреступники использовали фишинговые атаки и социальную инженерию, чтобы получить доступ к учетным записям сотрудников банка и информации о клиентах. После этого они смогли проникнуть в систему банка и провести кибератаку на около 1,6 миллиона долларов.

Это только некоторые известные примеры хакерских атак на банки. Все эти инциденты высветили важность кибербезопасности и заставили банки усилить свои меры защиты, чтобы предотвратить подобные атаки в будущем.

Изучив и проведя анализ всего сказанного выше, мы можем сделать вывод, что очень важно обеспечивать высокий уровень информационной безопасности в банковской сфере. Вмешательство злоумышленников в системы банков может привести к серьезным финансовым и репутационным последствиям как для банков, так и для их клиентов.

Банки должны активно вкладывать ресурсы в защиту своих информационных систем и клиентских данных. Необходимо установить и поддерживать современные системы безопасности, такие как фаерволы, антивирусы, межсетевые экраны и системы интра-сетевого обнаружения атак. Регулярное обновление и мониторинг этих систем является важным аспектом обеспечения безопасности.

Важным моментом также является обучение сотрудников банков вопросам информационной безопасности. Персонал должен быть осведомлен о возможных угрозах, методах атак, а также о процедурах предотвращения и реагирования на инциденты безопасности. Регулярные тренинги и тестирование знаний должны быть проведены, чтобы поддерживать высокую культуру безопасности среди сотрудников.

Взаимодействие с клиентами также требует особого внимания в плане информационной безопасности. Банки должны убедиться, что клиенты имеют доступ к безопасным каналам коммуникации и что их личные данные хранятся и передаются в безопасном режиме. Необходимо обеспечить двухфакторную аутентификацию и другие современные методы защиты для доступа клиентов к своим аккаунтам и выполнения финансовых операций.

В целом, адекватная информационная безопасность является неотъемлемой частью работы банка и его отношения с клиентами. Безопасность должна быть приоритетом для всех участников банковской сферы, чтобы защитить конфиденциальность и целостность данных, а также сохранить доверие клиентов и сохранить репутацию банка.

Использованные источники:

1. Марданов Р.Х., Ильин И.В. Стандарты информационной безопасности в банковской системе // Вестник Уфимского государственного авиационного технического университета. 2013. Т. 17. № 7. С. 55–60.
2. Приходько А.А., Керопян Г.Б. Потери банков от киберпреступности // StudNet. 2020. №12.
3. Особенности обеспечения информационной безопасности в банковской системе
[Электронный ресурс]. – Режим доступа: http://www.antimalware.ru/analytics/Technology_Analysis/Features_information_security_in_the_banking_system.
4. Сипратов, Р. О. Оценка рисков информационной безопасности кредитно-финансовой сферы и пути их снижения / Р. О. Сипратов // Актуальные вопросы современной экономики. — 2021. — № 2. — С. 369–375

УДК 641.58

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ОСОБЕННОСТИ ПРОИЗВОДСТВА БЛЮД ДИЕТИЧЕСКОГО ПИТАНИЯ В СТАЦИОНАРНЫХ УЧРЕЖДЕНИЯХ

Резюме. Даны результаты анализа организации диетического питания в стационарных учреждениях, роль медицинского персонала, этапы контроля качества продуктов питания, бракераж, оценочные критерии качества приготовленных блюд.

Ключевые слова: диета, диетолог, бракераж, блюда, контроль, оценка, пищеблок, требования, журналы.

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FEATURES OF PRODUCTION OF DIETARY DISHES IN STATIONARY INSTITUTIONS

Summary. The results of the analysis of the organization of dietary nutrition in inpatient institutions, the role of medical personnel, stages of food quality control, rejection, and evaluation criteria for the quality of prepared dishes are given.

Key words: diet, nutritionist, rejection, dishes, control, assessment, catering department, requirements, magazines.

Актуальность темы. В глобальном масштабе признано, что характер питания является важнейшим фактором, определяющим здоровье человека. Хорошее здоровье – показатель качества жизни современного человека и стремление к нему должно быть первостепенной социальной задачей. Правильно организованное питание – одно из важнейших условий здорового образа жизни [3,4,5,9]. Стратегические приоритеты Концепции РУз: борьба с такими факторами риска неинфекционных заболеваний, как: нездоровое питание; недостаточная физическая активность; избыточная масса тела пересмотр рациональных норм питания для различных половозрастных и профессиональных групп населения на основе современных достижений в области нутрициологии. Адекватное питание создает условия для оптимального физического и умственного развития, поддерживает высокую работоспособность, повышает способность организма противостоять воздействию неблагоприятных факторов внешней среды [1,2,4,6].

Организация лечебного питания в лечебно-профилактическом учреждении является неотъемлемой частью лечебного процесса и входит в число основных лечебных мероприятий [7,8].

Главная из задач лечебного питания и диет- это восстановление гомеостаза организма во время заболевания/болезни при помощи адаптации химического состава еды к его метаболическим потребностям с помощью комбинации и подбора продуктов, выбора разновидности кулинарной обработки, что во многом в современных условиях зависит от оснащения столовых больниц на основании сведений о метаболических особенностях, состояния системы тканей и органов пациента/больного. Самому полному применению всех достижений лечебного питания в большой мере помогает грамотная его постановка. В функции врача-диетолога, при назначении диетического питания пациенту, входит дать разъяснение о сущности данного диетического стола, значении для здоровья, воздействии на организм, о сроках применения. Контроль качества продуктов и готовой пищи осуществляется систематически поэтапно и соответствующим образом документируется. Дежурный врач в присутствии повара и диетсестры проводит снятие пробы (бракераж) готовой пищи, которое заключается в следующем. В бракеражный журнал, который контролирует качество готовой пищи, ежедневно записываются результаты контроля по каждому блюду, приготовленному на завтрак, обед и ужин.

Пищеблок включает в себя комплекс помещений, необходимых для хранения продуктов, доставленных с баз, разделки и приготовления, а также раздачи готовой пищи. Для реализации этих функций в состав пищеблока должны входить следующие помещения: склады (охлаждаемые и неохлаждаемые) для хранения продуктов, кладовая суточного запаса продуктов, производственные цеха (мясной заготовительный, рыбный заготовительный, овощной заготовительный, горячий доготовочный, холодный доготовочный, кондитерский), моечные (для кухонной посуды, для столовой посуды, для мытья тележек и транспортной тары), раздаточная (для отпуска пищи), обеденный зал, вспомогательные помещения (инвентарная, бельевая, тарная, помещение для отходов, помещение для персонала) В каждом отделении стационара для приёма пищи ходячим больным имеется столовая, лежачим тяжелобольным пища подаётся в палату. При централизованной системе пищу из кухни получает буфетчица отделения.

В отделениях стационара должны быть оборудованы для больных столовые и буфетные (рис.1).

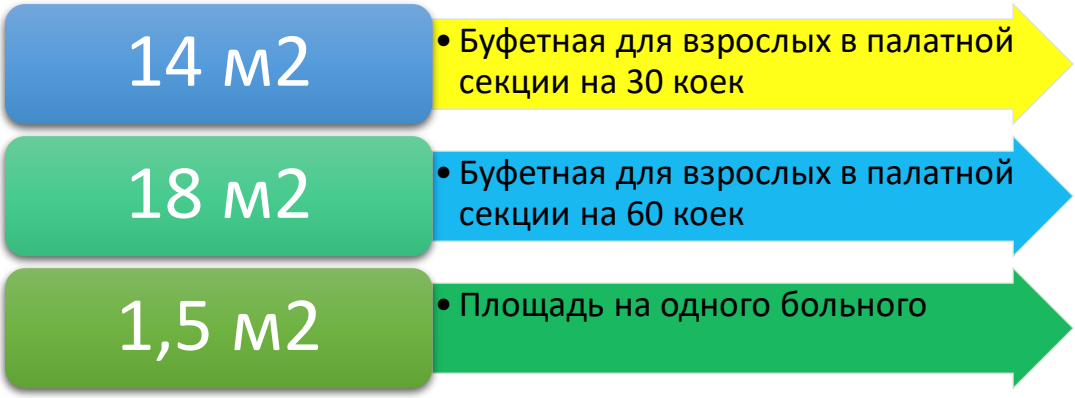

Рис.1. Площади буфетной и столовой

В инфекционных отделениях можно оборудовать одну буфетную на 2 секции и тогда её площадь увеличится на 4 м2. Исходя из количества больных отделения стационара, столовые здесь должны проектироваться для одномоментного обеспечения 50–60 % больных, соответствующего отделения. Обязательно необходимо вывесить в столовые отделения стационара ежедневное меню с массой готовых блюд. Здесь же должны быть кратко изложены характеристики лечебных диетических столов, обязательно с рекомендуемыми и запрещенными пищевыми продуктами для больных. К раздаче пищи технический персонал, занятый уборкой палат и других помещений, не допускается.

С-витаминизация пищи в стационаре. Согласно инструкции: «Проведение и контроль рационов питания» во всех медицинских учреждениях, включая стационары, родильные и перинатальные комплексы, санаторно-курортные дома, диетстоловые, дома-инвалидов и престарелых каждый день проводится добавление в готовую пищу витамина С, т.е. аскорбиновую кислоту.

В отделении стационара диетическая сестра или старшая медицинская сестра перед подачей пищи добавляют в неё витамин С (рис.25).

Рис.2. Нормы витамина С в стационарах

Аскорбиновую кислоту обычно добавляют в первые или третьи блюда. Блюда, в которые добавили витамин С, подогревать нельзя. Учёт, о проделанной витаминизации, ведётся в меню-раскладке и отражается в специальном журнале.

Нарушение санитарно-технического состояния производственного оборудования пищеблока и столовых стационара, может привести к вспышке пищевых отравлений, пищевых токсикоинфекций и других инфекционных болезней. Сегодняшняя диетология в век цивилизации даёт врачам и среднему медперсоналу новые клинические возможности в этой области. Согласно этого определены задачи медсестёр диетических (рис.3):

Рис.3. Задачи медсестёр

В функции врача-диетолога, при назначении диетического питания пациенту, входит дать разъяснение о сущности данного диетического стола, значении для здоровья, воздействии на организм, о сроках применения.

Приготовление лечебной пищи больному зависит от патологического процесса, состояния, осложнений заболевания. Согласно этого производится выбор продуктов и способы приготовления, чаще в рационе предпочтение отдают отварной пище.

Для механического щажения органов желудочно-кишечного тракта используются следующие технологические приемы обработки пищевых продуктов (рис.4):

Рис.4. Технологические приемы для механического щажения.

Для химического щажения органов пищеварения используют следующие технологические приемы (рис.5):

Рис.5. Технологические приемы для химического щажения

Температура горячих блюд должна быть в пределах от 62°С до 65°С, а холодных от 14°С до 15°С, что обеспечивает термическое щажение органов пищеварения больного. В диетическом питании жидкие блюда – супы бывают следующие (рис.6):

Рис.6. Виды супов

Порция супа в норме составляет — 400–500 г, однако для диет № 7, 8, 10 порция уменьшается и составляет — 200–250 г. Порции могут уменьшаться и для других диетических столов.

Диетическое (лечебное) питание является обязательным (а иногда основным или единственным) методом, входящим в мероприятия по лечению людей с

различными заболеваниями (главным образом, связанных с расстройствами

органов пищеварения).

Лечебное питание, соответствующее потребностям человека, оказывает лечебный эффект в отношении больного органа, способствует мобилизации защитных сил организма, предупреждению обострений, хорошему самочувствию и активной деятельности.

Использованные источники:

1. Постановление Президента Республики Узбекистан, от 18.12.2018 г. № ПП-4063 «О мерах по профилактике неинфекционных заболеваний, поддержке здорового образа жизни и повышению уровня физической активности населения».
2. СанПиН № 0366-19 «Гигиенические нормативы безопасности пищевой продукции».
3. СанПиН № 0367-19 «Гигиенические требования к производству и обороту продукции функционального, лечебного (диетического) и профилактического питания».
4. Гращенков Д.В. Современное состояние и совершенствование питания в лечебно-профилактических учреждениях/ Д.В. Гращенков, Е.Б. Дворядкина, О.В. Чугунова// Вестник ЮУрГУ. Серия «Пищевые и биотехнологии». – 2017. – Т. 5, №1. – С. 90–99.
5. Организация производства блюд диетического, детского и лечебно-профилактического питания: учебное пособие / сост.: А.А.Закурдаева, Я.П. Сердюкова; Донской ГАУ. - Персиановский: Донской ГАУ, 2019. - 184с.
6. Салиева М.Х., Основы клинической диетологии / Юсупов К.М. // Монография / Андижан, 2023 г. – 124 с.
7. Тель Л. З. Нутрициология: учебник / Л. З. Тель [и др.]. - Москва, 2021. - 544 с.
8. Салиева М.Х. Диетология: Учебное пособие /Арзикулов А.Ш., Юсупов К.М., Мирзаева М.М. Халмирзаева С.С. //- Андижан:2020. – 275 с.
9. Диетология /Под ред. А.Ю.Барановского.СПб.: Питер, 2012. —1024 с.

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ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИДА ТАЪЛИМ ХИЗМАТЛАРИ СИФАТИНИ БАҲОЛАШ

Аннотация. Мақолада таълим хизматларининг қамров кўлами ҳамда сифат жиҳатидан ўзгариши «инсон омили» дан фойдаланишда янги босқичга ўтишни намоён этиб, бу кўплаб мамлакатлар иқтисодиётининг ривожланишида асосий омил бўлиб хизмат қилиши акс этган

Калит сўзлар: демографик жараёнлар, инновация, илм-фан, таълим, инновацион фикрлаш, таълим жараёни, демографик таҳлил, касбий компетентлик.

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EVALUATION OF THE QUALITY OF EDUCATIONAL SERVICES IN HIGHER EDUCATION INSTITUTIONS

Abstract. The article shows that the change in the scope and quality of educational services represents a transition to a new stage in the use of the "human factor", which serves as the main factor in the development of the economy of many countries.

Key words: State educational standards personnel news, personnel innovations, development of the personnel system, demographic analysis, regression of the personnel system.

Жаҳонда таълим хизматларининг қамров кўлами ҳамда сифат жиҳатидан ўзгариши «инсон омили»дан фойдаланишда янги босқичга ўтишни намоён этиб, бу кўплаб мамлакатлар иқтисодиётининг ривожланишида асосий омил бўлиб хизмат қилмоқда. Жамият ҳаётини янгиловчи илмий-технологик тараққиётнинг жадал ўсиши таълим хизматларининг индивидуаллашуви, тор соҳалар бўйича ихтисослашуви ҳамда кўрсатилаётган таълим хизматлари сифатининг буюртмачилар талаби асосида ортиб бориши мазкур ўзгаришлар билан боғлиқ ҳолда юз бермоқда.

Жаҳон банки маълумотларига кўра, “2020 йилда жаҳон ялпи ички маҳсулотининг 19 фоизига тенг миқдордаги маблағ таълимнинг барча босқичларини молиялаштириш учун йўналтирилган” 78. Бундан кўринадики, таълим хизматлари сифати ва самарадорлигини оширишда меҳнат бозори ва кадрлар тайёрлаш тизимининг ташкилий-иқтисодий механизмларини такомиллаштириш долзарб аҳамият касб этмоқда.

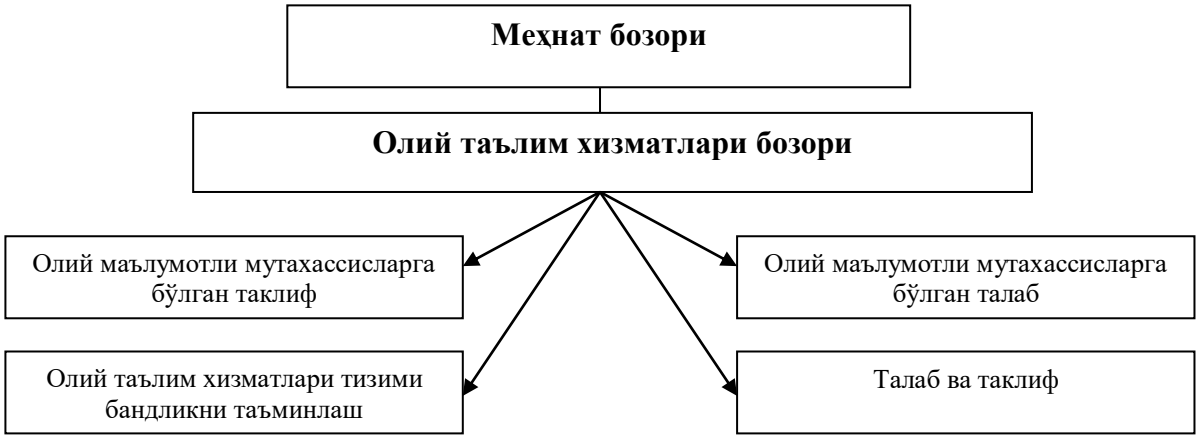
Сўнгги даврда жаҳон мамлакатларида ҳудудлар иқтисодиёти ўртасидаги номутаносибликлар кучайиб бормоқда. Илғор мамлакатларда аҳоли жон бошига тўғри келувчи реал ялпи ҳудудий маҳсулот ҳажми бўйича ривожланиш даражаси жиҳатидан энг юқори ва энг паст 10 фоизликка кирувчи ҳудудлар ўртасидаги ўртача тафовут ортиб бориб, охирги ўн йилликда 1,7 мартани, ривожланаётган мамлакатларда эса ушбу тафовут айтилган даврда 3,2 мартани ташкил этган. Баъзан иқтисодий салоҳият бўйича мамлакатлар ичидаги ҳудудлар ўртасидаги фарқ мамлакатлар ўртасидаги фарқдан катта бўлмоқда79.

Олий таълим хизматлари бозорини ривожланиши ва меҳнат бозори билан ўзаро боғлиқлиги нафақат у олий таълимга эга бўлган мутахассисларга тўланадиган иш хақига балки ишлаб чиқариш корхоналарида яратилган ишлаб чиқариш инфратузилмаларига, уларни келажакда мансаб даражаларида ривожланиши кафолатланишига ҳамда меҳнат қилиш учун зарур муҳит шароитларни борлигига боғлиқ. Ш.Ш.Зохидованинг фикрича “таълим хизматлари ва меҳнат бозорлари алоқалари тизимининг ажралмас қисмлари ҳисобланади”80 деб таъкидлайди. Меҳнат бозори билан олий таълим хизматлари бозорлари ўртасидаги муносабат олий таълим бозори талабларини эътиборга олган олий таълим хизматлари тизими томонидан тайёрланган олий малакали мутахассисларга бўлган жами таклифга боғлиқ. Олий таълим хизматлари тизимида тайёрланган олий малакали мутахассислар ва иқтисодий фаолликда банд бўлган олий малакали мутахассислар олий таълим бозорида жами таклифни ифодаласа жами талаб олий малакали мутахассисларга бўлган талаб ифода этади. Бу қуйидаги 1-чизмада кўриниши мумкин.

1https://diatatopics.worldbank.org.

2https://diatatopics.worldbank.org.https://blogs.imf.org/2019/10/09/widening-gaps-regional-nequality-within-advanced-economies/

4Захидова Ш.Ш. Олий таълим хизматлари бозорининг амал қилиш механизми самарадорлигини ошириш (Ўзбекистон материаллари асосида). и.ф.н. илм. дар. ол. уч. тақд. эт. дисс. автореф. – Тошкент, 2012. - Б. 27 б



1-расм. Умумлашган меҳнат ва олий таълим хизматлари бозоридаги талаб ва таклиф

Бозор механизми ҳаракати ишлаб чиқариш учун зарур бўлган ишчи ва олий малакали мутахассисларни таълим хизматлари тизими асосида тайёрлаб бериш, мавжуд ортиқча бўлган олий маълумотли мутахассисларни иш жойлари билан таъминлаш вазифаларини амалга оширади. Бозор механизмини яна бир йўналиши меҳнат бозорида ишчи кучига олий маълумотли мутахассисларга бўлган талаб ва таклиф конъюнктурасини ташкил топишидир.

Меҳнат бозорини ривожлантириш таълим тизимидаги меҳнат бозори ва уни бошқариш даражасига боғлиқ бўлиб, қуйида келтириладиган омиллар бу жараёнга таъсир кўрсатади:

- билимнинг асосий капитал мақомини олганлиги;
- таълим соҳасмида давлат ролининг ўзгарганлиги;
- ахборот технологияларининг ривожланганлиги.

Бу муаммони ҳал этишнинг бирдан-бир йўли фикримизча, уларни моддий рағбатлантиришни ўзаро мувофиқлаштириш асосида меҳнат ва олий таълим бозорида ижтимоий ҳамкор субъектлар тариқасида фаолият олиб бориши учун зарур бўлган механизмни шакллантириш деб қараш лозим. Ижтимоий муносабатларни бозор иқтисодиёти шароитида турли мулкчилик шаклларига асосланган ишлаб чиқариш жараёнида меҳнат ва олий таълим хизматлари бозорида меҳнат қилишга лаёқатли ишчи кучларини тақсимлаш, бандлигини таъминлаш ва уларни ўзаро боғлиқлиги ва умумий тақсимотга ва меҳнат тақсимотига таъсири ишчи кучи бандлигининг энг асосий боғловчи қисмидир.

Муаммони ҳал этишда давлат, ёлланиб ишловчилар ва ижтимоий ҳимояга муҳтожлар фикр ва мулоҳазаларидан келиб чиққан ҳолда умумий хулосаларга келиш асосида хал этиш зарур.Тўғри бозор иқтисодиётини давлат ва нодавлат мулкчилиги шароитида эркинлаштирилган ва эркин рақобатга асосланган фуқаролар жамиятини қурар эканмиз бу муаммони биргаликда

умум хулосада амалга оширилиши зарур, акс ҳолда бу муаммони ҳал этиш жавобсиз қолиши мумкин. Бу муаммони амалга оширишда меҳнат ва олий таълим бозори тааллуқли барча субъектлар давлатнинг бош ислоҳотчи эканлигини тан олган ҳолда биргаликда уни ҳал этиш мақсадига эришиш мумкин.

Бизнинг фикримизча худудларни ривожлантиришнинг олий малакали кадрлар билан боғлиқ жиҳатларига, муҳим тавсияларга алоҳида эътибор қаратишни лозим ва бу қуйидагилардан иборат:

1. Ҳудудларнинг иқтисодий ва меҳнат потенциалига мос кадрларга бўлган эхтиёжларини аниқлаш тизимини жорий этиш лозим.

2. Эркин иқтисодий худудларда хорижий таълимнинг барча бўғинларини очишга рухсат бериш ва шу асосда таълимни рақобатдошлигини таъминлашнинг маҳаллий муҳитини шакллантириш лозим (яъни, мактабгача таълим, мактаб таълими, ўрта таълим ва олий таълим бўйича хорижий таълим муассасалари фаолиятини йўлга қўйиш ва уларга рухсатномалар бериш).

3. Олий таълимнинг МДХ давлатлари ёки Шанхай хамкорлик ташкилотлари учун босқичма босқич ягона таълим келишувларига ўтиш орқали худудий имкониятларни ошириш лозим.

4. Олий таълимнинг хусусий бўғинларини ташкил этиш ва уларда таълим сифатини назорат қилишнинг муҳим нормаларини белгилаш.

5. Олий таълим битирувчиларининг худудлар бўйича меҳнат тақсимоти билан шуғулланувчи махсус ваколатли жамоат фондларини ташкил этиш;

6. Фан, таълим ва ишлаб чиқариш интеграциясини жадаллаштириш юзасидан худудларда махсус фондларни ташкил этиш ва уларнинг маблағларини шакллантиришни тартибларини белгилаш лозим.

Адабиётлар рўйхати:

1. Ўзбекистон Республикаси Президенти Ш.Мирзиёевнинг Олий Мажлисга Мурожаатномаси. 2020.24.01. https://president.uz/ru/lists/view/3324

2. Ўзбекистон Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”ги ПФ-5847-сонли Фармони. Қонун ҳужжатлари маълумотлари миллий базаси, 09.10.2019 й., 06/19/5847/3887-сон; 30.04.2020 й., 06/20/5987/0521-сон

3. Захидова Ш.Ш. Олий таълим хизматлари бозорининг амал қилиш механизми самарадорлигини ошириш (Ўзбекистон материаллари асосида). и.ф.н. илм. дар. ол. уч. тақд. эт. дисс. автореф. – Тошкент, 2012. - Б. 27 б

4. Аннакулов К.Меҳнат бозорида олий таълим муассасалари битирувчилари рақобатбардошлигини ошириш. И.ф.б.ф.д (PhD) илм. дар. ол. уч. тақд. эт. дисс. автореф. Тошкент. 2023. 28 Б.

5. Салохитдинов, Шерзод. "Олий таълим хизматлари сифатини баҳолаш тизимининг ижтимоий-иқтисодий моҳияти, мазмуни ва назарий ёндашувлар." Research and implementation (2023).5.

УДК 621.311.25

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ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ СОЛНЕЧНОЙ ПАНЕЛИ ПУТЕМ ПОНИЖЕНИЯ ПОТЕРЬ МОЩНОСТИ НА ДИОДАХ ШОТТКИ

Аннотация. В данной статье рассматривается влияние температурной зависимости параметров диодов Шоттки на общий коэффициент полезного действия (К.П.Д.) фотовольтаической станции. Экспериментально изучены температурные зависимости вольт-амперных характеристик диодов Шоттки различных фирм-изготовителей. Намечены пути повышения К.П.Д. солнечной панели через минимизацию потерь мощности блокирующих и шунтирующих диодов Шоттки.

Ключевые слова: Диод Шоттки, солнечные элементы, солнечные панели.

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INCREASING SOLAR PANEL EFFICIENCY BY REDUCING POWER LOSSES ON SCHOTTKY DIODES

Annotation. This article examines the influence of the temperature dependence of the parameters of Schottky diodes on the overall efficiency of a photovoltaic station. The temperature dependences of the current-voltage characteristics of Schottky diodes from various manufacturers were experimentally studied. Ways to increase efficiency have been outlined. solar panel through minimizing power losses of blocking and shunting Schottky diodes.

Key words: Schottky diode, solar cells, solar panels.

Введение. Эффективность солнечной батареи сильно зависит от температуры солнечного модуля. Стандартные условия испытаний (STC-Standard Test Conditions) — это широко используемый отраслевой стандарт для испытаний, в том числе и для солнечных панелей. Параметры STC

отражают работу солнечной панели в идеальных условиях. При этом освещенность должна быть 1000 Вт/м2 и температура солнечного модуля — 25 °C. Спектр излучения должен соответствовать массе воздуха 1,5, а скорость ветра должна быть равна нулю. Масса воздуха, равная 1, принимается при условиях, когда солнце находится прямо над головой. Для испытаний по STC было принято значение массы воздуха 1.5. Это некоторая усредненная цифра, позволяющая оценить потери в атмосфере на широтах, отличных от экватора [1].

Сам по себе рейтинг STC не указывает на качество сборки и то, насколько хорошо он будет работать в реальных условиях. Для выполнения этого требования имеется другой набор тестовых условий, известный как тестовое условие PVUSA- Photovoltaics for Utility-Scale Applications или PV-USA Test Conditions (PTC) [2]. В отличие от STC, PTC устанавливает температуру окружающей среды при испытаниях и моделирует повышение температуры ячейки при определенных скоростях ветра. В данных условиях панель нагревается, выходное напряжение падает, а вместе с ним и мощность. Потеря мощности значительно влияет на производительность и становится ключевой характеристикой, которую следует учитывать при выборе солнечных батарей [3,4].

Вместе с тем, при нагреве панели нагреваются и диоды Шоттки, которые установлены непосредственно на панели(блокирующие) и в токоведущих коннекторах (шунтирующие, Рис.1)

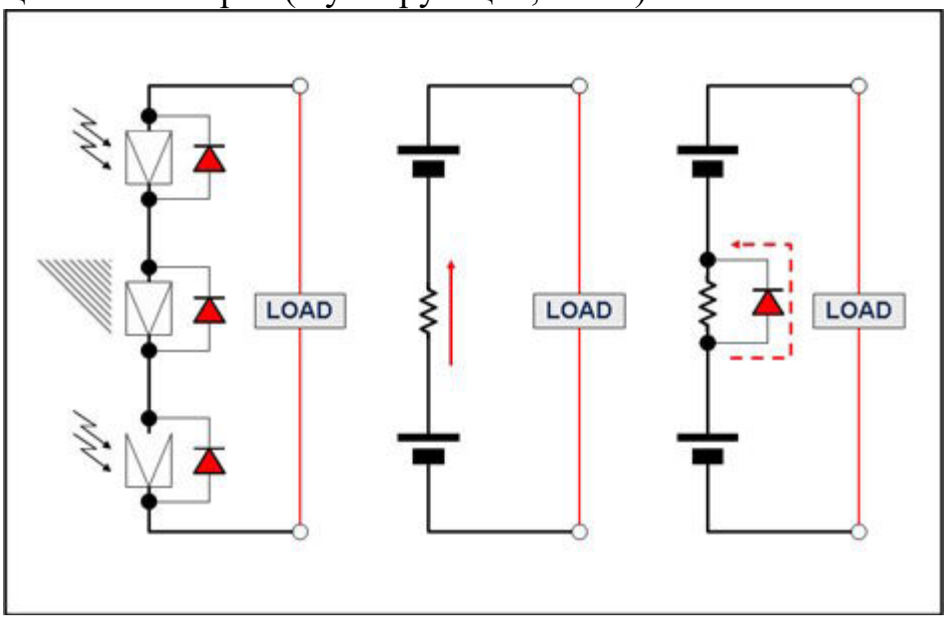

Рис.1 Расположение шунтирующих диодов

По этому для панели важен следующий дополнительный параметр - Номинальная рабочая температура солнечного элемента NOCT - Nominal Operating Cell Temperature [5]. Номинальная рабочая температура солнечного элемента (NOCT) измеряется при освещении солнечной панели солнечным светом интенсивностью 800 Вт/м2 и температуре воздуха 20°C. Цепь электрическая при этом разомкнута, угол наклона модуля 45° с ориентацией

на юг. Чем ниже NOCT, тем лучше будет работать модуль в реальных условиях. Температура хорошего солнечного элемента для испытаний на NOCT должна быть в районе 43-50°C. Однако, в условиях Узбекистана, когда в летнее время температура окружающего воздуха может достигать 50-55°C температура солнечного элемента может подняться свыше 80°C, что приведет к резкому общему падению К.П,Д. солнечной батареи [6,7]. В данной статье рассмотрено влияние повышения темепературы на К.П.Д. солнечной батареи за счет потери мощности на диодах Шоттки.

Эксперимент. В данной работе исследовались Диоды Шоттки изготавливаемые и используемые исключительно для солнечных батарей(20А, 50В) [8], сопоставлены их температурные зависимости электрических параметров (Табл.1)

Таблица 1. Перечень исследованных диодов Шоттки

Тип исследованного диода Шоттки для солнечной панели	**Фирма изготовитель**
20SQ045	www.taychipst.com, Chaine
20SQ045	www.liteon.com, Singapore
SFDS2045Le3	www.microsemi.com, USA
MC4 15A	www.reenergo.ru, Russia
PT001H-25-4	www.ooitech.com, Chaine
SM74611	www.ti.com, Texas instruments, USA

Для измерений использовалось измерительное оборудование фирмы “РОДЕ и ШВАРЦ”. Измерение вольт – амперных характеристик диодов Шотки проводилось на постоянном токе. Внешняя температура диодов поддерживалось с точностью ±1ºC. Все измерения диодов в первую очередь ориентировались на электрические параметры одной фотовольтаической панели размером 2,26х1,13м фирмы “OOITECH”(Китай), собираемой на заводе Джизакского политехнического института со следующими значениями [9,10]:

Таблица №2 Электрические параметры панели фирмы “OOITECH” [4]

Параметр	**Значение**
Ток короткого замыкания, Isc	14,7 А
Напряжение холостого режима, Uoc	49,5 В
Пиковая мощность панели, Pm	555 Вт
Сила тока на максимуме мощности, Ipm	13,9 А
Напряжение на максимуме мощности Upm	39,9 В

Результаты. На рис. 1 представлен типичный график температурной зависимости прямого тока диода Шоттки (20А, 50В) от внешней температуры диода.

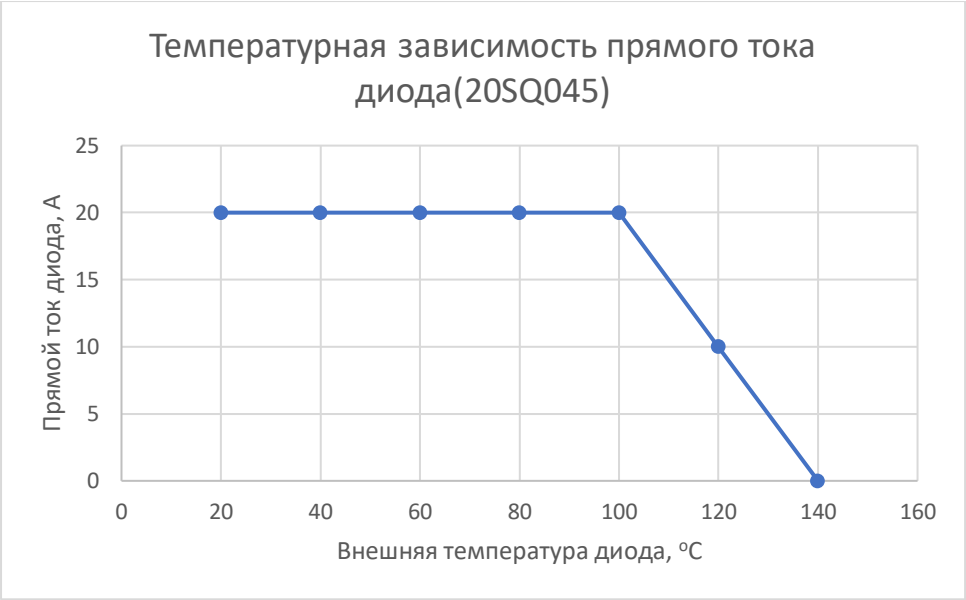

Рис.2 Температурный спад прямого тока диода Шоттки

При измерениях температурной зависимости обратного тока от процента пикового обратного напряжения, были получены типичные результаты [11].

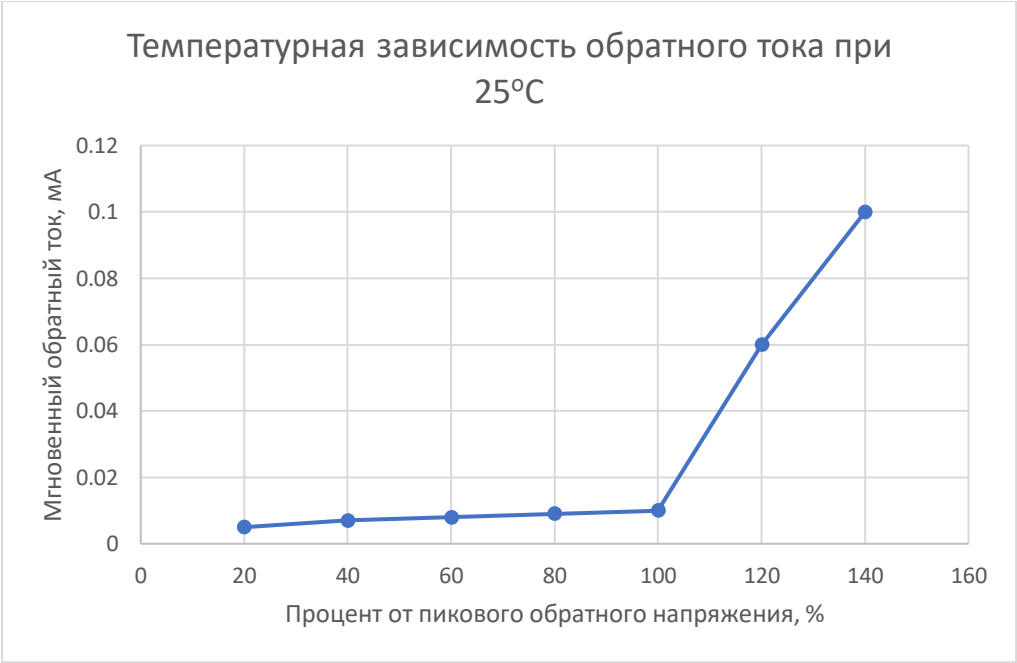

Рис. 3 Температурная зависимость обратного тока при 25 °C

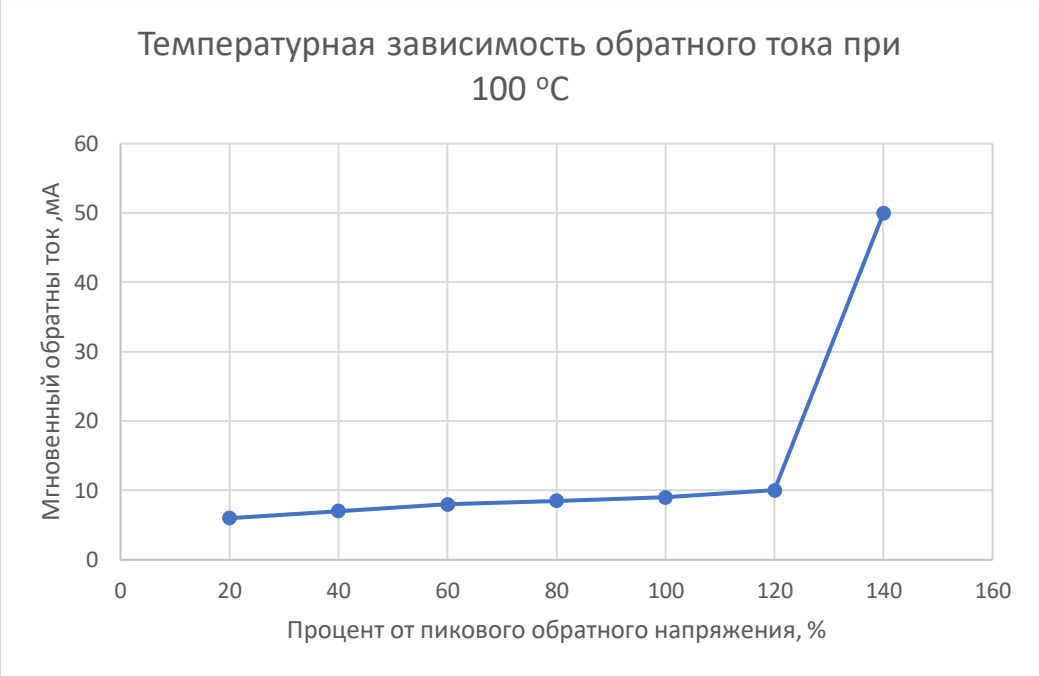

Рис.4 Температурная зависимость обратного тока при 100 оС

Обсуждение.

Примерные температурные коэффициенты солнечной панели имеют следующие значения (Табл. 3) [12].

Таблица 3 Температурные коэффициенты солнечной панели

Температурный коэффициент (Т.К.)	**Значение**
NOCT* (±2°C)	47±2°C
Т.К. по мощности (Pmax)	0,45 %/°C
Т.К. по напряжению (Uoc)	0,35 %/°C
Т.К. по току (Isc)	0,04 %/°C

По полученным температурным зависимостям можно сделать вывод, что в пределах заводского температурного интервала т.е. до 140 ºС прямой ток не изменяется. Это показывает, что прямое сопротивление диода не подвержено температурным изменениям. Однако, этого нельзя сказать для обратного тока, где он возрастает в 500 раз и при 100ºС имеет значения 50 мА. Вольт-амперная характеристика (ВАХ) барьера Шоттки имеет ярко выраженный несимметричный вид [13]. В области прямых смещений ток экспоненциально сильно растет с ростом приложенного напряжения. В области обратных смещений ток от напряжения почти не зависит [14]. При прямом и обратном смещении, ток в барьере Шоттки обусловлен основными носителями - электронами. Инжекция неосновных носителей в базу в таких диодах отсутствует. Ток образуется только электронами, движущимися из кремния в металл. По этой причине у диодов Шоттки отсутствует накопление зарядов в базе (отсутствуют рекомбинационные и диффузионные процессы) и время переключения значительно меньше, чем время переключения обычного диода [15]. Стоит отметить, что применение диодов Шоттки в сравнении,

например, с обычными кремниевыми диодами, позволяет снизить прямое падение напряжения с 0,6 - 0,7 В до 0,2 - 0,4 В.

Если принять минимальное падение напряжение 0,2 В на один диод, то для фотовольтаической станции мощностью 100КВт, общей численностью панелей 200 (при средней мощности 500Вт) количество диодов будет равно 600. При среднем токе 15А, общая потеря мощности только на диодах в прямом направлении будет $P_{пр}$= 1800Вт. Обратный ток в 50мА в условиях жаркого климата Узбекистана, также приведет к дополнительной потере мощности $P_{обр}$= 500 Вт. Таким образом, в летний период при общей мощности станции около 100 КВт, потеря мощности в диодах Шоттки будет составлять около 3 КВт. Процентная потеря мощности из-за превышения температуры солнечного элемента на 40^{o}C (исходя из температурного коэффициента 0,45%/^{0}C) будет равна 18% из этого 16% приходится на потери в диодах Шоттки [16].

Заключение. Исследование показало, что для больших фотовольтаических станций потеря мощности на блокирующих и шунтирующих диодов может достигать 3%. Для снижения потерь в целом необходимо снизить количество блокирующих диодов и применить специальную электронную схему с блокированием обратного тока. В целях сокращения числа шунтирующих диодов, в случаях если имеется гарантированное освещение всех участков одной панели, можно на некоторых панелях убрать шунтирующие диоды [17]. Следует внимательно рассмотреть ВАХ используемых диодов Шоттки и первую очередь использовать диоды, которые имеют малую потерю напряжения в прямом направлении. Необходимо также учитывать, что при кратковременном превышении максимального обратного напряжения (при грозовой атаке) диод Шоттки необратимо выходит из строя. Выход из строя приведет к большей потери мощности. В целом, рынок солнечных панелей постоянно стремится к разработке все более эффективных систем, с большим К.П.Д. В связи с этим, кроме разработки новых солнечных элементов, следует обратить внимание и на технологию получения новых более эффективных диодов с меньшим падением напряжения.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.

4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.

17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

УДК: 330.5.055.2.

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ЯНГИЧА ИҚТИСОДИЙ МУНОСАБАТЛАР ШАРОИТИДА РАҚАМЛИ ИҚТИСОДИЁТНИНГ ТУТГАН ЎРНИ ВА РОЛИ

Анотация. Ушбу мақолада мамлакатимизда рақамли иқтисодиётнинг тутган ўрни, шаклланиши ва унга таъсир этувчи омиллар, рақамли иқтисодиётни иқтисодий категория сифатида моҳияти ёритиб берилган. Рақамли иқтисодиётни ривожланиш йўналишлари ва ундаги муаммолар таҳлилий материаллар асосида баён қилинган ҳамда зарурий таклифлар берилган.

Калит сўзлар: рақамли иқтисодиёт, коммуникация, ақлли технология, интернет-савдо, рақамлаштириш, онлайн-буюртма, ахборот, илмий-тадқиқот, виртуал муҳит.

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THE PLACE AND ROLE OF THE DIGITAL ECONOMY IN THE CONDITIONS OF NEW ECONOMIC RELATIONS

Abstract. This article defines the role of the digital economy in our country, its formation and the factors influencing it, and reveals the essence of the digital economy as an economic category. Based on analytical materials, the main directions of development of the digital economy and its problems are described, and the necessary proposals are given.

Key words: digital economy, communication, smart technologies, online commerce, digitalization, online ordering, information, scientific research, virtual environment.

Кириш

Ўзбекистон Республикаси Президенти Ш.Мирзиёев томонидан 2022 йилда амалга оширилган асосий ишлар якуни ва Ўзбекистон Республикасини 2023 йилда ижтимоий-иқтисодий ривожлантиришнинг энг устувор йўналишларига бағишланган Мурожаатномада “...ракамли иктисодиётни жадал ривожлантириш учун шарт-шароитлар яратиш, давлат бошкаруви тизимини янада такомиллаштириш, ундан фойдаланиш имкониятларини

кенгайтириш, замонавий инфратузилмани қўллаш мухим ахамиятга эга” деб алоҳида таъкидлаб ўтилган [1]. Ғарб бизнеси янги коммуникация воситаларини биринчилардан бўлиб, фаол ўзлаштириб олди, мумкин бўлган хамма нарсани рақамлаштирди, хукуматдан электрон рақамли имзони қонунчилик билан расмийлаштиришга эришди, нафакат бизнес-хамжамият ичида, балки давлатда хам рақамли алоқани йўлга қўйди, давлат идоралари хам ўз ахборот тизимларини аста-секинлик билан интеграция қилдилар.

Иқтисодий ва технологик тараққиётнинг янги босқичи сифатида намоён бўлаётган рақамли инқилоб инсоният хаётини шиддат билан ўзгартириб, кенг имкониятлар яратиш билан бирга, халқаро рақобат майдонининг янада кескинлашув даврини бошлаб берди.Мамлакатимизда қишлоқ хўжалигини ривожлантиришнинг 2020-2030 йилларга мўлжалланган стратегиясида таъкидлаб ўтилганидек, “...илмий-тадқиқот, таълим ва ахборот-маслаҳат хизматларини кўрсатишни ўзаро боғлайдиган қишлоқ хўжалигига оид билим ва ахборотларни тарқатиш бўйича самарали тизимнинг йўқлиги соҳани илмий асосда ривожлантиришдаги энг жиддий тўсиқлардан бири бўлиб қолмоқда. Ҳозирда илмий-тадқиқотлар учун давлат инвестициялари даражаси қишлоқ хўжалиги умумий бюджетининг 0,2 фоизини ташкил этади. Илм-фан ва ишлаб чиқариш ўртасидаги ўзаро алоқаларнинг самарали механизмлари мавжуд эмаслиги давлат томонидан молиялаштирилган илмий-тадқиқотлар натижаларини амалиётга жорий қилишни сезиларли даражада чекламоқда” [3].

Тадқиқот мавзуси бўйича адабиётлар шарҳи (тахлили).

Рақамли иқтисодиётни ривожлантиришнинг назарий ва амалий жиҳатлари алоҳида тадқиқот йўналиши сифатида хорижлик иқтисодчи олимлардан Беккер Г., Гэлбрейт Дж., Грамков Х., Кейнс Дж.М., Норт Д., Макконел К.Р., Брю С. ва бошқаларнинг илмий ишларида атрофлича таҳлил қилинган [4]. Рақамли иқтисодиётни ривожлантириш муаммолари МДҲ олимлари Ачаповская М., Батракова А.Г., М.И.Столбова, Е.А.Бренделева, Маркова В.Д., Лапидус Л.В., Довбенко М.В., Осик Ю.И., Дубровин, И.А., Котов В., Новак А.Е., Толкачева С.А. ва бошқаларнинг илмий тадқиқотларида ўрганилган [5]. Мамлакатимиз иқтисодчи олимларидан Абдуллаев О.М., Фаттахов А.А., К.Ахмедов., Ваҳобов А.В., Абдуллаев Б.С.,Акрамова Ш.Ғ.,Ахмедов Ф., Ахмедов У.Қ., Бадалов Дж.Ш., Беркинов Б.Б., Ваҳобов А.В., Джураев Т.Т., Салимов Б.Т., Ғойибназаров Б.К., Юлдашев Д.Т. ва бошқаларнинг илмий изланишларида такрор ишлаб чиқариш жараёнида уй хўжаликлари салоҳиятидан самарали фойдаланишнинг назарий жиҳатлари ёритилган [6].

Тадқиқот методологияси.

Тадқиқотнинг назарий ва услубий асосларини махаллий ва ҳорижий олимларнинг “Рақамли иқтисодиёт”, ахборотлашган жамият ва ахборот-коммуникация технологияларига бағишланган илмий изланишлари натижалари, ушбу соҳада қабул қилинган Президент қарорлари ва ҳукумат дастурлари асос бўлди. Илмий мақолада кўтарилган муаммони атрофлича

таҳлил қилиш, таҳлил натижаларини тизимлаштириш асосида илмий асосланган хулоса ва тавсиялар ишлаб чиқишда илмий абстракция, диалектик тадқиқот, индукция ва дедукция, мақсадли ривожлантириш, монографик кузатув, тизимли ва қиёсий таҳлил, график тасвирлаш, эксперт баҳолаш ва иқтисодий статистик каби усуллардан кенг фойдаланилди.

Таҳлил ва натижалар муҳокамаси

"Рақамли иқтисодиёт" атамаси биринчи бўлиб 1995 йилда Дон Тепкотт муаллифлигида чоп этилган "Рақамли иқтисодиёт: тармоқда интеллект асрида ваъда ва хавф-хатар" (The Digital Economy: Promise and Peril in the Age of Networked Intelligence) нашрида алоҳида тушунча сифатида эътироф этилган. Иқтисодий жараёнларни рақамлаштириш нафақат бевосита ахборот-коммуникация тармоғини, балки мамлакат хўжалик фаолиятининг барча сохаларини хам қамраб оладиган кенг қамровли тенденцияга айланиб бормоқда. Интернет-савдо, рақамли қишлоқ хўжалиги, “ақлли” электр-тармоқ тизимлари, учувчисиз транспорт, шахсийлаштирилган соғлиқни сақлашда рақамли иқтисодиёт инқилоби кучли ҳис қилинмоқда.

Рақамли иқтисодиёт - бу ғоя Жаҳон банки томонидан 2016 йил “Жаҳон тараққиёти хақида маъруза - 2016: рақамли дивидендлар” маърузасида маълум қилинган. Жаҳон банки мамлакатда рақамлаштиришнинг очиқ маълумотлар, электрон ҳукумат тизими, “Яндекс” ва “Касперский” каби рақамли гигантлар, онлайн-буюртма хизматлари, ахборот технологиялари ёрдамида мулк хуқуқини рўйхатдан ўтказиш муддатининг 10 кунга қисқариши каби белги-ларини кўрсатади. Бундай шароитларда алоҳида компаниялар, минтақалар, мамлакатлар ва уларнинг бирлашмалари технологиялар, товарлар ва хизматларнинг янги турлари бозорларида янги шаклланадиган узоқ муддатли рақобатли устунликларни таъминлашга интилиб, рақамли иқтисодиёт соҳасида стратегик қарорлар шакллантириш ва амалга ошириш жараёнига фаол кириша бошлайди. Шу билан бир пайтда алоҳида тармоқлар ва мамлакат минтақалари кесимида рақамли иқтисодиёт афзалликларини амалга ошириш оқибатларини баҳолаш билан боғлиқ қатор масалаларни ҳал қилиш зарур. “Рақамли иқтисодиёт бу - реал воқеликни тўлдириб турадиган виртуал муҳитдир” [7].

Баъзи нашрларда рақамли иқтисодиётнинг асосий таркибий қисмларига фундаментал инновациялар (ярим ўтказгичлар, процессорлар), асосий технологиялар (компьютерлар) ва боғловчи инфратузилмалар (интернет ва телекоммуникация тармоқлари) ажратиб кўрсатилади. Рақамли иқтисодиёт икки хил турли тушунчаларни ифодалаш учун ишлатилади. Биринчидан, рақамли иқтисодиёт - бу ривожланишнинг замонавий босқичи ҳисобланиб, у ижодий меҳнат ва ахборот неъматларининг устувор ўрни билан тавсифланади. Иккинчидан, рақамли иқтисодиёт - бу ўзига хос тушунча бўлиб, унинг ўрганиш объекти ахборотлашган жамият хисобланади. Бугунги шиддат билан ривожланаётган глобал иқтисодиёт шароитида рақамли иқтисодиёт ўз ривожланишининг бошланғич даврида бўлиб, замонамизнинг рақамли ахборот босқичига ўтиши атига бир неча ўн йилни ташкил этади.

Умуман олганда, рақамли иқтисодиёт - бу жараёнларни таҳлил қилиш натижаларидан фойдаланиш ва катта ҳажмдаги маълумотларни қайта ишлаш асосида турли хилдаги ишлаб чиқаришлар, технологиялар, асбоб-ускуналар, товар ва хизматларни сақлаш, сотиш ва етказиб бериш самарадорлигини жиддий равишда оширишга имкон берадиган, рақамли кўринишдаги маълумотлар асосий ишлаб чиқариш омили хисобланган фаолиятдир [10].

Замонавий тараққиётнинг кейинги истиқболида катта ҳажмли маълумотлар билан ишлаш технологиялари (Big Data), сунъий интеллект, нейротехнологиялар, квант технологиялари, буюмлар интернети, робототехника ва сенсорика, рақамли электрон платформалар, булутли ва мобил технологиялар, виртуал ва қўшимча реаллик технологиялари, краудсорсинг, блокчейн технологиялари, криптовалюталар ва ICO, 3D-технологиялари сингари рақамли технологиялар ҳал қилувчи аҳамият касб этмокда.

Рақамли иқтисодиёт хозирги мавжуд соҳаларнинг ярмидан кўпроғида беқиёс ўзгаришлар келтириб чиқариши таъкидланмоқда. Жумладан, Жаҳон банки экспертлари фикрича, тезкор интернетдан фойдаланувчилар сонининг 10 фоизга кўпайиши миллий иқтисодиётлар ялпи хажмини хар йили ўртача 0,4-1,4 фоизга ошириш имконини беради [8].

Дунёда рақамли иқтисодиёт ўсишининг суръатлари йилига деярли 20 фоизни ташкил этмоқда. Тараққий этган давлатларда рақамли иқтисодиётнинг ялпи ички максулотдаги улуши 7 фоизга етган. Улар хозирнинг ўзида рақамли иқтисодиётнинг жорий қилинишидан жуда катта наф кўришмоқда. Хусусан, Америка Қўшма Штатлари йилига 400 миллиард АҚШ долларидан кўпрок рақамли хизматларни экспорт қилмоқда. Мазкур давлат ялпи ички махсулотининг 5 фоизидан кўпроғи бевосита интернет ва ахборот-телекоммуникация технологиялари билан боғлиқ соҳаларга тўғри келади. 2025 йилгача АҚШ саноатни рақамлаштиришдан қўшимча 20 трлн. доллар даромад олиши кутилмоқда. Бундай иқтисодий самарадорлик, айниқса истеъмол товарлари ишлаб чиқариш (10,3 трлн. доллар), автомобиль саноати (3,8 трлн. доллар) ва логистикада (3,9 трлн. доллар) юқори бўлиши таъкидланмоқда. Турли тадқиқотлар натижалари бўйича рақамли иқтисодиёт-нинг дунё иқтисодиётидаги салмоғи 4,5 фоиздан 15,5 фоизгачани ташкил этади. Жаҳон ахборот-коммуникация технологиялари секторида яратилаётган қўшилган қийматнинг деярли 40 фоизи ва блокчейн технологиялари билан боғлиқ патентларнинг 75 фоизи Америка Қўшма Штатлари ва Хитой Халк Республикаси ҳиссасига тўғри келади [7].

Мамлакатимиз Президенти Ш.М. Мирзиёевнинг 2020 йил 13 февраль куни ахборот технологияларини ривожлантиришга бағишланган тадбирда келтир- ган статистик маълумотларига мувофиқ, АҚШда рақамли иқтисодиётнинг ялпи ички максулотдаги улуши 10,9 фоиз, Хитойда 10 фоиз, Хиндистонда 5,5 фоизни ташкил этади. Ўзбекистонда бу кўрсаткич 2 фоиздан хам ошмайди [9].

Рақамлашгиришнинг аҳамияти ва таъсирини қанчалик ортиб бораётган-

лигини баҳолаш учун сўнгги ўн йилликдаги бир нечта йирик технологик компаниялар ва рақамли платформаларнинг жаҳон бозоридаги капитал-ларининг улушини кўриш кифоя. Хусусан, БМТнинг савдо ва ривожланиш конференцияси маълумотларида қайд этилганидек, бу кўрсаткич 2009 йилда 16 фоизни ташкил этган булса, 2020 йилнинг охирига келиб 56 фоизга етган. Дунё хамжамиятида рўй бераётган бундай жадал ўзгаришлар ва рақобатнинг кескинлашуви жараёнида инновациялар ва рақамли технологияларни кенг жорий этмасдан туриб, яқин ва узоқ келажакда мамлакатимиз иқтисодиётини барқарор ривожлантириш, унинг рақобатдошлигини таъминлай олмаслигимиз айни ҳақиқат бўлиб, бу эса, ўз навбатида, илмий ва амалий харакатларни кучайтиришни талаб этади. Бу борада, сўнгги йилларда миллий иқтисодиётимизни тубдан модернизация қилиш бўйича олиб борилаётган кенг қамровли ислоҳотлар доирасида мамлакатимиз ижтимоий-иқтисодий хаёти ва давлат бошқаруви тизимига рақамли технологияларни жорий этиш борасида қатор чора-тадбирлар амалга оширилмоқда [7]. Хусусан, Ўзбекистон Республикаси Президентининг "Ўзбекистон Республикасида рақамли иқтисодиётни ривожлантириш чора-тадбирлари тўғрисида"ги 2018 йил 3 июлдаги ПҚ-3832-сонли қарори қабул қилиниши рақамли иқтисодиётни ривожлантиришда мухим қадам бўлиб, мамлакатимизда рақамли иқтисодиётни янада ривожлантириш бўйича қуйидагиларни назарда тутувчи энг мухим вазифалар белгилаб берилди:

-инвестициявий ва тадбиркорлик фаолиятининг турли шаклларини диверсификация қилиш учун крипто-активлар айланмаси соҳасидаги фаолиятни, жумладан майнинг, смарт-контракт, консалтинг, эмиссия, айирбошлаш, сақлаш, тақсимлаш, бошқариш, суғурталаш, крауд-фандинг (жамоавий молиялаштириш) технологияларини жорий этиш;

-блокчейн технологияларини ишлаб чиқиш ва улардан фойдаланиш соҳасида замонавий ахборот-коммуникация технологияларини яхши тушунадиган, амалий иш кўникмаларига эга малакали кадрларни тайёрлаш, шунингдек, юқори малакали хорижлик мутахассисларни жалб қилиш;

-крипто-активлар бўйича фаолият ва "блокчейн" технологиялари сохасида халқаро ва хорижий ташкилотлар билан ҳамкорликни ҳар томонлама ривожлантириш, шунингдек, илғор хорижий тажрибани ҳисобга олган ҳолда зарур ҳуқуқий базани яратиш;

-рақамли иқтисодиётни янада ривожлантириш учун инновацион ғоялар, технологиялар ва ишланмаларни жорий этиш сохасида давлат органлари ва тадбиркорлик субъектларининг яқин ҳамкорлигини таъминлаш [7].

Чунончи, мамлакатимизда "Электрон ҳукумат" тизимини жорий этиш рақамли иқтисодиётни ривожлантиришнинг ажралмас таркибий қисми бўлиб, унинг асосий мақсади маъмурий тартиб ва тамойиллардан ўтишни соддалаштириш, аҳоли турмуш сифатини ошириш, инвестиция ва ишбилармонлик муҳитини яхшилашга қаратилган. Белгилаб олинган асосий вазифалар ижросини амалга ошириш, шунингдек, мамлакатимизда рақамли жамият ривожланиши, ахоли ва тадбиркорлар учун қулай имкониятлар

яратиш, бюрократик тўсиқлар ва коррупциявий омиллардан холи самарали ва очиқ давлат бошқаруви тизимини ривожлантириш борасида кўзланган мақсадга эришиш учун бугунги кунда иқтисодиётнинг барча сохаларини рақамли технологиялар асосида янгилашни назарда тутадиган "рақамли иқтисодиёт" миллий концепциясини ишлаб чиқилаётган бўлиб, айнан рақамли иқтисодиётни ривожлантириш орқали ялпи ички маҳсулот ҳажмини қўшимча 30 фоизга ўстириш имкони яратилиши кутилмоқда.

Жаҳон иқтисодиётининг глобаллашуви ва технологик ривожланиш шароитида Ўзбекистоннинг иқтисодий ривожланишини рақамли иқтисодиётсиз тасаввур қилиш қийин. Тадқиқотлар натижаларига кўра, 2022 йилга келиб глобал ЯИМнинг чорак қисми рақамли сохада бўлишини тахмин қилинмоқда. Лекин, халқаро ахборот коммуникация технологиялари ривожлантириш индекси бўйича Ўзбекистон 170 дан ортик давлат ичида 103-ўринни эгаллаб туришининг ўзи мамлакатимизда бу сохада хали ўз ечимини кутаётган масалалар ва қилиниши лозим бўлган ишлар кўплигидан далолат беради.

Давлатимиз раҳбарининг таъкидлашича, "...юртимиз халқаро ахборот коммуникация технологияларини ривожлантириш индекси бўйича 2019 йилда 8 поғонага кўтарилган бўлса-да, ҳали жуда ҳам орқада. Аксарият вазирлик ва идоралар, корхоналар рақамли технологиялардан мутлақо йироқ, десак, бу ҳам ҳақиқат. Албатта, рақамли иқтисодиётни шакллантириш керакли инфратузилма, кўп маблағ ва мехнат ресурсларини талаб этишини жуда яхши биламиз. Бироқ, қанчалик қийин бўлмасин, бу ишга бугун киришмасак, қачон киришамиз?! Эртага жуда кеч бўлади. Шу боис, рақамли иқтисодиётга фаол ўтиш - келгуси 5 йилдаги энг устувор вазифаларимиздан бири бўлади.

Рақамли технологиялар нафақат махсулот ва хизматлар сифатини оширади, ортиқча харажатларни камайтиради. Шу билан бирга, мени жуда қаттиқ ташвишга соладиган ва безовта қиладиган энг оғир иллат - коррупция балосини йўқотишда хам улар самарали воситадир. Буни барчамиз теран англаб олишимиз даркор. Давлат ва жамият бошқаруви, ижтимоий сохада хам рақамли технологияларни кенг жорий этиб, натижадорликни ошириш, бир сўз билан айтганда, одамлар турмушини кескин яхшилаш мумкин" [2].

Ўз ўрнида қайд этиб этиш лозимки, мамлакатимиз хаётида рақамли иқтисодиётнинг айрим элементлари аллақачон муваффақият билан фаолият кўрсатмоқда. Жумладан, хужжатлар ва коммуникацияларнинг оммавий равишда рақамли воситаларга ўтказилишини хисобга олиб, электрон имзога рухсат бериш, давлат билан мулоқот қилиш хам электрон платформаларга ўтказилмоқда.

Дарҳақиқат, рақамли иқтисодиёт миқёсининг кенгайиб боришида халқаро ҳамкорликни имкон қадар кучайтириш зарур. Шу ўринда мамнуният билан қайд этиш жоизки, Ўзбекистонда ахборот хавфсизлиги сохасида олиб борилаётган таъсирчан чора-тадбирлар натижасида 2020 йилда Киберхавф-сизлик глобал индексида 41 поғонага кўтарилиб, 52 ўринни эгалладик [7].

Хулоса ўрнида айтиш жоизки, инсоният тараққиётининг хозирги даври ва яқин истиқболида иқтисодиёт тармоқлари, ижтимоий соҳа ва давлат бошқаруви тизимининг сифат жиҳатдан ривожланиши рақамли технологияларни кенг жорий этиш билан бевосита боғлиқ бўлиб бормоқда. Мамлакатимиз тараққиётининг истиқболи хам рақамли иқтисодиёт ривожланиши ва рақамли технологияларнинг қамров даражасига таянади [12]. Бунга эришиш учун рақамли иқтисодиётни ривожлантиришнинг қуйидаги асосий шартлари ва устувор йўналишларини санаб ўтиш мақсадга мувофиқ, яъни:

- рақамли технологиялар барқарор фаолият кўрсатиши учун институционал муҳит ва рақамли инфратузилмани яратиш, давлат хизматларини кўрсатиш, иқтисодиётнинг реал сектори тармоқлари, соғлиқни сақлаш, давлат кадастри ва бошка сохаларда рақамли технологияларни кенг жорий этиш, шунингдек, Ўзбекистон Республикаси худудини ривожланган мамлакатлар даражасида интернет глобал тармоғига уланиш имкониятлари билан имкон қадар тўлиқ қоплашни босқичма-босқич таъминлаш;

- кадрлар тайёрлаш кўламини кенгайтириш ва бу йўналишлар бўйича чуқур билимга эга малакали дастурчилар ва инженер-техник ходимларни етиштириш, таълим тизимининг барча босқичларида халқаро андозаларга тўлиқ жавоб берадиган замонавий ахборот технологияларини ўқитиш, шу жумладан, хорижий хамкорларимиз билан биргаликда "1 миллион дастурчи" лойихасини муваффақиятли амалга ошириш;

- рақамли иқтисодиёт сохасида илмий-назарий базани мустаҳкамлаш ва бу соҳада "Рақамли ишонч" жамғармаси маблағларидан мақсадли фойдаланган холда илмий фаолиятни қўллаб-қувватлаш;

- аҳолининг кенг қатламлари ўртасида "рақамли саводхонлик"ни тартиб қилиш ва кенгайтириш, уларни ахборот технологияларини ўзлаштиришга жалб қилиш мақсадида ўқув юртларида семинар, курслар ва бошқа тадбирларни ўтказиш;

- рақамли иқтисодиёт сохасида меъёрий-хуқуқий базани мустахкамлаш ва қонунчилик хужжатларини такомиллаштириш, шунингдек, "стартап" тушунчаси, фаолияти, венчур фондлари орқали уларни молиялаштиришнинг хуқуқий асосларини яратиш;

- рақамли иқтисодиёт талабларига жавоб берадиган меҳнат бозорини ташкил этиш ва унинг мобиллигини ошириш, янги технологияларни тезкорлик билан ўзлаштириш учун мутахассислар малакасини ошириб бориш;

- рақамли иқтисодиёт сохасидаги халқаро ҳамкорликни мустаккамлаш, етакчи халқаро технологик компаниялар билан ўзаро ҳамкорликдаги лойиҳаларни амалга ошириш, шу жумладан, инновацион ишланмалар бўйича замонавий илмий-ишлаб чиқариш лабораторияларини ташкил этиш.

Халқаро тажриба шундан далолат бермоқдаки, бугунги кунда рақамли технологиялар асосан илмий ҳамжамият ва хусусий секторда жадал ривожланмоқда. Шунинг учун давлат, айнан, ушбу соҳаларда инновацион лойихалар ва IT- компанияларни қўллаб - қувватлаган холда қулай

экотизимни яратиши лозим. Шунингдек, давлат инновацион ва рақамли экотизимни қўллаб-қувватлаш сохасида рақамли таълимнинг замонавий методларини қўллаб-қувватлаши, инновацион хизматларни самарали тартибга солиш нормаларини ишлаб чиқиши, янги бозорларни ўзлаштиришда кўмаклашиши ҳамда технологик жараёнларнинг чуқурлашувида юзага чиқадиган рискларни пасайтириш чораларини кўриши мақсадга мувофиқ хисобланади.

Адабиётлар рўйхати:

1. Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг 2022 йил 20 декабрдаги Олий Мажлисга Мурожаатномаси. https://president.uz/uz/lists/vievv
2. Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг 2020 йил 24 январдаги Олий Мажлисга Мурожаатномаси. https://president.uz/uz/lists/vievv
3.“Ўзбекистон Республикаси қишлоқ хўжалигини ривожлантиришнинг 2020 - 2030 йилларга мўлжалланган Стратегиясини тасдиқлаш тўғрисида”гиЎзбекистон Республикаси Президентининг 2019 йил 23 октябрдаги ПФ-5853-сон Фармони
4. Беккер Г. «Человеческое поведение: экономический подход» «Москва: ГУ ВШЭ», 2003. – 672с.; Гэлбрейт Дж. Новое индустриальное общество. Избранное. М.: Изд-во: «Эксмо». – 2008. – 608с.; Грамков Х. “Ведение бизнеса”, Обеспечение исполнения контрактов – Узбекистан и 5 стран – лидеров в 2019 г.; Смит А. Исследование о природе и причинах богатства народов. – М.: Эксмо, 2016. – 255с.
5. Ачаповская М. Цифровизация экономики как драйвер инновационного развития. / Банкауски вестник, Сакавик 2019.; Батракова А.Г. Сбережения домашних хозяйств: сущность, группировки и роль в современной экономики // Деньги и кредит. – 2006. – №11.;
6. Абулкасимов Ҳ.П. ва бошқ. Ўзбекистонда кичик бизнес соҳасида оилавий тадбиркорликнинг ўрни ва уни ривожлантириш йўллари. / Монография. – Т.: “Университети”, 2015. ISBN –Б.54.; Ваҳобов А.В. Бозор муносабатларига ўтиш босқичида кўп укладли иқтисодиёт ва уни ҳосил бўлиши. –Т.: Молия, 2002.; Акрамова Ш.Ғ. Республикада инсон капиталини ривожлантириш жиҳатидан оилавий тадбиркорликни ривожлантириш истиқболлари. 28-29 мая 2018 г.; Абдуллаев О.М., Фаттахов А.А., К.Ахмедов. Рақамли иқтисодиёт. Т.: “LESSON PRESS, нашриёти 2020 йил - 686 бет;
7. Абдуллаев О.М., Фаттахов А.А., К.Ахмедов. Рақамли иқтисодиёт. Т.: “LESSON PRESS, нашриёти. 2021 й.
8. Республика давлат статистика қўмитаси маълумотлари. 2023й
9. press_secretary_uz
10.Ўзбекистон Республикаси Президентининг 2020 йил 5 октябрдаги "Рақамли Ўзбекистон – 2030 стратегиясини тасдиқлаш тўғрисидаги ПФ-6079-сонФармони.
11.Сатторкулов О.Т. Основы формирования инновационной среды// Молодой учёный. №9 (299). Февраль 2020 г. 217-219 стр

12.Сатторкулов О.Т. Инновацион фаолиятини давлат томонидан қўллаб қувватлаш ва ривожлантириш йўналишлари// Хоразм маъмун академияси ахборотномаси, №10/2, 2023. 156-163 бетлар.

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СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ГОРОДОВ КАШКАДАРЬИНСКОЙ ОБЛАСТИ

Аннотация. В данной статье изучаются и анализируются социально-экономические проблемы и перспективные направления развития городов Кашкадарьинской области, разрабатываются предложения и рекомендации
Ключевые слова: город, городок, урбанизация, агломерация, население, инфраструктура, социальная сфера.

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SOCIO-ECONOMIC PROBLEMS AND PERSPECTIVES OF THE DEVELOPMENT OF THE CITIES OF KASHKADARYA REGION

Abstract. This article studies and analyzes socio-economic problems and promising directions for the development of cities in the Kashkadarya region, and develops proposals and recommendations
Key words: City, town, urbanization, agglomeration, population, infrastructure, social sphere.

Известно, что городские поселения занимают ведущее положение в социально-экономическом развитии регионов. Именно в городах высоко интегрированы промышленность, культура, инфраструктура регионов, услуги населению, инвестиции и инновации. С этой точки зрения существующая проблема регионов отражается в проблеме городов. Эти проблемы есть в различных сферах, в том числе в промышленности, транспорте, коммунальном хозяйстве и сфере обслуживания, а также развитии сельского хозяйства, совершенствовании административно-территориального устройства и т.д.

Согласно данным, нынешний производственный потенциал Кашкадарьинской области, на долю которой приходится около 6,0% общей площади страны и 10% ее населения, недостаточно совместим с ее ресурсным

потенциалом. Например, регион опережает нашу республику по запасам природного газа, нефти, различных агрохимических ресурсов. В период до независимости экономика экономического района развивалась больше в аграрно-промышленном направлении, но в последующие годы с целью повышения экспортного потенциала региона осуществлялись иностранные инвестиции в горнодобывающую, топливную, химическую, легкий и развивается в индустриально-аграрном направлении на основе задействования пищевой промышленности и транспортной инфраструктуры. Кроме того, по объему инвестиций область занимает первое место в стране по производству хлопка и зерна, а по производству промышленной продукции уступает только городу Ташкенту.

Как уже говорилось выше, Кашкадарьинская область опережает по многим экономическим показателям. Но в этом регионе есть и свои проблемы. Например, основная часть промышленной продукции региона приходится на горнодобывающую и нефтяную промышленность, в которой ведущее место занимает добыча нефти и газа (на топливную промышленность приходится 77,9% общего объема промышленного производства). Такая ситуация привела к большей моноспециализации промышленности, замедлению развития обрабатывающих производств и производств полного цикла. Например, в среднем в регионе добывается около 2 миллионов тонн нефти в год (более 80 процентов нефти республики), но поскольку в регионе нет нефтеперерабатывающего предприятия, вся она поступает на нефтеперерабатывающие заводы в Бухарская и Ферганская области. Здесь следует отметить, что добыча нефти с каждым годом снижается в региональном масштабе.

Следует отметить, что строительная отрасль в регионе развита недостаточно. Однако география сырьевых месторождений этого сектора, непосредственно связанного с градостроительством и урбанизацией, охватывает всю территорию региона. Тот факт, что сырьевой фактор является основным фактором размещения этой сети, а кроме того, в Шахрисабз-Китабском бассейне имеются большие запасы ее, так как других видов полезных ископаемых здесь почти нет, необходимо развивать промышленность строительных материалов в районах этой зоны области.

Районы региона отличаются друг от друга по состоянию развития социальной сферы. Например, обеспеченность жильем на одного человека в среднем по Кашкадарьинской области по итогам 2018 года составляет 13,1м2. В то же время в Шахрисабзе (10,3 м2), Касби (9,7 м2) эта сумма значительно меньше, что приведет к дальнейшему обострению жилищной проблемы в этих районах в ближайшие годы. Современное жилищное строительство является важным индикатором сельской урбанизации.

Если уровень обеспечения населения питьевой водой практически одинаков по районам области, то ее снабжение природным газом более уязвимо в Чиракчинском, Дехканабадском и Камашинском районах. Дехканабад (51,1 %), Камаши (59,6 %), образовавшиеся в пустынных районах

(69,8 %), Касби (70,2 %), Миришкор (74,0 %) и, что самое прискорбное, также имеются проблемы в Гузоре (71,0 %), Яккабоге. (73,1 %) районов, имеющих много гидрографических притоков. Особенности рельефа региона имеют первостепенное значение в обеспечении населения природным газом, и в этом отношении равнинные районы обладают гораздо большими возможностями по сравнению с горными и долинными районами. В текущем году уровень обеспечения природным газом очень низкий в Гузорском (44,4%), Камашинском (44,8%), Дехканабадском (45,5%) районах. Особенно удивительно, что даже половина населения Гузорского района, известного на всю республику своим Шортанским газовым месторождением, не обеспечена природным газом.

Такие социально-экономические изменения отражаются, прежде всего, на сети и структуре городов. В настоящее время сеть городов в этом регионе сравнительно хорошо развита. Но существуют огромные различия в уровне обеспеченности городских территорий региональных округов. Например, каждая тысяча кв. км по обеспеченности городскими поселениями, площадь которых сравнительно невелика и создано много новых городов, лидируют районы Каршинский (18,0), Касбийский (12,8), Дехканабадский (0,8), Миришкорский (1,0), Мубарак (1,9), Камаши (2,3) и низкий в районах с неблагоприятными рельефно-климатическими условиями, таких как Гузор (2,3).

Анализ сети и структуры городов Кашкадарьинской области показывает, что хотя сеть (количество) городов к настоящему времени сформирована достаточно хорошо, улучшение их структуры является одной из важных проблем. Причина в том, что большинство городских поселений региона являются агрогородками с населением менее десяти тысяч человек и слабоиндустриализированными. При классификации городов области по численности населения к классу крупных городов относится только административный центр области Карши. Здесь следует отметить, что система городов среднего уровня в экономическом районе сформирована недостаточно; Этот класс городов, состоящий из Шахрисабза и Косона, в ближайшем будущем станет слабее, поскольку Шахрисабз станет большим городом. Потому что города Китаб (39,5 тысяч) и Камаши (36,8 тысяч), претендующие на место в средней системе урбанизации региона, растут медленно.

В целом 132 или 98 процентов городов Кашкадарьинской области относятся к классу малых городов. Среди них 6 городов с населением 20-50 тысяч жителей (Китаб, Камаши, Мубарак, Яккабог, Гузор и Чиракчи) и 12 городов с населением 10-20 тысяч человек. Они составляют ¼ всего населения города. Здесь 22 города с населением 5-10 тысяч человек.

В 2009 году в связи с переводом ряда сел в категорию городских поселений сеть городов региона стала меньше. Например, 90 городских территорий являются поселениями с населением до 5000 человек. Таким образом, города с населением до десяти тысяч человек занимают 88,7% от

общего числа городских поселений региона. Однако в них воплощено лишь 43,6% городского населения региона.

Следует отметить, что «искусственное» увеличение количества городских территорий и уровня урбанизации не является единственным решением полного решения социально-экономических проблем регионов. Поскольку в большинстве поселений сельского населения, входящих в категорию новых городов, градообразующие факторы (промышленность, инфраструктура, банковско-финансовое дело, наука-наука, квалифицированные кадры) недостаточно сформированы или развиты частично. В то же время большинство новых городов экономического района специализируются на сельскохозяйственном производстве и недостаточно обеспечены важными социальными сферами повседневной жизни, такими как питьевая вода, природный газ, связь и транспортная инфраструктура, то есть» старые проблемы новых городов» или характеризуется сохранением «больших проблем малых городов». Это не соответствует общим критериям для городов и городских территорий. Итак, можно сказать, что городская структура Кашкадарьинской области не развита и требует совершенствования.

Вышеуказанные города резко отличаются друг от друга и по своей социально-экономической функции: город Карши, будучи административным центром областей, одновременно является территориальным воплощением множества промышленных, финансовых, научных, образовательных и медицинских объектов описано. Однако в этих городах важнейшими экономико-географическими проблемами считаются обеспечение населения питьевой водой, оказание коммунально-бытовых услуг, увеличение объемов производства промышленной продукции, а экологические проблемы станут более острыми. Президент республики Ш.М.Мирзиёев комментирует эти проблемы в городе так: - «В частности, в последние годы работа, связанная с формированием центра города, полностью остановлена и предоставлена сама себе. Из-за узости городских проспектов Узбека, Насафа и Корлибогота общественный и частный транспорт создает некоторые неудобства для жителей. Кроме того, остаются нерешенными такие важные вопросы, как благоустройство центральных улиц города и обновление ирригационной системы, строительство современных жилых домов для жителей - предприятия, загрязняющие окружающую среду, должны быть вынесены за пределы города или в новые поселки. Также необходимо устранить проблемы обеспечения жителей города питьевой водой. Главное, что в дальнейшем город Карши целесообразно развивать исходя из потребностей населения региона, за счет непроизводственных отраслей и новых производственных предприятий, основанных на инновациях.

Необходимо ускорить процессы диверсификации и совершенствования функциональных типов остальных городов региона. Это увеличивает экономическую мощь региональных городов, специализирующихся на переработке сельскохозяйственной продукции, и повышает их роль во

внешней торговле. Большинство остальных городов (Шахрисабз, Косон, Китаб, Яккабог, Камаши, Гузор, Чиракчи, Бешкент) являются административными центрами агропромышленных и одновременно сельских округов.

В связи с объявлением 2009 года Годом «Развития и процветания села», хотя положение и ответственность этих функциональных типов городов и поселков возросли, их градообразующие основы находятся на очень слабом уровне. В то же время для районных центров характерна односторонняя специализация промышленности, в них преимущественно расположены предприятия легкой и пищевой промышленности. Однако в условиях рыночной экономики, основанной на спросе и предложении, деятельность многих хлопкоочистительных, плодоконсервных, винодельческих предприятий в этих городах прекращается. Например, если Гузорский хлопкоочистительный комбинат полностью остановил свою деятельность, то Шахрисабзский плодоконсервный и Китабский винно-винный заводы также продолжают производственный процесс с некоторыми перерывами. Такие города, как Мубарак и Машаль, служат основными топливно-энергетическими центрами экономического региона. Этот ресурс отражается в том, что основной проблемой городов является загрязнение воздуха и рост различных онкологических и респираторных заболеваний среди населения. В то же время из-за невыгодного естественно-географического положения (в горной местности) и отсутствия инфраструктурных сетей (вдали от основных автомагистралей и железных дорог) в таких городских районах, как Эски-Яккабог и Дехканабад, практически не сформировались промышленные отрасли., и их городской потенциал не слишком высок. В настоящее время устранение этих проблем важно не только для развития новых городов, но и для улучшения социально-экономического положения сельских поселений региона. Прежде всего, основное внимание должно быть уделено развитию промышленности, транспорта и социальной инфраструктуры в новых городах на основе эффективного использования местных природных, минерально-сырьевых и рекреационных ресурсов, дальнейшего улучшения занятости и условий жизни населения.

В регионе также медленнее происходит формирование крупных территориальных систем городских агломераций. Хотя Каршинская агломерация в настоящее время формируется, этот процесс идет медленно из-за влияния многих социальных и экономических проблем (в первую очередь, питьевой воды). Также в результате обширного расширения Каршинской агломерации становится затруднительным удовлетворение различных бытовых и коммунальных потребностей жителей города, ухудшается урбоэкологическая ситуация. Это ставит важные задачи перед новыми городами вблизи города, такими как Ханабад, Кочкак и Ертепа. В этих городах желательно развивать производства и отрасли, обслуживающие агломерационный центр.

Также близится к завершению формирование Шахрисабз-Китобской агломерации. Для этого необходимо перевести город Шахрисабз в категорию крупных городов со 100-тысячным населением. В целях укрепления позиций этого города и обеспечения быстрого экономического и социального развития целесообразно перевести его в класс городов подчинения региона.

К сожалению, в Кашкадарьинской области в настоящее время нет четко выраженных полюсов и центров роста. Однако существуют возможности повышения потенциала региона с помощью формирования таких центров, и в этой связи следует учитывать такие факторы, как их общее географическое положение, особенности исторического развития, демографическая ситуация, природные условия и ресурсы. в учетную запись.

Хотя экологическая ситуация городов Кашкадарьи положительная по сравнению с промышленно развитыми городами республики, особенности ухудшения экологической среды таких городов, как Карши, Косон и Мубарак, с каждым годом усиливаются. Это вызвано неблагоприятными природно-климатическими условиями в этих городах, устаревшими технологиями производства существующих нефтемасляных, вино-винных, газоперерабатывающих заводов, а также увеличением количества вредных веществ, выделяемых городским автомобильным транспортом и бытовыми отходами. При этом следует отметить, что промышленные предприятия (особенно загрязняющие окружающую среду) фактически расположены за пределами города, и их влияние выражено в разной степени. Особое значение имеет направление и скорость ветра. Поэтому необходимо учитывать сложившуюся экологическую ситуацию при городском планировании, организации заселения и промышленных территорий и управлении городской системой в целом.

В целом, согласно приведенному анализу, существуют следующие экономико-географические проблемы развития городских поселений Кашкадарьинской области:

• совершенствование региональной городской и региональной городской структуры, улучшение обеспеченности городов различного масштаба, развитие сельской урбанизации;

• усиление функциональной структуры городов и ускорение их адаптации к рыночным условиям (улучшение инвестиционной среды, создание совместных предприятий, повышение экспортного потенциала), социально-экономическое развитие новых городов, т.е. агрогородков;

• уточнение полюсов и центров роста с целью активизации сложной территориальной системы городов, включая формирование городских агломераций, региональное и региональное социально-экономическое развитие;

• диверсификация градообразующих производств, внедрение современных технологий в производственный процесс;

• решение урбоэкологических проблем, развитие городов и дорожных систем как социально-экономической основы региона, и х. к.

Научно-обоснованное решение вышеизложенных экономико-географических проблем, связанных с городом и урбанизацией, напрямую связано со стратегией и концепцией социально-экономического развития региона и их реализацией.

Для устранения вышеперечисленных проблем необходимо в будущем обратить особое внимание на функциональные типы региональных городов. В частности, большинство вновь образованных городов (агрогородков) в настоящее время служат центрами сельских сходов граждан (СГГ) региона. Они обеспечивают медициной (сельские медицинские пункты), образованием (обычно в этих городах расположены существующие колледжи) и другими бытовыми и обслуживающими услугами жителей сел, входящих в состав КФЮ, где они расположены. Но в них еще не сформировались промышленные предприятия и производство промышленной продукции, типичное для реальных городов. Из научных исследований, проведенных кандидатом географических наук П. Курбановым, видно, что всего 16 новых городов региона, таких как Ходжи, Паканди, Темирчи, Сарай, в настоящее время не выполняют социально-экономические функции, характерные для любых городов и практически ничем не отличаются от окрестных деревень. По этой причине в будущем новые города будут развиваться с учетом специализации экономики, социальной и транспортной инфраструктуры местности, где они расположены. Например, в десятках городов, таких как Муглан, Денов, Майманок, Полоти, Гувалак, Памук, Нишон, Самарканд, Пахтаабад, Гулистан, с учетом наличия хлопкового сырья, в них созданы хлопкоперерабатывающие, текстильные и швейные предприятия и есть возможности для развития других отраслей легкой промышленности. В результате экспорт значительной части хлопка региона без переработки, который наблюдается сейчас, будет прекращен. Также необходимо создать плодоконсервные и виноградоперерабатывающие заводы в таких городах, как Маданият, Варганза, Севаз, Кутчи, Чоршанбе, Каттабог. Причина в том, что на месте перерабатывается очень небольшое количество выращенного в настоящее время хлопкового волокна, и, несмотря на наличие благоприятных сырьевых возможностей в плодоводстве и виноградарстве, промышленные отрасли в этом направлении развиты слабо. Для удовлетворения потребностей населения региона в мясомолочной продукции целесообразно запустить новые мощности в городах Кокдала, Майманок, Фазли, Полоти, Джейнов, Ковчин. В то же время развитие рыбной отрасли в городах Талимарджон и Обихайот, расположенных вблизи естественных и искусственных водоемов, позволит сократить импорт рыбной продукции в регион.

В будущем ожидается развитие новых городов как нижнего городского звена региона, как урбанизированной части КФГ, а также повышение значимости районов в повышении уровня внутренней урбанизации. В последние годы, исходя из его административной функции и демографического потенциала, желательно передать города Янги-Миришкор (центр Миришкорского района), Карашину (центр Дехханабадского района),

Муглан (центр Касбийского района), Корлик и Майманок. к категории городов.

Использованные источники:

1. Abdullayev O. Mintaqalar va mamlakatlar iqtisodiyoti. – T.: Yangi asr avlodi, 2009. – 282 b.
2. Asanov G.R. Sotsial – iqtisodiy geografiya: termin va tushunchalar izohli lug‘ati. – T.: O‘qituvchi, 1990. – 248 b.
3. Ata–Mirzayev O.B. Regionalnoye prognozirovaniye rasseleniya i upravleniye protsessom urbanizatsii. – T.: Fan, 1979. – 92 s.
4. Soliyev A.S. Shaharlar geografiyasi. Ma’ruzalar matni – T.: O‘zMU, 2000.
5. Қурбонов П.Р. Жанубий Ўзбекистонда урбанизация жараёнлари. Монография. -Т.: «MUMTOZ SO`Z». 2019 йил. – 180 б.
6. Abdiholiqova G.A. Qashqadaryo viloyatida urbanizatsiya jarayonlari rivojlanishining iqtisodiy geografik jihatlari. Magistrlik dissertatsiya. 2022.
7. Safarov I. B. Geographical features of pilgrimage tourism (in the case of Kashkadarya region) //Экономика и социум. – 2023. – №. 2 (105). – С. 321-324.
8. Safarov I. B., Rasulov F. I. PROSPECTS FOR THE DEVELOPMENT OF PILGRIMAGE TOURISM (ON THE EXAMPLE OF KOSON DISTRICT) //Educational Research in Universal Sciences. – 2023. – Т. 2. – №. 4. – С. 189-191.
9. Safarov I. B., Toshquvvatov I. T. RECREATIONAL AND TOURISTIC OPPORTUNITIES OF UZBEKISTAN’S MOUNTAINS // Экономика и социум. – 2023. – №.11(114). – С. 303-312.
10. Navotova D.I. Theoretical and methodological aspects of resources of land resources in agriculture//Academicia: An International Multidisciplinary Research Journal. November, 2022. – P. 40-44
11. Навотова Д.И. Қашқадарё вилояти қишлоқ хўжалиги географияси ва уни карталаштиришнинг баъзи масалалари// Электронное научно-практическое периодическое издание. Экономика и социум. №3 (94), 2022. –721-725 с.
12. Навотова Д.И. Географические особенности использования зарубежного опыта использования земельных ресурсов в хозяйственных хозяйствах// Электронное научно-практическое периодическое издание. Экономика и социум. №4 (95), 2022. –198-202 с.
13. Navotova D.I. Internal Differences In The Use Of Land Resources In The Agriculture Of Kashkadarya Region// Eurasian Journal of History, Geography and Economics. Volume 16. Belgiya. 2023. P.100-104
14. Навотова Д.И. Ер ресурсларидан қишлоқ хўжалигида фойдаланишни тадқиқ қилишнинг назарий-услубий жиҳатлари// Central Asian Research Journal For Interdisciplinary Studies (CARJIS). Volume 2 | issue 1 | Tashkent,Uzbekistan. 2022. Б. 321-327
15. Navotova D.I. Main principles for determining the efficiency of the use of land resources// Proceedings of International Educators Conference 2023. Italiya. Vol. 2 No. 2 (2023) 25th February, 2023 P. 443-447

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О ЭВОЛЮЦИИ ВИОЛОНЧЕЛЬНОГО ИСКУССТВА В КИТАЕ

Аннотация. Развитие виолончельного искусства в Китае представляет собой захватывающий путь от истоков до современности. Статья "О эволюции виолончельного искусства в Китае" освещает ключевые этапы этого развития, включая изменения в педагогике, внедрение современных технологий и международное взаимодействие. Такой всесторонний взгляд позволяет лучше понять влияние культуры и образования на формирование музыкальной сцены в современном Китае.

Ключевые слова. Виолончель, музыкальная педагогика, Китай, современное искусство, педагогические трансформации, международное сотрудничество.

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ABOUT THE EVOLUTION OF CELLO ART IN CHINA

Abstract. The development of cello art in China has been a fascinating journey from its origins to the present. The article "On the Evolution of Cello Art in China" highlights key stages of this development, including changes in pedagogy, the introduction of modern technology and international interaction. This comprehensive perspective allows for a better understanding of the influence of culture and education in shaping the music scene in contemporary China.

Keywords. Cello, music pedagogy, China, contemporary art, pedagogical transformations, international cooperation.

Симфония звуков виолончели, виртуозные аккорды, и величественная мелодия — виолончельное искусство в Китае, подобно древним мастерствам, преобразилось и эволюционировало в соответствии с духом времени. От важности сотрудничества между композиторами и исполнителями до разнообразия педагогических методик — каждый этап в развитии виолончельной музыки отражает богатство культурного наследия и стремление к совершенству. Давайте отправимся в увлекательное путешествие сквозь эволюцию виолончельного искусства в Китае.

В свете богатой истории развития музыкального образования в Китае, педагогика виолончельного искусства является важной частью этой эволюции. Начиная с 1920-х годов, периодически создавались специализированные учебные музыкальные заведения, оказавшие значительное влияние на

формирование профессиональных музыкантов. Одним из важнейших учебных центров стал Центральный музыкальный институт, расположенный в Пекине. За свои более чем 100 лет существования институт утвердил систему непрерывного музыкального образования, эта система объединяет все ступени, начиная от детской музыкальной школы и музыкального училища, заканчивая консерваторией, аспирантурой и докторантурой. В составе института восемь факультетов, каждый из которых специализируется в определенной области музыкального искусства, включая традиционные китайские инструменты. Центральный музыкальный институт стремится поддерживать высокий профессиональный уровень преподавателей, это достигается приглашением иностранных музыкантов-педагогов для обучения игре на инструментах и чтения теории музыки. Более 200 предметов обучения по специальностям включаются в учебный план института, его влияние простирается за пределы Китая, пользуясь заслуженным авторитетом в области музыкального образования. Отметим также значительный вклад русских и советских представителей музыкальных школ в развитие китайской музыкальной педагогики. После образования Китайской Народной Республики в 1949 году, совместные усилия со специалистами из СССР способствовали формированию системы музыкального образования в Китае, это включало в себя создание консерваторий, музыкальных институтов и учебных заведений в различных городах, ставших ключевыми факторами в развитии музыкально-образовательной системы. Во второй половине XX века и в начале XXI века музыкально-педагогическое образование в Китае претерпело значительные изменения. Период восстановления после "культурной революции", этап мобилизации и разработки планов реформы, внедрение системных элементов, а также последующие этапы реформирования структуры образования под влиянием требований рыночной экономики — все эти факторы сыграли ключевую роль в улучшении качества музыкального образования в Китае. Важным направлением стало восстановление уважения к учителям и образованию, а также активное внедрение современных подходов в обучении. Сегодняшняя система музыкального образования в Китае отличается многообразием и высоким уровнем подготовки студентов. Учебные заведения, вроде Центрального музыкального института, продолжают играть ключевую роль в развитии и поддержании выдающегося стандарта музыкального образования в стране и за ее пределами.

Педагогика виолончельного искусства в Китае, подобно другим областям музыкального образования, прошла через значительные изменения в период восстановления в конце 1970-х и вплоть до 1990-х годов. В этот период государственные учебные заведения активно восстанавливали свою деятельность, разрабатывали новые учебные программы и улучшали материально-техническое обеспечение учебного процесса. В результате совещания руководителей высших музыкально-педагогических учебных заведений в Чжэн Чжоу в декабре 1979 года были определены четыре ключевых направления совершенствования системы образования в этой области.

Важнейшие шаги включали в себя составление учебных планов, создание учебников, повышение профессионального уровня педагогов вузов и разработку научно-методических подходов к проблемам художественного образования. В 1980-е годы в китайских университетах была внедрена международная система степеней: бакалавриат–магистратура–докторантура, это обеспечило стандартизацию высшего образования в музыкальных учебных заведениях, каждый из которых разработал свои правила поступления. Важным моментом стало издание учебных планов и программ, которые включали цели учебной и практической подготовки, учебные дисциплины, задачи научных исследований и сроки обучения. Профессия "учитель музыки" была включена в каталог специальностей, что конкретизировало цель музыкального образования в педагогических университетах — подготовку специалистов для работы в общеобразовательных школах. Постепенно в этот процесс вовлекались преподаватели, которым поручали составление учебников и разработку программ по своим дисциплинам. В 1990-е годы отмечены значительным повышением качества учебно-методической литературы. Издательства высшего образования выпускают "Музыкальные учебники телеспутника", использующие современные формы обучения с использованием спутниковой связи, данные учебники успешно сочетают теоретические аспекты с практическими навыками, ставящими их в ряд с полноценными учебными пособиями для вузов. Такие инновации продолжают вносить вклад в развитие педагогики виолончельного искусства в Китае, создавая качественные и современные условия для обучения будущих музыкантов.

Проблема дефицита учителей музыки в школах стала актуальной, и в ответ на это государство приняло ряд мер, направленных на обеспечение школ квалифицированными специалистами. С начала XXI века музыкальные факультеты педагогических вузов стремились решить проблему нехватки преподавателей. Расширение масштабов приема студентов, введение сокращенных программ обучения на факультетах с двух- и трехгодичным сроком обучения, а также создание специальных курсов для взрослых на заочных и вечерних отделениях вузов стали ключевыми шагами в решении проблемы. В 1987 году в Педагогическом институте китайского телевидения были запущены специальные курсы, призванные обучить учителей музыки среди выпускников программы. Важным этапом стала середина 1990-х годов, когда уровень подготовки абитуриентов значительно повысился, а вузы стали формировать контингент студентов с более высокой подготовкой. Отбор абитуриентов стал более строгим, с введением системы проходного балла и проведением экзаменов по теоретическим предметам. Постепенно проблема нехватки квалифицированных учителей музыки в школах начала уменьшаться. Важной составляющей стала реформа в образовательной системе, которая затронула и высшее музыкальное образование. Середина 1990-х годов стала периодом активизации научно-исследовательской работы в области музыкального образования, благодаря политике открытости, позволявшей преподавателям участвовать в международных конференциях и симпозиумах.

Реформа высшего музыкально-педагогического образования развивалась в двух основных направлениях: внедрение компьютерных технологий и обучение музыкальным дисциплинам с использованием этих технологий. На музыкальных факультетах многих университетов вводились новые дисциплины, такие как «Музыкальное творчество с использованием компьютера» и «Методика обучения игре на рояле», данные изменения позволили повысить профессиональный уровень преподавателей музыки в школах и на факультетах.

Современное виолончельное искусство в Китае испытывает своеобразное расцветание, проявляясь в выдающихся виолончелистах, музыкальных университетах и активной роли страны в мировой музыкальной арене. Известные китайские виолончелисты стали значимыми фигурами в мировой классической музыке. Ма Яньхонг — виртуоз и победитель множества международных конкурсов, включая Чайковского и Касальса. Яньг Кун — замечательный виолончелист и дирижер, активно выступающий на мировых сценах. Виолончелистка Цзинь Цзюн — еще одно яркое имя, чье талантливое исполнение завоевало признание и уважение в мире музыки. В Китае также существует несколько выдающихся музыкальных университетов, где развивается виолончельное искусство. Пекинская Центральная Консерватория, Шанхайская Консерватория, и Гуанчжоуская академия искусств являются лишь некоторыми из примеров учебных заведений, которые предлагают высококачественные программы в области виолончельного искусства, данные университеты активно участвуют в формировании будущих поколений виолончелистов, предоставляя возможности для обучения под руководством известных преподавателей и участия в международных музыкальных проектах. Кроме обучения, в Китае проводятся множество фестивалей, концертов и соревнований, которые стимулируют развитие виолончельного искусства в стране. Участие китайских музыкантов в мировых музыкальных мероприятиях и международных конкурсах дает свидетельство о растущем влиянии китайского виолончельного искусства на мировую сцену.

В современном Китае динамично развивается педагогика музыки, включая виолончельное искусство, под воздействием изменений в системе образования и потребностей музыкального сообщества. Одним из важных направлений стало не только формирование выдающихся исполнителей, но и подготовка квалифицированных педагогов, способных передавать свой опыт и воспитывать новое поколение музыкантов. Образовательные учреждения, такие как университеты и музыкальные консерватории, активно привносят изменения в учебные программы. Внедрение новых методик преподавания и использование современных технологий, включая компьютерные программы и онлайн-ресурсы, обогащают образовательный опыт студентов, делая его более доступным. Творческое развитие студентов становится центральным элементом образования. Современные педагоги виолончели в Китае акцентируют внимание на стимулировании самостоятельности, творчества и экспериментов с музыкальными идеями. Участием в концертной деятельности студенты получают возможность проявить свою индивидуальность и художественное

видение. Международное сотрудничество становится неотъемлемой частью развития виолончельного образования в Китае. Виолончелисты и преподаватели активно участвуют в международных проектах, мастер-классах и обменах опытом, что способствует обмену знаний и опыта, а также способствует расширению культурного понимания. Для более глубокого понимания инструмента в учебные планы вводятся специализированные программы и курсы, они направлены на развитие конкретных аспектов виолончельного искусства, таких как мастерство игры на высших позициях и особенности техники. Успех китайских виолончелистов на международных конкурсах играет важную роль в повышении статуса виолончельного образования в стране, это стимулирует учебные заведения вкладывать усилия в развитие талантливых музыкантов и поддерживать высокие стандарты преподавания в области виолончели.

В завершение этого музыкального путешествия, остановимся и взглянем на современное состояние виолончельного искусства в Китае. Сегодняшние студенты виолончели активно учатся искусству не только собственного исполнения, но и передачи своего мастерства будущим поколениям. Стремительное развитие образовательных программ, акцент на творческом развитии и участие в международных проектах делают китайских виолончелистов и педагогов неотъемлемой частью мирового музыкального сообщества. В таком контексте, эволюция виолончельного искусства в Китае становится не только увлекательным процессом непрерывного развития, но и важным вкладом в мировое музыкальное наследие.

Использованные источники:

1. Чжан Ли, Ян Иньфу. Выбор стратегии развития образования КНР // Педагогика. 2007. № 7. С. 91-107.
2. Сун Зинан. Летописи истории китайского современного музыкального образования и музыкального образования новой эпохи: 1840-2000. Шандон, 2004. С. 250. На кит. яз.
3. Да Ма. Взгляд и размышление о 50-й годовщине высшего педагогического образования // Исслед. музыки. 1994. № 4, ч. 2. На кит. яз. 4. Сборники пьес являются учебниками по направ- лениям исполнительской деятельности или учебно-методическими пособиями, сгруппированными по степени сложности.
5. Музыкальная теория / гл. сост. Сун Цонинь, Ма Донфен. Шанхай: Шанх. муз. изд-во, 1996. На кит. яз.

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О ВИОЛОНЧЕЛЬНОМ ИСКУССТВЕ И ЕГО ОСОБЕННОСТЯХ

Аннотация. Статья рассматривает роль монограммы D-Es-C-H в творчестве выдающегося композитора Дмитрия Шостаковича и ее влияние на музыкальную символику и программность виолончельных произведений. Исследование включает анализ мелодических оборотов этой монограммы в различных квартетах, выявляя ее уникальные характеристики и связующее значение в контексте творческой идентичности Шостаковича.

Ключевые слова. монограмма D-Es-C-H, виолончель, Шостакович, музыкальная символика, программность, камерно-инструментальная музыка, мелодические обороты.

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ABOUT CELLO ART AND ITS FEATURES

Abstract. The article explores the role of the D-Es-C-H monogram in the works of the eminent composer Dmitry Shostakovich and its impact on the musical symbolism and programmatics of cello compositions. The study includes an analysis of the melodic turns of this monogram in various quartets, revealing its unique characteristics and cohesive significance in the context of Shostakovich's creative identity.

Keywords. D-Es-C-H monogram, cello, Shostakovich, musical symbolism, programmatics, chamber instrumental music, melodic turns.

Виолончельное искусство, пропитанное вековой историей, представляет собой удивительную область музыкального творчества. В контексте камерно-инструментальной музыки, виолончель становится не просто средством исполнения, но и носителем глубоких эмоций и художественной экспрессии. От барочных сонат до современных экспериментов, виолончель продолжает восхищать своей красотой и выразительностью, являясь неотъемлемой частью музыкального наследия человечества. Важным элементом виолончельного искусства становится внедрение программности в произведения, создавая уникальные музыкальные миры и объединяя различные искусства.

Виолончельное искусство, в его богатом культурном контексте, представляет собой волнующую и величественную область музыкального творчества, в которой инструмент становится не только исполнительским средством, но и носителем глубоких эмоций, музыкальной истории и

художественной экспрессии. История виолончели прослеживает свой путь через века, начиная с ее возникновения в XVI веке. С течением времени инструмент стал важной частью оркестра и камерного ансамбля, а его репертуар охватывает широкий спектр стилей и эпох, начиная от барокко и классицизма, и завершая современностью. Великие композиторы, такие как Бах, Вивальди, Бетховен, Брамс, Шостакович, написали выдающиеся произведения для виолончели, отражающие различные музыкальные и эмоциональные тенденции. В контексте камерно-инструментальной музыки, виолончель выступает в роли неотъемлемого элемента ансамбля, обогащая звуковую текстуру и придавая произведениям глубину и насыщенность. Великие виолончелисты, такие как Ян Шеллер, Мстислав Ростропович, Янусц Кшеневски, Жаклин дю Пре, выдвинули виолончель в центр внимания, демонстрируя ее возможности как сольного и ансамблевого инструмента. Особую значимость приобретают виолончельные сонаты от великих композиторов, которые не только являются шедеврами камерной музыки, но и представляют собой уникальные художественные заявления. Сочинения С. В. Рахманинова, Н. Я. Мясковского, Д. Д. Шостаковича и других, созданные для виолончели и фортепиано, выражают глубокие эмоции, философские размышления и индивидуальный стиль каждого композитора, данные произведения не только утверждают важность виолончели в музыкальной традиции, но и служат примерами взаимодействия между исполнителем и композитором, между традицией и новаторством. Виолончельные сонаты в XX веке часто становятся экспериментальной площадкой для композиторов, где они могут проявить свою индивидуальность и свободу творчества, они отражают разнообразие стилей, техник и художественных концепций этой эпохи. Примечательные произведения Шостаковича, Прокофьева, Бриттена, Денисова и других открывают новые горизонты для виолончельного искусства, вызывая внимание своей сложной структурой, эмоциональной интенсивностью и тонкой интеллектуальностью. Важным аспектом виолончельного искусства становится внедрение программности в произведения. Программные элементы в виолончельных сонатах создают уникальные музыкальные миры, объединяя театральные, изобразительные и литературные аспекты. Композиторы стремятся детализировать содержание своих произведений, делая их более понятными и доступными для слушателя. Классификация программных сочинений, предложенная учеными, охватывает различные аспекты сюжетной выразительности, от обобщённого несюжетного до последовательно-сюжетного.

Научное исследование "Монограмма D-Es-C-H и ее варианты в струнных квартетах Д.Д. Шостаковича" было проведено Найко Натальей Михайловной, кандидатом искусствоведения и доцентом кафедра теории музыки и композиции, г. Красноярск, и Осипенко Олесей Александровной, старшим преподавателем той же кафедра. Исследование внесло значительный вклад в понимание творчества Дмитрия Шостаковича, фокусируясь на музыкальной символике и программности его струнных квартетов через призму монограммы

D-Es-C-H. Наталья Найко и Олеся Осипенко обширно анализировали мелодические обороты и разнообразные вариации монограммы в различных квартетах, выявляя их роль в структуре произведений и подчеркивая ее связующее значение в творческом наследии композитора. Монограмма D-Es-C-H в творчестве Шостаковича представляет собой уникальный аспект, добавляющий глубину и загадочность его музыке, данная тема становится не только звуковой подписью композитора, но и символом его внутреннего мира, тайных переживаний и музыкального самовыражения. В завершение можно подчеркнуть, что виолончельное искусство, насыщенное многовековой историей, является неотъемлемой частью музыкального наследия человечества. От барочных сонат до современных экспериментов, виолончель продолжает вдохновлять и поражать своей красотой и выразительностью, служа воплощением великого искусства и глубокого взаимодействия между композитором, исполнителем и слушателем.

Виолончельное искусство, особенно в контексте камерно-инструментальной музыки, находит своё воплощение в выдающихся произведениях, таких как сонаты от таких знаменитых композиторов, как С. В. Рахманинов, Н. Я. Мясковский, К. Дебюсси, С. Барбер, Д. Д. Шостакович, П. Хиндемит, Ф. Пуленк, С. С. Прокофьев, Б. Бриттен, Э. В. Денисов, А. Г. Шнитке, Р. К. Щедрин, данные произведения не только представляют собой великолепные образцы камерной музыки, но и являются своеобразным мостом между фундаментальными традициями и новаторскими подходами в жанре. Великое количество виолончельных сонат с фортепиано, созданных этими композиторами, разнообразны и богаты как композиционно-структурно, так и стилево. Одним из ключевых направлений в развитии виолончельной музыки стало внедрение программности. Программные сонаты для виолончели и фортепиано, представленные в перечисленных произведениях, несут в себе отпечаток процессов синтеза с различными видами искусства. Театральные, изобразительные и литературные элементы объединяются в единое целое, создавая уникальный музыкальный мир. Интерес к программному контенту в произведениях для виолончели и фортепиано в XX веке стал закономерным явлением, особенно учитывая усложнение музыкальной лексики и появление новых композиторских техник, данная тенденция привела к желанию авторов детализировать содержание своих произведений, предоставляя слушателям возможность лучше понять замысел композитора. Классификация программных сочинений, предложенная учеными, такими как В. Бобровский, Ю. Хохлов, Л. Казанцева, охватывает различные аспекты сюжетной выразительности. Три вида программных композиций – обобщённый несюжетный, обобщено-сюжетный и последовательно-сюжетный – выделяются Бобровским. Хохлов фокусируется на особенностях отношения композиторов к литературным источникам, представляя картинную музыкальную программность, обобщенно-сюжетную программность и последовательно-сюжетную программность. Казанцева выделяет четыре типа программности: обобщенный, обобщенно-сюжетный, сюжетный и картинно-описательный. Вместе с тем, содержательно-

смысловые функции внемузыкального компонента также рассматриваются. Прямой, косвенный и скрытый виды программности, такие как программа-импульс, программа-уточнение, программа-стержень, программа-отстранение, условная, антипрограмма, программанамек, виртуальная программа, формируют основу системы.

В исследованиях, посвященных творчеству Дмитрия Шостаковича, особенное внимание уделяется мелодическим оборотам, основанным на тоновой последовательности D-Es-C-H, данная монограмма, выявленная еще при жизни композитора, стала своеобразным символом, объединяющим творческое наследие Шостаковича и придавая ему оттенок утайки и незримого присутствия, как отмечает А. Климовицкий. Исследователи, такие как М. Сабинина и А. Климовицкий, различают использование мотива D-Es-C-H в его основной форме и разнообразные варианты, возникающие из специфики музыкального мышления композитора, этиварианты, хотя и напоминают монограмму, различаются звуковой высотой и не имеют самостоятельного значения в музыкальной структуре. Климовицкий выделяет важные факторы для функционирования мотива D-Es-C-H как семантического элемента: его композиционное и синтаксическое положение, а также драматургическая роль, он подчеркивает, что эти факторы влияют на яркость и выразительность подачи монограммы в контексте произведения. Некоторые исследователи, такие как М. Арановский и В. Бобровский, допускают возможность существования монограммы с неполным комплексом признаков. Например, мотив B-H-As-G в Пятнадцатой симфонии рассматривается как "закамуфлированная тема-монограмма", где семантическая функция выявляется благодаря драматургической и композиционной позиции. Тем не менее, проблема монограммы D-Es-C-H остается актуальной, так как в произведениях Шостаковича встречаются мелодические обороты, в которых изменена последовательность тонов монограммы, но которые также претендуют на роль авторского знака. На основе анализа текстов можно заключить, что композитор использовал различные варианты монограммы, изменяя порядок ее тонов. Следовательно, включение в произведения Шостаковича различных элементов, основанных на тоновой последовательности D-Es-C-H, в разнообразных формах и контекстах, можно рассматривать как авторский знак композитора, этимелодические обороты не только придают произведениям особый характер, но и подчеркивают уникальность творческой личности Дмитрия Шостаковича в контексте музыкальной символики.

Монограмма D-Es-C-H встречается явно в Восьмом квартете, где ее варианты служат основой для тематического материала каждой части. В различных эпизодах она может принимать различные характеры, от линейно-мелодического до наступательно-механистичного и скерцозно-танцевального, данный мотив также может быть представлен менее выразительно, вплетаясь в ритмически богатые мелодии, как, например, в I части Четырнадцатого квартета. Важно отметить, что монограмма и ее варианты служат связующим звеном между различными произведениями Шостаковича, вне зависимости от их

жанровой принадлежности и концепции, что дает основание рассматривать этот элемент как один из вариантов Авторского знака, представляя собой своеобразный музыкальный код, олицетворяющий авторскую идентичность. Также подчеркнем разнообразие вариантов мелодизированной темы-монограммы в различных квартетах, она может появляться в разных инструментальных партиях, в различных тесситурах и иметь различные характеры. Вариант нисходящего поступенного мотива, основанного на комбинации тонов монограммы Es-D-C-H, дополняет картину, демонстрируя ее разнообразие и возможность использования в различных музыкальных контекстах.

Виолончельное искусство, пронизанное символикой и программностью, становится увлекательным миром, где звуки превращаются в язык глубоких эмоций и художественных концепций. Монограмма D-Es-C-H в творчестве Шостаковича является ярким примером, как музыка становится не только звучащей, но и символической формой самовыражения композитора. В этом контексте виолончель становится не только инструментом, но и воплощением великого искусства, где каждая нота обретает глубину и значение, исследуя грани человеческой души.

Использованные источники:

1. Арановский М. Пятнадцатая симфония Д. Шостаковича и некоторые вопросы музыкальной семантики // Вопросы теории и эстетики музыки, вып. 15 – Л.: Музыка, 1977. 151 с.
2. Бобровский В. Камерные инструментальные ансамбли Д. Шостаковича. – М.: Советский композитор, 1961. 257 с.
3. Дворниченко О. Дмитрий Шостакович. Путешествие. – М.: Текст, 2006. 575 с.
4. Климовицкий А. Ещё раз о теме-монограмме DEsCH // Д.Д. Шостакович. Сборник статей к 90- летию со дня рождения / Сост. Л.Г. Ковнацкая. – СПб.: Композитор, 1996. С. 249-268.
5. Найко Н. О некоторых комбинациях тонов монограммы «D-Es-C-H» в сочинениях Дмитрия Шостаковича // Музыкальная жизнь. 2011. №7. С. 85-87.
6. Найко Н.М., Осипенко О.А. Д. Шостакович. Струнные квартеты 40-50 гг.: интонационные и драматургические особенности. – Красноярск: Красноярская государственная академия музыки и театра, 2009. 224 с.
7. Сабинина М. Шостакович – симфонист. – М.: Музыка, 1976. 477 с.

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СИНТЕЗ МУЗЫКАЛЬНОГО КАЛЕЙДОСКОПА И ВИОЛОНЧЕЛЬНОГО ИСКУССТВА

Аннотация. Эта статья исследует инновационный подход к обучению виолончели, объединяя технические аспекты искусства игры на инструменте с методикой "Музыкального Калейдоскопа". Мы рассматриваем фонетические упражнения, индивидуализацию обучения, а также эмоциональную интерпретацию в контексте виолончельного искусства. Синтез этих подходов создает уникальное образовательное пространство, способствуя всестороннему развитию студентов в мире виолончели и музыки в целом.

Ключевые слова. виолончель, музыкальное искусство, обучение, методика, Музыкальный Калейдоскоп, фонетические упражнения, эмоциональная интерпретация.

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SYNTHESIS OF MUSICAL KALEIDOSCOPE AND CELLO ART

Abstract. This article explores an innovative approach to cello education by merging the technical aspects of playing the instrument with the "Musical Kaleidoscope" methodology. We delve into phonetic exercises, personalized learning, and emotional interpretation in the context of cello artistry. The synthesis of these approaches creates a unique educational space, fostering the comprehensive development of students in the world of the cello and music as a whole.

Keywords. cello, musical art, education, methodology, Musical Kaleidoscope, phonetic exercises, emotional interpretation.

В мире образования искусств, объединение методик и подходов к обучению является ключевым фактором, определяющим успешность процесса. В статье мы рассмотрим уникальный подход к обучению виолончели, внедряя в него инновационную методику "Музыкального Калейдоскопа". От технических аспектов до эмоциональной интерпретации, эта гармония обещает новый уровень понимания искусства в звучании виолончели.

В свете растущего числа китайских студентов, изучающих музыкальное искусство в России, вопросы языкового владения и освоения музыкальной терминологии становятся важными аспектами педагогики и образования в этой

области. Китайским студентам-русистам музыкального профиля приходится сталкиваться с особыми трудностями, такими как запоминание обширного объема сложных музыкальных терминов для использования в речи, особенно в короткие сроки. Результаты опроса, проведенного в группах китайских студентов-русистов музыкального направления, подчеркивают, что более половины из них испытывают сложности в усвоении музыкальной терминологии, данные трудности частично обусловлены недостаточным словарным запасом в области музыкальной терминологии, слабым владением научным стилем и ограниченным уровнем владения русским языком. Музыкальная терминология, как часть научного стиля, представляет собой сложный инструмент для студентов, требующий особого внимания и организации обучения. Важно осознать, что эти термины обладают характеристиками, такими как точность, однозначность и когнитивная насыщенность. Они становятся ключевыми элементами в научном стиле, используемом в монографиях, диссертациях, лекциях, статьях и других научных текстах. Музыкальная терминология охватывает различные аспекты музыкального искусства, включая жанры, направления, выразительные средства, инструменты и тембры голоса, это динамичная область, подверженная изменениям, отражающим как изменения в самой музыке, так и в окружающем мире. Понимание и освоение терминологии в музыкальной сфере могут быть облегчены системой упражнений, направленных на формирование языковых навыков и углубленное понимание содержания. Важно подчеркнуть, что музыкальные термины не остаются неизменными; их состав динамичен и подвергается изменениям. Обучение принципам формирования терминологии в музыкальном искусстве через систему упражнений может способствовать лучшему освоению студентами этой сложной области знаний.

В процессе изучения виолончельного искусства и музыкальной педагогики, особенно для китайских студентов, сталкивающихся с изучением русского языка в этой области, важным аспектом является усвоение музыкальной терминологии, данная область лексики обладает рядом особенностей, таких как международность, заимствование слов и разнообразие национальных наименований для музыкальных направлений. Как отмечает Н. Г. Ткаченко, музыкальная терминология в русском языке обогащена за счет заимствования слов из итальянского, французского и немецкого языков, что отражает интернациональный характер музыкального искусства, это может представлять трудности для студентов, особенно из Китая, ввиду разнообразия форм и вариантов терминов. Важной чертой музыкальной терминологии также является ее динамичность и национальная специфика. Каждое направление в музыке имеет свои уникальные наименования, что подчеркивает многообразие и культурное разнообразие в музыкальном мире. Ну вот к примеру, в китайской музыке выделяются "взаимопроникающие звукоряды" - инь (минорный) и ян (мажорный), в то время как в джазовой музыке появляются новые лексические единицы, такие как "swing", "licorice stick", "slush pump", что может быть сложно усвоить студентам из Китая. Для эффективного обучения музыкальной

терминологии китайским студентам-русистам предлагается использовать многомерную систему упражнений, встроенную в программу обучения "Музыкальный калейдоскоп", данная программа разработана с учетом особенностей этнопсихологии китайских студентов, уделяя внимание их коллективистским принципам, уважению к учителю и трудолюбию в обучении. Программа включает различные уровни сложности упражнений, что обеспечивает прогрессивное усвоение терминологии, это учитывает не только лингвистические, но и коммуникативные аспекты, помогая студентам развивать навыки общения на русском языке в контексте музыкальной среды. Используя концепцию "Музыкального калейдоскопа", студенты могут эффективно углублять свои знания в музыкальной терминологии и преодолевать языковые барьеры в процессе обучения.

Исследование фонетических вариантов в музыкальной терминологии предоставляет уникальную возможность углубленного изучения языка искусства, особенно в контексте виолончели, где точность и ясность в понимании музыкальных терминов являются важными аспектами успешного обучения. В данном контексте, применение фонетических упражнений может быть настоящим ключом к усвоению музыкальной терминологии студентами-виолончелистами.

Процесс обучения может быть организован следующим образом:

● Фонетическое произношение терминов:

Студенты могут активно участвовать в процессе фонетического произношения музыкальных терминов, подобранных специально для виолончелистов. Например, термины, такие как "арпеджио", "легато", "гармония" и "ле-га-то", могут быть подвергнуты детальному фонетическому анализу и регулярному произношению.

● Ударение в словах:

Этот этап обучения может включать фразы, содержащие термины, требующие ударений. Например, фраза "Эмоциональный ле-га-то добавляет глубину музыкальной фразе" поможет студентам не только правильно поставить ударения, но и интегрировать термины в реальный музыкальный контекст.

● Сортировка терминов:

Студенты могут участвовать в сортировке музыкальных терминов в алфавитном порядке, что подчеркнет алфавитный порядок терминов и обеспечит лучшее их усвоение.

● Выбор правильной буквы в словах:

Упражнение на выбор правильной буквы в терминах поможет студентам различать звуки, что важно в контексте виолончели, где даже небольшие фонетические различия могут влиять на произношение и смысл.

Применение методики виолончельного искусства:

Допустим, студент работает над фразой, содержащей термин "ле-га-то". Преподаватель вводит фразу, например, "Лега-то в этой части придает музыке гладкость и выразительность". Затем студенты могут пройти через

фонетические упражнения, чтобы правильно произнести и выделить ударения в данном музыкальном контексте. Также, важно подчеркнуть, что эта методика может быть адаптирована под индивидуальные потребности студентов. Если студент имеет сложности с определенными звуками, то упражнения могут быть персонализированы для преодоления этих трудностей. Интеграция фонетических упражнений в обучение музыкальной терминологии в виолончельном искусстве способствует не только более четкому произношению терминов, но и их лучшему пониманию в музыкальном контексте, это может значительно обогатить образовательный процесс в области виолончельного искусства, делая его более доступным и эффективным для студентов.

Погружение в удивительный мир виолончельного искусства — это не только уникальный процесс, но и настоящее волшебство, где технические навыки, музыкальная теория и эмоциональное восприятие музыки становятся неразрывным единым целым. Все начинается с освоения технических тонкостей: правильная постановка рук, чтение нот, лады и позиции на грифе виолончели. В этом мире звуков и нот "Музыкальный калейдоскоп" вносит свою уникальную ноту. Техническое мастерство виолончелиста – это как плетение волшебных нитей, где каждый звук, каждое движение руки имеет свое значение. Внедрение методики "Музыкальный калейдоскоп" превращает техническое обучение в захватывающее приключение. Упражнения интегрируют технические детали с языком музыки, позволяя студентам не только виртуозно владеть инструментом, но и погружаться в мир музыкальных терминов. Каждый студент — уникальная нота в этой музыкальной симфонии. "Музыкальный калейдоскоп" предлагает модули, созданные индивидуально для каждого виолончелиста. Выбор репертуара, адаптированного под уровень сложности, и интеграция предпочтений виолончелиста создают магическое обучение, где каждый ученик расцветает в своей музыкальной вселенной. Фонетические упражнения становятся ключом к языку музыки. Правильное произношение музыкальных терминов становится неотъемлемой частью технических и музыкальных упражнений, это не только улучшает языковые навыки, но и открывает новые горизонты в понимании и восприятии музыкальных концепций. Виолончель — инструмент, способный переносить эмоции и чувства в самой глубокой и искренней форме. Преподавание виолончели, насыщенное эмоциональной интерпретацией, требует не только мастерства, но и душевной гармонии. "Музыкальный калейдоскоп" открывает модули, посвященные различным стилям музыки, где виолончелист может раскрывать свою музыкальную личность и передавать эмоции через свой инструмент. Музыка как форма коммуникации занимает важное место в обучении виолончели. Умение эффективно общаться через звуки и мелодии становится ключом к успешному исполнению. "Музыкальный калейдоскоп" внедряет упражнения, развивающие коммуникативную компетенцию студента в музыкальном контексте, что особенно важно при совместной игре в оркестре или ансамбле.

В синтезе идей "Музыкального калейдоскопа" и виолончельного обучения звучит мелодия образовательного восхождения. В этой гармонии студенты виолончели открывают для себя новые грани творчества и погружаются в мир музыкальных открытий.

Современная педагогика в области музыкального искусства требует интегрированных подходов, способных раскрывать потенциал каждого ученика. В статье мы рассмотрели, как методика "Музыкального Калейдоскопа" может стать тем ключом, который открывает перед виолончелистами новые горизонты творчества и понимания музыкальной терминологии. Гармония обучения виолончельному искусству через объединение технических, эмоциональных и коммуникативных аспектов создает уникальное образовательное пространство, где каждая нота звучит в согласии с индивидуальностью студента.

Использованные источники:

1. Ткаченко Н. Г. К истории музыкальной терминологии // Язык, сознание, коммуникация: сб. ст. / сост.: В. В. Красных, А. И. Изотов. -Вып. 5. - М.: Филология, 1998. - С. 71-75.
2. Ахманова О. С. Словарь лингвистических терминов. - М., 1982.
3. Ожегов С. И. Словарь русского языка. - М.: Русский язык, 1991.
4. Jin L., Cortazzi M. Dimensions of dialogue: Large classes in China // International Journal of Educational Research. - 1998. - No. 29. -P. 739-761.
5. Кошелева Е. Ю., Пак И. Я., Чернобыльски Э. Этнопсихологические особенности модели обучения китайских студентов // Современные проблемы науки и образования. - 2013.

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ВЛИЯНИЕ ПРИРОДНО-КЛИМАТИЧЕСКИХ ФАКТОРОВ НА ФИЗИЧЕСКОЕ РАЗВИТИЕ, ДВИГАТЕЛЬНУЮ АКТИВНОСТЬ И ФИЗИЧЕСКОЕ СОСТОЯНИЕ ЧЕЛОВЕКА

Резюме. В статье рассматривается воздействие природно-климатических факторов на физическое развитие, двигательную активность и физическое состояние человека.

Ключевые слова: факторы внешней среды, экологические условия, здоровье человека.

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INFLUENCE OF NATURAL-CLIMATIC FACTORS ON PHYSICAL DEVELOPMENT, MOTOR ACTIVITY AND PHYSICAL CONDITION OF HUMAN

Summary. The article examines the impact of natural and climatic factors on physical development, motor activity and physical condition of a person.

Key words: environmental factors, environmental conditions, human health.

В мировом сообществе уделяется особое внимание воспитанию учащейся молодежи. В современных условиях модернизации образования во многих странах одной из главных задач является сбережение и повышение знаний и здоровья учащейся молодежи. Новая модель образования смешает акцент с формирования умений и навыков на ценностное развитие личности. Однако, несмотря на обозначенные ориентиры совершенствования системы образования в последние годы наблюдается увеличение числа учащейся молодежи, имеющих низкий уровень физического и психического здоровья. А по мнению Воз (всемирной организации здравоохранения загрязнение окружающей среды связано с ростом синдрома гиперактивности и нарушения внимания ощущений среды, аутизм. Еще один диагноз который в последние время связывают с загрязнением в этих условиях возрастает социальная и педагогическая значимость формирования ценностей физической культуры здоровья у обучающихся определяющих дальнейший полноту реализации их жизненных целей и смысла.

Особую тревогу по мнению группы специалистов в своем докладе (специалисты созданного Международного фонда спасения Арала) отмечают что состояние здоровья населения региона Аральского моря вызывает беспокойство. Случай респираторных заболеваний включая астму туберкулёз, стали одним из самых частых в Центральной Азии, так высоки показатели детской и материнской смертности. Хотя до сих пор не установлены явные причины следственные связи между пылью, загрязнением и распространенностью респираторных заболеваний, вероятно эти стресс-факторы влияют на общее состояние здоровья населения. Известные ученые Израиля (2010) высказали следующее: оценка риска для здоровья для человека-это процесс установления вероятности развития опасных последствий и степени выраженности неблагоприятных факторов окружающей среды и цивилизации на здоровье. Воспитание здорового поколения формирования здорового образа жизни укрепление здоровья молодёжи не возможно без повышения качества образовательного процесса, обеспечения интересов молодого поколения и расширение возможностей для регулярных занятий спортом.

Для чего во многих странах мира введена кредитная система обучения, где предмет, физическое воспитание проводится во внеучебное время не занятиях по секциям. В США, студентам кто занимается в секции и участвует в соревнованиях к окончанию университета дается 2 балла. Важно отметить, что национальные сборные США, Китая, Японии состоят на 75% из студентов университетов. В то же время в Европейских странах, кредитная система не получила своего распространения предмет. Физическое воспитании основан не оздоровительной физической культуре и валеологии. В сваю очередь вызывает беспокойства здоровья молодежи в регионах природной экстремальной зоны, где в формировании приспособления и окружающей среде большая роль принадлежит климатическим и погодным фактором. Знание особенности сезонных периодов и двигательной активности и стилизованное при подборе упражнений дают положительные результаты в решений в главной задачи – улучшение состояние здоровья. [1].

Авторы [4] изучая проблему среднего Приобья пришел к выводу, что это типичный пример природной экстремальной зоны. Суровость климата ХМА-Югры определяется не только факторов, входящих в понятия синдром полярного напряжения, но и факторов урбанизированной среды обитания и связи с длительным пребыванием в закрытых помещениях и малоподвижный образ жизни. Эти условия отражают суммарный эффект влияния многих факторов их взаимодействии включающие синергизм, ортагонизм и кумуляцию для принятия обоснованных управлен числих решений необходим мониторинг не только состояние здоровья, физического развития, физической подготовленности учащейся молодежи, но и факторов их определяющих. В своей работе специалисты [4] выявили факторы в условиях ХМА-Югры определяющие состояние здоровья, физическое развитие и подготовленность учащейся молодежи и они достаточно много образны. Поэтому для

организации наиболее эффективного оздоровительного вмешательства необходимо использовать те из них которые оказывают решающее влияние на конечный результат. В формирование приспособления к окружающей среде большая роль принадлежит климатическим и погодным фактором, которые обладают известной повторяемостью и одновременно аритмичностью. Знание особенностей сезонных периодов и двигательной активности, и использовании при подборе упражнений дают положительный результаты в решении главной задачи-улучшение состояния здоровья. Отсюда актуальность и востребованность темы диссертации. Важно отметить, что горный климат оказывает влияние организм человека тем, что температура и влажность воздуха в горах ниже, с интенсивность солнечной радиации выше, чем на равнине. Но самая вешняя особенность горного климата в том, что по мере увеличения высоты снимается атмосферное давлении воздух становиться боли разряженным, соответственно уменьшении количество вдыхаемого воздуха,

Специалист [3] на основе исследований пришла к заключению, что в условиях среднегорья в результате активной акклиматизации с использованием мышечных нагрузок) спортивная работоспособность сохраняется ещё некоторое время. Поэтому во многих случаях после тренировок в среднегорье спортсменом удается улучшить свои спортивные достижения — вот почему перед ответственными соревнованиями спортсмены тренируется и горных условиях. У жителей Памира на 20 % выше у жителей равнины, а у жителей Анд (высота 4540 м) – на 30 % [2]. Сравнительный анализ литературных источников о Приаралье проведенный авторами сказано, что средние значение данных физического развития по длине тела, массы тела и другим параметрам значительно ниже чем учащейся молодежи равниной зоны. Это обусловлено климата географическими условиями. В рамках рассматриваемой проблемы следует отметить исследования проведенные специалисты изучившие адаптационные реакции организма студентов, проживающих в различных природно-климатических регионов. В исследовании приняли участие студенты Владимирского государственного университете (n=302) и ряда вузов Забайкалья (n=261). Коренные жителей Забайкалья были разделены на две группы по этническим признакам буряты и русские. В качестве функциональной нагрузки на координатор система в работе использовано проба с фиксированным темпам дыханья. Полученные результаты свидетельствуют о необходимости создание региональных систем мониторинга окружающий среды и здоровья поколения, дифференцированного подхода и выработки научно-обоснованный лечебно-профилактических мероприятий и при отборе людей для работы тех или иных неадекватных условий занятий спортом. Сниженные резервы организма студентов, подвергающихся техногенному воздействию, приводят к нарушению адаптации к учебному процессу, что проявляется повышением средних показателей гемодинамики систематического

артериального давления, частоты сердечных сокращении дыхательных движений.

Страны центральной Азий осознав глубину экологического условия в 1993 году создали международный фонд спасения Арала (М.Ф.С.А) группа авторов, в своем докладе отмечают, что состояние здоровья населения в регионе Аральского моря вызывает беспокойства. Случаи респираторных заболеваний, включая астму и туберкулез стали одним из самых частых в центральной Азии, так высоки показатели детской и материнской смертности.

Степень изученности проблемы. Футбол является самой популярной массовой игрой и занимает значительной место в структуре социального капитала различных стран. Занятия футболом могут быть ресурсам поддержания социального капитала. Особую роль футбол играет в жизни студенческой молодежи. В целом массовость футбола является местом для международных встреч молодежи. Кроме того, как массовый вид спорта командная спортивная игра, футбол непосредственно связан с физическим здоровьем, которое является основой формирования здорового образа жизни. Зарубежные специалисты занятие футболом рассматривают его как активная форма социального капитала, что проявляется в непосредственном участии в занятиях футболом, футбольных матчах. Занятие футболом является фактором развития человеческого капитала, так как содействует становлению спортивного мастерства, что является общей целью вузовского физического воспитания и многих молодежных организаций [4]. Особый интерес представляет сведения об особенностях помещения футбола в структуре социального капитала молодежи различных регионов Российской Федерации. Так при анализе результатов опроса Чемпионат мира по футболу-2018 в оценках и мнениях молодежи выяснилось, что только 2% по массиву орошенных занимаются футболом профессионально. В среднем по России практически не играют в футбол 47% опрошенных, вообще не играют 8% и 5% соответственно. Таким образом студенты Астрахани играют футбол чаще, чем в России в целом авторы пришли выводу, что футбол занимает значительное место в структуре социального капитала молодежи рамках регионов. Необходимо отметить, что среди опрошенных студентов категория будущих спортсменов-профессионалов составила 4%. Следовательно, будущая профессионального длительность не является причиной их интереса и футболу [5].

Исследователи [5] разработали методику повышения эффективность выполнения технического действия в футболе-приема к передаче мяча в касание-квалифицированными футболистами и обосновали количественные параметры оценки освоения заданного пространственного поля и средств развития специальной силы в моральных физических упражнениях на силовых тренажерах.

Следует отметить что автор считает, что важнейшим критерием оценки технической подготовленности квалифицированных футболистов является уровень развития специальной силовой подготовленности мышечная группы

нижних конечностей, обеспечивающих фронтальные перемещено футболиста [5].

В сухом жарком климате специалисты [1] отмечают, что эффективность процесса подготовки футболистов к соревнованиям предполагает учет многих факторов, в том числе и высокой температуре внешней среды установлено, что длительно пребывание в условиях сухой жаркого климата вызывает существенные сдвиги в деятельности сердечно-сосудистой системы, в динамике водно солевого обмена и при совместном воздействии на организм нагрузки и высокой температуры среды и инсоляции при адаптации организма нагрузки и высокий температуры среды, что не учитывается документах по планированию учебно тренировочного процесса как по различном видам спорта, так и по футболу. Любая деятельность человека оказывает влияние на окружающую среду, ухудшение состояния биосфере опасно для лиц всех живых существ в том числе для человека. Всесторонни изучение человека, его отношений с окружающим миром привели к понимаю, что здоровье — это не только следствии болезни, но и физическое и психологическое, социальное благополучие.

Использованные источники:

1. Агаджанян, Н. А. Экология человека. М: КРУК, — 256 с.
2. Батоцырева, Т. Е., Иванов С. В. Особенности адаптационных реакций организма студентов, постоянно проживающих в условиях Забайкалья и Центральной России./Мат. метод. конф. «Организация и методика учебного процесса физкультурной, оздоровительной и спортивной работы» МГУ Москва 2008. с. 280–281.
3. Васьковский, Р. А., Павлова С. Е. Изменение спортивной работоспособности и физиологических функций организма в горных условиях/Мат. метод. научно-практ. конф. студентов и молодых учёных. 22 апреля. т. II. 2011. Иркутск. с. 184–186.
4. Вишневский, В. А., Апокин В. В., Соколов С. В. Влияние природно-климатических и социально-экономических факторов на здоровье, физическое развитие и физическую подготовленность учащихся ХМАО-Югры.// Теория и практика физической культуры. 2010. — №7. — с. 95–98
5. Еськов, В. И. Экологические факторы Ханты-Мансийского автономного округа — Самара. Офорт. 2004. —172 с.

УДК 343.44

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О НЕКОТОРЫХ ПРОБЛЕМАХ ОБЩИХ ПРАВИЛ ПРОВЕДЕНИЯ СЛЕДСТВЕННЫХ ДЕЙСТВИЙ

Аннотация. Автором проанализированы особенности проведения следственных действий. Сделан вывод о том, что сформулированные законодателем правила производства следственных действий не являются оптимизированы в своем содержании и системе в целом, что обосновывает необходимость оптимизации системы общих правил производства следственных действий.

Ключевые слова: следственное действие, общие правила, следователь, расследование.

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ABOUT SOME PROBLEMS OF THE GENERAL RULES FOR CONDUCTING INVESTIGATIVE ACTIONS

Annotation. The author analyzes the peculiarities of conducting investigative actions. It is concluded that the rules for the production of investigative actions formulated by the legislator are not optimized in their content and the system as a whole, which justifies the need to optimize the system of general rules for the production of investigative actions.

Keywords: investigative action, general rules, investigator, investigation.

Внимание законодателя к особенностям порядка проведения следственных действий обосновано тем, что результат следственного действия является крайне важным для уголовного дела, поскольку оно будет иметь доказательственное значение. Нарушение установленного федеральным законодательством порядка проведения следственного действия будет являться основанием для признания такого доказательства недопустимым, вследствие чего рассмотрение условий проведения следственных действий необходимо.

Общие условия проведения следственных действий независимо от их вида предписаны ст. 164 УПК РФ. Каждое предписание данной уголовного-процессуальной нормы относимо ко всем видам следственных действий, независимо от их специфики.

Согласно ч. 3 ст. 164 УПК РФ проведение следственных действий в ночное время не допускается. Ночным временем согласно уголовно-процессуального законодательства признается промежуток времени с 22 до 6 часов. Интересно отметить особую законодательную конструкцию данной уголовно-процессуальной нормы. Она представляет собой не правило, а запрет, предписание на проведение следственных действий в ночное время. При этом стоит отметить, что в исключительных случаях следственные действия могут быть произведены и в ночное время в тех случаях, которые не терпят отложения.

В данном возникает вопрос о том, возможно ли проведение осмотра в ночное время, к участию в котором не привлекаются участники уголовного судопроизводства и иные лица? Да, безусловно, если в следственном действии участвуют иные лица, кроме должностных лиц – следователей, дознавателей, то данное общее правило имеет место быть. На наш взгляд, принципы уголовного судопроизводства, признающие охрану прав и свобод человека, не будут нарушаться, если следователем или дознавателем будет производиться осмотр местности, помещения в промежуток времени, который признается по действующему уголовно-процессуальному законодательству ночным временем. На наш взгляд, формулировка ч. 3 ст. 164 УПК РФ должна быть видоизменена на законодательном уровне. Так, предлагаем изложить ч. 3 ст. 164 УПК РФ в следующем виде: «Производство следственных действий с привлечением участников уголовного судопроизводства, за исключением должностных лиц, осуществляющих производство по уголовному делу, в ночное время не допускается, кроме случаев, не терпящих отлагательства или требующих воссоздания обстановки события, произошедшего в ночное время». Ведь в действительности, ряд следственных действий, например, следственный эксперимент, проверка показания на месте в ряде случаев производятся с воссоздание всех обстоятельств, при которых было совершено преступление. Нередко обстоятельством будет являться ночное время суток [1].

Согласно ч. 7 ст. 164 УПК РФ следователь обладает правом привлечь в проведения следственного действия участника – должностное лицо органа, осуществляющего оперативно-розыскную деятельность. Наиболее часто участие лиц оперативных подразделений органа дознания встречается в ходе проведения обысков, особенно в больших помещениях или жилищах.

Включение данного права следователя в ст. 164 УПК РФ, которая регламентирует общие правила производства следственных действий также расценивается в научной среде противоречиво [2]. На наш взгляд, любое общее правило проведения следственного действия должно быть поддержано и в иных нормах уголовно-процессуального права. То есть в них должен быть

отражен порядок реализации данного правила, его особенности. Говоря о возможности участия в следственных действиях сотрудников оперативно-розыскных подразделений стоит отметить, что упоминание об этом содержится только в ст. 164 УПК РФ. Законодателем проигнорирована цель участия данных лиц в следственном действии, основания, согласно которым следователем или дознаватель вправе принять решение о необходимости их участия. Кроме того, неизвестно, каков объем процессуального статуса должностного лица подразделения органа дознания, осуществляющего оперативно-розыскную деятельность, участвующего при проведении следственного действия.

Смысл общих правил производства следственных действий аккумулировать общие положения, позволяющие не тиражировать их применительно к порядку производства каждого следственного действия. Кроме того, правильно сформулированные правила позволят правоприменителю с большей вероятности производить следственные действий без нарушений федерального законодательства. В связи с чем полагаем, что общие правила должны быть краткими, но при этом конкретными по содержанию.

В заключение мы обоснованно можем сделать вывод о том, что существующая на сегодняшний день система общих правил производства следственных действий отнюдь не является совершенной. Так, во-первых, многие, по мнению законодателя, правила не являются в действительности общими, как об этом указывается законодателем в названии ст. 164 УПК РФ. Во-вторых, некоторые правила не конкретны в своем содержании, обладают декларативным характером и не раскрываются в законодательстве.

Учитывая вышеизложенное следует отметить, что сформулированные законодателем правила производства следственных действий не являются оптимизированы в своем содержании и системе в целом, что обосновывает необходимость оптимизации системы общих правил производства следственных действий.

При этом возникает также вопрос о разграничении категории «правила» и «условия» производства следственных действий. В настоящее время по данному спорному вопросу существует множество позиций в науке, однако законодателем данное разграничение не приводится.

Систематизация общих правил производства следственных действий будет эффективна лишь в комплексе с внесением изменений в законодательство, связанных с определением законодательного подхода к пониманию сущности следственных действий.

Использованные источники:

1. Теппеев А.А. Следственные действия как основа уголовного судопроизводства и правила их производства // Евразийский юридический журнал. 2021. № 9 (160). С. 361-362.

2. Давыдовская М.В. О причинах проблемности общих правил производства следственных действий // В сборнике: Регулирование уголовно-

процессуальных правоотношений: 20-летний опыт применения Уголовно-процессуального кодекса Российской Федерации. Сборник статей по материалам Всероссийской научно-практической конференции. Под общей редакцией К.А. Корсакова, В.А. Шиплюка. Санкт-Петербург, 2023. С. 136-142.

УДК - 316.612

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ЖИЗНЕННЫЙ МИР РОЛЕВИКА-РЕКОНСТРУКТОРА

Аннотация. Статья посвящена теме жизненного пути участника реконструкторской деятельности на примере отдельного индивида. Актуальность данного исследования состоит в том, современная глобальная массовая культура формирует у человека интерес к истории, а в условиях новой политической ситуации – не только интерес к своему историческому прошлому, но и необходимость знаний о нем. В российском обществе наблюдается подъем национального сознания, государство акцентирует особое внимание на роли образования молодежи, отмечая, что образованные, творческие, физически и духовно здоровые люди, станут главной силой России этого и последующего веков. Основная цель этой работы состояла в выявлении посредством анализа биографического нарратива причин и условий вхождения в реконструкторско-ролевую деятельность, отношения к ней, перспектив и проблем развития исторической реконструкции в России.

Ключевые слова: историческая реконструкция, ролевое движение, интерпритативный анализ, биографический метод, социальный портрет.

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THE LIFE WORLD OF A ROLE-RECONSTRUCTION PLAYER

Annotation. The article is devoted to the topic of the life path of a participant in reconstruction activities using the example of an individual. The relevance of this study lies in the fact that modern global mass culture creates in a person an interest in history, and in the conditions of a new political situation - not only an interest in one's historical past, but also the need for knowledge about it. In Russian society, there is a rise in national consciousness; the state focuses special attention on the role of youth education, noting that educated, creative, physically and spiritually healthy people will become the main strength of Russia in this and subsequent centuries. The main goal of this work was to identify, through the analysis of the biographical narrative, the reasons and conditions for entering into reconstruction-

role-playing activity, attitudes towards it, prospects and problems for the development of historical reconstruction in Russia.

Key words: historical reconstruction, role movement, interpretive analysis, biographical method, social portrait.

Введение. Биографические данные являются крайне ценными в социологии, а иногда и вовсе самым крупным источником эмпирической информации, в случае же изучения индивидуальных жизненных траекторий они являются и вовсе незаменимыми. Они позволяют более детально изучить историю жизни человека, его мотивацию и связи с социальными структурами. В контексте социологического анализа, биографические данные предоставляют возможность углубленно рассмотреть события, которые повлияли на формирование индивидуальности и определили его место в обществе.

Значимость социальных связей и мотивов деятельности рассматривается через призму собственного опыта деятеля. Благодаря этому подходу, полученные данные приобретают более убедительное освещение и объяснение. История отдельной личности, рассказанная самим актором, позволяет проникнуть в глубину его мыслей, чувств и намерений.

Именно поэтому использование биографических данных в социологии является необходимым шагом для полного понимания человеческого поведения и функционирования общества в целом. На основе такого подхода, социологи могут выявить тенденции и закономерности, анализируя индивидуальные жизненные истории и сопоставляя их с общими трендами в социуме. Таким образом, биографические данные открывают перед нами дверь в уникальный мир человеческой жизни и дают возможность лучше понять сложные социальные процессы. Методы сбора и анализа биографических данных играют важную роль в социологии, позволяя получить детальные и мотивационные описания «истории» отдельной личности [4]. Они являются основным источником информации о значимых социальных связях и мотивах действительности, которые могут быть убедительно освещены с точки зрения деятеля.

Существует несколько методов сбора биографических данных. Один из них – интервьюирование. С помощью структурированных или полуструктурированных интервью, исследователь может задавать вопросы о различных аспектах жизни человека: его прошлом, опыте, мотивациях и ценностях. Это позволяет осуществить глубокое понимание его биографии.

В данном конкретном случае мы будем анализировать полуформализованное интервью участника реконструкторских и ролевых фестивалей Суворовой Анастасии Александровны. Основная цель этой работы состояла в выявлении посредством анализа биографического нарратива причин и условий вхождения в реконструкторско-ролевую деятельность, отношения к ней, перспектив и проблем развития исторической реконструкции в России. «Самовыражение личности в исторической

реконструкции – процесс по своей сути творческий, и в качестве такового является проявлением индивидуальности в терминологии триады теоретических конструктов «индивид-личность-индивидуальность» [1].

Биография респондента. Респондент родилась в 1983 г. и с момента рождения по сей день проживает в г. Ростове-на-Дону. Как и большинство людей, в школу пошла в 7 лет, отучилась там до 9 класса и после поступила в техникум по специальности керамика. Учеба не была в тягость, однако, стремление получить оценку «отлично» по всем предметам отсутствовало. Во время школьного обучения школы менялись довольно часто. *«Школу до сих пор не люблю. Училась хорошо, не отлично. Любимые предметы биология, география, ИЗО. С одноклассниками не общалась кроме одной-двух девочек. За школьные годы пришлось поменять 5 школ, из-за этого ни одна родной не стала, я всегда новенькая и изгой. С учителями были нормальные рабочие отношения».* После обучения в техникуме поступила в вуз на заочное отделение по направлению инженер геолого-разведочных работ.

Родилась и воспитывалась в полной семье, также имеет сестру и брата. О своей семье респондент говорит: *«С родителями были довольно прохладные отношения, хотя они нам не запрещали заниматься всем что нам хочется но и особо не помогали. Оба родителя с двумя высшими техническими образованиями. Папа разрешал пользоваться всеми своими инструментами, рассказывал и показывал, как ими пользоваться. Мама тоже очень умная, талантливая, добрая, понимающая, не могу сказать, что конкретно было ее влиянием, никогда не повышала на нас голос, не поощряли деструктивное поведение, были против алкоголизма, но собираться с друзьями никогда не запрещали. Всегда поддерживали наши увлечения, путешествия. Родители сами туристы-альпинисты».* После первой учебы началась работа по полученной специальности, в процессе получения высшего образования – работа по получаемому образованию. Недолго работала в керамическом цеху, потом в витражной мастерской (очень классно было, душевно, небольшой дружный коллектив, потом мастерская закрылась из-за нерентабельности), немного секретарем в приемной замдиректора колледжа (не того где училась), гардеробщицей в рок-клубе, потом устроилась в ФБУ Геологический фонд информации (на третьем курсе института), где проработала последние 10 лет (включая декрет).

Знакомство с реконструкторской и ролевой деятельностью у респондента собственно началось в техникуме, в 2000-м году. *«Однажды весной 2000 года сестра пришла из университета, и говорит, что одногруппник очень смеялся, что толкиенистов выгнали из спортзала ЮФУ и они теперь не будут там заниматься. Я говорю, а кто такие толкинисты? И решили мы с ней пойти к ним».* Сначала, как и у многих реконструкторов, у Анастасии начался этап вхождения в движение, как ролевика, вступление в первый клуб «О.Р.К.И.», развитие в парадигме ролевых игр, потом несколько переходов в другие клубы, как итог нахождение себя в клубе реконструкции «ВИК Станица». Далее следовал временный уход из движения, возвращение

спустя несколько лет, знакомство с нынешним мужем и приобщение его к движению. Не без поддержки мужа, а также вследствие того, что увлечение стало семейным – реконструкторская деятельность респондета продолжается и по сей день.

Параллельно с участием в фестивальной деятельности, респондент включается в процесс изготовления самих предметов реконструкции, Анастасия тут находит себя, как швея.

Интерес респондента концентрируется на реконструкции периода Руси и степи 13–15 веков, а также Швейцарии 16 века. Реконструкция оказывается длительным увлечением в жизни, однако даже с учетом того, что шитье костюмов начинает осуществляться не только для собственных нужд, коммерциализации дела не происходит, пошив остается только в рамках знакомства или дружбы с людьми, которым требовался ролевой или реконструкторский комплект.

Интерпритативный анализ. Учитывая, что мы имеем данные, которые получили методом интервью, мы можем предположить, что часть информации может быть скрыта самим респондентом, либо просто не упомянута. Однако в данной ситуации мы работаем непосредственно с текстом интервью, на основе которого также можем сделать несколько выводов.

Первый вопрос, который встает с самого начала формирования личности – это процесс социализации. Респондент росла в полноценной семье, в которой не была единственным ребенком, что непосредственно не могло не отразиться на ее социализации. С одной стороны, по тексту интервью мы понимаем, что человек имеет очень четкое представление о том, какая роль в социуме отведена индивиду, с другой, не в последнюю очередь несколько прохладные отношения с родителями связаны с количеством детей в семье, чувствуется, что респондент переживал некоторый недостаток родительского внимания. Далее школа становится первым социумом за пределами семьи, куда попадает респондент и где социализация была не вполне успешной: упоминание о нежелании находиться в школе вероятно связано с тем, что отношения со сверстниками не ладились. Пять школ, которые меняла респондент – свидетельство того, что респондент не смог, и возможно не хотел налаживать связи в сфере, которая казалось временной. С учителями были рабочие отношения, таким образом наставничество остается на уровне необходимости, нежели приятного провождения времени и включении в социальную систему.

Социализация после школы, показывает нам выбор респондентом творческой профессии, желание работать в креативной области так и останется в ее жизни, даже после получения менее творческой профессии в дальнейшем – лучшие воспоминания о рабочей среде остались от витражной мастерской. Немалая роль в романтизации этого места работы связана с коллективом людей, увлеченных одним делом, который был приятным и очень теплым, что как раз составляло некоторый контраст с теми группами,

которые респондент не встречала в школе и в техникуме. Именно стремление найти интерес, а затем единомышленников и приводит респондента в новое сообщество. Ролевики становятся первой значимой группой, с которой респондент связан на уровне общего интереса, которая захватывает и становится в итоге увлечением на долгое время и по сей день [5]. «Ролевка» трансформируется в реконструкцию, более четкую и более понятную систему, проходит самоопределение респондента в рамках выбранного направления, переосмысление своей роли в нем, уход из него, возвращение и процесс превращения увлечения в семейное. По сути, мы видим здесь достаточно универсальную модель развития интереса и формирование устойчивого увлечения через включение в ролевую/реконструкторскую деятельность, уход из нее и возвращение с учетом прошлого опыта. Это непосредственно указывает на зрелость выбора респондентом своего увлечения [6]. Помимо реконструкции респондент отметила, что ее привлекает велосипедный спорт и туризм, туризм в какой-то степени является семейной практикой, воспринятой от родителей.

Важным моментом, является то, что респондент даже с учетом, того, что ему есть, что предложить на рынке в плане продуктов собственного труда – предпочитает не заниматься коммерцией, оставляяя и процесс производства в категории увлечения.

Заключение. Подводя итог, можно попытаться ответить на вопрос, почему респондент выбрал и стал развиваться именно в реконструкторском движении. Представляется, что главной причиной здесь стало знакомство и включение в дружественный коллектив единомышленников, где были возможности для творческой самореализации респондента, которая занимает значимое место в ее жизни. Кроме того, участие в движении дает возможность удовлетворять еще одну важную для респондента потребность – потребность в активном отдыхе с возможностью смены геолокации на время фестивалей и игр. В целом можно сказать, что эти потребности свойственны подавляющему большинству людей, которые выбирают данный вид деятельности, ведь удовлетворение этих потребностей – уникальная черта реконструкторского движения [2].

Использованные источники:

1. Кадер А. М. Историческая реконструкция как способ самовыражения личности // Труды СПБГИК. 2013. URL: https://cyberleninka.ru/article/n/istoricheskaya-rekonstruktsiya-kak-sposob-samovyrazheniya-lichnosti (дата обращения: 20.11.2023).
2. Жаворонкова А. Историческая реконструкция в событийном туризме // Форум молодых ученых. 2017. № 11 (15). URL: https://cyberleninka.ru/article/n/istoricheskaya-rekonstruktsiya-v-sobytiynom-turizme (дата обращения: 10.12.2023).
3. Клюев А. И., Свешников А. В. Движение исторической реконструкции – от хобби к бизнесу // magazines.gorky.media: [сайт]. URL: https://magazines.gorky.media/nz/2018/1/dvizhenie-istoricheskoj-rekonstrukczii-

ot-hobbi-k-biznesu.html (дата обращения: 02.03.2023)
4. Селиверстова М. В., Сарымкулова А. Ж. Библиографический анализ подходов к адаптации вновь принятого персонала // Инновационная экономика: информация, аналитика, прогнозы. 2016. № 1. URL: https://cyberleninka.ru/article/n/bibliograficheskiy-analiz-podhodov-k-adaptatsii-vnov-prinyatogo-personala (дата обращения: 09.12.2023).
5. Оленина Г. В., Гекман Н. А. Программы деятельности любителе ролевых игр: теоретико-практический анализ // Вестник МГУКИ. 2015. № 3 (65). URL: https://cyberleninka.ru/article/n/programmy-deyatelnosti-lyubitele-rolevyh-igr-teoretiko-prakticheskiy-analiz (дата обращения: 02.02.2023).
6. Каган М. С. Мир общения: проблема межсубъектных отношений. Москва: Политиздат, 1988. 319 с.

УДК 616.13.002.2-004.6.

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АТЕРОСКЛЕРОЗ У БОЛЬНЫХ РЕВМАТИЧЕСКИМИ ЗАБОЛЕВАНИЯМИ

Резюме. Ревматические болезни (РБ) в клинической практике нередко являются причиной смерти больных молодого и среднего возраста. В последние годы активно обсуждается высокая смертность больных РБ от сердечно-сосудистых катастроф. Исследования последних лет показали, что ведущей причиной снижения продолжительности жизни при РБ являются кардиоваскулярные осложнения, связанные с атеросклеротическим поражением сосудов. Доклинические формы атеросклероза (эндотелиальная дисфункция, утолщение комплекса интима-медиа, увеличение уровня коронарного кальция) у больных РБ выявляются значительно чаще, чем в общей популяции. В многочисленных исследованиях показано, что у больных РБ риск сердечно-сосудистых заболеваний в 2-5 раз выше, чем в общей популяции.

Ключевые слова: ревматические болезни, атеросклероз, иммуновоспалительные механизмы, кардиоваскулярные факторы риска, эндотелиальные дисфункции, толщина комплекса интима-медиа.

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ATHEROSCLEROSIS IN PATIENTS WITH RHEUMATIC DISEASES

Resume. Rheumatic diseases (RB) in clinical practice are often the cause of death in young and middle-aged patients. In recent years, the high mortality rate of patients with RB from cardiovascular accidents has been actively discussed. Recent studies have shown that the leading cause of reduced life expectancy in RB is cardiovascular complications associated with atherosclerotic vascular lesions. Preclinical forms of atherosclerosis (endothelial dysfunction, thickening of the intima-media complex, an increase in the level of coronary calcium) are detected in RB patients much more often than in the general population. Numerous studies have shown that the risk of cardiovascular diseases in RB patients is 2-5 times higher than in the general population.

Key words: rheumatic diseases, atherosclerosis, immune-inflammatory mechanisms, cardiovascular risk factors, endothelial dysfunctions, intima-media complex thickness.

Введение. В настоящее время» обсуждается вопрос о том, что ведущей причиной снижения продолжительности жизни при РА являются кардиоваскулярные осложнения, связанные с атеросклерозом (инфаркт миокарда, застойная сердечная недостаточность, внезапная* смерть) [2,7]. Описывается несколько взаимосвязанных причин, приводящих к увеличению риска кардиоваскулярных катастроф, связанных с ускоренным атеросклеротическим поражением сосудов при РА [4,5].

К ним относят накопление классических кардиоваскулярных факторов риска, побочные эффекты лекарственной терапии, использующейся для лечения РА, недостаточное внимание к необходимости профилактики кардиоваскулярных осложнений при данном заболевании. По мнению большинства исследователей, основную роль играют общие иммунновоспали-тельные механизмы, лежащие в основе патогенеза РА и атеросклероза [1,3]. Нарушение липидного спектра при РА напоминает таковое при других воспалительных заболеваниях (снижение концентрации ХС ЛПВП) и коррелирует с активностью воспалительного процесса (увеличением уровня-СОЭ и концентрации СРБ). При РА снижение СОЭ на фоне противовоспалительной терапии ассоциируется с нормализацией концентрации «антиатерогенного» ХС ЛПВП [2,6].

Для ранней диагностики атеросклеротического поражения сосудов и оценки риска кардиоваскулярных сосудистых осложнений используется широкий спектр неинвазивных инструментальных методов. Среди них особенно информативно определение толщины комплекса интима-медиа (КИМ) сонных артерий с помощью ультразвукового исследования с высоким разрешением. Увеличение КИМ на каждые 0,1 мм сопряжено с нарастанием риска инфаркта миокарда на 11% (Bots M.L. et al., 1997). Установлена высокая частота субклинических проявлений атеросклероза сонных артерий при РА [5].

Цель исследования: Определить факторы риска и иммунологические маркеры атеросклеротического поражения сосудов и связанных с ним осложнений у пациентов с СКВ и РА.

Материалы и методы исследования: Для решения поставленных задач мы обследовали 55 пациентов с диагнозом ревматоидном артрите и системной красной волчанкой в г.Андижана.

Результаты исследования: Впервые на большой группе больных СКВ и РА показана высокая частота атеросклеротического поражения сонных артерий (42,9% и 58,7%) и клинических (18,5% и 23,5%) проявлений АС, как в целом по группам, так и в зависимости от пола пациентов. У пациентов с СКВ и РА определен комплекс ФР (традиционных и обусловленных болезнью), значимых для развития атеросклеротического поражения сосудов. Показана взаимосвязь между ФР и ССО, обусловленными АС. У больных с аутоиммунной патологией определен диморфизм ФР развития АС и его осложнений, обусловленный полом.

Установленная ассоциация уровней вч-СРБ, рС040Ь, рФНО- а и неоптерина с атеросклеротическим изменением сосудов у больных СКВ и РА подтверждает их роль, как «предикторов» ССО.

Установлены различия в распространенности ССО (ИБС и ИМ), атеросклеротического поражения сосудов и ТФР у больных РА разного пола. ССО наблюдались в 4 раза, а атеросклеротическое поражение сонных артерий - в 2 раза чаще у мужчин, чем у женщин: 16% vs 4% и 52,2% vs 24,8%, соответственно, p<0,001. Аналогичные результаты получены при сравнении встречаемости ТФР ССЗ: гипер-липидемия, курение и отягощенная наследственность по ССЗ преобладали у мужчин.

Два ФР и более имели 75,4% пациентов с РА. В зависимости от количества ФР больные РА были разделены на 2 группы: I - пациенты с 1 ФР (n=138), II - пациенты с 2 ФР и более (n=425). Пациенты II группы имели большее значение медианы КИМ (среднюю и максимальную) - 0,75 мм vs 0,66 мм и 0,9 мм vs 0,8 мм, соответственно, p<0,05. Установлено нарастание частоты АТБ и утолщение КИМ+АТБ у пациентов с РА, имеющих 2 ФР и более, ОР развития АТБ составил 4,56 (95%ДИ 1,7-12,2, p<0,001); утолщения КИМ+АТБ - 2,42 (95%ДИ 1,57-3,43, p<0,001). Различий по ССО (ИМ, ИБС и инсульта) в зависимости от количества ТФР не отмечено. При исследовании корреляционных связей прослежена ассоциация между значениями СКР, SCORE и атеросклеротическим поражением сосудов средней толщиной КИМ (r=0,56 и r=0,6, соответственно, p<0,001, где здесь и далее r - коэффициент корреляции) и максимальной толщиной КИМ (r=0,44 и r=0,52, соответственно, p=0,001). ОР развития АТБ были значительно выше у пациентов РА с «высоким» кардиоваску-лярным риском и составил по Фремингемской шкале 4,45 (95%ДИ 2,94-6,73), по шкале SCORE - 3,73 (95%ДИ 2,43-5,73) соответственно, p<0,001.

У больных РА прогностическая многофакторная модель максимальной толщины КИМ включала значения SCORE и СКР, возраст, пол, уровни САД, ТГ и семейный анамнез ССЗ.

Вывод: Частота клинических проявлений атеросклероза у больных СКВ выше, чем в контроле - 18,5% (ОР=9,16), у больных РА -23,5% (ОР=4,19); ИБС выявлена у 13,2% (ОР=6,54) и 20,4% (ОР=3,64), соответственно. Атеросклеротическое поражение сонных артерий встречались у 42,9% больных СКВ и у 58,7% больных РА, ОР развития атеросклеротических бляшек в сонных артериях - 5,2 и 2,7, соответственно (p<0,001).

Использованные источники:

1.Аганбегян А.Г. О программно-целевом управлении в здравоохранении / А.Г. Аганбегян, Ю.В. Варшавский, В.Д. Жуковский // SPERO. 2017. -№7. – С. 5-26.
2.Бадоьсин В.В. Терапевтическая активность и безопасность артрофоона при псориатическом артрите / В.В: Бадокин, Ю. – Л. Корсакова // Consilium Medicum. 2016. - Том 8. - № 81. - С. 126-130.
3.Кубышкин В:Ф. Поздние потенциалы желудочков; желудочковые аритмии- и внезапная смерть у больных с приобретенными пороками сердца / В.Ф.

Кубышкин, А.В. Легконогов, Т.А. Мангилева // Терапевт, архив. -2006. – №4. – С. 45-47.
4.Насонов Е.Л. Фармакотерапия ревматоидного артрита с позиций доказательной медицины: новые рекомендации / Е.Л. Насонов // Рус. мед. журнал. 2012. - № 10 (6). - С. 11-23.
5.Шостак Н.А. Клинико-иммунологические особенности раннего ревматоидного артрита / Н.А. Шостак, А.А. Мурадянц, Т.К. Логинова, В.Т. Тимофее // Научно-практич. ревматол. — 2014. — № 2. С. 15-17.
6.Burleigh M.E. Cyclooxygenase-2 promotes early atherosclerotic lesion formation in LDL receptor deficiency mice / M.E. Burleigh, V.R. Babaev, J.A. Oates et al. // Circulation. 2012. - Vol. 105. - P. 1816 - 1823.
7.Hansson G.K. Immune mechanisms in atherosclerosis / G.K. Hansson // Arterioscler. Thromb. Vase. Biol. 2011. - Vol. 21. - P. 1876-1890.

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ЖАДИД МАТБУОТИНИНГ 1917-18 ЙИЛЛАРДАГИ ҲОЛАТИ: “ТУРК СЎЗИ” ГАЗЕТАСИ ПУБЛИЦИСТИКАСИ МИСОЛИДА

Аннотация. Ушбу мақолада жадид матбуоти 1917-18 йилларда жамоатчилик эътиборига олиб чиққан ижтимоий, сиёсий, иқтисодий мавзулар кўлами “Турк сўзи” газетаси материаллари асосида таҳлил қилинади. Газетанинг публицистик руҳи, тили ва услубини ўрганиш давр матбуотининг умумий қиёфасини жонлантиришга хизмат қилади.

Калит сўзлар: жадидчилик, жадид матбуоти, “Турк сўзи” газетаси, публицистика, мақола, тил ва услуб.

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SITUATION OF THE JADID PRESS IN 1917-1918: AN EXAMPLE OF PUBLICISTICS OF THE NEWSPAPER “TURK SUZI”

Abstract. This article, based on materials from the Turk Suzi newspaper, analyzes the range of socio-political and economic topics brought to the attention of the public by the modern press in 1917-1918. The study of the journalistic spirit, language and style of the newspaper serves to revive the general image of the press of that time.

Key words: Jadidism, Jadid press, newspaper “Turk Suzi”, journalism, article, language and style.

1917-18 йиллар жадид матбуотида демократик фаолият куртаклари кўзга ташланади. Чунки бу давр нашрларида халқимизни қийнаб келаётган зулм, маънавий-маданий маҳдудликдан қутилиш чоралари ва миллий тараққиётга эришиш йўллари баён этилган публицистик чиқишлар сон жиҳатидан кўпаяди. Шу давр публицистикасини кузатар эканмиз, Туркистон ҳаётида юз бераётган ҳар бир ўзгариш, депсиниш жадид публицистларининг эътиборидан четда қолмаганига, уларни халққа етказишга мунтазам интилишганига амин бўламиз. “Турк сўзи” газетаси илғор нашр сифатида мазкур восита ва усуллардан қай даражада фойдаланди? Афсуски, газетанинг барча сонлари ҳозиргача сақланиб қолмаган. Алишер Навоий номидаги Миллий кутубхонанинг “Нодир манбалар” фондида сақланаётган 4-сони 1918 йилнинг 2 июнида, якшанба куни чоп этилган (ҳижрий ҳисобда 22 шаъбон, 1336 йил). Агар газетанинг ҳафтада икки марта чоп этилганини ҳисобга олсак, биринчи сони тахминан 22 майда чиққан бўлиши мумкин. Ҳар бир сонда обуна нархлари бериб борилган: 1 йил учун – 34 сўм, 6 ой учун – 17 сўм, 3 ой

учун – 9 сўм. Газета ҳафтанинг якшанба ва чоршанба кунлари чиқиши кўрсатилган бўлса-да, ҳар доим ҳам бу кўрсаткичга тўлиқ риоя этилмаган. Манзили: Эски Тошкент, Шайхонтоҳур даҳаси, Саид Али хўжа эшон ўғли болохонаси.

Газета “шапка”сидаги “Маслагимизга мувофиқ ёзувларга саҳифаларимиз очиқдир. Дарж этилмаган (*чоп этилмаган*) мақолалар қайтарилмайди” деган битик таҳририят кенг жамоатчилик билан алоқа ўрнатишдан манфаатдор бўлганини тасдиқлайди. Баҳоси 40 тийинни ташкил қилган. Шиори: “Турк миллатини сиёсий, иқтисодий ва илмий қутқаруб чин бир турк маданиятини вужудга келтурмак”. Бу “сиёсий, ижтимоий, иқтисодий ва адабий турк газетаси” муштарийларга қарата “Турк болалари, бирлашуб сиз ҳам ҳаётдан ўз насибангизни олингиз!” дея мурожаат килади. Газетанинг 4-сони бош саҳифасига муаллифи “идораи таҳририя” бўлган “Эҳтиёж” номли бош мақола жойлаштирилган. Унда “...инсон дунёсининг бош дақиқасиндин бошлаб диққат билан қараб келганлар. Кўрарларким: Еримизнинг қизиқ бир ажойиб хонаси бўлган бу дунё (*инсон дунёси*) кўб ўзгаришлар ва кўб табдилларни (*йўқотишлар*) кўрмишдур. Бурун замонларда маданиятнинг бутун осориндин баҳрамиз бўлғон инсонлар ёвош-ёвош (ёш) оилалар, эллар, аймоқлар ва миллатлар ясаб, қишлоқлар, кентлар, шаҳарлар ва ўлкалар қурарлар. Бу миллатлардан иккиси уришур, бири енгар, бири енгилур. Бири саодат тоғларининг тебаларига қадар чиқар экан, ўзгаси бадбахтлик чуқурларининг тубларинда тушиб колар...”, дея замонанинг ўзгаришларига муносабат билдирилади. Мақоланинг публицистик тилига эътибор берилса, метафорлаштириш ва истиора услуби кўзга ташланади.

Мақола куйидагича давом этган: “Мана шул ясаш-қурушлар, енгиш-енгилишлар, чиқиш ва тушишларни(*нг*) тарихчи билгули сабаблари бордир: замон истаги билан одам бошига тушган эҳтиёж! Замон ўтгунча одам боласининг муҳтожлик доираси кенгаюр, эҳтиёжи кўпаюр. Шул эҳтиёжларни сезиб кўтарилмаси учун тиришкан миллатлар яшай биларлар. Дунёда тараққий килғон миллатлар шул муҳтожликларини англаб кўрилмаси учун тиришканлар эрурлар. Замонанинг ўзгардигини (*ўзгарганини*) ва шул ўзгаришлар сабабли эҳтиёжларнинг кўпайдигини (*ортганини*) сезмаганлар истар-истамаса маҳв бўлуб кетарлар”.

Аён бўлмоқдаки, мақоланинг асосий мақсади Туркистон халқлари тараққий этиши учун, аввало, ўз эҳтиёж доирасини белгилаб олмоғи зарурлигини кўрсатишдир. Акс ҳолда эҳтиёжини англаб етмаган миллат “истар-истамаса маҳв бўлуб кетар”ини ҳаётнинг ўзи кўрсатиб турибди. Бу ҳақиқатни таҳририят жамоаси ўзига хос пафос билан муштарийларига етказмоқда.

Мақола давомида Одам болаларининг ёлғиз эл, кабила, тарқоқ бўлиб яшаши тарихда қолгани, энди замонлар ўтиб “миллат” бўлиб яшашга муҳтож бўлишгани, натижада тил бирлиги остида бирлашиб бир миллат шаклини олган қабилалар шубҳасиз яшаб юксалишаётгани таъкидланади. Лекин шу эҳтиёжни сезмаган ёхуд ўзини сезмасликка олиб бирлашмаган қабилалар

албатта кучсизланиб, йўқолиб кетишганидан ёзғирилади. Ҳа, бу тахлит “табиий бир қонун, ижтимоий бир қоида, олий бир низом” остида миллатнинг бирлашуви масаласи 1918 йилда замон талабига айланди.

Мақола давомида даврнинг асосий сиёсий воқеликлари – Биринчи жаҳон уруши ва миллатлар ўртасидаги ички низоларга ҳам диққат қаратиладию Сўнг секин-аста мақола мавзуси Туркистон халқлари ҳаётига бурилади. Унинг ўша пайтдаги ачинарли аҳволи, таназзули устидан ёзғирилади: “Энди инсоф кўзларини каттароқ очиб ўз ҳолимизга карайлук: кўриб турдиғимиз юксалган миллатларнинг қай бири янглик кучимиз бор? Инглизлар каби тарбия ва саботимизми бор? Олмонлардек ҳунар ва журъатимизми бор? Русия сингари ғайратми кўрсатдик? Франция янглиғ фалсафа ва ҳикматми билдик? Энг сўнгги...шул яҳудий ва арманларга тенг тижорат ва бирлигимиз борми? Йўқ, йўқ, йўқ..!” Айтиш керакки, риторик саволлар воситасида ўртага ташланган бундай “ҳасби ҳол” жадидлар учун хос бўлиб, ўзларининг хар бир чиқишларида ўз аянч аҳволларидан қайғуриш орқали миллат қиёфасини ислоҳ этишга тиришишган. Мақолада мазкур муаммони ечиш йўли илм-фан ва маданиятни кўтариш экани кайд этилади.

Шу сондан ўрин олган “Турклик жараёни” мақоласи ҳам эътиборга муносиб. Публицист Муҳаммад Саид бу мақоласида 1917-18 йилларда турк халқлари бошига тушган кийинчиликларни баён килар экан, бунга уларнинг бирлашиб ҳаракат қилмаганини сабаб қилиб кўрсатади. Умуман олганда, “Турк сўзи” газетасида шунга ўхшаш туркий халқларни бирликка чакирувчи мақолалар кўплаб босилган.

Газетанинг “Адабиёт” рукнида берилган ғазаллар ҳам публицистик руҳияти билан диққатга сазовор. Фондда мавжуд сонларнинг иккитасида 2 та ғазал бор. Улардан бири “Дорилфунун учун” деб номланган. Муаллифи Бахром Хидрис деб кўрсатилган. Маълумки, Маҳмудхўжа Бехбудий бошчилигида қатор жадид маърифатпарварлари 1918 йилнинг 12 май куни “Туркистон халқ дорилфунуни”ни очишга муваффақ бўладилар. Бу дорилфунун ҳозирги Мирзо Улуғбек номидаги Ўзбекистон Миллий университетининг “бобокалони”дир. Жадидлар яхши англардиларки, миллатни уйғотишнинг бош воситаси илм-маърифат, дорилфунун эса Туркистон халқларига маърифат зиёсини таратувчи маёқ вазифасини бажариши керак эди. Ғазалда хам шу мазмун ва маслак аниқ ифода этилган:

“Ғофил ўлмангиз ёронлар, очилур Дорилфунун,
Табрикланг, ғайрат этинг, илм ўрганинг миллат учун!
Фан керак, ғайрат керак, жаҳд ва жадал килмоқ керак,
Ташлангиз ғафлат ила танбаллигингиз бус-бутун...”

Шеърда ўткир нигоҳ ва норозилик аланга олаётганининг нишоналари бор. Бундай публицистик пафосга қараганда, “Турк сўзи” миллий талантларни тарбияловчи ижодий масканга ҳам айланган кўринади.

“Турк сўзи” газетасида Муҳаммад Саид, Бахром Хидрисдан ташқари Туйғун ҳам ўз мақолалари билан иштирок этиб турган. Газетада катта ҳажмдаги, хатто бир неча сонларга чўзилган мақолалар учрайди. Масалан,

“Турклик жараёни”, “Франция инқилоби натижалари”, “Яшамоқ орзуси”, “Яна интизор” каби мақолалар шулар жумласидан.

Газетанинг ҳар сони сўнгги 4-саҳифаси хабарлар учун ажратилган. Бу хабарлар “Дохилий хабарлар” (маҳаллий), “Хорижий хабарлар” (ташқи) тарзида рукнлаштирилган. Шунингдек, эълон ва рекламалар ҳам ўрин олган. Фондда сакланаётган ҳар тўрт сонида “Халқ дорилфунуни” газетаси чоп этила бошлагани ва унга обуна бўлиш шартлари баён этилган эълон бор. Маълумот ўрнида айтиш керакки, “Халқ дорилфунуни” газетаси 31 майдан Туркистон халқ дорилфунунининг нашри афкори сифатида чиқа бошлаган. Демак, бу газета ҳозирги “Ўзбекистон Миллий университети” газетасининг тарихий негизидир. “Турк сўзи” бу воқеани ҳам миллат учун муҳим санаб, ўз саҳифаларида мунтазам ёритиб боришга интилган.

Хулоса ўрнида айтиш мумкинки, “Турк сўзи” газетаси Туркистоннинг 1917-18 йилдаги ҳаётида нимаики содир бўлса, барига муносабат билдиришга, камчилик ва муаммоларни олиб чиқишга ҳаракат қилди. Газета публицистикаси ва услубига таъсир этган омилларни қуйидагича таснифлаш мумкин:

- Туркистон халқлари силласини қуритаётган Биринчи жаҳон уруши ва унинг салбий оқибатлари, ўлкада юзага келган иқтисодий таназзул;
- февраль ва октябрь тўнтаришлари; пировардида туркий халқлар хаётида бўлган ўзгаришлар, инкилобларнинг Туркистонга кўрсатган таъсири;
- 1917 йил 27 ноябрда Қўқонда ташкил этилган ва шу кунни Фитрат “миллий лайлатул кадримиз” деб улуғлаган Туркистон Мухторияти, унинг дастур ва низомлари, мухторият масъулларининг федерация олиш учун саъй-ҳаракатлари ва унинг большевиклар томонидан қуролли барбод этилиши;
- 1918 йил 12 майда Туркистон халқ дорилфунуни (ҳозирги Ўзбекистон Миллий университети)нинг очилиши ва иш бошлаши.

Адабиётлар рўйхати:

1. Sotvoldiev, S. (2023). PRINCIPLES OF COMPOSITION OF SCIENTIFIC-CRITICAL TEXT OF IBN SAYYID'S DICTIONARY" AL-MUSALLAS". THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY, 1(7), 62-66.
2. Sotvoldiev, S. (2022). PRINCIPLES OF COMPOSITION OF SCIENTIFIC-CRITICAL TEXT OF IBN SAYYID'S DICTIONARY" AL-MUSALLAS". Thematics Journal of History, 8(1).
3. Maxammaddin o'g'li, S. S. (2023). IBN MOLIK HAYOTI VA UNING ARAB TILSHUNOSLIGIDA TUTGAN O'RNI. Vol. 2 No. 11 (2023): Innovative Development in Educational Activities (IDEA)
4. Sirojiddin, S. (2023). «МУСАЛЛАС» ТУРИДАГИ ЛУҒАТЛАРНИНГ АРАБ ЛЕКСИКОГРАФИЯСИДАГИ ЎРНИ. Innovative Development in Educational Activities, 2(11), 356-365.
5. ўғли Сотволдиев, С. М. (2023). АРАБ ЛЕКСИКОГРАФИЯСИДА МАНЗУМА МУСАЛЛАСЛАРНИ ТАДҚИҚ ЭТИШНИНГ ЎЗИГА

ХОСЛИКЛАРИ. Innovative Development in Educational Activities, 2(23), 474-478

УДК 615.256:618.4

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ПРИМЕНЕНИЕ СОВРЕМЕННЫХ МЕДИКАМЕНТОЗНЫХ ПРЕПАРАТОВ ДЛЯ ЛЕЧЕНИЯ ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА ПРИ ДОБЕРЕМЕННОМ СОСТОЯНИИ ШЕЙКИ МАТКИ И НАСТУПЛЕНИИ РОДОВ

Резюме. Для научного и практического акушерства большое значение имеет изучение особенностей формирования готовности организма беременной женщи ны к родам при физиологическом и осложненном течении беременности.

Решение закончить беременность прежде, чем начнутся спонтанные роды, является одним из наи более драматических путей вмешательства в естест венный ход развития беременности и родов. Доводы, выдвигаемые в поддержку элективного родоразрешения, которое может достигаться как путем индукции родов, так и кесарева сечения, варьируют, начиная от жизненных показаний до совершенно тривиальных. Если планируется индукция родов и вагинальное родоразрешение, тогда главное внимание следует уде лять состоянию шейки матки.

Ключевые слова: шейки матки, простагландины, первобеременных.

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THE USE OF MODERN MEDICATIONS FOR THE TREATMENT OF WOMEN OF REPRODUCTIVE AGE WITH PRE-PREGNANCY CERVICAL CONDITION AND THE ONSET OF LABOR

Resume. For scientific and practical obstetrics, it is of great importance to study the characteristics of the formation of the readiness of the body of a pregnant woman for childbirth in the physiological and complicated course of pregnancy.

The decision to end the pregnancy before spontaneous labor begins is one of the most dramatic ways of interfering with the natural course of pregnancy and labor. The arguments put forward in support of elective delivery, which can be achieved by both induction of labor and caesarean section, range from vital indications to downright trivial. If induction of labor and vaginal delivery are planned, then the main attention should be paid to the condition of the cervix.

Key words: cervix, prostaglandins, primary pregnant.

Актуальность. В акушерской практике часто возникает необходимость досрочного родоразрешения, связанная чаще всего с экстрагенитальной патологией (гипертоническая болезнь, сахарный диабет и др.) и осложненном течением беременности (гестоз, перенашивание, патологическое состояние плода, иммунноконфликтная беременность и др.).

На сегодняшний день индукция родовой деятельности является общепринятым акушерским методом, применяемым для улучшения перинатальных результатов [6]. Современные системы диагностики состояния матери и плода дают основания для программированного ведения родов у беременных с высоким риском развития перинатальной патологии [2, 1,3].

Кардинальным вопросом, определяющим стратегию современного акушерства, является прогнозирование, профилактика и раннее выявление возникающих в процессе родового акта осложнений, что даст, несомненно, возможность своевременного выбора оптимального метода родоразрешения [4].

Своевременная и правильная оценка состояния готовности ("зрелости") шейки матки к родам имеет большое значение для прогнозирования течения предстоящих родов и, особенно, при выборе времени и метода родовозбуждения [2].

Известно, что даже при неосложненном течении беременности ко времени спонтанного начала родов в среднем у 10% обнаруживается "незрелая" или недостаточно "зрелая" шейка матки, в том числе у 16,5 % первородящих, и у 3,5% повторнородящих [1,5], а при сопутствующих соматических заболеваниях эти показатели возрастают. Так при НЖО II степени при доношенной беременности незрелая шейка матки встречается в 15,4%, при НЖО III степени — в 30,4% [6].

При незрелой или недостаточно зрелой шейке матки роды сопровождаются преждевременным излитием околоплодных вод (57,2%), дискоординацией (16%) и слабостью родовой деятельности (28,1%), не поддающейся медикаментозной коррекции, а в 35,4% повышению оперативных методов родоразрешения [2].

Как в нашей стране, так и за рубежом в настоящее время применяются различные способы подготовки шейки матки к родам. Однако до сих пор остается открытым вопрос о наиболее оптимальной схеме, поскольку все методы имеют ряд недостатков, а их использование, к сожалению, не всегда приводит к желаемому результату.

Исторически первыми методами, разработанными для подготовки шейки матки к родам, были механические (нефармакологические) [1]. Эти методы не получили большую популярность из-за опасения инфицирования и наличия материнского дискомфорта [3]. Наиболее популярным на сегодняшний день является применение простагландинов (PO), моделирующих естественные эффекты в начале родов. Однако как показала мировая практика, фармакологические методы влекут наибольший процент

осложнений и побочных эффектов, что лимитирует их широкое применение [5].

В нашей стране длительное время применялся традиционный способ комплексного использования эстрогенов. Однако данный метод, как показывает практика, малоэффективен (особенно при недоношенной беременности), проводится длительно в течение 2-10 дней и, зачастую, требует повторного применения [4,6].

Цель исследования. Оценить безопасность и эффективность применения простагландина Ei для подготовки организма беременной к родам и стимуляции родовой деятельности в различных акушерских ситуациях.

Материалы и методы исследования. Нами проведена подготовка беременных к родам путем назначения мизопростола в дозе 50 мкг, вводи мого интравагинально 106 беременным в III триместре беременности. Срок гестации 103 пациенток соответ ствовал 39–40 нед. У всех беременных было отсутст вие биологической готовности к родам (незрелая шейка матки), что и послужило основанием начала индукции, причем у 3 беременных срок гестации соответствовал 36–37 нед., в этих случаях показанием к досрочному прерыванию беременности послужил длительно текущий гестоз средней степени. Пациент ки были сопоставимы по возрасту, паритету и гинекологическому анамнезам.

Результаты исследования. В результате проведенных исследований было установлено, что срочные роды были у 99 (93,3%) рожениц, преждевременные роды у 3 (2,8%) и запоздалые роды также у 3 (2,8%).

При изучении общей продолжительности родов после применения мизопростола в дозе 50 мкг интравагинально последняя у первородящих составила 7,1 ± 0,3 ч. При этом продолжительность родов 6,1± 0,3 ч. была у 16 женщин. Максимальная длитель ность родового акта составила 8,7 ± 0,05 ч.

Состояние зрелости шейки матки после введения препарата оценивали по шкале Бишопа. Как показа ло исследование, «зрелая» шейка матки определялась уже через несколько часов (2–3 ч.) после начала индукции у 65 (59,6%) женщин, у 18 (16,5%) IV степень зрелости шейки матки отмечена через 4–5 ч. после начала индукции. У оставшихся 26 (23,8%) пациенток «зрелая» шейка матки отмечена через 6 ч. после введения препарата.

Представляет большой интерес время возникновения регулярных схваток после однократного введения 50 мкг мизопростола. Менее чем в течение 2 ч. с момента индукции мизопростолом регулярные схватки возникали у 67 (63,2%) женщин, из них 56 пациенток были первородящими, что составляет 52,8%, а свыше 2 ч. – у 38 (35,8%), из них 26 были первородящими, что составляет 24,5%. Таким образом, у 2/3 пациенток возникновение регулярной родовой деятельности наблюдается в течение первых 2 ч. после интравагинального введения 50 мкг мизопростола.

Как показало исследование, частота несвоевременного излития околоплодных вод составила 38 (35,8%). Слабость родовой деятельности отмечена в 9 случаях (8,09%), этим пациенткам применена дополнительная

родостимуляция введением в/в окси тоцина. Существенно отметить, что гиперстимуляции матки не было ни у одной пациентки.

В результате проведенной индукции родов появились 106 новорожденных, 3 (2,08%) недоношен ных с признаками гипотрофии, связанной с гестозом средней степени.

Дети, рожденные в результате «чистой» простагландиновой индукции, оценены в среднем на 8 / 8 баллов по шкале Апгар, что соответствует норма тивным показателям. Адаптационный период протекал без осложнений, и на 5–6-е сутки они были выписа ны в удовлетворительном состоянии домой. Новорожденные, появившиеся на свет в родах, где допол нительно применена родостимуляция окситоцином 9 (8,09%), также находились в удовлетворительном состоянии и были оценены на 7 / 8 баллов по Апгар. Однако адаптационный период в этой группе протекал с некоторыми осложнениями. Так, травмати зация головки плода отмечена у 2 (22,2%) новорожденных, в связи с чем эти 2 новорожденных были выписаны на 7–8-е сутки, у оставшихся 7 детей период адаптации протекал без патологических отклонений. 3 недоношенных ребенка с признаками гипотро фии на 5-е сутки были переведены в отделение дохаживания.

Последовый и ранний послеродовый периоды у пациенток исследованной нами группы протекал благополучно, без каких-либо осложнений. Гипо- и атонического кровотечений не отмечено ни в од ном случае. Все родильницы выписаны на 5–6-е сутки после родов.

Клинический анализ течения беременности и родов, состояния плода и новорожденного ребенка показывает, что подготовка беременных к родам назна чением интравагинального введения мизопростола при незрелой шейке матки оказалась эффективной у большинства беременных женщин. При этом существенно отметить, что имеет место одновременное быстрое созревание шейки матки и вступление в роды в течение ближайших 2 ч. у 2 / 3 пациенток.

Вывод. 1. Применение ПГ Ei позволяет:

• эффективно и в достаточно короткий срок проводить подготовку беременных к родам;

• успешно проводить родовозбуждение при отсутствии неблагоприятного влияния на состояние матери, плода и новорожденного;

• эффективно индуцировать родовую деятельность у женщин с преждевременным излитием околоплодных вод, особенно при незрелой шейке матки.

2. Применение ПГ Ei является безопасным у беременных с разной степенью акушерского риска и позволяет ограничиться стандартными методами наблюдения за состоянием матери, плода и течением родового акта.

3. Низкая стоимость препарата делает его широко доступным для беременных и рожениц, снижает затраты на медикаментозное обеспечение родов.

Использованные источники:

1.Абрамченко В.В. Индукция родов и их регуляция простагландинами: руководство для врачей / В.В. Абрамченко, Р.А. Абрамян. - СПб: Элби. – 2005. – 288 с.

2.Баев О.Р. Подготовка шейки матки к родам // Фарматека. - 2010. - № 14. -С. 31-36.

3.П.Гутиков Л.В. Применение ламинарий для подготовки шейки матки к родам при гестозе лёгкой степени /Л.В. Гутиков, В.А. Лискови // Акушерство и гинекология. – 2006. – №5. – С.47-49.

4.Хурасаев Б.Ф. Особенности подготовки шейки матки к родам /Б.Ф. Хурасаев, Л.М. Кузнецова //Актуальные вопросы акушрства и гинекологии. - 2002. - т.1. - №1.

5.Чернуха Е.А. Родовой блок: руководство для врачей. 3-е издание переработанное, исправленное и дополненное / Е.А. Чернуха - М.: "Триада-Х". 2005. – 712 с.

6.Pevzner L. Factors predicting successful labor induction with dinoprostone and misoprostol vaginal inserts /L.Pevzner, W.F. Rayburn, P.Rumney, D.A.Wing //Obstet. Gynecol. – 2009. - Vol. 114. - P.261-267.

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ЭКОЛОГИЯ ФАНИНИ ЎҚИТИШДА ИНТЕРФАОЛ УСУЛЛАРДАН ФОЙДАЛАНИШ ИМКОНИЯТЛАРИ

Аннотация. Мақолада илғор педагогик технологияларни амалиётда қўллаш имкониятлари Экология фани «Атмосфера ҳавосини муҳофаза қилиш» мавзуси мисолида ёритилган. Фанга доир таянч сўз ва иборалар ёрдамида «Венн диаграммаси», «Кубик стратегияси», «Кластер» ва «Синквейн» интерфаол усулларини қўллаб, мавзунинг мазмуни ва моҳияти очиб берилган.

Таянч сўзлар: Атмосфера, экология, педагогик технология, таълим тизими, ижодий фикрлаш, венн диаграммаси, кластер, синквейн, кубик стратегияси, интерфаол усул.

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POSSIBILITIES OF USING INTERACTIVE METHODS IN TEACHING ECOLOGY

Annotation. The possibility of using advanced pedagogical technologies in practice is highlighted in the article on the example of the topic "Protection of Atmospheric Air" in Ecology. With the help of basic words and phrases related to science, the content and essence of the topic is revealed using the interactive methods "Venn diagram", "Cubic strategy", "Cluster" and "Sinquain".

Key words: Atmosphere, ecology, pedagogical technology, educational system, creative thinking, venn diagram, cluster, sinkvein, cubic strategy, interactive method.

Педогогик инновация таълимотини мамлакатимиз таълим тизимига жорий этишдан кўзда тутилган мақсад, ёшларни миллий мавкура ва мустақиллик маънавияти руҳида тарбиялашнинг янги шакл ва услубларини яритишдан иборат.

Педагогик инновациялар – ўқитишга технологик ёндашув, ўқитишнинг интерфаол моделлари, тестшунослик, шахсга йўналтирилган таълим, масофадан ўқитиш акмеология ва бошқа шаклларда намоён бўлади.

Ўқитишнинг педагогик инновация шакллари педагогик жараён сифати ва натижасини аввалгига нисбатан сезиларли даражада ортишини таъминлайди.

Жаҳон педагогикасида эътироф этилган ўқитишнинг «Мия хужуми» ўтказиш, ахборотларни йиғиш ва ёйиш-синквейн кластерлар тузиш, матнни «инсерт» ва «зиг-заг» интерфаол усулларидан амалда кенг фойдаланиш талабаларнинг мустақил фикрлаш қобилятларини ривожлантиришга хизмат қилади.

Ўқитишга технологик ёндашув усулларини деярли барча фанларга, шу жумладан, экология фанига ҳам қўллаш мумкин. Ушбу мақолада экология фанида ўқитиладиган «Атмосфера ҳавосини муҳофаза қилиш» мавзуси бўйича ўқув моделлари тузилиб, аниқлаштирилган мақсадлар Блум таксаномияси асосида ишлаб чиқилган. «Атмосфера» ибораси мисолида «Венн диаграммаси», «Кубик стратегияси», «Кластер» ва «Синквейн» интерфаол усулларидан фойдаланиб, мавзунинг мазмуни ва моҳиятини очиб беришга харакат қилинган.

1.«Венн диаграммаси» ёрдамида 2 та тушунчани ўзига ҳос ва хар иккиси учун умумий бўлган белгилари ёки хислатлари аниқланади. қуйида «Атмосфера» ва «Гидросфера» тушунчалари мисолида Венн диаграммасини тузишга ҳаракат қиламиз.

Назарий томонлари	Умумий томонлари	Йўлланма
Атмосфера: 1.Агрегат ҳолати-газ 2.Кимёвий таркиби: азот-78%, кислород-20,9%, аргон-0,98%, карбонат ангидриди-0,03% ва бошқалар 3.Асосан транспорт воситалари ифлослайди 4. Ҳосил бўладиган чиқиндилари газсимон	1.Тирик организм ларнинг яшаш муҳити. 2.Ифлосланади. 3.Тоза бўлиши талаб этилади. Илослантирувчи моддаларнинг рухсат этилган чегара меъёрлари ишлаб чиқилган 4.Тозалаш қурилмалари ёрдамида тозаланади	Гидросфера: 1.Агрегат ҳолати-суюқлик 2.Кимёвий таркиби: H_2O 3.Саноат корхоналари, қишлоқ ва коммунал хўжаликлари томонидан ифлосланади 4.Ҳосил бўладиган чиқин-дилари суюқ

1. **Кубик стратегиясини қўллаш.**

А) **«Таърифланг».**

Атмосфера-ернинг газ қобиғи бўлиб, унинг ер юзига яқин жойлашган қаватини 78%ини азот, 20,9%ини кислород, 0,98%ини аргон, 0,03%ини карбонат ангидриди, қолган қисмларини эса сув буғлари, неон, ксенон, криптон, озон, водород, озот оксидлари каби газлар ташкил қилади.

Б) **«Таққосланг».**

Бизга маълум бўлган 9 та сайёранинг ҳам атмосфера қобиғи мавжуд бўлсада, уларда ер атмосферасидаги каби таркиб бутунлай бошқача. Масалан, Меркурий сайёрасида ҳам атмосфера мавжуд бўлсада, унинг таркиби асосан гелий ва аргон газларидан ташкил топган. Шунингдек, Венера сайёрасининг

атмосфера таркибини 97%и карбонат ангидридидан, 2%га яқини азотдан, 1% атрофида кислороддан, 0,01-0,1%и аммиакдан ташкил топган. Марс сайёрасининг атмосфераси эса асосан карбонат ангидридидан ташкил топган. Шу сабабли уларда ҳаёт мавжуд эмас.

В) **«Ассоциация».**

Атмосфера деганда одатда, унинг кимёвий таркибига унчалик эътибор берилмайди. Уни қўл билан ушлаб, кўз билан кўриб, мазасини тотиб бўлмайдиган, лекин тирик организмларнинг нафас олиши учун зарур бўлган физик ҳолат деб тушинилади.

Г) **«Таҳлил»**

Атмосфера ер юзидан космик бўшлиқ томон ўзига хос хусусиятлари билан бир-бирдан фарқ қилувчи қаватлар(«Етти қават осмон»)дан ташкил топган. Улар қуйидагича номланади:

-тропосфера
-стратосфера
-озоносфера
-мезосфера
-термосфера
-мезосфера
-экзосфера

Ушбу қаватларнинг хар бири ерда ҳаёт мавжудлигини таъминлашда муҳум аҳамият касб этади.

Д) **«қўллаш».**

Атмосфера ҳавоси таркибини доимий тоза бўлишига эришиш, уни турли хил ифлослантирувчи унсурлар билан ифлосланишига йўл қўймаслик, ердаги тирик мавжудодлар учун, шу жумладан, инсонлар саломатли учун, атроф-табиий муҳит учун муҳим аҳамиятга эга. Бу борада атроф муҳитни муҳофаза қилиш бўйича маъсул бўлган ташкилот ва муассасаларда маълум бир ижобий ишлар амалга оширилмоқда. Жумладан, БМТнинг «ЮНЕСКО», «ЮНЕП» ташкилотлари бутун дунёда экологик аҳволни яхшилаш бўйича амалий ишларни бажариб келмоқда. Бутун дунёда бўлгани каби Республикамизда ҳам табиат муҳофазасига доир ўнлаб қонунлар қабул қилинган, табиатни муҳофаза қилиш, шу жумладан, атмосфера ҳавосини муҳофаза қириш тўғрисида» қонунлар ишлаб чиқилган ва уни бажарилиши Давлат томонидан назоратга олинган.

Е) **«Асословчи далиллар».**

Афсуски, хозирги кунга келиб, автотранспорт воситаларидан, саноат корхоналаридан ҳавога чиқариб юборилаётган 200 дан ортиқ зарарли моддалар ҳаво муҳитини ифлосланишига олиб келмоқда. Бу хол албатта, она табиатга, унда яшовчи мавжудодларга, фауна ва флораларга катта зарар етказмоқда. Бобо колонимиз Али Абу Ибн Сино таъкидлаганларидек, «Агар чанг ва ғубор бўлмаганда эди одам минг йил яшарди». Дархақиқат, ҳаво муҳитини тоза бўлиши узоқ умр ва схат саломатлик гаровидир. Бугунги кунга келиб, табиий муҳитга етказилаётган зарарларни олдини олиш, табиат

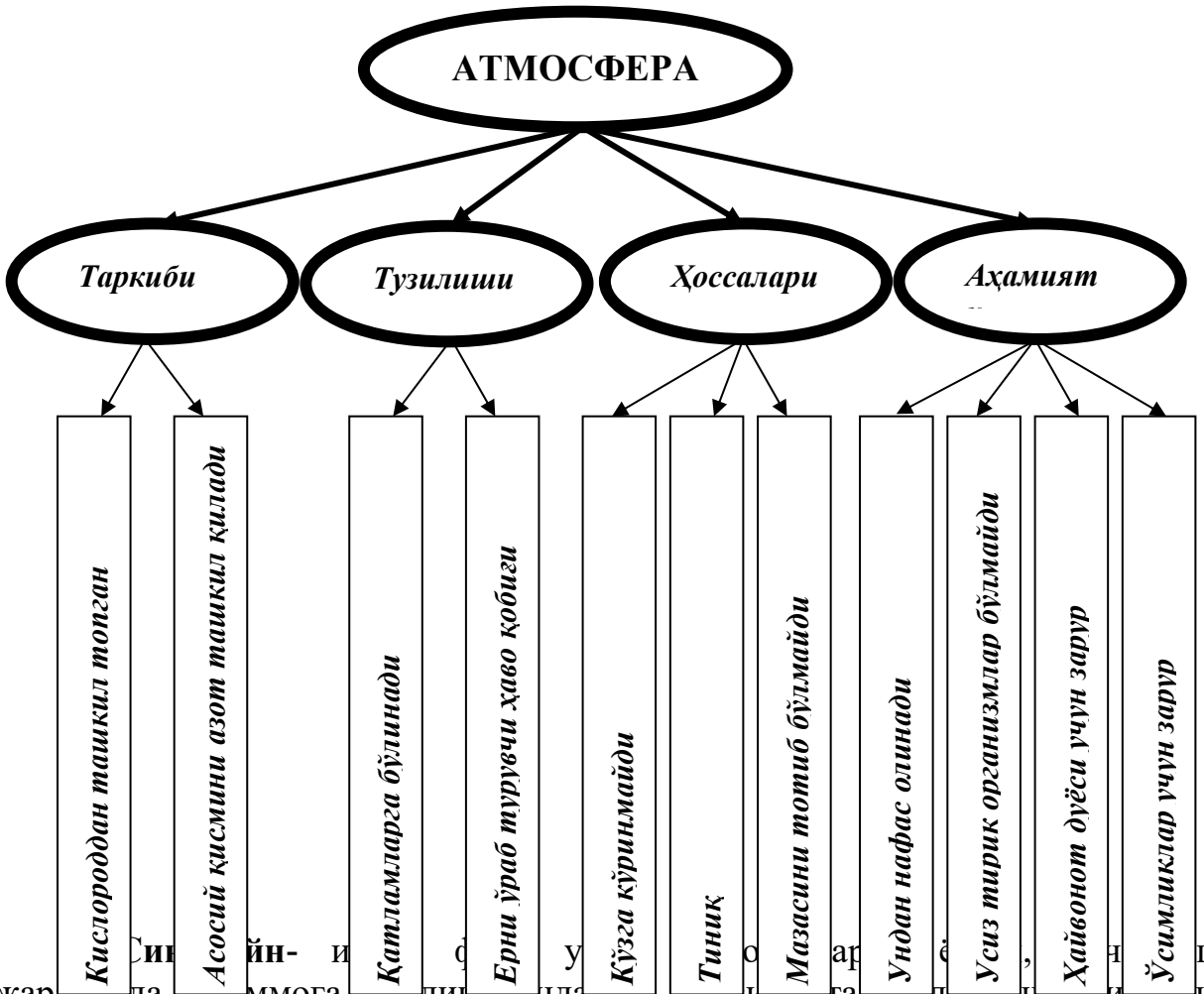
мўжизаларидан, унинг бойликларидан келажак авлодни ҳам баҳраманд қилишга қодир бўлган, ўз ақл-идроки билан ердаги бошқа мавжудодлардан кескин фарқ қилиб яратилган инсоният масулиятида эканлиги яққол сезилиб қолди.

2. Кластер-интерфаол усулини қўллаш.

Мавзуга доир иборани ушбу усулини қўллаш учун талабаларга «атмосфера» сўзи билан «Мия хужуми» ўтказилади ва улар томонидан айтилган хар бир фикр ёки ахборот йиғилади. Атмосфера ибораси айлана марказига олиниб, талабалар томонидан айтилган хар қандай мазмунга эга бўлган фикрлар айлана атрофига ёзиб чиқилади.

Айни холатда бундай сўзлар қуйидагича бўлиши мумкин: Кўзга кўранмайди..., Кислороддан ташкил топган..., Тиниқ..., Ундан нафас олинади..., Усиз тирик мавжудодлар бўлмайди..., қаватларга бўлинади..., хайвонот дунёси учун ҳам зарур..., Ўсимликлар учун ҳам зарур..., Ерни ўраб турувчи ҳаво қобиғи..., Мазасини тотиб бўлмайди... ва хокозо.

Сўнгра билдирилган барча фикрлар қуйидагича туркумланади.



Синийн- и ф у о ар а , ш жарасида муаммога турлича ёндашув асосида талабаларнинг фикрлаш қобилятини ривожлантиришга ёрдам беради.

1.___от (ким, нима);

2.___ ___сифат (қандай, қанақа);

3.___ ___ ___ фел (вазифси, функцияси);

4.___ ___ ___ ___ ассоциация (тасаввур, хаёлга нима келди)
5. ___ отнинг синоними(ўхшатмаси).

Масалан: «Атмосфера» ибораси бўйича синквейн тузамиз:

1. «Атмосфера»;
2. тоза, газсимон;
3. нафас, тириклик, жон;
4. табиат, инсон, ўсимлик, тоғ;
5. ҳаво.

Фойдаланилган адабиётлар:

1.Гусейнзаде Р.Лятиф угли. Современные образовательные технологии: Уч. пособ. – М., Народное образование, 1998. -198 с.

2. П.С.Султонов. Экология ва атроф муҳитни муҳитни муҳофаза қилиш асослари. Дарслик. Мусиқа нашриёти. Тошкент. 2007й

УДК 334.012

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АУТСОРСИНГ ПРОИЗВОДСТВА И ГЛОБАЛЬНАЯ ЦЕПОЧКА ПОСТАВОК ТРАНСНАЦИОНАЛЬНЫХ КОРПОРАЦИЙ

Аннотация. В данной статье описывается понятие производственного аутсорсинга. В статье описывается понятие производственного аутсорсинга, а также риски и проблемы, возникающие в процессе производственного аутсорсинга.

Ключевые слова: Аутсорсинг производства, цепочка поставок, многонациональный, Китай.

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PRODUCTION OUTSOURCING AND GLOBAL MULTINATIONAL SUPPLY CHAIN

Abstract. This article describes the concept of production outsourcing. This article describes the concept of production outsourcing and the risks and challenges arising from the process of production outsourcing.

Key words: Manufacturing outsourcing, supply chain, multinational, China.

С углублением глобализации аутсорсинг производства и глобальные цепочки поставок транснациональных компаний стали основными тенденциями в современном деловом мире. В этой высококонкурентной среде транснациональные компании повышают эффективность и сокращают затраты, передавая производственные процессы в другие страны или регионы. Эта стратегия позволяет транснациональным компаниям сосредоточиться на своем основном бизнесе и создать эффективные сети цепочек поставок по всему миру. Однако эта тенденция также сопряжена с некоторыми проблемами и рисками, которые необходимо тщательно анализировать и управлять ими.

Аутсорсинг производства означает перенос производственной деятельности из одного региона в другой, обычно при передаче производства и связанных с ним связей в страны с большим количеством дешевой рабочей силы. Этот подход может помочь транснациональным компаниям снизить затраты, повысить эффективность и еще больше расширить долю рынка. Например, Китай, как крупнейшая в мире производственная база, привлек множество транснациональных компаний к аутсорсингу производства в

Китае. Таким образом, транснациональные компании могут воспользоваться дешевой рабочей силой Китая и извлечь выгоду из огромного рынка Китая.

Однако производственный аутсорсинг не только приносит экономические выгоды, но также сопряжен с рядом проблем и рисков. Во-первых, контроль качества является серьезной проблемой. Поскольку производственная деятельность осуществляется различными поставщиками и субподрядчиками, транснациональным компаниям необходимо обеспечить соответствие всех аспектов высоким стандартам качества. Плохой контроль качества может привести к снижению качества продукции и нанесению ущерба репутации компании. Во-вторых, может быть поставлена под угрозу гибкость и оперативность цепочки поставок. Из-за расстояния и разницы во времени между транснациональными компаниями и поставщиками затраты на связь и координацию могут увеличиться, и, следовательно, способность реагировать на изменения рыночного спроса и чрезвычайные ситуации может быть ограничена.

Чтобы преодолеть эти проблемы и риски, транснациональным компаниям необходимо создать глобальную сеть цепочек поставок и укрепить управление цепочками поставок. Концепция глобальной цепочки поставок подразумевает интеграцию всех соответствующих поставщиков, субподрядчиков и партнеров в единую сеть для достижения обмена информацией, интеграции ресурсов и совместных инноваций. Таким образом, транснациональные компании смогут лучше контролировать цепочку поставок и быстро и оперативно реагировать на требования и изменения рынка. Например, Apple создала огромную сеть цепочек поставок по всему миру, что позволяет ей эффективно управлять производством, логистикой и продажами продуктов для удовлетворения потребностей глобальных потребителей.

Однако создание и управление глобальными цепочками поставок также сталкивается с некоторыми трудностями. Во-первых, транснациональным компаниям необходимо найти надежных поставщиков и субподрядчиков и установить с ними долгосрочные отношения сотрудничества. Это требует значительных затрат времени и ресурсов на расследования и аудиты, чтобы гарантировать, что поставщики смогут доставлять товары вовремя и предоставлять высококачественную продукцию. Во-вторых, управление цепочкой поставок требует соблюдения сложного набора правил и процессов, в том числе

Оценка работы поставщиков, управление запасами, организация логистики и т. д. Транснациональным компаниям необходимо оптимизировать эти процессы для повышения эффективности и снижения затрат. Наконец, неконтролируемые факторы в цепочке поставок также представляют собой проблему. Например, такие факторы, как стихийные бедствия, политические волнения и торговые разногласия, могут оказать непредвиденное воздействие на цепочки поставок.В целом, аутсорсинг производства и глобальных цепочек поставок транснациональными

компаниями является сложным и важным стратегическим решением. Оно потенциально может принести огромные экономические выгоды, но также сопряжено со своими проблемами и рисками. Поэтому транснациональные компании нуждаются в детальном анализе и управлении для обеспечения успешной реализации и устойчивого развития своих стратегий. Только всесторонне понимая эти проблемы и реагируя на них, транснациональные компании смогут в полной мере использовать возможности, открываемые глобализацией, и добиться устойчивого развития и конкурентных преимуществ.

Использованные источники:

1. Лю Хайюнь и Тан Лин, «Эффекты производительности и отраслевые различия международного аутсорсинга – эмпирическое исследование, основанное на промышленных отраслях Китая», China Industrial Economics 8 (2009): 10.
2. Шэнь Ци, «Теоретическое исследование «аутсорсинга» в международной экономике», «Модернизация торговых центров 01Z» (2006): 2.
3. Чжан Цзе, Исследование механизма и последствий международного аутсорсинга услуг, Дисс., Океанский университет Китая.
4. Сюй Чунянь, Международный аутсорсинговый бизнес и развитие обрабатывающей промышленности Китая, Дисс. Университета международного бизнеса и экономики.

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ИННОВАЦИОННЫЕ НАПРАВЛЕНИЯ РАЗВИТИЯ СЕЛЬСКОГО ХОЗЯЙСТВА

Аннотация. В статье преимущественно говорится о направлениях инновационного развития сельского хозяйства и его значении, о тенденциях развития времени.

Ключевые слова: мировая экономика, инновации, хозяйствующие субъекты, экономическая глобализация, инновационные риски и опасности.

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INNOVATIVE DIRECTIONS FOR AGRICULTURAL DEVELOPMENT

Abstract. The article mainly talks about the directions of innovative development of agriculture and its importance, about the trends in the development of time.

Key words: world economy, innovation, economic entities, economic globalization, innovative risks and dangers.

Тенденция развития мировой экономики является одним из основных факторов прекращения нищеты и голода, которые усиливаются во многих регионах планеты во всех отраслях и аспектах жизни этого общества, особенно под влиянием глобального изменения климата, производящего сельскохозяйственную продукцию, а также в различных направлениях. Организация бизнес-деятельности поставщиков услуг на основе инноваций приобрела стратегическое значение, постоянное совершенствование этого процесса становится требованием времени.

В новых условиях экономической глобализации главным признаком экономического развития являются изменения в технологическом способе производства и их влияние на экономический потенциал всего общества. По данным многих современных исследователей, происходящие сегодня инновационные изменения не только меняют производительные силы общества, но и представляют собой центральное звено в системе социально-экономических процессов.

Согласно Постановлению Президента нашей страны №ПФ-5853 от 23 октября 2019 года в «Концепции развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» укрепление продовольственной безопасности

страны, развитие современные системы государственного управления в сети поддержки аграрного сектора. Определен ряд задач, таких как постепенная диверсификация государственных расходов, направленных на поддержку.

Важным аспектом системы инновационного развития является то, что это экономика деформируется состав, управление инновационными процессами сходит под откос, короткий в условиях наличия информационного вакуума на уровне сельского хозяйства создает новые возможности для роста сети стабильно высокими темпами в течение определенного периода времени. Роль государства в формировании этой системы бесподобна.

Иметь обширную информацию о научно-технических возможностях сельхозпроизводителей и передовом опыте производства, обучать их инновационным методам ведения сельского хозяйства, осваивать правила инновационной деятельности, оказывать консультационные услуги создает условия для обеспечения повышения инновационной активности АПК путем подачи.

Однако из-за своей чувствительности и зависимости от природно-климатических факторов аграрный сектор имеет ряд трудностей в создании и внедрении инноваций по сравнению с другими отраслями, в связи с чем его развитие на основе инновационной модернизации происходит глубоко по конкретным и целесообразным инновационным направлениям. требует регулярного совершенствования научно-исследовательской и экспериментально-открытой работы.

Формирование и функционирование рынка аграрных инноваций в условиях деятельности большого количества фермеров и фермерских хозяйств, производящих сельскохозяйственную продукцию.

Сбор и обработка конкретной информации об особенностях и направлениях наблюдается попытка реализации научных разработок как инновационного проекта в условиях недостаточности знаний по использованию полученных выводов. Это приводит к снижению экономической, технико-технологической, экологической эффективности инновационных идей.

Как эффективная форма организации и стимулирования инновационной деятельности в сельском хозяйстве, на основе принципа государственно-частного партнерства, т.е. поощрения участия частного бизнеса в развитии инновационных процессов с использованием государственного механизма, объединения ресурсов, распределения прибыли и риски, формирование конкурентной среды и в то же время должно быть участие государственного капитала, что будет стимулировать эффективное использование бюджетных средств. В результате эффективной роли экономического механизма можно определить систему форм и способов организации и стимулирования инновационной деятельности в сельском хозяйстве. На основе исследования рекомендована система классификации следующих форм и способов

организации и стимулирования инновационной деятельности в сельском хозяйстве.

В заключение следует подчеркнуть, что сегодня производство основных продуктов питания является одним из важных направлений инновационной политики, направленной на развитие сельского хозяйства и повышение эффективности деятельности фермеров и фермерских хозяйств в нем. обеспечить соответствие объемов нормативам медицинского потребления и производства продукции с высокой долей добавленной стоимости и экономической эффективности.

Использованные источники:

1. Указ Президента Республики Узбекистан №ПФ-5853 «Об утверждении Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы». 23.10.2019

2. Safoevna, S. Z., & Juraevna, M. N. (2021). Analysis of economic efficiency of the use of irrigated land in agriculture and factors on them. Journal of ontemporary Issues in Business and Government| Vol, 27(2), 4056.

УДК 616.981.718-08

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КЛИНИКО-ЛАБОРАТОРНЫЕ ПРОЯВЛЕНИЯ КОКСИЕЛЕЗА В АНДИЖАНСКОЙ ОБЛАСТИ

Резюме. Актуальность изучения коксиеллеза заключается в его широкой распространенности, полиморфизме клинических проявлений, затрудняющем постановку диагноза, возможности формирования гепатита и пневмонии, подострой и хронической форм болезни. Крупнейшая эпидемия коксиеллеза в 21 веке была отмечена в Нидерландах, где с 2007 по 2010 годы было выявлено около 4000 случаев инфицирования. По официальным данным за период с 1957 по 2016 год зарегистрировано 13290 случаев заболевания.

Хотя в последние годы произошел существенный прогресс в изучении коксиеллеза, патогенез этого заболевания еще недостаточно выяснен. По данным литературы основную роль в формировании клинических проявлений коксиеллеза играют изменения иммунитета.

Ключевая слова: коксиеллез, распространенность, эпидемия, клинико-лабораторные проявления.

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CLINICAL AND LABORATORY MANIFESTATIONS OF COXIELLOSIS IN THE ANDIJAN REGION

Resume. The relevance of the study of coxiellosis lies in its wide spread, polymorphism of clinical manifestations that complicates the diagnosis, the possibility of the formation of hepatitis and pneumonia, subacute and chronic forms of the disease. The largest epidemic of coxyellosis in the 21st century was noted in the Netherlands, where about 4,000 cases of infection were detected from 2007 to 2010. According to official data for the period from 1957 to 2016, 13,290 cases of the disease were registered.

Although significant progress has been made in the study of coxiellosis in recent years, the pathogenesis of this disease has not yet been sufficiently clarified. According to the literature, the main role in the formation of clinical manifestations of coxyellosis is played by changes in immunity.

Keywords: coxiellosis, prevalence, epidemic, clinical and laboratory manifestations.

Введение. Коксиеллез (лихорадка Ку) - острая риккетсиозная болезнь из группы природно-очаговых зоонозов, характеризующаяся различными путями передачи, общей интоксикацией и полиморфизмом клинических проявлений. Возбудитель - грамотрицательная внутриклеточная бактерия Coxiella burnetii. Это одно из тех редких заболеваний, когда при аэрогенном инфицированиии один микроорганизм может привести к болезни [2,5]. При всех путях инфицирования возбудитель проникает в кровь, размножается в эндотелии сосудов и обусловливает развитие общей интоксикации. В отличие от других риккетсиозов размножение возбудителя происходит не только в эндотелии сосудов, но и в гистиоцитах и макрофагах ретикулоэндотелиальной системы [4]. Возбудитель может длительно персистиро-вать в организме человека, что объясняет возможность развития при коксиеллёзе затяжного и хронического течения. 50-60% пациентов, инфицированных коксиеллёзом, болеют бессимптомно. Инкубационный период колеблется от 3 до 40 дней. Описано более 30 симптомов, характерных для данного риккетсиоза [3]. Полиморфизм клинических проявлений коксиеллёза определяется механизмом передачи, первичной инфицирующей дозой риккетсий и уровнем защитных сил организма [1].

Цель исследования. Определить клинико-патогенетическое и прогностическое значение иммунологических и биохимических маркеров у больных коксиеллезом для оптимизации терапии.

Материалы и методы исследования. Наше исследование показало различия в распределении пациентов по возрасту (до 50 лет и старше 50 лет) и полу. В обеих группах мужчины болели чаще, чем женщины (p 0,001), что соответствует данным других исследователей. Хотя точные причины этого распространения неизвестны, предполагается, что определенную роль играют половые гормоны.

Результаты исследования. Наши исследования показали, что кокциеллез наблюдается непрерывно в течение всего года с плавным подъемом в апреле-июле (60,1%), то есть в весенне-летний период обострения. Эпидемиологический анамнез показал, что 136 больных (41,5%) проживали в сельской местности, а 190 человек (58,3%) – в городе, то есть население города в 1,4 раза больше, чем у сельского населения с кокцеллезом (p 0,01). В то же время население 77 городов (23,6%) имело дачи. Как видно из рисунка 1, среди сельских пациентов с кокциелозом в наблюдаемой нами группе было больше зарегистрировано население Шахриханского, Балыкчинского и Мархаматского районов Андижанской области. Неравномерное территориальное распространение заболевания кокциеллезом, несомненно, связано не только со степенью активности природных и антропогенных очагов инфекции, но и с реальной возможностью их выявления.

Так, 91 пациент (27,9%) временно безработный, 41 пациент (12,6%) рабочий, 36 человек (11,0%) пенсионеры, 34 пациента (10,4%) водители транспортных средств, 13 пациентов (3,4%) охранники, 12 пациентов (3,7%) медицинский персонал. Остальные 99 пациентов (30,7%) имели разные профессии: сотрудники полиции, руководители фирм и предприятий, инженеры, предприниматели, пограничники, рыбаки, учителя.

Был отмечен полиморфизм путей передачи. Учитывая место проживания всех обследованных пациентов в эндемическом очаге коксиеллеза, существовала высокая вероятность заражения аэрогенным путем. Заражение в 59,8% случаев может произойти при алиментах. Так, 119 пациентов (36,5%) употребляли домашние молочные продукты, 10 человек (3,0%) – пастеризованное молоко, 67 пациентов (20,2%) – мясо (шашлык), которое не было достаточно термически обработано. У 54 пациентов (16,5%), которые зафиксировали поглощение или удаление клещей, была возможна передача инфекции коксиеллы. Перенос может быть осуществлен 28 пациентам (8,6%), которые часто отправляются на рыбалку водным путем. 69 пациентов (21,1%) спасли своих домашних животных: крупный рогатый скот, кроликов, хомяков, домашнюю птицу, собак и кошек, как крупных, так и мелких. По сравнению с данными десятилетней давности [38], произошли изменения в путях передачи коксиеллы. В современных условиях пути передачи коксиеллы Burnet алиментарный и в 1,7 раза чаще наблюдались при передаче в 4,3 раза чаще.

Пациенты с коксиеллезом получали в среднем 6,2 дня, при продолжительности заболевания более 0,2 дней, и у них часто наблюдались симптомы, показанные на рисунке 3. Одним из ведущих признаков была лихорадка (326 человек). У большинства пациентов была ремиттирующая (280 человек, 85,4%), редко даврийская (34 человека, 10,4%) и персистирующая (12 человек, 4,3%) лихорадка. Продолжительность лихорадочного периода колебалась от 5 до 35 дней и составляла в среднем 13,5, соответственно, 0,8 дня. Лихорадка продолжительностью 1 неделю была зарегистрирована у 100 пациентов (30,5%), через 2 недели – у 163 пациентов (50,0%). У 25 пациентов (7,6%) с коксиеллезом продолжительность лихорадки наблюдалась в течение 3 недель, у 38 пациентов (11,7%) лихорадка наблюдалась в течение 4-6 недель. В начале заболевания температура у больных повышалась до 39-40С, в среднем 13,0 градусов Цельсия на 0,5 день, температура снижалась до субфебрильных показателей.

Интоксикация вовлекла в этот процесс соответствующие отделы нервной системы, что наблюдалось у 315 человек со слабостью, головной болью у 266 пациентов, мышечными болями в верхних и нижних конечностях и пояснице у 225 пациентов. У 138 пациентов наблюдалось снижение аппетита. Лихорадка сопровождалась ознобом у 165 пациентов, потливость наблюдалась у 54 пациентов (16,6%).

Гиперемия слизистой оболочки ротоглотки наблюдалась у 204 пациентов, в то время как гепатомегалия наблюдалась у половины пациентов.

Наличие гепатомегалии не всегда характеризует степень поражения печени, нарушение ее функций, так как увеличенная печень может нормально функционировать. У 152 пациентов (46,6%) был ssle, у 127 человек были боли в суставе. 90 пациентов жаловались на кашель, сухость или выделение мокроты, боль или чувство стеснения в груди. В то же время аускультативно было выслушано сухое свистящее дыхание у 156 пациентов (47,8%) на фоне тяжелого дыхания.

Хотя повреждение сердечно-сосудистой системы было отмечено в виде тахикардии у 213 (65,3%), брадикардии у 25 (7,7%), некоторые клиницисты отметили наличие брадикардии у преобладающего числа пациентов с коксиеллезом [38, 119, 154]. Артериальная гипотензия была выявлена у 78 (23,9%) пациентов, а тональные или глухие сердечные тоны - у 91 (27,9%) пациента. Это К. М. Лобан (2002) считает, что токсин-рикезия при кокселлиозе является следствием причинного действия N-окончаний. нарушения метаболических процессов миокарда, приводящие к развитию изменений во влагалище и его ядрах, также оцениваются в клинической практике как "инфекционное сердце".

49 пациентов жаловались на тупую боль в животе, локализованную в эпигастрии и правом подреберье. У 57 пациентов (17,5%) при пальпации отмечалась боль в эпигастрии и правом подреберье. У 60 пациентов было отмечено пожелтение слизистых оболочек и кожи, что свидетельствовало о нарушении обмена билирубина вследствие развития гепатита.

Синдром интоксикации проявился у 48 пациентов тошнотой, которая сопровождалась рвотой у 28 человек.

У 19 пациентов развились нарушения гемостаза, проявляющиеся кровотечением из десен, кровотечением из носа и образованием гематом в местах инъекций. У 18 больных коксиеллезом экзантема была выявлена на 3-16-й день заболевания в виде локализованного поражения, поражения-папулезных и геморрагических элементов в верхних и нижних конечностях, спине, груди и хвосте.

Возраст пациентов с подострым коксиеллезом был в 1,2 раза выше, чем возраст пациентов с острой формой (47,1 года и 1,8 года и 39,9 года и 3,8 года, р 0,001). Длительность заболевания при подострой форме была в 2,1 раза выше, чем при острой форме (р 0,001). Как видно из таблицы 10, у пациентов с подострой формой заболевания лихорадка наблюдалась в 2,4 раза, слабость и артралгия в 2,3 раза, озноб, потливость, миалгия и снижение аппетита в 2,2 раза, кашель в 2,1 раза, головная боль в 2 раза, гиперемия слизистой оболочки ротоглотки и рассеянный склероз в 1,9 раза. по сравнению с пациентами с острым коксилом, роконъюнктивитом, гепатомегалией в 1,8 раза, болью в животе в 1,7 раза, желтухой в 1,6 раза, тошнотой в 1,5 раза.

Вывод. Таким образом, данные исследования показали, что текущее течение коксиеллеза в Андижанской области по-прежнему сопровождается полиморфизмом клинических проявлений этого заболевания.

Выявление различных клинических симптомов зависит от пола пациента, продолжительность которых зависит от возраста пациента. В последние годы, в дополнение к препаратам типа тетрациклина, в качестве этиотропной терапии для лечения коксиеллеза был использован ряд альтернативных антибактериальных препаратов. Было показано, что этиотропную и патогенетическую терапию при необходимости следует проводить параллельно с иммунокоррекцией.

Использованные источники:

1.Жаркова, В. В. Клинико-патогенетические особенности и оптимизация терапии коксиеллёза на современном этапе: автореф. дис.... канд. мед. наук / В.В. Жаркова. – М., 2007. – 23 с.

2. Лобан, К.М. Риккетсиозы человека / К.М. Лобан, Ю.В. Лобзин, Е.П. Лукин. – М. – СПб.: Издательство ЭЛБИ -СПб., 2002. – 397 с.

3. Покровский, В.И. Инфекционные болезни и эпидемиология: учебник для медицинских вузов / В.И. Покровский, С.Г. Пак, Н.И. Брико, Б.К. Данилкин. – М.: ГЕОТАР-МЕД, 2003. – 816 с.

4. Q fever: persistence of antigenic non-viable cell residues of Coxiella burnetii it the hast-implications for post Q fever infection fatigue syndrome and other chronic Seguelae / B.P. Marmion [et al.] // An International Journal of Medicine. – 2009. – Vol. 102. – № 10. – P. 673-684.

5. Raoult, D. Natural hystory and pathophysiology of Q fever / D. Raoult, T. Marrie, I. Mege // Lancet Infect Dis.— 2005.— Vol. 5.— № 4.— P. 219—226.

УДК: 13.00.02

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ЯЗЫКОВО-РЕЧЕВЫЕ АСПЕКТЫ УСТНОЙ И ПИСЬМЕННОЙ РЕЧИ ПРИ ОБУЧЕНИИ РУССКОМУ ЯЗЫКУ КАК ИНОСТРАННОМУ

Аннотация. Цель статьи – подробно описать лингвистические и риторические аспекты обучения устному и письменному общению на русском языке как иностранном, как новом языке

Ключевые слова: Методика, педагогика, иностранный язык, устная речь, письменная речь, аудирование, грамматика, лексические единицы, механизм аудирования, техника чтения

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LANGUAGE AND SPEECH ASPECTS OF ORAL AND WRITTEN SPEECH WHEN TEACHING RUSSIAN AS A FOREIGN LANGUAGE

Annotation. The purpose of the article is to describe in detail the linguistic and rhetorical aspects of teaching oral and written communication in Russian as a foreign language, as a new language

Key words: Methodology, pedagogy, foreign language, oral speech, written speech, listening, grammar, lexical units, listening mechanism, reading technique.

Слово «метод» происходит от греческого слова «metodos», что означает «путь». Сейчас это слово употребляется в двух смыслах.

1. Совокупность приемов, методов, форм работы учителя при преподавании какого-либо предмета, то есть искусство, мастерство учителя.

2. Наука, изучающая возможности и средства достижения максимального результата образовательного процесса, то есть теория преподавания какого-либо предмета. В будущем объектом нашего внимания станет методология как наука, как теория преподавания русского языка как

иностранного студентам. Методологическая наука рождается из практики, чтобы понять ее и подчеркнуть положительный опыт. Развитие науки и практики происходит в полном взаимодействии. Известно, что теория всегда обогащается практикой. Но в то же время практика может быть успешно реализована только в том случае, если она опирается на определенные знания, теоретические основы и законы.

Методика изучения русского языка направлена на формирование коммуникативной полиязычной личности, обладающей специфичными для разных культур принципами оценивания и находящейся в педагогическом отношении в процессе обучения русскому языку как иностранному.

Изучение произношения – это аспект практического курса обучения русскому языку как иностранному, направленный на формирование навыков аудирования и произношения (правильного восприятия услышанных элементов языка, связывания их со смыслом и соответствующей повторяемости, скорости, устойчивости).

Фонетические навыки можно считать сформированными, если развит фонетический (содержательный) речевой слух и установлены связи между слухо-звуковыми, двигательными и фонематическими сторонами речи, в результате чего произношение получается достаточно точным. Требования к уровню навыков аудирования и говорения зависят от целей и условий обучения, в ряде случаев ограничиваются определением приемлемого произношения. Однако следует отметить, что фонетика и ее преподавание — очень обширная область, и ее уместно организовать как методическое пособие.

Еще одна область, поддерживающая языковые навыки, — это лексикология. На начальном этапе в обучении лексике выделяют ряд задач:

1) обеспечение минимального словарного запаса для повседневной речи и учебной деятельности учащегося, при этом подбирается и вводится словарный запас, сочетающийся с соответствующими темами: «Учёба», «Мой день», «Моя комната», «Магазин», «Одежда»;

2) создание ядра словаря будущего пользователя на русском языке как неродном;

3) обеспечение лексической основы формирования речевых умений и навыков;

4) создание лексической базы обучения грамматике. Основные подготовительные лексические упражнения.

Среди упражнений рецептивного типа важное место занимают упражнения, направленные на выработку у обучающегося лингвистического предположения о значении нового слова путем анализа слова и контекста.

Лексическими упражнениями называются коммуникативные упражнения, содержание которых состоит из практики учащегося выполнения ситуативной условной речевой деятельности на основе вводимых и редуцированных лексических единиц. Активизация словарного запаса – завершающий этап работы над новыми словами. На традиционных уроках

принято считать, что для стойкого усвоения лексической единицы необходимо повторить в среднем от 15 до 25 разрядов. Но инновационные методы показывают, что постоянное повторение самого слова не гарантирует его сохранение в памяти ученика. Основным методом активизации является введение новой лексики во все виды непосредственных и последующих упражнений, но главное – использовать их в текстах и речевой деятельности.

Педагогической практике нет чисто грамматических уроков или чисто теоретических объяснений. Существуют методологические различия между практической и теоретической (описательной) грамматикой. Известно, что теоретическая грамматика классифицирует слова по их обобщенному значению, разделяет части предложения - значимые и функции частей предложения и описывает их; изучает способы соединения слов и их функцию в предложении. В теоретической грамматике материал излагается линейно, обобщенно, систематически.

При обучении русскому языку с нуля важно включать в учебный материал минимум грамматических событий, которые в то же время представляют систему русского языка в ее основных чертах. Этот материал должен содержать типические события, на основе которых студент обобщает и систематизирует различные языковые факты, выстраивает в своем сознании правила использования русского языкового материала в речи.

Изучение нового языка, развитие навыков говорения осуществляется в основном посредством аудирования, поэтому аудирование должно быть развито лучше, чем другие навыки, но на самом деле этот процесс вызывает у учащихся наибольшие трудности. Неслучайно ученые связывают аудирование с фундаментальными навыками, включая его в разряд активных мыслительных процессов, поскольку аудирование направлено на восприятие, распознавание и понимание каждый раз новых речевых сообщений и включает в себя творческое комбинирование. Слушатель должен объединить информацию из различных источников: фонологических, просодических, лексических, синтаксических, семантических, прагматических – это происходит путем получения информации.

Основная цель обучения иностранному языку – научить речи как средству общения. Устная речь занимает особое место в живом обучении иностранному языку: как правило, она является одновременно основным стимулом изучения языка и основным критерием уровня владения языком. Нормальное устное общение предполагает очень быструю реакцию и развитие речи, которое осуществляется без коррекций и предварительных обсуждений. Для того чтобы речевая деятельность имела место, необходимо наличие как минимум двух партнеров (отправителя и получателя речи), один из которых «производит» речь, другой воспринимает ее, понимает ее и «производит» ответ. Поэтому можно сказать, что речь представляет собой единство двух взаимосвязанных процессов: процесса говорения и процесса слушания.

Использованные источники:

1. Джуманова Д.Р., Практика курса русского языка, учебник -Т 2014-123б
2. Митрофанова, О.Д. Традиционное и новое в методике преподавания русского языка как иностранного В: Щукин А. Н. (ред. – сост.) Язык и культура в филологическом вузе. Актуальные проблемы учебы и преподавания: Сборник научных трудов. Москва: ГИРЯ им. А. С. Пушкин; Филоматис. 2006.
3. Баданина, И.В. Изучение актуальных процессов грамматики современного русского языка в иностранной аудитории / И.В. Тело. - М., 2005.
4. Баяманова Р.Г. Организация коммуникативно-ориентированного урока русского языка. Учебно-методическое пособие. Караганда, 2006.

УДК: 13.00.01

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ИСТОРИЯ РАЗВИТИЯ РУССКОГО ЯЗЫКА И ЕГО ЗНАЧЕНИЕ В МИРОВОМ МАСШТАБЕ

Аннотация. В данной статье говорится об истории развития русского языка, современном и древнем русском (восточнославянском) языке, взглядах лингвистов на его развитие

Ключевые слова: язык, русский язык, восточнославянские, русские, индоевропейские языки

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HISTORY OF THE DEVELOPMENT OF THE RUSSIAN LANGUAGE AND ITS IMPORTANCE ON A WORLD SCALE

Annotation. This article talks about the history of the development of the Russian language, modern and ancient Russian (East Slavic) language, the views of linguists on its development

Key words: Language, Russian language, East Slavic, Russian, Indo-European languages

Язык является ключом ко всем знаниям и природе. Язык относится к социальным явлениям, которые существуют во все периоды существования человеческого общества. Основное назначение (или функция) языка — служить средством общения.

Язык неразрывно связан с мышлением, сознанием человека, служит средством формирования и выражения наших мыслей и чувств. На нашей планете более двух тысяч языков. Среди них русский язык является одним из наиболее распространенных. Он включает в себя все языковые средства, используемые в общении между людьми. Все мы знаем, что русский язык –

один из крупнейших языков мира. Современный русский язык является продолжением древнерусского (восточнославянского) языка. Славянские языки также сохраняют индоевропейскую древность как в грамматике, так и в лексике. (Правда, наиболее консервативными из ныне живущих индоевропейских языков являются балтийские: литовский и латышский.)

Это древнее наследие делает русский язык (как и остальные славянские языки) очень сложным, но приятным. На древнерусском языке говорили восточнославянские племена, основавшие древнерусскую нацию в 9 веке в составе Киевского государства. Этот язык имел большое сходство с языками других славянских народов. Но оно уже отличалось некоторыми фонетическими и лексическими особенностями. Все славянские языки (польский, чешский, словацкий, сербохорватский, словенский, македонский, болгарский, украинский, белорусский, русский) происходят от общего корня – единого праславянского языка, существовавшего, вероятно, до X-XI веков. В XIV и XV веках на основе единого языка древнерусской нации в результате распада Киевского государства возникли три самостоятельных языка: русский, украинский и белорусский, которые стали национальными языками. С формированием наций этапов первые кириллические тексты появились у восточных славян в X в. В 988 году книги были написаны на русском языке. Летопись рассказывает о многих книжниках, работавших во времена Ярослава Мудрого. Часто подходят богослужебные книги. Оригинальные восточнославянские рукописные книги представляли собой преимущественно южнославянские рукописи произведений Кирилла и Матфея, учеников создателей славянской письменности. В процессе переписки язык оригинала был адаптирован к восточнославянскому языку.

Кроме того, в наше время не существует единой периодизации истории литературного языка в русском языке, принятой всеми лингвистами, но все исследователи при построении периодизации учитывают социально-исторические и культурно-социальные условия развития. языка. Периодизация истории русского литературного языка Л.П. Якубинский, В.В. Виноградов, Г.О. Винокура, Б.А. Ларина, Д.И. Горшкова, Ю.С. Сорокин и другие лингвисты основываются на наблюдениях, учитывающих нормы русского литературного языка, его связь с древней литературно-лингвистической традицией, с общелитературным языком и диалектами, социальные функции и области применения русского литературного языка.

Большинство филологов XVIII-XX веков заявляли, что основой русского литературного языка является церковнославянский язык, пришедший в Россию с принятием христианства. Некоторые исследователи имплицитно развивали и развивают теорию церковнославянской основы русского литературного языка (А. И. Соболевский, А. А. Шахматов, Б. М. Ляпунов, Л. В. Щерба, Н. И. Толстой и др.). Итак, А.И. Соболевский писал: «Известно, что церковнославянский язык был первым из славянских языков, употреблявшимся в буквальном смысле», «После Кирилла и Мефодия он стал литературным языком сначала у болгар, затем у сербов и русских. " А. А.

Шахматов подчеркивал полное отражение и завершение полученной в XVIII веке гипотезы о церковнославянских основах русского литературного языка как пример необычайной сложности формирования русского литературного языка: «Ни один другой язык в мире не может «Нет», — говорит он. Ученый решительно возводит современный русский литературный язык к церковнославянскому: «Русский литературный язык по своему происхождению есть русский, который в течение столетий приближался к живому просторечному языку и постепенно утрачивал свой облик», который был пересажен в его почву. А. Шахматова, древнебулгарский язык не только стал письменным литературным языком Киевского государства, но уже в X веке оказал большое влияние на устную речь «образованных слоев Киева», поэтому современный русский литературный язык содержит много древнебулгарской книжной речи.

Русский язык — один из самых распространенных и богатых языков в мире, на котором говорят представители различных национальностей за пределами основного ареала его распространения, общаясь не только с носителями этих языков, но и с сами себя. Полное описание синонимов современного русского литературного языка, их речевых особенностей и употребления в русском речевом этикете и культуре дано А.П. Выполнено Евгеньевой. В результате кропотливой работы в 1975 году был составлен однотомный «Тезаурус синонимов. Справочник» (авторский перевод). В 1997 году в Российской академии наук имени В. В. Виноградова под руководством Ю.Д. Апресяна был создан новый толковый словарь синонимов русского языка. Этот словарь составлен по принципам целостного описания языка. В словаре описаны смысловые, прагматические, коммуникативные и другие сходства и различия между синонимами, а также частично нейтральный взгляд на эти различия.

Вообще в русском языкознании, помимо общих словарей, разработаны градуированные словари для более низких ступеней образования. Данными проблемами занимаются такие российские лингвисты, как Д. Н. Ушаков, С. Е. Крючков, А. Н. Тихонов, П. А. Грушников, З. А. Потиха, М. Р. Львов. Для того, чтобы научить школьников работать со лексикой с раннего возраста созданы различные иллюстративные и интересные словари. По мнению профессора М.Р. Львова, создание подобных учебных словарей для студентов направлено на повышение уровня их самостоятельной работы и обеспечение их качественными и отборными языковыми материалами. Следует отметить, что профессор М.Р. Львов является автором различных учебных словарей для младших школьников. Сюда входят «Словарь синонимов и антонимов русского языка», «Словарь антонимов русского языка для детей школьного возраста», «Различение слов и их значений: многозначные слова, т. Тематические группы, омонимы, синонимы, паронимы»., синонимы, антонимы, в качестве примера можно привести «Словарь антонимов русского языка», «Аннотированный словарь антонимов русского языка». Эти словари в основном состоят из слов, подходящих для учащихся начальной школы.

Например, «Словарь синонимов и антонимов русского языка» состоит из пяти разделов, в которых юные школьники начинают работать с синонимами и планомерно переходят к антонимам, в которых синоним-антонимические отношения, такие как многозначность слов Систематизированы синонимические и антонимические пары.

Использованные источники:

1. Русская языковая культура. (Учебник) Маслов В.Г., 2010 – 160 с.
2. Русский язык и культура речи: Учебник для высших учебных заведений. Л.А. Введенская, Л.Г. Павлова, Е.Ю. Кашаева, Ростов н/Д: Издательство «Феникс», 2001. – 544 с.
3. Русский язык и культура речи / И. А. Долбина, Т. А. Карпинец, О.А. Салтакова; Кузбасский государственный технический университет, 2011. – 63с.
4. Русский язык в конце 20 века. В.Л. Воронцова и др. – М.: Языки русской культуры, 2009. – 478 с.

УДК 371

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ВЛИЯНИЕ ЦИФРОВИЗАЦИИ НА СИСТЕМУ ОБРАЗОВАНИЯ

Аннотация. Данная научная статья исследует процесс цифровизации образования и его влияние на современные образовательные системы. В статье анализируются вызовы, с которыми сталкиваются образовательные учреждения при внедрении цифровых технологий, а также рассматриваются перспективы и возможности, которые открываются перед образованием в эпоху цифровой трансформации.

Ключевые слова: цифровизация образования, цифровые технологии, цифровая образовательная среда, риски цифровизации, система образования.

Современный мир находится в состоянии постоянной трансформации под воздействием цифровых технологий. Одной из областей, на которую оказывается огромное влияние этот процесс, является образование. Цифровизация образования – это не просто адаптация новых технологий в учебном процессе, но и переосмысление педагогических стратегий, методов обучения и взаимодействия между преподавателями и учениками.

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THE IMPACT OF DIGITALIZATION ON THE EDUCATION SYSTEM

Annotation. This scientific article explores the process of digitalization of education and its impact on modern educational systems. The article analyzes the challenges faced by educational institutions in the implementation of digital technologies, as well as examines the prospects and opportunities that open up to education in the era of digital transformation.

Keywords: digitalization of education, digital technologies, digital educational environment, risks of digitalization, education system.

Цифровизация непрерывно проникает во все сферы нашей жизни, и образование не является исключением. В современном мире, где технологии играют все более важную роль, цифровизация стала неотъемлемой частью образовательного процесса. Она меняет не только способы обучения, но и саму систему образования в целом.

Одним из главных преимуществ цифровизации в образовании является доступность знаний. С развитием интернета и широкого распространения электронных устройств, ученики и студенты получают возможность обучаться в любое время и в любом месте. Онлайн-курсы, электронные учебники, видеолекции — все это делает образование более гибким и доступным для всех, независимо от географического положения или социального статуса.81

Кроме того, цифровые технологии позволяют создавать интерактивные учебные материалы, которые делают обучение более интересным и привлекательным. Видео, аудио, анимации, интерактивные задания — все это помогает учащимся лучше усваивать материал и развивать свои навыки. Также цифровые инструменты позволяют персонализировать образование, адаптировать его под индивидуальные потребности каждого ученика.

Однако, несмотря на все преимущества цифровизации, есть и некоторы вызовы и проблемы. Например, необходимость адаптации педагогического процесса к новым технологиям требует от учителей и преподавателей дополнительных знаний и навыков. Также существует риск неравномерного доступа к цифровым ресурсам, особенно в отдаленных и малообеспеченных регионах.

В целом, цифровизация вносит значительные изменения в систему образования, делая ее более современной и адаптированной к требованиям современного общества. Однако, важно помнить, что технологии являются всего лишь инструментом, и успех образования все равно зависит от качества преподавания и мотивации учащихся. Только совместное использование традиционных и цифровых методов может привести к оптимальным результатам и обеспечить качественное образование для всех.

Развитие цифровых технологий существенно влияет на сферу образования, привнося новые возможности и вызывая изменения в традиционной системе обучения. Цифровизация проникает во все аспекты образования, начиная от учебных материалов и методик преподавания, и заканчивая организацией учебного процесса и оценкой успеваемости студентов.

Одним из главных преимуществ цифровизации образования является доступность образовательных ресурсов и информации. С появлением интернета и электронных учебных материалов, студенты получают возможность изучать новые знания в любое время и в любом месте. 82

Это особенно актуально для тех, кто не имеет доступа к традиционным образовательным учреждениям или живет в удаленных регионах.

Кроме того, цифровые технологии позволяют индивидуализировать образование и адаптировать его под потребности каждого ученика.

Маркова В. Д. Цифровизация образования: вызовы и перспективы. // Информатизация образования и науки. 2019. Том 3. С. 38-47.

Семенов А. В. Цифровизация образования: проблемы и пути развития. // Инновационное развитие образования. 2019. № 4. С. 52-59.

С помощью специализированных программ и алгоритмов, учителя могут создавать персонализированные образовательные планы, учитывая особенности и уровень подготовки каждого студента. Это способствует более эффективному усвоению материала и повышению мотивации учащихся.

Цифровизация образования демонстрирует бесспорное значение в современном мире. Она предоставляет образовательным учреждениям и педагогам возможности для индивидуализации обучения, глобализации учебного процесса и введения интерактивных методов обучения. Однако этот процесс сопряжен с вызовами, такими как неравенство доступа к технологиям, изменение роли педагога, необходимость качественной фильтрации информации и обеспечение кибербезопасности.

Проблемы кибербезопасности и конфиденциальности данных.

Цифровизация образования также поднимает вопросы безопасности данных. Хранение и передача личных данных учеников и педагогов требует высоких стандартов кибербезопасности. Уязвимость перед кибератаками и утечками данных может иметь серьезные последствия. Поэтому образовательные учреждения должны уделять особое внимание обеспечению безопасности данных и разработке стратегий предотвращения инцидентов.

Примечание: Решение указанных вызовов требует системного подхода, совместных усилий со стороны педагогов, администрации, государства и общества. Внедрение цифровых технологий должно сопровождаться учетом интересов и потребностей всех участников образовательного процесса.83

Необходимо строительство специализированных дата-центров для хранения большего количества информации, развитие систем связи (мобильная связь и широкополосный интернет).

Разработка и внедрение цифровых программ. Создание и применение учебно-методических материалов с использованием технологий нейросетей, искусственного интеллекта. Данные программы могут дополнить преподавателя, а возможно в будущем, частично даже их заменить.

Разработка новых систем управления обучением (СУО). СУО (система управления обучением) — программа по администрированию и контролю учебных курсов. Данные программы позволяют обеспечить равный и свободный доступ студентов к знаниям, а также гибкость обучения.

Повышение навыков и умений преподавателей в сфере цифровых технологий. В настоящее время большой проблемы является цифровая грамотность преподавательского состава. Преподаватели старшего возраста зачастую имеют трудности при обращении с современными цифровыми технологиями. Предлагается повышать навыки преподавателей посредством проведения курсов компьютерной грамотности, которые позволят им работать в цифровой образовательной среде.

Буданов В.Г. Новый цифровой жизненный техноуклад – перспективы и риски трансформаций антропосферы // Философские науки. 2019. №6. С. 47-55.

Ракитов А.И. Человек в оцифрованном мире // Философские науки. 2019. №6. С.32-46.

Подводя итог, стоит сказать, что процесс цифровизации системы образование неизбежен. Несмотря на имеющиеся минусы и трудности перехода в цифровую среду, сейчас цифровое образование является попросту необходимостью. Конечно, полностью заменить традиционную систему образование цифровым не получится, но значительная часть образовательного процесса станет цифровым. И данный переход будет стремительным.

Использованные источники:

1. Маркова В. Д. Цифровизация образования: вызовы и перспективы. // Информатизация образования и науки. 2019. Том 3. С. 38-47.
2. Семенов А. В. Цифровизация образования: проблемы и пути развития. // Инновационное развитие образования. 2019. № 4. С. 52-59.
3. Буданов В.Г. Новый цифровой жизненный техноуклад – перспективы и риски трансформаций антропосферы // Философские науки. 2019. №6. С. 47-55.
4. Ракитов А.И. Человек в оцифрованном мире // Философские науки. 2019. №6. С.32-46.

УДК: 519.24:556.5

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ПРИРОДНЫЕ ПРОЦЕССЫ, ВЛИЯЮЩИЕ НА ЗДОРОВЬЕ ЖЕНЩИН СЕЛЬСКОГО НАСЕЛЕНИЯ В РЕСПУБЛИКЕ УЗБЕКИСТАН

Аннотация. В настоящее время сельские жители Республики Узбекистан испытывают трудности с доступом к качественной питьевой воде под влиянием климатических, социально-экономических и других факторов.

Цель исследования найти и описать связь между качеством водных ресурсов и здоровьем населения на двух масштабах рассмотрения: в целом по областям Узбекистана на примере женщин детородного возраста в сельской местности и детально по районам Ташкентской области на примере здоровья всех сельских жителей.

В ходе исследования были применены теоретические методы, методы-операции, эмпирические методы, а также методы моделирования и создания географических карт с помощью ГИС технологий. Использованные данные были получены у Государственного комитета Республики Узбекистан по статистике, Центра Гидрометеорологической Службы Республики Узбекистан и Министерства Здравоохранения Республики Узбекистан.

Выявлено, что значительное увеличение количества зарегистрированных заболеваний наблюдается на территориях, расположенных ниже по течению основных рек и каналов, особенно в районе Ташкентской области (Зангиатинский, Янгиюльский, Чиназкий районы) и ниже города Чирчик (Кибрайский район).

Установлено, что возрастание концентрации химических элементов, в том числе общей минерализации по длине рек Чирчик и Ахангаран зависит от уровня антропогенного воздействия

Ключевые слова: Республика Узбекистан, река Сырдарья, водные ресурсы, минерализация воды, загрязнение воды, качество водных ресурсов, здоровье населения.

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NATURAL PROCESSES AFFECTING WOMEN'S HEALTHRURAL POPULATION IN THE REPUBLIC OF UZBEKISTAN

Annotation. Currently, rural residents of the Republic of Uzbekistan experience difficulties with access to quality drinking water under the influence of climatic, socio-economic and other factors.

The purpose of the study is to find and describe the relationship between the quality of water resources and the health of the population on two scales of consideration: in general for the regions of Uzbekistan using the example of women of childbearing age in rural areas and in detail for the districts of the Tashkent region using the example of the health of all rural residents.

During the study, theoretical methods, operational methods, empirical methods, as well as methods of modeling and creating geographic maps using GIS technologies were used. The data used was obtained from the State Committee of the Republic of Uzbekistan on Statistics, the Center of the Hydrometeorological Service of the Republic of Uzbekistan and the Ministry of Health of the Republic of Uzbekistan.

It was revealed that a significant increase in the number of registered diseases is observed in the territories located downstream of the main rivers and canals, especially in the Tashkent region (Zangiata, Yangiyul, Chinaz districts) and below the city of Chirchik (Kibray district).

It has been established that the increase in the concentration of chemical elements, including total mineralization along the length of the Chirchik and Akhangaran rivers depends on the level of anthropogenic impact

Key words: Republic of Uzbekistan, Syrdarya River, water resources, water mineralization, water pollution, quality of water resources, public health.

Введение. Большая часть территории Узбекистана имеет аридный климат, наличие водных ресурсов является особенно важным для данных территорий. Глобальные изменения климата являются причиной изменения водного режима региона. В этих условиях особую актуальность приобретает оценка водных ресурсов, формирующихся на территории бассейна реки Сырдарьи, а также изменения характеристик гидрологического цикла под влиянием климатических и антропогенных факторов [Ресурсы поверхностных…, 1969]. Проблемы, связанные с гидрологическим режимом водных объектов и в последствии, с доступом к чистой воде оказывают сильное влияние на социально – бытовое, общественное и экономическое развитие.

Сегодня Узбекистан, как и другие страны, сталкивается с необходимостью поиска путей решения управления и рационального использования водных ресурсов и смягчения последствий водного дефицита [Разаков, 1989; Рафиков, Тютюхин, 1981]. Существуют значительные проблемы доступа к водопроводной воде в горных местностях Ташкентской области. Нехватка воды для хозяйственных нужд и питья - влечет за собой проблемы здоровья населения. В горных местностях сельское население, имеет доступ к природной талой воде. Однако эта вода не содержит в себе все необходимые элементы для организма человека, что является опасным для здоровья. В отличие от зоны формирования, в нижних частях бассейна рек возрастает содержание в воде микро и макро- элементов, а также загрязняющих веществ вредных для здоровья населения, что приводит к превышению предельно допустимой дневной нормы для одного человека. Отклонение от нормы показателей качества вод, используемых для питья местным населением, вызывает отклонение в перинатальный период, а также оказывают влияние на репродуктивную систему женщин, например, аномалии плода в период беременности [Тилляходжаева, 2014; Тилляходжаева, 2015].

Цель исследования найти и описать связь между качеством водных ресурсов и здоровьем населения на двух масштабах рассмотрения: в целом по областям Узбекистана на примере женщин детородного возраста в сельской местности и детально по районам Ташкентской области на примере здоровья всех сельских жителей.

Природные процессы и социально-экономические факторы, влияющие на здоровье населения

На здоровье человека влияют социально-экономические и географические факторы [Атаниязова, 1994]. Разные сочетания этих факторов

могут определять распространение регионально-специфичных видов заболеваний [Мягков и др., 2016]. Географическое распространение таких болезней, разделение их по степени локальности и выраженности является предметом изучения относительно новой науки нозогеографии.

На территории Узбекистана практически все водные ресурсы подвержены антропогенному влиянию. Качество воды большинства из них не отвечает нормативным требованиям. Многолетние наблюдения за динамикой качества поверхностных вод выявили тенденцию к росту их загрязнённости, особенно в нижнем течении.

Схема оценки риска здоровью состоит из следующих основных блоков [Шапалов, 2008]:

- Расчет потенциального (прогнозируемого) риска в соответствии с результатами оценки качества гидрохимического состояния водных ресурсов.
- Оценка заболеваемости (здоровья) населения в соответствии с материалами медицинской статистики при сопоставлении состояния и динамики химического состава природных вод.
- Оценка реального риска здоровью с использованием статистических и экспертных аналитических методов, и связи между загрязнением и гидрохимическим режимом.

Изучаемый регион

Исследование проводили как по областям республики Узбекистан, так и административным районам ТО.

Ташкентская область имеет общую площадь 15 300 км^2. Ее территория протянулась от реки Сырдарья до гор Западного Тянь-Шаня. Климат – континентальный, характеризуется сухими и жарким летом и относительно мягкой зимой, резкими суточными и годовыми колебаниями температур, малым количеством осадков, сухостью воздуха и большим числом ясных дней. Максимальная летняя температура достигает +43 +45° С, зимняя опускается до -10 -15 ° С [Шульц, 1965].

В данной статье рассматриваются поверхностные водотоки в бассейнах рек Чирчик и Ахангаран. Долина Ахангарана представляет собой крупную межгорную впадину, в которой можно выделить следующие элементы рельефа. Северные склоны Кураминского хребта, сложенные палеозоем, которые образуют зону среднегорного рельефа. Абсолютные высоты здесь колеблются в пределах 600-1200 м. Склоны расчленены многочисленными ветвистыми долинами – саями, в местах развития известняков – крутыми скальными обрывистыми склонами, узкими водоразделами и корытообразными днищами. Относительное превышение водоразделов над днищами долин составляет 100-300 м [Ресурсы поверхностных…, 1969].

В Ташкентской области находятся бассейны рек Чирчик и Ахангаран. Основные водные артерии: река Сырдарья с ее притоками Ахангаран и Чирчик, а также множество оросительных каналов, дренажных коллекторов, сбросов, арыков [Иванов, 2007]. Питание р. Ахангаран снего-дождевое [Шульц, 1965].

Важность и новизна исследований

Территория Ташкентской области испытывает огромную антропогенную нагрузку на водные ресурсы, в части их многократного и повторного использования, особенно в части неконтролируемых сбросов возвратных вод и промышленно-бытовых стоков. Необходимо отметить, что медицинское обслуживание населения, контроль над качеством водных источников, санитарно-гигиенический и экологический контроль в Ташкентской области находится на высоком уровне по отношению к другим областям, однако нозогеографическое исследование и выявление возможного влияния химического состава поверхностных вод на состояние здоровья населения позволит дополнить картину и раскрыть вопрос [Чуб и др., 2016].

Проблемы, связанные с гидрологическим режимом водных объектов, и впоследствии, с доступом к водным ресурсам оказывают сильное влияние на социально – бытовое, общественное и экономическое развитие [Атаниязова, 1994]. Известно, что в сельской местности часто затруднен доступ к водопроводной и особенно к бутилированной воде, а для питьевых и хозяйственно-бытовых нужд используется вода из поверхностных водотоков [Салиев, 2014]. Поэтому вопросы рационального природопользования, экобезопасности, здоровья населения в сельских районах Узбекистана приобретают первостепенную важность [Турдымамбетов, 2012]. Сегодня Узбекистан, как и другие страны, сталкивается с необходимостью поиска путей решения управления и рационального использования водных ресурсов и смягчения последствий водного дефицита.

Однако вопрос об экологической локализации пространственно-временного загрязнения и оценка его влияния на здоровье населения остается неизученным.

Методы исследования

Теоретическую основу статьи составили работы узбекских исследователей [Мягков, Климов, 2011; Солиев, 2014; Чембарисов, 2017].

В качестве изучаемых параметров были рассмотрены динамика первичной заболеваемости и патологии женщин детородного возраста, проживающих в сельской местности Узбекистана с 1997 по 2006 годы. Детальные данные за тот же период с разбивкой по районам Ташкентской области описывают такие параметры как первичная заболеваемость и болезни кроветворных органов всех сельских жителей. Более подробно, эти материалы обсуждаются в диссертации Тилляходжаевой [2021].

Для анализа рассматривали такие химические параметры как загрязнение и общая минерализация воды, а также степень засоления почв. Дополнительно использовали материалы по средней степени засоления почв [фондовые материалы Центра Гидрометеорологической Службы Узгидромета при Кабинете Министров Республики Узбекистан и Среднеазиатского научно-исследовательского института ирригации]. Некоторые из этих данных описаны ранее [Чембарисов, и др., 2020а; Чембарисов, и др., 2020б; Чембарисов, и др., 2013]. Для Ташкентской области была использована

детальная информация с гидропостов на реках и каналах Ахангаранского и Чирчикского гидроузлов. Для построения карт параметры были усреднены за период 2004 – 2015 годы. Расчеты были произведены согласно методике, описанной Тилляходжаевой [2021].

Для выявления силы связей в масштабе всей страны были рассчитаны коэффициенты линейной корреляции Пирсона (r) между заболеваниями женщин детородного возраста и указанными выше, химическими параметрами. Коэффициенты корреляции принимались к рассмотрению при уровне значимости 0,05. Связи визуализировали с помощью линейных регрессионных трендов.

Зависимость заболеваемости населения от качества поверхностных вод в Ташкентской области описывали множественным линейным уравнением регрессии и определяли визуально по электронным нозогеографическим картам наложения медицинской статистики на информацию о нехватке / избытке макро- и микро- элементов (Ca, Mg, Na, K, Cl, NO_2,NO_3,HCO_3, SO_3) в воде.

История нозогеографических исследований

Шапалов А.Е. [2008] на примере Смоленской области проанализировал влияние концентраций различных элементов и соединений в воде на здоровье человека. Автором были выделены те заболевания, которые могли быть вызваны потреблением питьевой воды со сверхнормативным содержанием различных элементов и веществ. Особую роль в формировании патологических состояний играли кальций и магний в питьевой воде.

Тарянникова с соавторами провели исследования по оптимизации системы мониторинга загрязнения поверхностных вод Узбекистана, и унификации методов анализа качества воды [Тарянникова и др., 2011]. Климатические изменения обострили проблемы дефицита и загрязненности водных ресурсов, особенно в сельской местности. В этих условиях проявляется тенденция увеличения уровня заболеваемости бактериальными и вирусными острыми кишечными инфекциями (ОКИ) на 10%-13% [Мягков и др., 2017; Tillyakhodjaeva, 2019].

На данный момент специалистами Узгидромета построена геоинформационная система позволяющая выявлять территориальные особенности распространения различных видов заболеваемости [Тарянникова и др., 2011]. Данные о заболеваемости населения для активации этой системы предоставлены подразделениями Минздрава Республики Узбекистан. Было выявлено увеличение числа заболеваемостей вниз по течению рек Чирчик и Ахангаран [Tillyakhodjaeva et al., 2019]. Однако в проведенных исследованиях не использовался комплексный нозоэкологический и нозогеографический подход. Недостаточно изучены проблемы здоровья населения с учетом географических условий, химического состава поверхностных вод и улучшения нозогеографической ситуации.

В работах Камиловой [1999; 2017; 2019; 2010] поднимаются такие вопросы, как географические проблемы здоровья населения,

нозогеографические аспекты распространения болезней, смертность, медико-географическое районирование, факторы, влияющие на заболеваемость населения в Республике Узбекистан. Автор также утверждает что тяжело протекающая беременность женщин в основном является причиной смертности женщины при родах либо в течении 42 дней после родов. Причиной этого являются хронические заболевания, такие как анемия, гестоз, острые сердечно сосудистая и почечная недостаточность. В свою очередь эти заболевания связанны с экологическими условиями проживания.

Несмотря на известные пути изучения нозогеографической ситуации, до сих пор нет научно обоснованного анализа воздействия факторов окружающей среды в условиях экологического неблагополучия, особенно в части касающейся химического состава поверхностных вод. В научных исследованиях приводятся только общие экологические характеристики территорий, и указывается на рост общей минерализации воды [Мягков, 2010].

В целом, ученые Узбекистана [например, Салиев, 2014; Камилова, 2019; Мягков и др., 2010] подтверждают влияние гетерогенной природной среды на географическое распределение заболеваний, что вызывает необходимость проведения комплексных и системных нозогеографических исследований.

Статистический анализ репродуктивного здоровья сельских женщин по всем областям республики

На Рис. 1 отражена зависимость между средними значениями минерализации, загрязняющих веществ вод, и средним количеством выявленных аномалий в перинатальном периоде. Значимый коэффициент корреляции r = -0,537 подтверждает то, что одной из возможных причин заболеваний возникающих в перинатальный период в сельской местности, может быть слишком слабая минерализация вод. В свою очередь, воздействие загрязняющих веществ на патологии в перинатальном периоде маленькое и не подтверждается значимым коэффициентом корреляции при рассмотрении всей выборки.

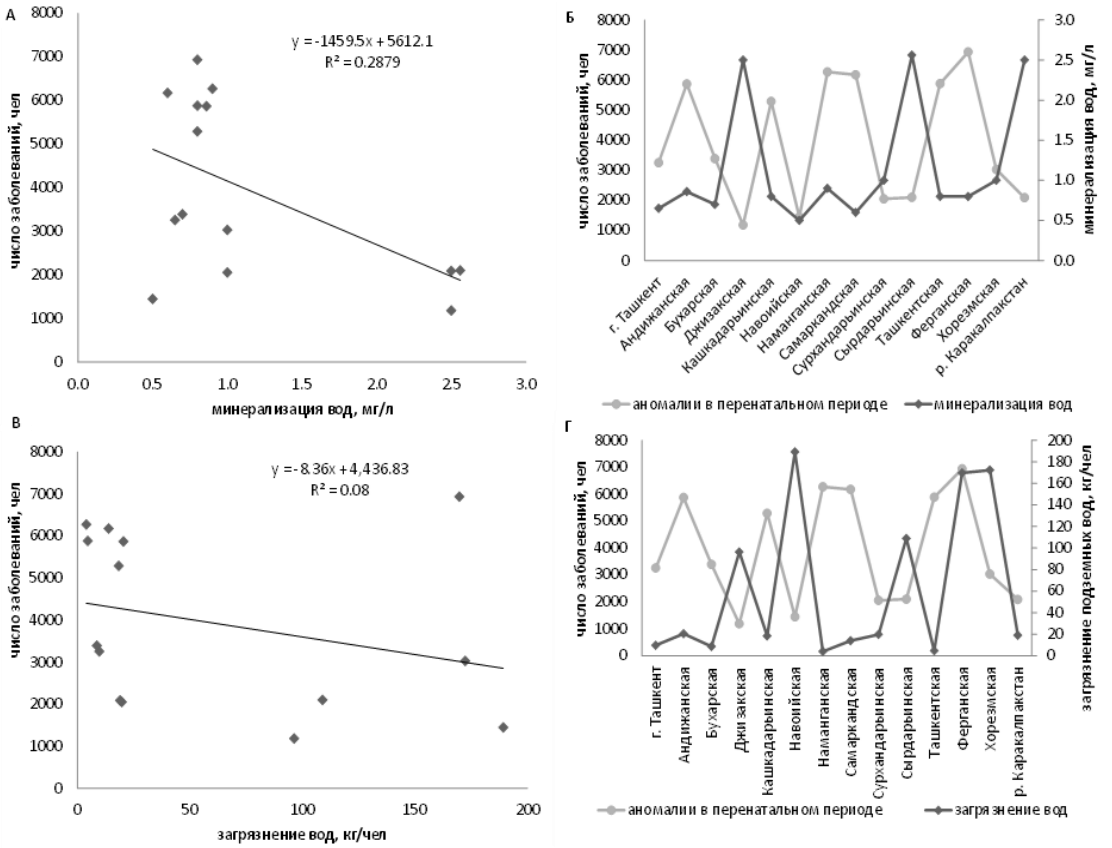

Рис. 1. Взаимосвязи числа аномалий в перинатальный период в сельской местности с минерализацией (А, Б) и загрязнением (В, Г) поверхностных вод. Все области республики.

В ходе работы был проведен анализ влияния минерализации и загрязнения вод на бесплодие у женщин в детородном возрасте, проживающих в сельской местности каждой из областей за 1997-2006 годы. Значимых коэффициентов корреляции между этими параметрами установить не удалось, но тенденция может быть описана нисходящим линейным трендом (Рис. 2. А, В) и видна при визуальном сопоставлении данных по отдельным районам (Рис. 2 Б, Г).

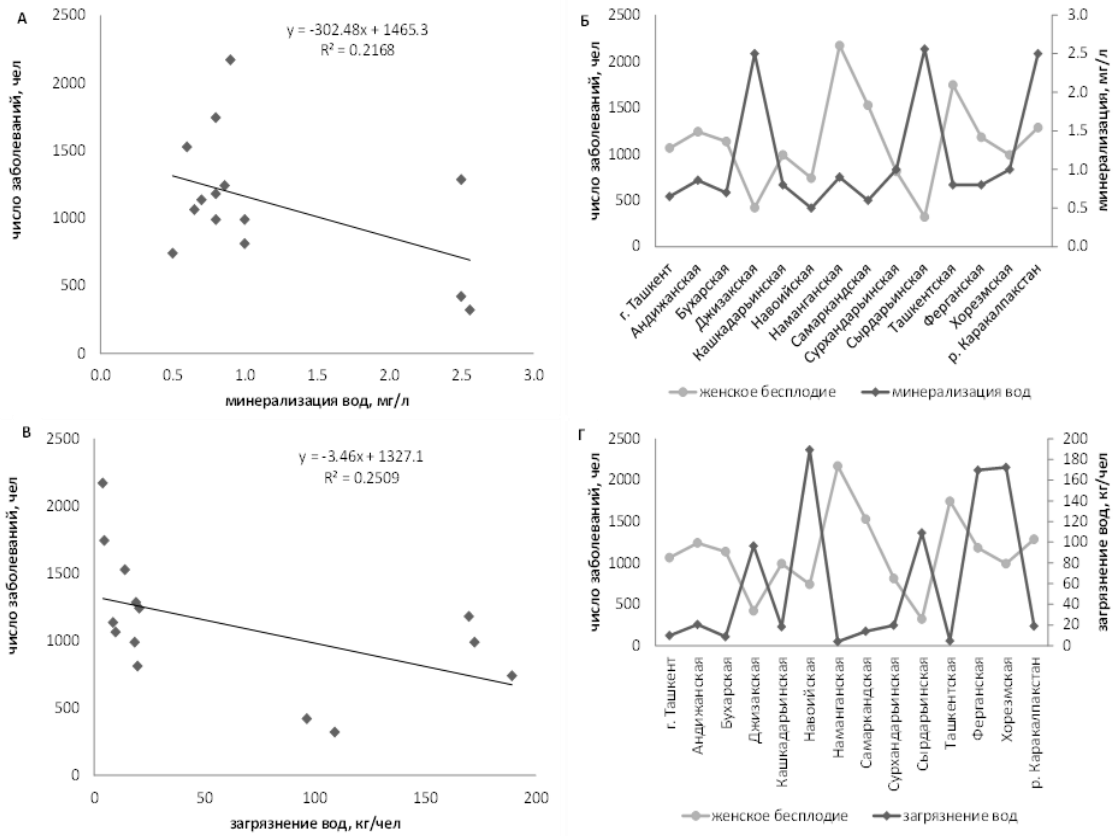

Рис. 2. Взаимосвязи бесплодия у женщин в фертильном возрасте в сельской местности с минерализацией (А, Б) и загрязнением (В, Г) поверхностных вод. Все области республики.

На рис. 3 демонстрируется связь между средними значениями минерализации вод, степенью засоления почв со средним количеством зарегистрированных случаев тяжелого течения беременности, родов и осложнений в послеродовом периоде за 1997-2006 годы. Значимый коэффициент корреляции установлен только для степени засоления почв (r= -0,558). Для минерализации вод можно отметить лишь тенденцию в виде нисходящего линейного тренда (Рис. 3 А, Б). Статистически значимая корреляция между данными состояниями здоровья с загрязнением вод не обнаружена.

Обсуждение полученных результатов статистического сопоставления качества окружающей среды и репродуктивного здоровья женщин весьма сложно. Прямой анализ выборки показывает разнонаправленные тенденции по отдельным областям республики Узбекистан (Рис. 1 Б, Г; Рис. 2 Б, Г; Рис. 3 Б, Г). Но если рассматривать весь массив данных как целое, то значимые коэффициенты корреляции явно показывают, что чем выше минерализация вод и засоление почв, тем меньше проблем со здоровьем. Т.е. мы имеем дело с явным дефицитом минеральных веществ в воде, используемой для питья в сельской местности.

8.Территориально-временной анализ гидрохимического режима водотоков и отдельных видов заболеваний по Ташкентской области

Гидрохимический режим рек Чирчик и Ахангаран формируется за счет поступления практически чистой воды горной и предгорной зон формирования стока, в среднем и нижнем течении. В результате значительной антропогенной нагрузки и интенсивного многократного использования река насыщается различными химическими элементами, в результате чего концентрации веществ в воде значительно возрастают и часто превышают ПДК [Гигиенические критерии…, 2006].

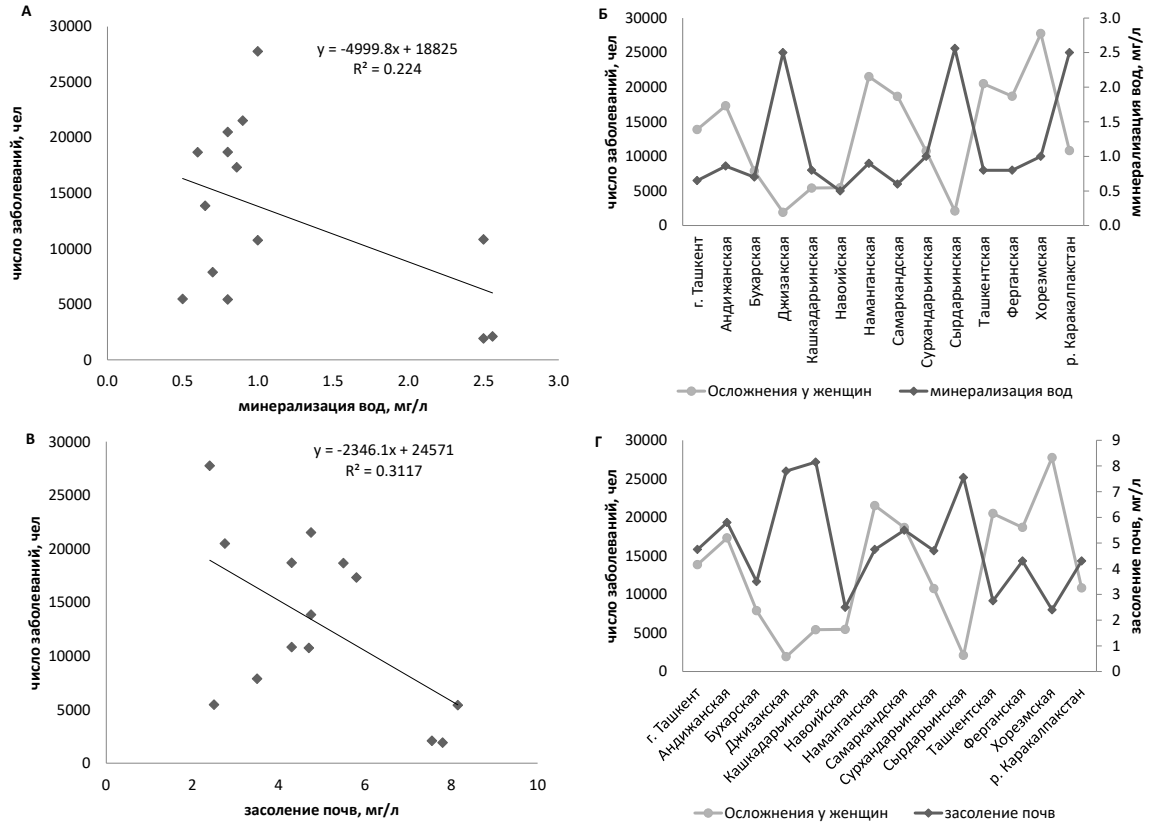

Рис. 3. Взаимосвязи осложнений у женщин во время беременности, родов и в послеродовом периоде в сельской местности с минерализацией поверхностных вод (А, Б) и степенью засоления почвы (В, Г). Все области республики.

Взаимосвязь между расходом воды и содержанием в речной воде загрязняющих веществ выявить очень трудно. Это связано в основном с уязвимостью и неустойчивостью природной среды, особенностями гидрологии рек, интенсивностью и динамикой хозяйственной деятельности в ее бассейне. Однако в наших ранних исследованиях сравнения расходов воды и содержания макроэлементов и нитритов была отмечена отрицательная взаимосвязь на реках Чирчик и Ахангаран [Мягков и др., 2016].

Наибольшую часть загрязнений поверхностных вод органическими веществами на реках Чирчик и Ахангаран создают сельскохозяйственная и коммунальная отрасли. Можно сказать, что на загрязнение поверхностных

вод бассейнов рек Чирчик и Ахангаран оказали влияние промышленные и рекреационные факторы.

На рис. 4 приведена совмещенная карта-схема первичной заболеваемости (полигоны) по районам Ташкентской области и значения общей минерализации (гистограммы) по створам водотоков бассейнов рек Чирчик и Ахангаран. Однако для качественной оценки зависимости заболеваемости от гидрохимического режима водотоков необходимо использовать многофакторный регрессионный анализ.

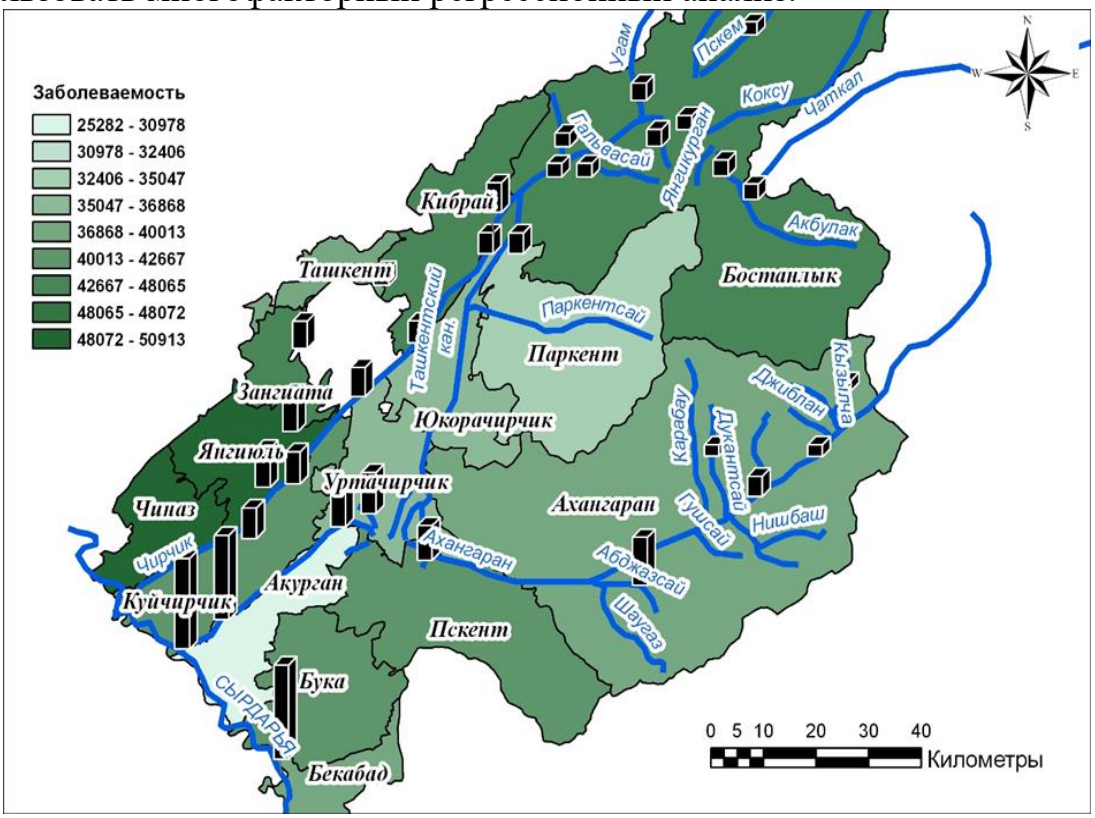

Рис. 4. Карта-схема наложения общей минерализации воды в створах бассейнов рек Чирчик и Ахангаран и первичной заболеваемости всех сельских жителей по районам Ташкентской области. Гистограммы отображают значения минерализации (мг/л) [с модификациями из Tillyakhodjaeva, 2020].

Для Ташкентской области получено общее множественное линейное уравнение регрессии с описанием зависимости числа болезней сельских женщин от отклонения концентрации гидрохимических элементов в воде от нормы. Факторы считались значимыми, если связь между результативным признаком и факторным признаком была выше межфакторной связи. Подробно это описано в наших ранних работах [Tillyakhodjaeva, 2019; Tillyakhodjaeva, 2020].

9.Создание нозогеографических схематических карт Ташкентской области при помощи ГИС технологий

Риск роста числа заболеваемости также обусловлен территориальной изменчивостью воздействия природных и социально-экономических

факторов. На основе научных результатов оценки данных по гидрохимическим элементам в воде и числом распространенных заболеваний, анализированы показатели гидрохимических элементов и их влияние на рост числа заболеваемости населения Ташкентской области. Анализ полученных результатов позволил выяснить, что в зоне формирования в верхний части бассейнов рек Чирчик и Ахангаран значения минерализации очень малы. А в нижних частях бассейнов у и устьях этих рек, концентрация гидрохимических элементов (Ca, Mg, Na, K, Cl, NO2, NO3HCO3, SO3) очень высокая (Рис. 4). Построенные карты дали возможность, определить какие районы более подвержены росту числа заболеваний из-за отсутствия необходимых элементов в потребляемой воде или их переизбытка. В Пскемском и Бостанлыкском районах общее количество заболеваний значительно выше, чем в других районах. Это свидетельствует о том, что в этом горном районе низкое значение по минерализации становится причиной увеличения заболеваемости из-за отсутствия необходимых элементов в потребляемой воде. В среднем русле реки, Кибрайском, Паркентском, Юкоричирчикском районах, как и минерализация, так и общее число показателей количества заболеваний стабильны. В нижнем течении реки в районах Янгиюль и Чиназ наблюдается большая минерализация и, соответственно, увеличивается число общей заболеваемости.

В заключение можно отметить, что в верхних частях реки минерализация очень мала, а в нижних частях реки минерализация увеличивается и превышает ПДК [Гигиенические критерии…, 2006] для питьевой воды. Следовательно, отсутствие необходимых элементов в воде или их превышение приводит к увеличению тех или иных заболеваний. Градация цвета начинается от светлого к темному, а это означает, что с увеличением числа заболеваний в административных районах Ташкентской области, цвет становится темнее (Рис. 5).

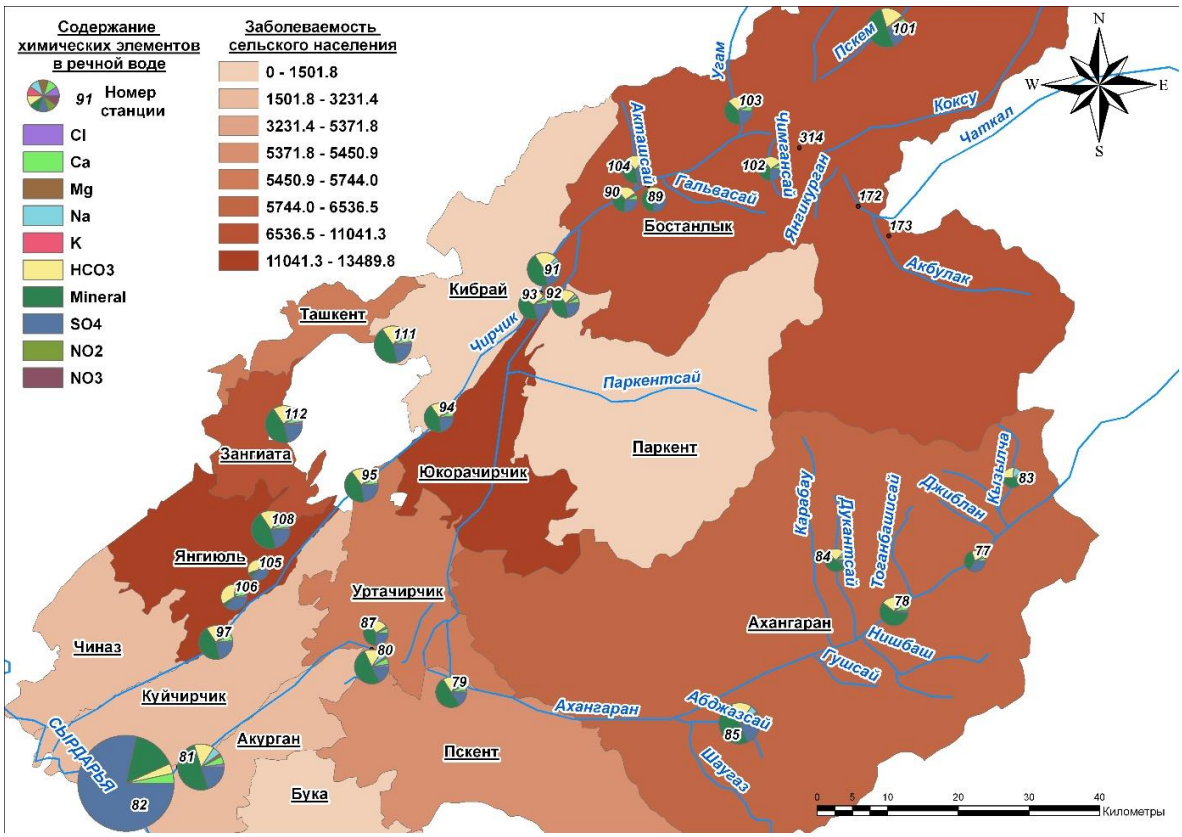

Рис. 5. Карта-схема наложения макроэлементов и показателей водного загрязнения по гидропостам рек Ахангаран и Чирчик на распределение заболеваемости системы кровообращения всего сельского населения по районам Ташкентской области. Данные за 2006 год.

Рекомендации. Необходимо проводить регулярный нозогеографический мониторинг с использованием современных достижений ГИС технологий для выявления развивающихся в динамике трендов заболеваемости сельского населения и своевременного принятия превентивных мер по снижению риска роста числа заболеваний в выявленных районах.

Благодарности. Непосредственно данная статья написана и оформлена в рамках проекта «Гендерные аспекты управления водными ресурсами в Центральной Азии и Афганистане: поддержка молодых женщин-исследователей путем публикации статей в Центральноазиатском журнале исследований водных ресурсов (CAJWR)». Выражаем свою благодарность организаторам проекта из Казахстанско-Немецкого Университета в Алматы и донорам из Всемирного Банка.

Выражаем благодарность Э. И. Чембарисову – сотруднику лаборатории гидрометрии и метрологии научно-исследовательского института ирригации и водных проблем за предоставление материала. Кроме того, авторы искренне признательны всем коллегам за предоставленные материалы и неизвестным рецензентам за ценные замечания при редактуре рукописи.

Заключение. Данное исследование наглядно показывает риск роста числа заболеваемости из-за территориальной изменчивости природных и антропогенных факторов качества окружающей среды.

При детальном рассмотрении в масштабе Ташкентской области значительно увеличивается число зарегистрированных заболеваний на территориях, расположенных ниже по течению в бассейнах рек Чирчик и Ахангаран, особенно в Зангиатинском, Янгиюльском и Чиназком районах Ташкентской области, а также ниже города Чирчик (Кибрайский район). Это объясняется ростом антропогенного воздействия на водные ресурсы и высокими уровнями минерализации – концентрация гидрохимических элементов (Ca, Mg, Na, K, Cl, NO2, NO3HCO3, SO3) очень высокая, от 40 013 до 50 913 мг/л.

В горных и предгорных районах (например, Бостанлыкский и Паркентский районы) сельское население использует воду родников с недостатком химических элементов, что также негативно сказывается на здоровье. В зоне формирования в верхний части бассейнов рек Чирчик и Ахангаран значения минерализации очень малы, в градации от 36 868 до 30 978 мг/л. Это следует помнить при организации рекреационных зон для городских жителей.

В обзорном масштабе, когда каждая область республики Узбекистан усредняется до одной точки, удалось отследить обратные линейные тенденции между репродуктивным здоровьем женщин и качеством воды в сельской местности. Значимый коэффициент корреляции r = -0,537 подтверждает то, что одной из возможных причин заболеваний, возникающих в перинатальный период в сельской местности, может быть слишком слабая минерализация вод. При этом загрязнение воды на данном масштабе не проявляет себя как фактор ухудшающий здоровье на фоне проблем с недостаточной минерализацией.

Невозможно охватить все аспекты влияния окружающей среды на здоровье, поэтому одним из главных достижений работы следует обозначить привлечение общественного мнения к проблеме нозогеографии. Это должно подтолкнуть региональную науку и органы власти к дальнейшим детальным исследованиям. Создание нозогеографических карт очень важно, как для превентивной борьбы с болезнями местного населения, так и бизнеса, планирующего размещение жилья и рекреационных зон, нозогеографические карты должны обязательно использоваться в расчётах по экосистемному сервису. Тем не менее, основной проблемой на этом пути является закрытость медицинской статистики из-за чего организация кооперационных связей между исследователями – врачами и географами очень затруднена.

Использованные источники:

1. Tillyakhodjaeva Z. Hydrochemical Analysis of Surface Water in the Tashkent Region and Assessment of Its Impact on Public Health // International Journal of

Advanced Research in Science, Engineering and Technology. – India. Vol. 7, Issue 1, 2020. 12692-12701 p.
2. Tillyakhodjaeva Z. Hydrochemical Анализ заболеваемости сельского населения от гидрохимического режима поверхностных вод // Science and innovative development №-6. – Ташкент, 2019. 88-96 с.
3. Tillyakhodjaeva Z., Myagkov S.V., Risk assessment of diseases in the conditions of climate change //, “European Science Review, Scientific journal, # 3-4 – Austria, 2019. 15-18 p.
4. Tillyakhodjaeva Z., The effect of chemical elements in the water on human health //, Z 40 Zbior artykulow naukowych z Konferencji Miedzynarodowej Naukowo-Praktycznej, Digest of articles “Science Research, Development # 23” – Netherlands, 2019. 17-22 p.
5. Рафиков А.А, Тютюхин Г.Ф, Снижение уровня Аральского моря и изенение природных условий низовьев Амударьи, Ташкент «Фан», Узбексая ССР, 1981. // С. 200.
6. Салиев А.С, Взаимодействие общества и природы как поле исследований в современной публичной географии, Географический вестник, История и археология. № 1, с. 16-19, 2014.
7. Мягков В, Тилляходжаева З.Д, Задорожная О, Нозогеографическая оценка экологического состояния Ташкентской области // Экологический Вестник Узбекистана №7(195)., Ташкент, 2017. 49-50 с.
8. Гигиенические критерии и контроль качества воды централизованных систем хозяйственно-питьевого водоснабжения населения Узбекистана. Утверждено главным государственным санитарным врачом республики Узбекистан Ниязматовым Б.И. от 01.06.2006 г., Постановление № 0211-06. Электронный ресурс: https://www.lex.uz/acts/1934624
9. Камилова Н.К. Территориальний анализ медико-географических условий и проблемы здоровья населения Узбекистана // Ўзбекистон География жамияти ахбороти. 36-жилд, Ташкент, 2010. 128-133 б.
10. Мягков С.В., Задорожная О., Дергачева И.В., Тилляходжаева З., Оценка влияния изменения погодно-климатических факторов на риск роста заболеваемости населения//Изменение климата, причины, последствия и меры реагирования. Бюллетень-№10, Ташкент, 2016. 78-84 с.
11. Камилова Н.К., и др., Территориальные определения смертности населения в Узбекистане, ASTRA Salvensis, Дополнение №. 1, 2019. с.619-641.
12. Камилова Н.К., Зайнутдинова Д., Равшанов А. Некоторые теоретические проблемы патологий // Региональная география проблемы. Материалы республиканской научно-практической конференции. -Джизак, 2017, 47 с.
13. Атаниязова О.А, Экологические факторы и репродуктивная функция // Самаркандский государственный медицинский институт, Самарканд, 2013, №4. 16 с.
14. Разаков Р.М, Развитие мелиорации и охрана окружающей среды в Средней Азии // Обзор - Ташкент,: УзНИИНТИ, 1989.

15. Ресурсы поверхностных вод СССР, том 14, Средняя Азия, Вып. 1, Бассейн р. Сыр-Дарьи., СПб.: Гидрометеоиздат, 1969. 439 с.
16. Мягков С.В, Климов С.И, Чуб В.Е, Изменение климата и здоровье населения. Экологический вестник, – Ташкент, 2010. - № 11, С. 49
17. Мягков С.В, Задорожная О, Тилляходжаева.З.Д, Оценка влияния загрязнения водотоков на заболеваемость населения // Экологический Вестник Узбекистана №7(183)., Ташкент, 2016. 32-34 с.
18. Статистика о соотношении городского и сельского населения [Эл. ресурс]. URL: https://gender.stat.uz/164-oficialnaya-statistika-ru/6569-demografiya2-sootnoshenie- gorodskogo-i-selskogo-naseleniya (Дата обращения: 18.03.2020).
19. Тарянникова Р.В., Карасева Т.А., Нишонов Б.Э. Национальный отчет // Оценка воздействия изменения климата на здоровье, уязвимость и адаптацию системы здравоохранения в Узбекистане, 2011. С. 41.
20. Тилляходжаева З.Д. 2021. Анализ нозогеографической ситуации с использованием гидрохимической оценки поверхностных вод Ташкентской области. Диссертация на соискание учёной степени PhD географических наук. Научно-исследовательский гидрометеорологический институт, Ташкент, Узбекистан. 114 с.
21. Тилляходжаева.З.Д, Проблемы выявления связей между заболеваемостью населения и загрязнением водных источников // Вестник ТашГТУ №4., Ташкент,2014. 178-182 с.
22. Тилляходжаева.З.Д, Сопоставление показателей заболеваемости с показателями качества поверхностных вод. // Вестник ТашГТУ №4., Ташкент, 2015. 203-207 с.
23. Турдымамбетов И.Р, Экологические аспекты нозогеографической ситуаций в Республике Каракалпакстан // Узбекистон Георафик жамияти ахбороти. Ташкент, 2012. Вып. 40, 32-37 с.
24. Чембарисов Э. И., Насрулин А. Б, Лесник Т. Ю, Шодиев С. Р. (2013). Минерализация и химический состав коллекторно-дренажных вод орошаемой зоны юго-запада Узбекистана. Мелиорация и проблемы восстановления сельского хозяйства в России С. 100-104.
25. Чембарисов Э.И., Хожамуратова Р., Рахимова М., Шодиев С. (2020б). Многолетние изменения качества речных вод Узбекистана. Природные ресурсы среда и общество. Вып. 3 (7) С. 55-58.
26. Чембарисов, Э. И., Хожамуратова, Р. Т., Рахимова, М. Н., Шодиев, С. Р. (2020а). Современная минерализация и химический состав поверхностных вод орошаемых массивов Узбекистана. Вестник мелиоративной науки, (1), 64-69.
27. Чуб В.Е, Мягков С.В, Дергачева И.В, Тилляходжаева З, Водные ресурсы Амударьи в условиях изменения климата // Изменение климата, причины, последствия и меры реагирования. Бюллетень-№10, Ташкент, 2016. 29-31 с.
28. Шапалов А.Е. 2008 Медико-географическая оценка влияния загрязнения питьевых подземных вод на здоровье населения на примере Смоленской области. // Диссертация. 141 с.

29. Шульц В.Л. Реки Средней Азии. – Л.: Ресурсы поверхностных вод, том 14, Средняя Азия, Вып.1, Бассейн р. Сыр-Дарьи, Л: Гидрометеоиздат, 1965. –691 с.
30. Иванов Я.Н, Водные ресурсы Чирчикского бассейна, НИГМИ, вып. 4 (249), стр. 60-88, 2007.

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ПОВЫШЕНИЕ ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ ФУНКЦИОНИРОВАНИЯ МАЛОГО ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ

Аннотация. В статье раскрывается необходимость повышения эффективности малых про мышленных предприятий, показана взаимосвязь структур социальной и экономической эффективности предпринимательской деятельности, обозначены основные меры в области повышения социально-экономической эффективности функционирования малого предпринимательства в промышленности.

Ключевые слова: малый бизнес, малые промышленные предприятия, социально-экономическая эффективность малого промышленного предприятия.

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IMPROVING SOCIAL AND ECONOMIC EFFICIENCY OF FUNCTIONING OF A SMALL INDUSTRIAL ENTERPRISE

Annotation. The article reveals the need to improve the efficiency of small industrial enterprises, shows the interrelation of the structures of social and economic efficiency of entrepreneurial activity, identifies the main measures in the field of improving the socio-economic efficiency of small business in industry.

Keywords: small business, small industrial enterprises, social and economic efficiency of a small indus trial enterprise.

Введение. В настоящее время одной из первостепенных задач для развития малых промышленных предприятий является повышение эффективности их функционирования. Благодаря тому, что малым промышленным предприятиям присущи гибкость и адаптивность к изменениям конъюнктуры рынка, они способны стать стабилизирующими институциональными структурами для экономики России.

Понятия экономической и социальной эффективности функционирования производства тесно переплетены между собой. Решение социальных вопросов в большинстве своем зависит от результатов экономической деятельности производства и эффективности предприятия в целом. Для того чтобы повысить экономическую эффективность производства, следует развивать социальную инфраструктуру общества, и взаимодействие этих мер поможет решить многие социальные проблемы.

Эффективность как сложная экономическая категория характеризует различные стороны деятельности компании и степень развития производств целом. Доходность и производительность главные критерии, указывающие на успешную работу предприятий. Эффективность рассчитывается как отношение всех результатов, полученных в процессе производства, ко всем затратам. Если рационально использовать ресурсы, происходит снижение затрат и повышение эффективности деятельности компании.

На микроуровне эффективность деятельности малых промышленных предприятий сопряжена с процессом выбора оптимальной траектории развития бизнеса, приводящей к получению результатов в форме максимальной величины прибыли, минимизации затрат и капиталовложений. Для оптимизации работы малых промышленных предприятий необходимо учитывать влияние внешней экономической среды, рынка финансовых и человеческих ресурсов, средств и предметов труда, информации. Грамотное использование данных ресурсов при планировании объемов продаж и издержек производства, а также цен на продукцию ведет к максимизации прибыли и, как следствие, к эффективной деятельности малого предприятия.

Предпринимательским структурам любого уровня характерно наличие социально-экономических процессов как взаимодействующих между собой эле ментов.

Социальная эффективность малых промышленных предприятий направлена на снижение уровня безработицы в стране, удовлетворение социальных потребностей и улучшение благосостояния общества.

Социальная эффективность малых промышленных предприятий характеризует процессы внутри компании, направленные на развитие человеческого потенциала, сплочение коллектива малого предприятия и другие аспекты использования трудовых ресурсов, в том числе на повышение квалификации кадров.

Для повышения статуса малого промышленного предприятия как социально ответственного и добросовестного работодателя необходимо принять меры по улучшению условий труда, охраны здоровья.

Методы и результаты. Существует три аспекта предпринимательской деятельности, относительно которых можно оценить экономическую эффективность предприятия: производственный, коммерческий и финансовый [1].

Производственный аспект определяет, насколько эффективно происходит использование ресурсов при производстве продукции.

Для оценки эффективности реализации товаров и услуг используется коммерческий аспект.

Финансовый аспект характеризует эффективность управления всеми финансовыми потоками на предприятии.

Экономическая эффективность производства считается главным показателем развития предприятия и принятия решений, связанных с деятельностью компании:

для получения экономического роста производства внедряют систему регулирования рационального использования определенных затрат (ресурсов) в производстве;

для принятия грамотных инвестиционных решений в сфере деятельности предприятия за счет внедрения инноваций, нового оборудования, новых системных продуктов и производственных решений.

Для повышения эффективности функционирования малого бизнеса в промышленности необходимо решение ряда задач [2], таких как:

повышение технического уровня производства;

освоение инновационных материалов и технологий для автоматизации производства и улучшения качества продукции;

внедрение системы материального стимулирования;

повышение профессионального уровня работников и управленцев, улучшение условий труда;

уменьшение ставки дополнительных кредитных средств и расширение их доступности для малых промышленных предприятий;

увеличение притока инвестиций в малые промышленные предприятия, в том числе для реализации мер по политике импортозамещения;

государственная поддержка для развития деятельности малых промышленных предприятий в соперничестве с различными видами бизнеса.

Динамика экономических показателей функционирования малых промышленных предприятий выступает также индикатором эффективности монетарной и фискальной политики, проводимой государством, поскольку малые компании, как никто другой, чувствительны к изменениям процентной ставки, доступности финансовых ресурсов, налоговой нагрузке, размерам страховых взносов.

Для управления эффективностью компании необходимо учитывать влияние финансовых рисков на ее экономическую деятельность. Находясь в прямой зависимости от крупных производственных объединений и являясь обеспечивающим звеном основного производства, малые промышленные предприятия сталкиваются со специфической группой рисков [3]. Малое предприятие посредник, деятельность которого зависит от стабильной деятельности крупных компаний. Анализируя риски малого производственного предприятия, можно повысить его социально-экономическую эффективность, увеличив прибыльность вложений и сократив возможные потери ресурсов в процессе экономической деятельности [4].

Деятельность малых промышленных предприятий нуждается в поддержке со стороны государства и органов муниципальной власти для повышения социально-экономической эффективности.

В условиях кризиса именно малые предприятия принимают на себя основной удар в процессе консолидации ресурсов в крупном бизнесе, и поэтому именно малые промышленные предприятия должны являться первоочередными получателями поддержки со стороны региональных и федеральных властей. На 2022 год существуют такие федеральные программы поддержки малых и средних предприятий, как «Умник», «Старт», «Коммерциализация», «Развитие», «Интернационализация», «Коопе рация». Они имеют определенную направленность продвижение товаров и услуг на международный рынок, увеличение количества новых рабочих мест для населения, объединение производственных мощностей разных типов бизнеса и т.д. Что касается конкретной специализации бизнеса, находящегося в приоритете у государства, необходимо выделить сферу инноваций, пищевой и тяжелой промышленности, транспортный бизнес и туризм, сферу жилищного коммунального хозяйства, сельское хозяйство, строительство в целом, бизнес, связанный с грузоперевозками и туризмом, социально ориентированный бизнес, а также развитие промышленности, ориентированной на производство товаров широкого потребления.

В качестве показателей социально экономической эффективности часто используют показатели демографии предприятий: коэффициент рождаемости на 1000 предприятий и коэффициент ликвидации на 1000 предприятий.

Как следует из графика, наиболее высокие показатели рождаемости компаний в расчете на 1000 предприятий отмечались в марте 2021 года – 9.5; аналогичная ситуация прослеживается и в марте 2022 года – 8.4. Абсолютный минимум за рассматриваемый период приходится на январь 2021 и январь 2022 года – 5.7 и 5.4 соответственно.

Из полученных графиков видно, что за два последних года намечается рост коэффициента ликвидации и снижение коэффициента рождаемости предприятий. Наиболее сильная диспропорция наблюдается в декабре 2021 года. Существует множество причин, способствующих развитию данной ситуации.

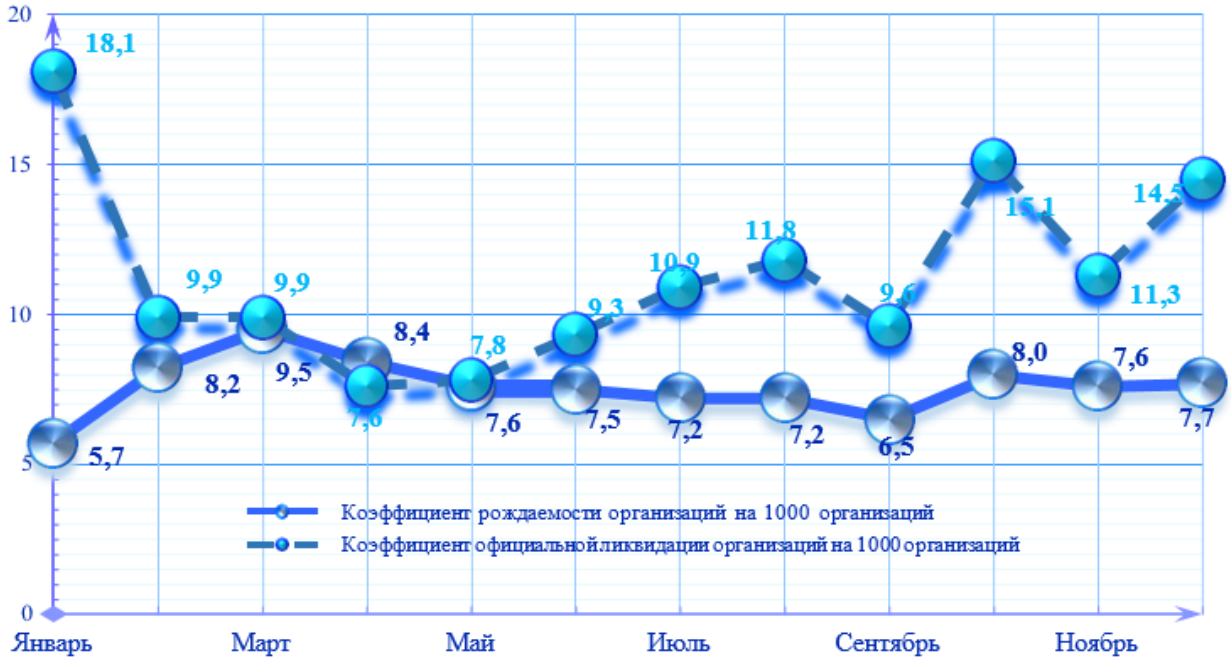

Рисунок 1 – Показатели демографии предприятий и организаций по РУ в целом, 2021 г.

Составлен автором на основе [5].

Рисунок 2 – Показатели демографии предприятий и организаций по РУ в целом, 2022 г.

Составлен автором на основе [5].

Заключение. Все представленные сведения помогут дать оценку адаптации малых промышленных предприятий к изменениям экономической ситуации, определить наиболее гибкие к изменениям регионы, разработать меры по нивелированию негативного влияния внешних факторов, используя опыт наиболее успешных в этом отношении регионов.

Использованные источники:

1. Киреев Н.Н. Социальная и экономическая эффективность пред принимательской деятельности // Вестник ТГУ. – 2021. – Вып. 9 (101). – С. 29- 32.
2. Овчинникова А.В. Роль и функции малых предприятий промышленности в экономическом системном комплексе // Известия УрГЭУ. – 2021. – № 1 (51). – С. 29-32.
3. Аббасова О.М., Щемелев С.Н. Современное состояние и проблемы развития малых предприятий в промышленности в Российской Федерации // Финансовые исследования. – 2021. – № 4 (53). – С. 134-140.
4. Моисеева И.И. Принципы и методы оценки эффективности предпринимательской деятельности // Вестник Тамбовского университета. Серия: Гуманитарные науки. – 2020. – Вып. 6 (86). – С. 38-44.
5. Попова Л.В. Экономическая информация в управлении промышленным предприятием // Экономические и гуманитарные науки. – 2022. – № 4. – С. 112-116.

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ИНТЕГРАТИВ ДАРСЛАРНИ ТАШКИЛ ЭТИШНИНГ ПЕДАГОГИК ШАРТ-ШАРОИТЛАРИ

Аннотация. Бугунги кунда бўлажак ўқитувчиларнинг таҳлилий, мантиқий ва дарсларни интегратив моделлаштириш компетенцияларини шакллантиришнинг педагогик-психологик хусусиятларини аниқлаштириш, уларнинг билим, кўникма, малака ҳамда шахсий сифат ва фазилатларни ривожлантириш алоҳида аҳамиятга эга.

Мақолада бўлажак ўқитувчиларни касбий амалиётга тайёрлашнинг ташкилий-педагогик жиҳатларини ўрганиш, битирувчиларнинг зарурий компетенцияларини шакллантириш масалалари ҳақида сўз юритилади.

Калит сўзлар. Компетенция, тафаккур, технология, талаб, ёндашув, билим, тажриба, таълим, тарбия, жараён, дарслик, машғулот.

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PEDAGOGICAL CONDITIONS OF ORGANIZING INTEGRATIVE LESSONS

Abstract. Today, it is of particular importance to clarify the pedagogical-psychological features of the formation of analytical, logical and integrative modeling competencies of future teachers, to develop their knowledge, skills, competences and personal qualities.

The article deals with the study of organizational-pedagogical aspects of training future teachers for professional practice, formation of necessary competencies of graduates.

Keywords. Competence, mindset, technology, demand, approach, knowledge, experience, education, training, process, tutorial, training.

Жаҳонда етакчи илмий марказлар ва олий таълим муассасаларида бўлажак бошланғич синф ўқитувчиларининг касбий-инновацион ривожлантириш моделларини ишлаб чиқиш, ахборот-коммуникация технологиялари воситасида шахсга йўналтирилган ўқитиш тизимларини яратиш ва уларни амалга оширишнинг инновацион механизларини татбиқ

этишга оид илмий тадқиқотлар олиб борилмоқда. Айниқса бўлажак бошланғич синф ўқитувчиларининг методик компетенцияларини ривожлантиришнинг самарали механизмларини ривожлантириш, интегратив дастурий таъминотини такомиллаштириш алоҳида аҳамият касб этади. Шу билан бирга, замонавий мактаб шароитида дарсларни инновацион ёндашувлар асосида ташкил этишга устворлик бериш алоҳида долзарблик касб этади.

Мамлакатимизда умумий ўрта таълим тизими педагог кадрларини сифат жиҳатдан жаҳон стандартлари асосида тайёрлаш бўйича тадқиқотлар Ш.Абдуллаева, Ф.Р.Қодирова ва бошқалар томонидан амалга оширилган.

Мамлакатимизнинг таълим тизимдаги тараққиёти, иқтисодий юксалишининг устувор йўналишлари, фундаментал босқичларидан бири сифатида бошланғич таълимдаги фан, таълим ва нновациялар интеграциясини олиш мумкин. Хусусан, Ўзбекистон Республика Президентининг 2017 йил 7 февралдаги “Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида”ги84 Фармонининг “Ижтимоий соҳани ривожлантириш” деб номланган тўртинчи йўналиши, таълим-тарбия жараёнларини янги сифат босқичига олиб чиқиш, шунингдек, 2022-2026 йилларда Ўзбекистон Республикасини ривожлантиришнинг еттита устувор йўналиши бўйича Тараққиёт стратегиясида “Инсон қадрини юксалтириш ва эркин фуқаролик жамиятини янада ривожлантириш орқали халқпарвар давлат барпо этиш” устувор вазифа этиб белгиланган85. Бу эса, бўлажак ўқувчиларнинг компетенциясини интегратив дарсларни моделлаштириш асосида шакллантириш, мантиқий тафаккурни ривожлантиришнинг инновационон педагогик технологияларини оптималлаштириш масалаларига алоҳида эътибор берилишини тақоза этади. Бу борада бўлажак ўқитувчиларнинг таҳлилий, мантиқий ва дарсларни интегратив моделлаштириш компетенцияларини шакллантиришнинг педагогик-психологик хусусиятларини аниқлаштириш, бўлажак бошланғич синф ўқитувчиларининг билим, кўникма, малака ҳамда шахсий сифат ва фазилатларни ривожлантириш алоҳида аҳамиятга эга. Шу боис бўлажак ўқитувчиларни касбий амалиётга тайёрлашнинг ташкилий-педагогик аспектларини ўрганиш, битирувчиларнинг зарурий компетенцияларини шакллантириш методикасини такомиллаштириш зарурияти пайдо бўлади.

Ривожланган мамлакатларда инсон капитали сифатини оширишда ижтимоий-иқтисодий ва маданий ўзгаришлар интеграцияси алоҳида аҳамият касб этиб, ЮНЕСКО таълим сиёсатини юритиш сектори

84 Ўзбекистон Республикаси Президентининг Фармони. Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида. Тошкент ш., 2017 йил 7 февраль, ПФ-4947-сон
85 Ўзбекистон Республикаси Президентининг Фармони. Янги Ўзбекистоннинг Тараққиёт стратегияси тўғрисида. // Ўзбекистон Республикаси Қонун ҳужжатлари тўплами. –Т., 2022. –Б.39. www.lex.uz

(Едусатион Сестор)нинг 2030 йилгача белгилаган халқаро таълим концепциясида «ҳаёт давомида сифатли таълим олиш имкониятини яратиш (Лифе леарнине)»га алоҳида эътибор қаратилган86. Унда умумий ўрта таълимни сифат жиҳатдан янги даражага кўтариш мақсадида рақобатбардош ва профессионал кадрларни тайёрлаш долзарб вазифа этиб белгиланган.

Мазкур заруратдан келиб чиққан ҳолда, ўқувчиларнинг билимли ва ақл заковатли, етук кадрлар сифатида тайёрлаш масаласи давлат сиёсатининг демократик моҳиятида яққол намоён бўлиб, етук авлод тарбиясида таълим ва тарбия тушунчалари бир бири билан доимо уйғун тарзда ишлатилади. Таълим тушунчаси - шахснинг маърифий ва тарбиявий даражасини ошириш орқали унинг ақлан ривожланишини таъминлаш мақсадида таълим субъектлари орасидаги дидактик фаолият бўлса, тарбия тушунчаси эса - янги авлоднинг ижтимоий тарихий тажрибасини бериш туфайли ривожланишини таъминловчи ижтимоий функция, ижтимоий таъсир остида инсон шахсий ва маънавий дунёсини шакллантириш, бойитиш ва такомиллаштиришнинг аниқ мақсадга йўналтирилган, системалаштирилган онгли жараён сифатида қаралади. Тарбия–таълим билан ўзаро боғланган ижтимоийлашнинг асосий бўғини ҳисобланиб, таълим тизимининг таркибий қисми ҳисобланади. Таълим-тарбия жараёни таълим субъекти ва объекти, умуман атроф-муҳитнинг барча типологик хусусиятларига, узлуксиз даражадаги таълим ва тарбияга қўйилган мақсадларни амалга ошириш ҳамда таълимнинг қиймат йўналишлари векторини аниқлаш, ижтимоий, предметли ва психодидактик компонентларнинг диалектик ўзаро таъсирини ҳам ҳисобга олишни тақозо этади. Демак, таълим узлуксизлиги таълим субъектлари ҳамда уларнинг самарали интеграцияси билан белгиланади.

Республикамизда узлуксиз таълим тизимининг ислоҳ қилиниши, оптималлаштирилган таълим стандартлари асосида таълим ва тарбия жараёнини қайта ташкил этишга йўналтирилган. Шу маънода таълим ва тарбия муассасаларининг замонавий ёндашуви, бўлажак мутахассисларнинг касбий фаолиятидаги мобиллиги, ўз касбининг амалий жиҳатларига эрта мослашиш, ахборотлаштирилган жамиятнинг XXИ асрида ахборот технологияларнинг роли ва ўрни ҳар бир жабҳанинг ажралмас қисмига айланиб бормоқда.

Педагогика соҳасидаги олий таълим муассасаларида бўлажак ўқитувчиларни интеллектуал салоҳиятини ошириш, дунёқарашларини бойитишда уларни инновацион таълим технологиялари, ўқитишнинг янги, инновацион шакл, услуб ва воситалари билан таништириш, педагогларда

86 Академис ресеарч ин едусатионал ссиенсес волуме 2 | иссуе 4 | 2021 иссн: 2181-1385 Ссиентифис Жоурнал Импаст Фастор (СЖИФ) 2021: 5.723 ДОИ: 10.24411/2181-1385-2021-00668 Академис Ресеарч, Узбекистан 817 www.apec.уз

касбий компетентлик сифатлари ва креатив қобилият моҳияти билан яқиндан таништириш муҳим аҳамиятга эга. Бундай ёндашувлар сифатида педагогика соҳасида узлуксиз таълим кластерини таъминланишини алоҳида таъкидлаб ўтиш жоиз. Бу соҳадаги илмий тадқиқот ишларини ўрганиш эса, мазкур масаланинг амалий жиҳатларини очиш имкоятини оширади.

Республикамизда таълим соҳасида ижтимоий- педагогик, акмеологик ҳамда компетенциявий масалаларга доир бирқатор илмий тадқиқотлар олиб борилган. Масалан, Н.Муслимов, Ш.Шарипов ва бошқаларнинг тадқиқотларда бевосита муайян йўналишлардаги мутахассисларнинг касбий компетенцияларини такомиллаштириш масалалари келтириб ўтилган.

Бу тажрибалардан бўлажак ўқитувчиларининг таълим-тарбия жараёнларида интернет тармоғидан кенг фойдаланишда, ўқитувчилар, тарбиячилар томонидан яратилаётган ўқув электрон дарсликлар, ноанъанавий дарс ва машғулотлар ишланмалари мазкур web-сайтларга жойлаштирилиб барча қулай имкониятлар яратилади.

Таълим фаолиятининг таҳлили, педагогик диагностикани қўлланишини талаб этувчи асосий муаммолар сифатида қуйидагиларни санаб ўтиш мумкин:

1. Педагогик жараёнда диагностика. Ўқитувчи таълим жараёнини доимий равишда режалаштириши, амалга ошириши ва баҳолаши лозим. Бу вазифа ўзлаштиришнинг диагностик назорати ёрдамида бажарилиши мумкин.

2. Индивидуал ўзига хосликларини диагностика қилиш.

3. Ривожланишда қолоқликнинг турли шаклларини диагностикаси ва уларнинг тузатилиши.

4. Таълим жараёнининг самарадорлигини диагностик таққослаш.

Юқоридаги муаммолар бўлажак педагоглардан маълум бир ишни бажариш учун зарур бўлган шахсга қаратилган, стандартлаштирилган талабларидан иборат бўлган- касбий компетенцияларга эга бўлишни талаб қилади. Компетентли ёндашув давлат, жамият ва инсоннинг ўз манфаати учун ҳаётнинг муҳим соҳаларида муваффақиятли ишлаш учун билим ва амалий фаолият усулларини комплекс ўзлаштиришга қаратилган. Компетентли ёндашувнинг мақсади замонавий таълим нуқтаи назаридан келиб чиқган ҳолда, ўқувчининг назарий билимлари ва уни амалий қўллаш ўртасидаги узилишни енгишга интилишдир.

Шунинг учун замонавий таълим жараёни амалиётда қўлланилиши қийин бўлган билимларни талабаларга беришдан иборат эмас, аксинча шу билимларни долзарб касбий муаммоларни ҳал қилишга намойиш этиш, шунингдек ўқув жараёнида бу каби муаммоларни ўқувчиларнинг ўзлари мустақил равишда ҳал қилишлари учун шароит яратишдан иборат бўлиши керак.

Таҳлилларга кўра, педагогик шарт-шароитларни учта катта гуруҳга бўлиш мумкин: ташкилий-педагогик, педагогик-психологик, дидактик.

Ташкилий педагогик шарт-шароитларни таъминлашда асосан фан дастурлари, ўқув режалар, талабларни ишлаб чиқиш, ривожлантириш, ўқув-услубий таъминотни мазмунан ривожлантириш назарда тутилади.

Педагогик-психологик шарт шароитларга турли методикалар ишлаб чиқиш ва таълим тарбия жараёнига тадбиқ этиш, психологик ўйинларни қўллаш, ўқувчиларнинг ҳиссий-эмоционал ва ақлий ҳаракатларини шаклланишига хизмат қилувчи ишланмалар ва технологиялар ишлаб чиқиш назарда тутилади.

Дидактик шарт-шароитларга умумтаълим мактаблари ўқувчилари учун тегишли фанлардан ўқув қўлланма ва дарсликлар, электрон усулубий қўлланмалар ҳамда дидактик ўйинларнинг электрон вариантларини ишлаб чиқиш назарда тутилади.

Таълим муассасаларида самарадорликни таъминлаш учун таълим жараёнида ижодий муҳит яратилмоғи, узлуксиз методик хизматни ташкил этиш, ўқитувчиларнинг ўз устида ишлашини таъминлашда ижодий ёндошувнинг таълим-тарбия самарадорлигига таъсири, аввало мавжуд муаммоларни аниқлаштириб олиш билан белгиланади. Шу нуқтаи назардан таълим муассасаларида бўлажак педагогларини касбий компетенциясини шакллантиришда муҳитини яратиш барқарорлигини таъминлашга халақит берувчи омиллар:

1. Таълим муассасаси педогогларининг самарали ишлашлари учун ижтимоий психологик ҳолатлар ва хусусиятлар шаклланишида сусткашлик ҳолатининг юзага келиши, соҳадаги узвийликнинг тўлиқ натижаларга йўналтирилганлиги ўз исботини топишида муаммаоларнинг юзага келиши.

2. Педогогик фаолиятини самарали ташкил этишида амалий кўникмаларнинг етишмаслиги;

3. Узлуксиз методик хизмат кўрсатишнинг қуйи бўғинлари, фан кафедралари, методик кенгашларнинг фаоллиги самарали натижа кўрсатмаслиги.

Хулоса ўрнида шу айтиш мумкинки таълим-тарбия муҳити мутахассисларни тайёрлаш учун фақатгина буюртмачи сифатидагина эмас, балки ўқув жараёнининг фаол иштирокчисига айланади, талабалар билан мулоқот қилиш учун янги имкониятлар яратиш, касбий ҳамжамият ва педагогик муаммоларни ҳал қилишда фаол иштирок этиш, фир мулоҳазаларини билдиришга масъул ҳисобланадилар. Интеграциялашган “мактаб-ОТМ-оила” муҳитида ташкилий, услубий, дастурий таъминот, уларнинг техник воситалари асосида самарали шароитлар яратиш талабаларнинг ижодий фаолиятини ривожлантириш, талабаларнинг таълим эҳтиёжларини ҳам ҳисобга олишлари лозим. Интеграциялашган таълимга ривожланаётган ижтимоий ҳамжамият сифатида қаралади, талабанинг

профессор-ўқитувчилари билан ўзаро муносабати, мактаб ўқитувчиси ва ўқувчилари билан кенг ижтимоий-маданий ҳамда мафкуравий контекстда инсонни ақлли жамиятда ҳаётга тайёрлаш ва мослаштириш категориялари деб қаралади.

Фойдаланилган адабиётлар рўйхати:

1. Ўзбекистон Республикаси Президентининг Фармони. Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида. Тошкент ш., 2017 йил 7 февраль, ПФ-4947-сон
2. Ўзбекистон Республикаси Президентининг Фармони. Янги Ўзбекистоннинг Тараққиёт стратегияси тўғрисида. // Ўзбекистон Республикаси Қонун ҳужжатлари тўплами. –Т., 2022. –Б.39. www.лех.уз
3. Академис ресеарч ин едусатионал ссиенсес волуме 2 | иссуе 4 | 2021 иссн: 2181-1385 Ссиентифис Жоурнал Импаст Фастор (СЖИФ) 2021: 5.723 ДОИ: 10.24411/2181-1385-2021-00668 Академис Ресеарч, Узбекистан 817 www.apec.уз
4. Муслимов Н.А. Бўлажак касб таълими ўқитувчиларини касбий шакллантириш. Монография. – Т.: Фан, 2004. - 128 б.
5. ЮНЕСКО халқаро меъёрий ҳужжатлари. / масъул муҳаррир: Л.Саидова. – Т.: Адолат, 2004. –Б. 19-62.
6. Десигнинг ефферсиве мониторинг анд евалуатион оф едусатион сйстемс фор 2030: А глобал сйнтhесисс оф полисиес анд прастисес (УНЕССО Едусатион Сестор Дивисион фор Полисиес анд Лифелонг Леарнинг Сйстемс, Жануарй 2016), п 38,52,77
7. Усмоналиев, И. (2022). Бўлажак ўқитувчилар касбий компетенсиясини тарихий тафаккур асосида такомиллаштириш зарурати ва муаммонинг амалиётдаги ҳолати. Общество и инновации, 3(5/S), 132-141.

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ТАКРОРИЙ ЭКИН СИФАТИДА МОЙЛИ МАХСАРДАН ФОЙДАЛАНИШ

Аннотация. Мақолада буғдойдан кейин такрорий экин сифатида экилган мойли махсар устида олиб борилган тажриба натижалари келтирилган. Маълум бўлдики, мойли махсарнинг К-70 навини буғдойдан кейин экиб ҳосил олиш мумкин.

Калит сўзлар: мойли махсар, такрорий экин, озиқ-овқат, мой, дала тажрибалари, саватча, уруғ, вегетация даври, картамин, ҳосил.

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USE OF OIL CROP AS A RECIPROCAL CROP

Abstract. The article presents the results of an experiment on oilseed rape planted as a repeated crop after wheat. It turned out that the K-70 variety of oilseed rape can be planted after wheat.

Key words: oilseed rape, repeated crop, food, oil, field experiments, basket, seed, growing season, cartamine, yield.

Кейинги йилларда дунёда, хусусан Ўзбекистонда озиқ-овқат маҳсулотлари,жумладан мойга талаб тобора ортиб бормоқда. Республи-камизда мой асосан ғўза чигитидан олинади. Маълумки, сўнгги йилларда пахта экиладиган майдонларнинг қисқариши,аҳоли сонининг тўхтовсиз ортиб бориши ва бошқа сабаблар туфайли пахтадан олинадиган мой республика аҳолисининг мойга бўлган талабини тўлиқ қондира олмайди. Шуни ҳисобга олган ҳолда бир қатор илмий-тадқиқот институтларида ҳамда айрим илғор фермер хўжаликларида ноанъанавий бўлган соя,цегра,зиғир каби мойли ўсимликларни экиб ўстириш устида дала тажрибалари олиб борилмоқда. Кўпчилик мамлакатларда асосий мойли экинлар сифатида соя, рапс, ерёнғоқ, кунгабоқар, зиғир, кунжут каби ўсимликлардан фойдаланила-ди.

Мамлакатимизда пахта билан буғдой экинларини алмашлаб экиш йўлга қўйилган. Одатда буғдой июнь ойининг ўрталаридан бошлаб ўриб олинади. Буғдой ўриб олинган даладан такрорий экин экиб тўлиқ ҳосил олиш имконияти бор. бунинг учун тезпишар, қисқа кунли экинларни танлаб

олиш мақсадга мувофиқдир. Ана шундай ўсимликлардан бири мойли махсар ўсим-лигидир.

Мойли ёки рангли махсар - Cartamus tinctorius L. мураккабгулдошлар оиласига мансуб бир йиллик ўсимлик бўлиб, у Марказий Осиё, Шимолий Кавказ, Озарбайжоннинг қурғоқчил шароитида кунгабоқар ўсимлиги ўрнини босувчи маданий ўсимлик ҳисобланади. Шунингдек, таркибида ранг берувчи картамин моддаси борлиги учун бўёқли ўсимлик сифатида ҳам аҳамиятли. Юқоридагилардан келиб чиққан ҳолда биз ўз тажрибаларимизда такрорий экин сифатида мойли махсар устида тадқиқотлар олиб бордик. Махсар мамлакатимизда, хусусан Фарғона водийсида ноъананавий экин ҳисобланади ва кам экилади. Махсар қимматли озуқа ўсимлигидир. Унинг уруғи таркибида 15 %дан 37 %гача чала қурийдиган оч-сариқ рангли мой олинади. Тозаланган ёғ сифати жиҳатидан кунгабоқар мойидан қолишмайди ва овқатга ишлатилади. Тозаланмагани техник мақсадларда яъни оқ бўёқ, эмал, алиф, совун тайёрлашда, линолиум ишлаб чиқаришда ишлатилади. Махсар уруғи паррандалар учун яхши ем бўлади. Махсар уруғидан олинган кунжара чорва ҳайвонлари учун аъло сифатли озиқадир. Бу кунжара ўғит сифатида ҳам ишлатилади.

Махсар ўсимлиги таркибида протеин моддаси ҳам кўп бўлиб, унинг поясида 19%гача, баргларида 24%гача протеин моддаси бор. Шунинг учун махсар пояси билан боқилган ҳайвонларга кунжара ёки бошқа тўйимли овқат бериш шарт эмас.

Тажрибаларимизни Ўзбекистон ўсимликшунослик илмий-тадқиқот институти генофондидан олинган К-70 нави билан олиб бордик. Дала тажрибалари Избоскан тумани Лўғимбек қишлоғи шароитида ўтказилди. Буғдой ўрилган майдон 15-июнь куни 25-30 см чуқурликда ҳайдалди, мола ёрдамида текисланди ва ораси 60 см қилиб эгат олинди. Уруғ 60х25х 30 см схемасида экилди. Ҳар уяга 3-5 тадан уруғ ташланди. Тажриба юзасидан фенологик кузатишлар олиб борилди, яъни:

Экилган вақти -17.06

Униб чиқиш вақти-24.06

Гуллаган вақти- 14.08

Пишган вақти- 20.10

Бўйи- 78 см

Уруғ ҳосилдорлиги-13,8 ц/га

Пичан(кўк масса) ҳосилдорлиги-75 ц/га.

Махсар сувни жуда тежаб сарфлайди, кўп миқдорда ҳужайра ширасы тўплаш хусусиятига эга. Шунинг учун унинг ташқи ноқулай шароитга чидамлилиги ошади ҳамда тупроқдаги жуда оз намдан ҳам фойдалана олади.

Махсарнинг ана шу хусусиятларини эътиборга олиб тажрибада фақат 3 маротаба, яъни уруғ суви, гуллаш даврида ҳамда уруғнинг пишиш даврида сув берилди.

Хулоса қилиб айтганда,мойли махсар ўсимлиги қишлоқ хўжалигида энг аҳамиятли экинлардан бири бўлиб,катта майдонларга экилса мақсадга мувофиқ бўлади.

Адабиётлар:

1. М.Мўминов, Т.Топволдиев, А.Тўхтабоев. Ўзбекистон ўсимликлари атласи. Тошкент,2020 йил.
2. М.Мўминов, А.Тўхтабоев. Махсар ҳам мой,ҳам озуқа. Қишлоқ хўжалигида хусусий тадбиркорликни ривожлантириш истиқболлари. Республика илмий-амалий конференцияси материаллари. Андижон,2011 йил.
3. М.Мўминов, А.Тўхтабоев. Мойли махсар ўсимлигининг тезпишар К-70 навини такрорий экин сифатида экиб ўстириш. Қишлоқ хўжалик маҳсулотларини етиштиришда ресурстежамкор технологиялардан самарали фойдаланиш ва экологик тоза маҳсулотлар ишлаб чиқаришни модернизациялаш. Республика илмий-амалий анжумани. Андижон,2014 йил.

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ИСКУССТВО ВОПЛОЩЕНИЯ РУССКОЙ КЛАССИКИ НА КИТАЙСКОЙ ТЕАТРАЛЬНОЙ СЦЕНЕ

Аннотация. Данная статья рассматривает тонкости воплощения русских классиков на китайской театральной сцене, исследуя конфликты и вдохновение, возникающие при столкновении двух богатых театральных традиций. Авторы исследуют вызовы, с которыми сталкиваются китайские актеры и режиссеры, интерпретируя произведения известных русских авторов, таких как Чехов, Достоевский, Толстой, Пушкин и Островский, и оценивают совместимость системы Станиславского с китайской театральной педагогикой. Статья предлагает взгляд на переосмысление этих конфликтов и предлагает, что создание мостов между двумя традициями может стать ключом к более глубокому и успешному воплощению русского литературного наследия на китайской сцене.

Ключевые слова. Русская классика, китайский театр, Станиславский, культурные конфликты, театральная педагогика, межкультурная интерпретация.

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THE ART OF IMPODING RUSSIAN CLASSICS ON THE CHINESE THEATER STAGE

Abstract. This article delves into the intricacies of embodying Russian classics on the Chinese theatrical stage, exploring the conflicts and inspirations that arise from the collision of two rich theatrical traditions. Examining the challenges faced by Chinese actors and directors in interpreting the works of renowned Russian authors like Chekhov, Dostoevsky, Tolstoy, Pushkin, and Ostrovsky, the study evaluates the compatibility of Stanislavski's system with Chinese theatrical pedagogy. By navigating through these conflicts, the article suggests that bridging the gap between the two traditions may hold the key to a more profound and successful representation of Russian literary heritage on the Chinese stage.

Keywords. Russian Classics, Chinese Theatre, Stanislavski, Cultural Conflicts, Theatrical Pedagogy, Cross-cultural Interpretation.

В увлекательном мире театрального искусства, сталкивающегося с культурными различиями и творческими вызовами, произведения русской классики в Китае становятся настоящим полем борьбы и вдохновения. Стремясь воплотить произведения великих русских писателей, китайские актеры и режиссеры сталкиваются с вызовами, выходящими за пределы технического мастерства, данная статья предлагает взглянуть на сложности и противоречия, сопровождающие репетиции и представления русской классики в китайском театре. Система Станиславского, олицетворяющая стандарты глубокого внутреннего изучения персонажей, кажется неотъемлемой частью русской театральной традиции, но каким образом эти стандарты сочетаются с китайской театральной педагогикой? И насколько успешно китайские актеры могут воплотить сложные образы русской литературы? Давайте погружаемся в мир конфликтов и мостов, созданных при воплощении русской классики на китайской театральной сцене.

Становление китайской оперы представляет собой удивительный путь, который можно проследить от древних династий Цинь и Хань, но только в период Сун и Юань она приобрела свою полноценную форму. Современная китайская опера, беря свое начало из мета-разнородной оперы, прошла непрерывное развитие, пройдя через династии Мин и Цин, и приведя нас в современную эпоху, которой уже более 360 лет. В течение этого долгого процесса развития, выделились четыре основные формы классической китайской оперы, каждая из которых оставила свой след в истории и культуре. Одной из первых форм была опера Сун-Юань, поставленная в конце династии Северной Сун и ранней династии Южной Сун. Расцвет оперы произошел в городах Вэньчжоу в Чжэцзяне, Цюаньчжоу и Фучжоу в Фуцзяни, и стал ключевым периодом становления этого искусства. Опера Сун-Юань представляет собой более раннюю и зрелую форму оперы в Китае, данная форма искусства объединяет пение и танцы, создавая полноценное визуальное представление драматической истории. Сценарий оперы Сун-Юань часто был излишне длинным, сюжетной линии придавалась особая важность, и использовались разнообразные стили пения, включая сольное, дуэтное, ротационное пение и хор. Музыкальным инструментом, сопровождающим оперу, часто служила барабанная доска. Опера династии Юань, также известная как опера "Бэйцюй", была впервые поставлена в конце династии Цзинь в районах Чжэньдин в Хэбэе и Пинъян в Шаньси, данный период считается золотым веком китайской оперы, когда она достигла высокого литературного уровня. Стихи, слова и песни этой эпохи сравниваются с поэзией Тан и Сун, выделяясь своим глубоким идейным содержанием и художественными достижениями. Опера династий Мин и Цин развивалась из оперы Сун-Юань и стала популярной в периоды Мин, Цзяцзин, Ваньли и ранней Цин. Различные диалекты, такие как куньшаньский и иянский, приобрели популярность среди населения, и театральные представления стали неотъемлемой частью культурной жизни,

происходящей в королевских дворцах, резиденциях чиновников, храмовых дворах и травяных террасах. Китайская опера оставила неизгладимый след в истории и культуре Китая, и, несмотря на более чем три с половиной века своего существования, продолжает вдохновлять и поражать своей красотой, выразительностью и уникальностью.

Сопоставление различных официальных мелодий и аранжировка выступлений в истории китайской оперы были стандартизированными, однако, в то же время, широко использовались усовершенствованные музыкальные элементы, придавая выразительности каждому представлению. В данном контексте, гуманитарные, социально-экономические и общественные науки стали неотъемлемой частью изучения истории и культурологии в серии научных публикаций. Период, охватывающий оперное искусство Китая, характеризовался постепенным усовершенствованием музыкальных элементов и повышением мастерства актеров. Особое внимание уделялось певческому мастерству, требуя от артистов способности "петь всевозможные песни с глубоким смысловым и философским содержанием", данный опыт, наработанный в процессе практики оперного пения Куньцюй на протяжении долгого времени, стал важным наследием китайской национальной вокальной музыки. Куньшаньская акцентуация не только утончила певческое мастерство, но и сформировала богатую конфигурацию инструментов аккомпанемента и оркестра, что позволило более полно раскрыть выступления в заданных стилях и ритмах. Опера династий Мин и Цин оказала глубокое влияние на музыку более поздних драм, проложив путь к разнообразию и богатству оперного искусства. Опера династии Цин, схожая с современной оперой, процветала в Хуабу в конце династии Канси, конкурируя с оперой Куньцюй, это время стало эпохой оперы династии Цин, выделяющейся сильным и пронзительным стилем. Формирование музыкальной системы в этот период подразумевало использование вариаций новой формы драматической литературы, хотя сюжеты оперы могли оставаться сложными для восприятия. Современная опера, зародившаяся между 1840 и 1919 годами, подразумевает Пекинскую оперу, сформированную в периоды Тунчжи и Гуансюй, данный период также ознаменовался появлением китайского оперного реформаторского движения, начавшегося в начале 20-го века. Становление Пекинской оперы было результатом развития оперы династии Цин, и она стала национальной драмой, не подавив развитие местной оперы, это время также ознаменовалось развитием искусства театральной режиссуры, особенно после 1921 года, когда драматург ХунШэнь вернулся из США, внедрив режиссерскую систему искусства театра, и собственно поэтому китайская опера в своем развитии переживала различные эпохи, оставляя свой след в истории и культуре, а уникальные черты каждого периода вносили свой вклад в общую картину богатства и разнообразия китайской оперной традиции.

В 1950-х и 1970-х годах культурная доминация русского и советского литературного материала в переводах иностранной литературы в Китае не оставила без внимания театральную традицию, это было обусловлено не только стойкой славой русской театральной школы, но и ориентацией культурной политики Китая на изучение и исследование советского искусства. Отмеченные торжественности, посвященные 160-летию со дня рождения Александра Пушкина и столетию Антона Чехова, подчеркивают важность русской литературной и театральной культуры в Китае того времени. В начале 1960-х годов, важного периода для китайской театральной сцены, произведения Станиславского, включая пять из восьми томов полного собрания его сочинений, были переведены на китайский язык, данный этап был отмечен значительным влиянием русской театральной школы на китайское театральное искусство. Теоретические трактаты о сценическом искусстве, выпущенные в Китае в 1930-е и 1960-е годы, раскрывали Станиславского как создателя реалистического театра, что прочно вошло в сознание китайских режиссеров и театральных педагогов. С усвоением теорий Станиславского китайскими актерами, особенно в области психологической драмы, было обеспечено глубокое понимание необходимости изучения времени, места, привычек и даже истории государства для полного погружения в создаваемый образ. Практика чтения книг, посещения музеев и исследование фоновой информации перед репетицией стала устоявшейся нормой, но вызывая определенные сложности, китайские переводчики сталкивались с необходимостью передачи аспектов русской действительности, с которыми они не всегда были знакомы, что иногда приводило к недостаточной адекватности передачи оригинала, а еще стоит отметить что китайские актеры сталкивались с вызовом индивидуализации и коллективизма на театральной сцене. Русская драматическая школа, в отличие от китайской, стремилась к созданию чувства взаимности, где взаимодействие между актерами и коллективностью на сцене считалось ключевым элементом театрального искусства. В сценическом ансамбле русской драматической школы реальное чудо преображения происходило, когда зрители становились свидетелями взаимодействия актерского ансамбля, но в контексте китайской традиции, актеры склонны к индивидуализму, что создает разрыв между актером и его персонажем, воплощенным на сцене, это проявляется в том, что даже при совместных репетициях, китайские актеры остаются склонными к индивидуализму, не всегда находя общий язык друг с другом, и собственно поэтому влияние русской театральной традиции на китайский театр оказало существенное воздействие на творческий процесс, поднимая вопросы адаптации и взаимодействия между различными театральными школами и культурами.

В свете сравнения театральных традиций между Россией и Китаем, основанного на данном тексте, выявляется интересное противостояние в

методах и ценностях актерского искусства. Система Станиславского, с ее уникальными стандартами, внедренными в русскую театральную практику, находится в контрасте с особенностями китайского драматического театра. Одним из ключевых моментов различий является подчеркивание несовершенства сценического мастерства китайских актеров и театральной педагогики. Текст утверждает, что китайским актерам часто не хватает той уникальной черты Станиславского – способности искать глубокие аспекты каждого персонажа, находить оправдание и добро в даже самых злых героях, данный дефицит, как утверждается, создает впечатление отсутствия понимания важности глубокого внутреннего изучения пьесы и аутентичного воплощения персонажей. Особый акцент делается на том, что для китайского актера мир представляет собой мир поверхностности. Возможно, из-за этого отмечается взрывной и крайне поверхностный темперамент, ограничивающий способность актеров полностью погружаться в мир своих персонажей. В контексте педагогики также выделяются разные традиции и стратегии обучения в России и Китае. Там, где Станиславский строил свою систему для того, чтобы раскрывать этическое оправдание актерской профессии и вдохновлять актеров на глубокое исследование души и роли, китайская традиция, по мнению автора, более поверхностна и неудовлетворительна в этом аспекте.

В контексте китайского театра, репетиции русской классики становятся не просто актами творчества, а настоящим полем борьбы и конфликта. Видится, что конфликт протекает как на уровне подходов к репетициям, так и на уровне окончательных результатов, приводя к фактической производительности, которая оказывается трудной для оценки и оценивания. Именно в этой области, когда речь идет о произведениях Чехова, Достоевского, Толстого, Пушкина и Островского, выявляется сложность передачи всей глубины и сложности русской классики. Основной дилеммой является невозможность полностью передать суть и характер персонажей великой русской литературы даже при хорошо налаженных костюмах и декорациях. Параметры личности даже самого крайне сложного или безрадостного героя представляют собой вызов для китайских актеров, поскольку они выходят за пределы психологических возможностей даже самых опытных артистов. Репетиции, следовательно, становятся подобными американским горкам, где режиссер, как аттракционный проводник, ведет актеров то вверх, то вниз, создавая бурю эмоций и переживаний, и собственно поэтому одной из ключевых проблем, стоящих перед китайским театральным искусством, является не только совершенствование методов репетиции, но и выработка общих профессиональных критериев, данная необходимость возникает из осознания того, что русская классика требует не только технического мастерства, но и глубокого понимания психологии и этических нюансов, которые могут оказаться чуждыми китайским традициям.

В конечном счете, воплощение русской классики на китайской театральной сцене представляет собой не только техническое испытание, но и культурный вызов. Возможно, в создании более глубоких мостов между двумя театральными традициями заключается ключ к успешному преодолению конфликтов, возникающих на пути. Используя принципы Станиславского и осмысливая уникальные черты китайского театрального искусства, актеры могут подняться над поверхностными различиями и добиться великолепных воплощений русской литературной наследственности на китайской сцене.

Использованные источники:

1. ЧжанПзнчунь. Тенденции советской драмы // Жизнь и литература. Шанхай. - 2021. - №1. - С. 133-135.
2. СюйЦзяцин. История западного театра. Шанхай: Издательство «Шанъу». – 2019. - С. 54.
3. ЮйШанъюанъ. Сборник работ ЮйШанъюаня о театре. Шанхай: Изд-во «Чанцзянвэньи». - 2018. - С. 122-126.
4. Ихсанов А.У. Глобализация как инструмент сближения национальных культур: мифы и реальность // Евразийский юридический журнал. – 2021. – № 12 (163). – С. 545-546. Гуманитарные, социально-экономические и общественные науки. Серия: Исторические, Культурология. Политические науки. 2023. №1 ISSN (Online) 2686-8350 ISSN (Print) 2713-1742 https://social-economic.ru/
5. Бондаренко А.В. Интуиция и искусство // Гуманитарные, социальноэкономические и общественные науки. – 2014. – № 12-1. – С. 37-39.

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СТАНИСЛАВСКИЙ И ЭВОЛЮЦИЯ КИТАЙСКОГО ТЕАТРА

Аннотация. Данная статья исследует влияние театральной методологии Константина Станиславского на развитие китайского театрального искусства. Обсуждаются вызовы, с которыми сталкиваются актеры и режиссеры, применяя принципы Станиславского в контексте китайской культурной традиции. Исследование рассматривает, какие новые возможности и проблемы возникают при интеграции этих двух театральных традиций.

Ключевые слова. театр, Константин Станиславский, китайский театр, актерское мастерство, культурный обмен, театральные традиции, этика в искусстве, влияние искусства, китайская культура.

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STANISLAVSKY AND THE EVOLUTION OF THE CHINESE THEATER

Abstract. This article explores the influence of Konstantin Stanislavski's theatrical methodology on the development of Chinese theatrical art. The challenges faced by actors and directors in applying Stanislavski's principles within the context of Chinese cultural traditions are discussed. The study examines the new opportunities and issues arising from the integration of these two theatrical traditions.

Keywords. theatre, Konstantin Stanislavski, Chinese theatre, acting mastery, cultural exchange, theatrical traditions, ethics in art, art influence, Chinese culture.

В мире искусства театр считается местом, где соединяются культурные традиции, выражаются человеческие эмоции и обсуждаются нравственные дилеммы. В данной статье мы обратим внимание на влияние выдающегося русского режиссера и актерского педагога, Константина Станиславского, на китайский театр. Раскрывая свою систему, Станиславский внес существенный вклад в актерское мастерство, заложив фундамент для глубокого понимания ролей и этических аспектов искусства. Как эта русская театральная философия нашла свое отражение в китайской сценической практике и какие вызовы, и возможности это предоставило, станет объектом нашего исследования.

Театральное наследие Константина Станиславского оказало значительное влияние на развитие китайского театра, особенно в период с 1950-х по 1970-е годы. В это время в Китае преобладали русские и советские литературные материалы, что было связано с ориентацией культурной политики на изучение и исследование советского искусства. В начале 1960-х годов значительная часть теоретических трактатов о сценическом искусстве, изданных в Китае, представляла Станиславского как создателя реалистического театра. Важно отметить, что пять из восьми томов полного собрания сочинений Станиславского были переведены на китайский язык в это время, это событие сделало доступным для китайских режиссеров и театральных педагогов широкий спектр теорий и методов, разработанных Станиславским.

Ключевым вкладом Станиславского в китайский театр было внедрение методов изучения роли и подготовки к представлению. Китайские актеры, исполняющие русскую психологическую драму, признают, что они обязаны своим знанием методов Станиславского. Согласно этим методам, актерам необходимо тщательно изучать время, в которое происходит действие, исследовать место, а также погружаться в историю государства или страны, данный подход предполагает, что актеры должны полностью погрузиться в мир своих персонажей перед репетицией. Однако, несмотря на значительный вклад Станиславского в китайский театр, существовали трудности в передаче некоторых аспектов русской действительности через китайских переводчиков, что вызывало некоторые сложности в адекватном воспроизведении оригинальных идей и концепций. Несмотря на это, влияние Станиславского оставило неизгладимый след в развитии китайской театральной сцены, формируя подходы к актерской игре и реалистическому представлению.

Русская драматическая школа, в частности под влиянием Станиславского, стремилась к созданию ансамблевого взаимодействия на сцене и устранению разрыва между актером и персонажем, она акцентировала важность взаимности между актерами, что создавало настоящее чудо преображения в театральных постановках, данный подход отличался от индивидуалистического стиля китайских актеров, которые, как отмечается в тексте, часто не могли найти общий язык друг с другом на сцене. Ключевым элементом метода Станиславского, который привносился в русскую, европейскую и североамериканскую актерскую традицию, было стремление к полному погружению актера в реальность персонажа, данный аспект, как утверждается, был отсутствующим в китайской действительности, где актеры часто демонстрировали индивидуализм и не всегда находили общий язык в представлении своих ролей. Станиславский также предлагал актерам исследовать и понимать своих персонажей, даже если они играют негативные роли, данный подход к изучению и оправданию персонажей, даже тех, кто предстает перед зрителями в качестве "злых", не всегда был характерен для китайской театральной практики. Станиславский, таким образом, представлял

собой своеобразный культурный мост между двумя театральными традициями, стараясь внедрить в китайский театр принципы взаимности и коллективизма, характерные для русской школы.

Воздействие теорий и методов Константина Станиславского на китайский театр становится очевидным в контексте проблем, выявленных в китайской драматической сцене. Здесь поднимается вопрос о недостатке внутреннего исследования пьесы, о поверхностном восприятии мира китайскими актерами и о несовершенстве театральной педагогики в Китае. Станиславский строил свою театральную систему, стремясь не только облегчить достижение успеха актером, но и выявить этическое оправдание актерской профессии. В отличие от индивидуалистического подхода китайских актеров, Станиславский подчеркивал важность глубокого изучения и внутреннего переживания роли. Критика в сторону китайского актера обращена к его взрывообразному и поверхностному темпераменту, который, по мнению автора, ограничивает возможность создания полноценного эффекта на театральной сцене. В этом контексте становится очевидным разрыв между актером и персонажем, отсутствие глубокого эмоционального отождествления, что приводит к потере взаимности с аудиторией. Существенное влияние Станиславского на китайский театр выражается также в философском понимании актерской роли. Актеры, по философскому взгляду, должны оживлять мертвую материю текста, жертвуя своим телом и разумом. Такой подход вытекает из станиславскианских принципов, ставящих под сомнение механическое исполнение и призывающих актеров исследовать свои внутренние ресурсы.

Существуют определенные особенности менталитета китайских актеров, которые, по мнению исследователей, создают барьеры для полноценного воплощения станиславскианских принципов. Одной из ключевых особенностей, выделяемой в контексте критики, является недостаток внутреннего исследования пьесы. Китайские актеры, согласно анализу, часто подходят к роли поверхностно, уделяя меньше внимания внутреннему миру персонажа. В отличие от подхода Станиславского, который призывает к глубокому изучению и внутреннему переживанию роли, этот аспект китайской актерской методологии может создавать преграды для полноценной передачи эмоциональных и этических аспектов на сцене. Индивидуалистический подход китайских актеров также сталкивается с критикой в контексте ограничения возможности создания полноценного эффекта на театральной сцене. В то время как Станиславский подчеркивал важность глубокого эмоционального отождествления с ролью, критика в сторону китайских актеров связана с их взрывообразным и поверхностным темпераментом, данный столкновение стилей создает разрыв между актером и персонажем, что, по утверждению авторов, умаляет взаимодействие с аудиторией. Влияние Станиславского на китайский театр также отражается в философском понимании актерской роли. Станиславский предлагает

жертвовать телом и разумом для оживления мертвой материи текста, что становится философской основой для создания новой, ранее не существовавшей сущности на сцене. Однако, согласно критикам, несовершенство театральной педагогики в Китае может привести к недостаточному исследованию внутренних ресурсов актеров, что усложняет реализацию станиславскианских принципов на китайской театральной сцене.

В основе русской театральной традиции, особенно под влиянием Станиславского, лежит убеждение в том, что для создания подлинного искусства необходимо проникновение в глубину человеческой души и понимание нравственных проблем, данная концепция подчеркивает важность этической составляющей в искусстве, где каждый актер становится не только исполнителем роли, но и пророком, учителем, исследователем и образцом нравственности. Подход Станиславского требует не только технического мастерства актера, но и глубокого внутреннего понимания персонажа и его моральных аспектов. В контексте китайского театра, где нередко подчеркивается взрывообразность и поверхностность темперамента, принятие русской методологии может стать вызовом, требующим изменения в подходе к подготовке и актерскому мастерству. Необходимость выработки общих профессиональных критериев в китайском театре представляет собой возможность объединения традиций и методов, позволяя создавать произведения, богатые эмоциональной глубиной и нравственной подоплекой, данный процесс потенциально может привести к уникальному синтезу китайской и русской театральных искусств, где разнообразие и культурный обмен становятся силой, а не препятствием.

Соединение двух культурных традиций в театре не только обогащает художественное наследие, но и создает уникальное пространство для взаимопонимания и культурного обмена. В статье мы рассмотрели, как принципы Станиславского нашли отклик в китайском театре, вызывая не только вызовы в традиционных методах, но и открывая новые горизонты для развития искусства. Таким образом, эта эволюция театральной практики становится свидетельством не только силы культурного наследия, но и гибкости театрального искусства, способного адаптироваться к новым вызовам и вдохновлять аудиторию на глобальном уровне.

Использованные источники:

1. ЧжанПзнчунь. Тенденции советской драмы // Жизнь и литература. Шанхай. - 2021. - №1. - С. 133-135.
2. СюйЦзяцин. История западного театра. Шанхай: Издательство «Шанъу». – 2019. - С. 54.
3. ЮйШанъюанъ. Сборник работ ЮйШанъюаня о театре. Шанхай: Изд-во «Чанцзянвэньи». - 2018. - С. 122-126.
4. Ихсанов А.У. Глобализация как инструмент сближения национальных культур: мифы и реальность // Евразийский юридический журнал. – 2021. – № 12 (163). – С. 545-546. Гуманитарные, социально-экономические и

общественные науки. Серия: Исторические, Культурология. Политические науки. 2023. №1 ISSN (Online) 2686-8350 ISSN (Print) 2713-1742 https://social-economic.ru/

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ВЛИЯНИЕ МЕТОДОВ СТАНИСЛАВСКОГО НА КИТАЙСКИЙ ТЕАТР И ЕГО НАСЛЕДИЕ

Аннотация. Статья рассматривает трансформацию китайского театра под влиянием методик Константина Станиславского. Исследуется внедрение этих методик в традиционные театральные практики, их влияние на актерское мастерство и режиссуру, а также оценивается современное наследие этих изменений.

Ключевые слова. Китайский театр, методики Станиславского, традиционные практики, актерское мастерство, режиссура, культурная трансформация, наследие, современное искусство.

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THE INFLUENCE OF STANISLAVSKY'S METHODS ON THE CHINESE THEATER AND ITS LEGACY

Abstract. The article explores the transformation of Chinese theater under the influence of Konstantin Stanislavski's methodologies. It examines the integration of these techniques into traditional theatrical practices, their impact on acting and directing, and evaluates the contemporary legacy of these changes.

Keywords. Chinese theater, Stanislavski's methodologies, traditional practices, acting mastery, directing, cultural transformation, legacy, contemporary art.

Слияние культур искусства – место, где встречаются вековые традиции и новаторские тенденции. В последние десятилетия китайский театр претерпел несравненные изменения под воздействием методик Станиславского, внедренных в его ткань. Этот процесс привнес новый взгляд на актерское мастерство, режиссуру и обучение, открывая двери для современных тенденций в традиционном искусстве.

Методика Константина Станиславского оказала значительное воздействие на развитие театрального искусства в Китае, прежде всего в контексте восприятия новых театральных идей и организационных методов. В 1916 году в Китае впервые упоминается имя Станиславского в книге Слой Цзяцина "История западного театра", где отдельная глава посвящена новому театру в России, включая Московский художественный театр, основанный

Немировичем-Данченко и Станиславским. Следует отметить, что, несмотря на детальные рассказы о Московском художественном театре и Немировиче-Данченко, в китайской литературе методика Станиславского выделяется единожды. В начале XX века Китайские исследователи, такие как Чжан Пэнчунь и Юй Шанъюань, сыграли важную роль в понимании театральной ситуации в Советском Союзе. Визит Чжан Пэнчуня в 1923 и 1931 годах, а также статья Юй Шанъюаня о МХТ в 1924 году послужили мостом для внедрения станиславсковских идей в китайскую театральную среду. Анализ работы Московского художественного театра и рассмотрение режиссерских методов Станиславского, представленные Юй Шанъюанем, говорят о глубоком понимании принципов организации и подготовки спектаклей. Процесс репетиций, внимание к деталям, анализ ролей и создание атмосферы творчества стали ключевыми аспектами, вдохновляя китайских исследователей и актеров.

В период с 30-х до 40-х годов XX века, в Китае произошло важное воздействие методики Константина Станиславского на актерское искусство. Новые идеи и принципы театрального искусства Станиславского внедрялись в китайскую театральную практику, привнося свежий взгляд на традиционные формы исполнения. Согласно убеждениям того времени, для достижения аутентичности на сцене актеры должны были отображать внутренний смысл повседневной реальности с использованием простых жизненных форм. Эта "реалистичность" отличалась от концепций конца XIX века и труппы Мейиигана. Она не ограничивалась описанием внешнего, а, наоборот, передавала таинственность духа жизни. Основные шаги внедрения методики Станиславского в китайскую сцену произошли в период с 30-х до 40-х годов XX века. Этот временной отрезок стал известен как "красные тридцатые", период повышенного интереса к советской культуре в Китае. Исследователи и театральные деятели восприняли советские достижения с восторгом и стремились изучать опыт советского искусства, включая методику Станиславского. Одним из важных моментов было посещение актером традиционной китайской оперы Мэй Ланьфаном Советского Союза в 1935 году, где он провел несколько выступлений. Это событие способствовало обмену опытом между китайским и советским театром. Несмотря на трудности, такие как "неподготовленность зрителей", "экономические затруднения" и "отсутствие надлежащего обучения", китайские театральные деятели смотрели в будущее с оптимизмом. В конце 30-х годов увеличилось число публикаций в китайских газетах и журналах, посвященных описанию методики Станиславского.

Во второй половине 1930-х годов Китайские театральные деятели начали систематическое изучение и практическое внедрение методики Станиславского, чему предшествовал перевод известных работ российских и европейских авторов по театральной педагогике. Среди переведенных произведений были «Мастерство актера и режиссера» Б. Е. Захавы, а также

«Из прошлого» В. И. Немировича-Данченко, что помогло китайским театральным деятелям перейти на новый, более продвинутый этап изучения "системы Станиславского". Практическое освоение метода Станиславского в Китае началось в 1938 году, маркируя начало процесса внедрения педагогических методов, характерных для европейского искусства, в китайский театральный мир. В этот период Хуан Цзолинь и Дань Ни, вернувшиеся из Лондона, привнесли новые теоретические и практические знания в Чунцинское государственное театральное училище, предоставив уникальные возможности для студентов ознакомиться с методикой Станиславского. Согласно рассказам Ли Найчэня, ученика Хуан Цзолиня и Дань Ни, занятия актерского мастерства включали в себя использование методов, заимствованных из "системы Станиславского". Дань Ни учила студентов базовым движениям балета, нацеленным на улучшение координации и избавление от расхлябанности телодвижений. Ей также удалось внедрить в обучение элементы психологического тренинга, направленные на развитие воображения, анализа событий и наблюдательности у будущих актеров. Занятия Хуан Цзолиня и Дань Ни вызвали значительный интерес в театральных кругах Китая, обозначив начало для развития новой театральной школы в стране. Несмотря на то, что не все упражнения были адаптированы корректно, они стали важным шагом вперед по сравнению с предыдущими методами подготовки актеров в Китае.

До внедрения методик Станиславского в Китай традиционный китайский театр, в частности, китайская опера, оставался основным и влиятельным театральным жанром в стране. Китайская опера, в свою очередь, имела долгую и богатую историю, охватывая различные формы и стили, такие как Пекинская опера, Кунг-опера, Юй-опера, Хэбэй-опера и другие. Традиционные формы китайского театра представляли собой уникальные комбинации музыки, пения, актерского искусства, мимики и костюмов. Они были насыщены символикой и традиционными элементами, такими как маски, костюмы и стилизованные движения. Однако до внедрения методик Станиславского китайский театр встречал ряд вызовов и ограничений. В традиционной китайской опере актеры, как правило, обучались с детства и следовали жестко установленным традициям. Обучение было базировано на передаче определенных ролей и техник от поколения к поколению, и акцент делался, в основном, на стилизованных движениях и технике, чем на внутреннем переживании роли. Подход к актерскому мастерству в традиционном китайском театре часто подчеркивал внешние аспекты представления, и актеры, скорее всего, не обладали глубоким внутренним пониманием своих персонажей. Возможно, это приводило к отсутствию эмоциональной аутентичности и слабой взаимосвязи с аудиторией. До влияния методик Станиславского китайский театр оставался в значительной степени укорененным в традициях, но в то же время испытывал ограничения в разнообразии актерских методов, акцентируясь в основном на формальных

и стилизованных аспектах. Внедрение иностранных методик, таких как театральная система Станиславского, представляло собой значимый поворот в развитии китайского театрального искусства, открывая новые возможности для глубокого внутреннего исследования ролей и более эмоционального взаимодействия с публикой.

После внедрения методик Станиславского в китайское театральное искусство, произошли значительные трансформации, оказавшие глубокое воздействие на все его аспекты. Эта встреча двух культурных традиций привнесла в китайский театр новые методы и подходы, обогатив его эстетику и повысив профессионализм. В первую очередь, методика Станиславского внесла в китайское актерское мастерство акцент на глубокое внутреннее исследование ролей. Актеры стали уделять больше внимания внутреннему миру своих персонажей, стремясь к более глубокой и эмоциональной интерпретации ролей. Это придало китайским театральным постановкам новую, более реалистичную и человечную основу. Процесс внедрения методик Станиславского в режиссуре также оказал заметное воздействие. Режиссеры стали более тщательно подходить к организации репетиций, сосредотачиваясь на внутреннем аспекте перформанса. Эксперименты с использованием принципов Станиславского привели к новым формам театральных выражений и интерпретаций классических произведений. Процесс обучения также претерпел изменения. Появились новые театральные школы и образовательные учреждения, активно внедряющие методы Станиславского в программы обучения. Это способствовало распространению влияния Станиславского в театральном сообществе и подготовке нового поколения театральных профессионалов. Однако, важно отметить, что эти изменения не привели к утрате китайского театрального наследия. Напротив, традиционные формы и элементы китайской оперы сохранились, живя рядом с новыми, современными театральными выражениями. Вместе они создают уникальную динамичную сцену, где современность гармонично сочетается с традициями. В результате этого влияния китайский театр получил признание не только на национальном, но и на мировом уровне. Многие китайские театральные постановки стали успешными на международной арене, что способствовало интернационализации китайского театрального искусства.

Сегодня Китайский Театр – это уникальный симбиоз традиций и современности. Все благодаря глубокому влиянию методик Станиславского, которые переросли в живую, эмоциональную часть его наследия. Поднимаясь на мировую арену, китайский театр представляет вдохновляющий плод эволюции, покоряя сердца зрителей в своей уникальной гармонии между культурными корнями и современными вызовами искусства.

Использованные источники:

1. ЧжанПзнчунь. Тенденции советской драмы // Жизнь и литература. Шанхай. - 2021. - №1. - С. 133-135.

2. СюйЦзяцин. История западного театра. Шанхай: Издательство «Шанъу». – 2019. - С. 54.
3. ЮйШанъюанъ. Сборник работ ЮйШанъюаня о театре. Шанхай: Изд-во «Чанцзянвэньи». - 2018. - С. 122-126.
4. Ихсанов А.У. Глобализация как инструмент сближения национальных культур: мифы и реальность // Евразийский юридический журнал. – 2021. – № 12 (163). – С. 545-546. Гуманитарные, социально-экономические и общественные науки. Серия: Исторические, Культурология. Политические науки. 2023. №1 ISSN (Online) 2686-8350 ISSN (Print) 2713-1742 https://social-economic.ru/

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ЭКОНОМИЧЕСКИЕ РЕСУРСЫ НА ПРЕДПРИЯТИЯХ ПРЕДПРИНИМАТЕЛЬСТВА И ПОКАЗАТЕЛИ ЕГО ЭФФЕКТИВНОСТИ

Аннотация. Для изучения и анализа уровня использования имеющихся экономических ресурсов в предприятиях предпринимательства используется система различных показателей. В статье предпринята попытка определить пути эффективного использования экономических ресурсов в предприятиях предпринимательства.

Ключевые слова: экономические ресурсы, показатели, эффективность, материальные ресурсы, трудовые ресурсы, технологические ресурсы.

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ECONOMIC RESOURCES AT BUSINESS ENTERPRISES AND ITS EFFICIENCY INDICATORS

Annotation. To study and analyze the level of use of available economic resources in economic enterprises, a system of various indicators is used. The article attempts to determine the ways of efficient use of economic resources in economic enterprises.

Key words: economic resources, indicators, efficiency, material resources, labor resources, technological resources.

Эффективность деятельности предприятий и организаций во многом зависит от используемых ими экономических ресурсов. В настоящее время эффективное использование ограниченных ресурсов является одной из наиболее актуальных проблем, стоящих на повестке дня. Для того чтобы определить эффективность использования экономических ресурсов на предпринимательских предприятиях, необходимо определить показатели их использования. Сегодня в направлении изучения и анализа уровня использования экономических ресурсов на предпринимательских предприятиях используется система различных показателей. Такие показатели свидетельствуют о наличии экономических ресурсов, размере сбережений и уровне использования на предприятии. Показатели,

характеризующие использование экономических ресурсов, определяются индивидуально по каждому экономическому ресурсу.

Основным показателем использования материальных ресурсов является показатель экономии материальных ресурсов. При эффективном использовании материальных ресурсов их расход сложно выразить в натуральных показателях, поэтому значение рассчитывается в показателях. Помимо общего потребления материальных ресурсов, определяется также относительное потребление. Относительный расход материальных ресурсов показывает среднее количество, затраченное на производство одной единицы продукции на предприятии. Этот показатель определяется путем деления общего расхода материальных ресурсов на количество произведенной готовой продукции и указывает на материальные затраты, затраченные на одну единицу продукции. Относительный расход материальных ресурсов рассчитывается в натуральных показателях.

Стоимость материальных ресурсов для всей продукции, производимой на предприятии, рассчитывается по формуле:

$$Э = (m_1 – m_0)\ q_1 \text{ или } Э = (m_1 - m_M)\ q_1;$$

здесь:q_1 – объём выпущенной продукции.

Эффективность предпринимательских предприятий во многом зависит от используемых ими трудовых ресурсов. Для определения уровня использования трудовых ресурсов используется показатель производительности труда. Показатель производительности труда представляет собой объем продукции, произведенной на одного работника в единицу времени. Этот показатель определяется по следующей формуле:

$$M = \frac{Q}{И}$$

здесь: M - производительность труда;

Q – объём произведенной продукции;

И – количество работников.

Помимо производительности труда, показатель трудозатрат при производстве продукции также является одним из важнейших показателей. Снижение затрат на рабочую силу, которые могут быть использованы для производства продукции, важно для повышения конкурентоспособности. В организационно-хозяйственной деятельности, предписанной на предприятии, следует предпринять попытку снизить затраты на рабочую силу.

Такие показатели, как эффект от использования основных фондов, фондоотдача, фондоемкость, производительность основных фондов, рентабельность основных фондов, коэффициент использования мощностей машин и оборудования, указывают на эффективность использования основных фондов.

В виде отношения произведенного (проданного) продукта за период, когда анализируется производительность основных средств, к среднегодовой стоимости основных средств целесообразно найти его по следующей формуле:

$$А_{фм} = М \mid А_{ф.ср}$$

здесь:

$Ав_{м}$— эффективность основных фондов;

М — объем произведенной продукции в анализируемом периоде;

$Ав_{ўр}$ — среднегодовая стоимость основных фондов.

Объем реализованной продукции в условиях рыночных отношений отражает экономическую активность в натуральную величину. Показатели, отражающие финансовое состояние предприятия, такие как прибыль и рентабельность, также имеют прямую связь с этими показателями. Следовательно, правильно будет определять производительность основных средств не по произведенному продукту, а по объему реализованного продукта. Для этого рекомендуется использовать следующую формулу:

$$А_{фм} = С \mid А_{ф.ср}$$

здесь:С — объем реализованной продукции.

Рентабельность основных средств представляет собой величину прибыли на 1 сумму основных средств. Ее можно рассчитать следующим образом по отношению чистой прибыли к среднегодовой стоимости основных средств:

$$Р_{аф} = П_{ч} \cdot А_{ф\ ср}$$

здесь: $Р_{аф}$ — рентабельность основных средств;

$П_{ч}$ — чистая прибыль.

Для эффективного использования экономических ресурсов на коммерческих предприятиях мы предлагаем следующее:

1. Повысить эффективность процесса отбора экономических ресурсов, необходимых для деятельности. Уделяя особое внимание качеству необходимых ресурсов.

2. Эффективное использование современных информационных технологий в процессе поиска и отбора экономических кандидатов.

3. Улучшение условий труда и создание подходящих условий для продуктивной работы.

4. Углубление разделения труда и налаживание трудовой кооперации.

5. Разработка и использование интегрированных показателей с целью полного определения эффекта от использования материальных и трудовых ресурсов.

6. Углубленный анализ каждого экономического ресурса, выявить неиспользуемые внутренние возможности и определить направления их использования.

Использованные источники:

1. Указ Президента Республики Узбекистан от 28 января 2022 года № ПФ-60 «О стратегии развития Нового Узбекистана на 2022-2026 годы». Ташкент, Узбекистан, 2022 г.
2. Olim Sabirovich Kazakov,&Ilhom Mahamadjanovich Kamoliddinov. (2021). SOME QUESTIONS OF INCREASE OF EFFICIENCY IN ACTIVITY ENTERPRISE SUBJECTS. *Journal of Central Asian Social Studies, 2*(01), 160-169. https://doi.org/10.37547/jcass/volume02issue01-a24
3. Kazakov, O. S., &Ahmedkhodjaev, X. T. (2017). Fundamentals of management. *Tashkent, Ilm-Ziyo*.
4. Казаков О.С.Improving the management activity of the fruit and vegetable industry. Журнал “Theoretical & Applied Science” № 12/ 2018interprises.
5. Казаков О.С. The Role of the Textile Industry in the Economy of UzbekistanЖурнал*Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2, Dec -2019*
6. Kazakov Olim Sabirovich Management of the economic power of business activities and its impact on its efficiency Journal of Pharmaceutical Negative Results, Volume 13 Spesial Issue 6, 2022 https://www.pnrjournal.com/index.php/home/issue/view/25
7. Olim Kazakov, Shaxboz Valijanov, Bobur Nabiyev, Abdullo Mirzababayev. ECONOMIC POWER OF ENTREPRENEURSHIP AND ITS IMPACT ON ITS EFFICIENCY Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html
© Platform & Workflow by: Open Journal Systems.
8. Elnara Alievaa, Olim Kazakov EFFECTIVE APPLICATION OF INNOVATIONS OF THE "THIRD RENAISSANCE" IN INCREASING THE COMPETITIVENESS OF SMALL BUSINESSES Namangan Institute of Engineering and Technology, Namangan, Uzbekistan Central European Management Journal, Vol. 30 Iss. 3 (2022) ISSN:2336-2693 | E-ISSN:2336-4890, Retrieved from https://journals.kozminskicem-j.com/index.php/pl_cemj.index.html
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UDK:321

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ИЛМ-ФАН РИВОЖИ ВА ҚАДРИЯТЛАР ТИЗИМИ

Аннотация. Мазкур мақолада Янги Ўзбекистонда амалга оширилаётган маънавий ислоҳотлар тизимида илмий қадриятларнинг тутган ўрни ҳақида фикр юритилади.

Калит сўзлар: Янги Ўзбекистон, қадриятлар, илм-фан, маънавий ислоҳотлар, жамият, маънавий бойликлар, фуқаролик бурчи, инсонпарварлик, бадиий-эстетик қадриятлар, демократик қадриятлар, маънавий қадриятлар, ахлоқий, диний, бадиий-эстетик, сиёсий, ҳуқуқий қадриятлар.

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DEVELOPMENT OF SCIENCE AND SYSTEM OF VALUES

Abstract. This article discusses the role of scientific values in the system of spiritual reforms implemented in New Uzbekistan.

Keywords: New Uzbekistan, values, science, spiritual reforms, society, spiritual wealth, civic duty, humanitarianism, artistic-aesthetic values, democratic values, spiritual values, moral, religious, artistic-aesthetic, political, legal values.

Инсоният пайдо бўлгандан бошлаб, ўзининг маънавий ва маърифий қарашларини миллий қадриятлари асосида шакллантириб боради. Бунда,албатта, илм-фаннинг ўрни алоҳида аҳамиятга эга.

Янги Ўзбекистонда амалга оширилаётган маънавий ислоҳотлар тизимида илмий қадриятлар алоҳида ўрин тутади. Бу жараённинг моҳиятини чуқурроқ тасаввур қилишда мақсади инсонни, жамиятни, моддий, маънавий бойликларни авайлаб-асраш ва ривожлантиришга қаратилган таълим соҳасида амалга оширилаётган ислоҳотларнинг роли ниҳоятда каттадир. Таълимнинг вазифаси фуқаролик бурчлари, мустақиллик ғоялари, демократик қадриятларга садоқатли эркин ва мустақил фикрлайдиган шахсни вояга етказишдан иборатдир. Таълимни янгича тушуниш, шахс қадриятини унинг эркинлиги билан уйғунлаштириш, таълимни инсонпарварлаштириш ва гуманитарлаш каби тамойиллар

асосида шахснинг интеллектуал маданиятини таркиб топтириш мумкин. Бунинг натижаси ўлароқ, инсонпарварлик тамойилларига асосланган таълимнинг янги қадриятлари юзага келади. Бинобарин, таълимни гуманитарлаштириш инсонларни бу дунёда ўзларини англашини таъминлайди, таълимни инсонпарварлаштиришнинг асосий мақсади эса гуманистик дунёқарашни, тегишли билим ва кўникмаларни таркиб топтиришга олиб келади. Буюк немис файласуфи И.Кант билим, фикр ва эътиқод тушунчаларини бир-биридан фарқлаш анъанасини фаол қўллаб-қувватлаган ва биринчи бўлиб билим ва қадрият тушунчаларини бир-биридан фарқлаш зарурлигини кўрсатган эди. Билим ва қадриятни бир-биридан фарқлаш қадриятни илмий асосда ўрганишни ва билимни, фанни қадрият сифатида англашни истисно этмайди, балки тақозо этади.

Мустақиллик йилларида ижтимоий-гуманитар фанларимизда ва жонли тилда диний қадрият, бадиий-эстетик қадриятлар, демократик қадриятлар мустаҳкам ўрин эгаллай бошлади. Маънавий қадриятларнинг муҳим элементлари бўлган ахлоқий, диний, бадиий-эстетик, сиёсий, ҳуқуқий ва шу каби қадриятлар моҳиятини илмий асосда тадқиқ этиш борасида талайгина ютуқларга эришилди.

Президентимизнинг БМТ Бош Ассамблеясининг 72-сессиясидаги нутқида алоҳида таъкидлангани каби, “Бугунги кунда Ўзбекистон жадал ривожланмоқда. Биз аждодларимизнинг донишмандлик анъаналарига амал қилиб, теран англаган ҳолда, қатъий ислоҳотларни амалга оширмоқдамиз, мамлакатимизнинг янги қиёфасини шакллантириш йўлидан бормоқдамиз. Жамиятимизда сиёсий фаоллик ортиб бормоқда, барча соҳаларда чуқур ислоҳотлар амалга оширилмоқда. Улардан кўзланган мақсад - “Инсон манфаатлари ҳамма нарсадан устун” деган оддий ва аниқ-равшан тамойилни амалга ошириш устувор аҳамиятга эга бўлган демократик давлат ва адолатли жамият барпо этишдан иборат” [1].

Жаҳон илм-фани тарихида чуқур из қолдирган улуғ аждодларимиз ўзларининг ўлмас асарларида илм-фаннинг аҳамияти, хосияти, куч-қудрати ҳақида қимматли ғояларни илгари сурганлар. XI асрда яшаб ижод қилган буюк ватандошимиз Юсуф Хос Хожибнинг “Қутадғу билик” (“Саодатга элтувчи билим”), Маҳмуд Қошғарийнинг “Девони луғатит турк”, Фаробий, Беруний, Ибн Сино, Алишер Навоий, Бедил сингари ўнлаб ва юзлаб мутафаккирларнинг илмий-фалсафий асарларида инсон бахт-саодати, фаровонлиги фақат илм шарофатидан, барча бахтсизлик ва кулфатлар илмсизлик, жаҳолат туфайли эканлигини далиллар билан исботлашга ҳаракат қилганлар.

Марказий Осиёдан етишиб чиққан улуғ маърифатпарварлар (Алишер Навоий, Паҳлавон Маҳмуд, Муқимий, Фурқат, Анбар Отин, Аваз Ўтар, Фитрат, Чўлпон, Абдулла Қодирий, Беҳбудий, Абдулла Авлоний, Ҳамза Ҳакимзода ва бошқалар) диннинг жамият ва шахс ҳаётидаги аҳамиятини инкор этмаган ҳолда дунёвий илм-фаннинг яшаш ва ривожланиш ҳуқуқини

ҳимоя қилдилар: фақат дунёвий илм-фангина ўлкани қолоқлик ва қашшоқликдан, маҳдудлик ва жаҳолатдан халос қилиши мумкинлигини исботлашга ҳаракат қилдилар.

Миллий мустақиллик туфайлигина халқимиз биринчи марта ўзининг бой маънавий қадриятларидан баҳраманд бўлиш, илм-фанни қадрият сифатида англаш, жаҳон илм-фани равнақига муносиб ҳисса қўшган улуғ алломаларни эъзозлаш, қадрлаш имконига эга бўлди.

Янги Ўзбекистонда таълим-тарбия соҳасида амалга оширилаётган туб ислоҳотлар халқимиз маънавий салоҳиятини юксалтиришга, илм-фанни равнақ топтиришга қаратилгандир. Илмий қадриятларнинг маънавий қадриятлар тизимида тутган ўрни ва ролини белгилашдан олдин унинг туб моҳияти, таркиби ва функциялари ҳақида фикр юритиш мақсадга мувофиқдир. Аввало, илмий қадриятларнинг нисбий эканлигини таъкидлаш жоиздир. Илм-фан жамиятнинг барча аъзолари учун эмас, балки жамиятнинг энг юқори – элитар қатлами (зиёлилар, тадбиркорлар, мансабдор шахслар) томонидангина қадрият сифатида англанади. Айни вақтда илм-фанга ўзининг бутун онгли ҳаётини бағишлаган зиёлилар учун илмий қадриятлар олий қадрият, ҳаётнинг маъноси, ўзликни намоён этиш воситаси сифатида англанади.

Илм-фанни қадрият сифатида англайдиган ва унга ўзини бағишлаган кишилар илм-фанга осонгина ҳаёт кечириш, фаровон ва тўқ яшаш воситаси деб қарамайдилар. Балки аксинча: ўзларининг ғоят машаққатли ва чеки-чегараси кўринмайдиган уқубатли меҳнатга гирифтор қиладилар, бироқ илм заҳматларидан, эришган ҳар бир янгиликдан ҳаловат ва ҳузур топадилар. Туғма интеллектуал қобилиятга эга бўлган ёшлар мамлакатимизнинг бебаҳо бойлигидир87.

Илмий қадриятлар – кишилардаги интеллектуал-маънавий қобилият ва истеъдодни рўёбга чиқариш, аждодларимиз илмий меросини чуқур ўрганиш, воқеликни тадқиқ этиш орқали янгилик ва кашфиётлар яратишга имкон берадиган ғоялар, асарлар, ўқув ва илмий муассасалар, олимлар жамоаси, илм аҳллари мажмуасидир. Илмий қадриятлар кенг қамровли фалсафий тушунчадир. Бу тушунча фандаги ворисийлик, анъанавийлик, новаторликни ўзида диалектик тарзда уйғунлаштиради. Илмий қадриятлар таркибига энг аввало инсоният тарихида чуқур из қолдирган барча алломаларнинг ўлмас асарларини киритиш мумкин. Ҳар бир соҳадаги олим фан тарихини чуқур билмай, улуғ олимларнинг илмий назарияси ва илмий билиш методларига таянмай туриб, янгилик ярата олмайди. Бироқ, табиатан танқидий фикрлашга одатланган олим илмий меросни сарагини саракка, пучини – пучга ажрата олсагина, илмий билишнинг янги усулларини қўллай олсагина бирон бир муваффақиятга эришиши мумкин.

87 Ғайбуллаев О. Ёшлар онгига истиқлол ғоясини сингдиришнинг ижтимоий моҳияти ҳақида.//Ўзбекистонда ижтимоий фанлар.– 2005. – № 12. – Б.80.

Илм-фанни қадрият сифатида англаш таълим-тарбия ва илмий муассасаларга муқаддас даргоҳ сифатида қарашни, уни қадрлашни, авайлаб асрашни тақозо этади. Европада узоқ тарихга эга бўлган таълим муассасалари, университетлар, илмий лабораторияларнинг зиёратгоҳга айланганлиги европаликларнинг маънавий салоҳияти, қадриятли онги қай даражада ривожланганлигидан гувоҳлик беради. Илмий тадқиқот институтлари – илмий қадриятларнинг муҳим таркибий қисми бўлиб, бундай табаррук масканларда олимлар илмий кашфиётлар қиладилар. Ниҳоят, илмий қадриятларнинг субъекти ҳам, объекти ҳам заҳматкаш олимлардир. Бутун жамият аъзоларининг илм-фанга бўлган муносабатлари олимларга бўлган муносабатда яққол кўзга ташланади.

Олим ҳақида ғамхўрлик қилиш, фанга ҳомийлик қилиш, уни ҳар томонлама қўллаб-қувватлаш демократик ва тараққийпарвар давлатнинг бош вазифасидир. Миллий мустақиллик йилларида ҳукуматимизнинг илм-фан аҳлларини ижтимоий ҳимоялаш, фан тараққиёти учун кенг имкониятлар яратиш борасида амалга ошираётган тадбирлари ҳақида кўп ва хўп ёзиш мумкин. Бироқ, илм-фан, таълим-тарбия соҳасида тўпланиб қолган муаммолар олимлар ҳақида давлат томонидан қилинаётган ғамхўрликларнинг ўзи етарли эмаслигини, илм-фанни ривожлантириш, янги илмий кашфиётларни рағбатлантириш учун нодавлат ташкилотлар, кўнгилли уюшмалар, турли жамғармалар фаолиятини кучайтиришни тақозо этяпти. Илмий қадриятлар комил инсон шахсини шакллантиришнинг муҳим олмили бўлиб, айниқса, таълим жараёнида кишиларда ижобий ахлоқий сифат ва фазилатлар шаклланади.

Таълим инсон табиатини тузатади ва уни яхшилайди. Афлотун ўз замондошлари хулқ-атвори ёмон эканлигини кўриб барча ижтимоий ишлардан воз кечган ва шундай деб ёзган эди: “Ватан билан муносабатда бўлишда худди ота-оналарга бўлган каби муносабатда бўлиш керак, яъни унга зулм ўтказиш эмас, балки уни кўндириш, уни ҳақорат қилиш эмас, балки илтимос қилиш лозим”. Олимлар ўз манфаатлари ва хавфсизликларини ватан манфаатлари ва шарафи йўлида қурбон қиладилар. Бошқача бўлиши ҳам мумкин эмас. Чунки фан инсон ақлининг мустаҳкам эмаслигини, бахтнинг беқарорлиги ва ўзгарувчанлигини, руҳ афзаллиги ва ўз мажбуриятлари ахамиятини ҳаққоний тушуниш билан қуроллантиради. Шунинг учун ҳам улар “ман ўзимга нима фойда келтирдим” деган принцип билан эмас, балки “мен сенга қандай фойда келтирдим” деган принципга амал қилиб яшайдилар.

Таълим инсон табиатини улуғвор қилади. Илмли кишилар салобатли ва сирли бўлиб кўринадилар. Албатта, бундай муҳташам кошоналар уни яратган кишилардан узоқроқ яшаши мумкин. Бироқ абадий эмасдир. Ахир, Фаробий, Беруний, Ибн Сино, Навоий, Бобур асарлари неча асрлардан бери яшаяпти-ку! Бу давр ичида қанча саройлар, тож – тахтлар, ибодатхоналар, қасрлар йўқ бўлиб кетмади. Буюк даҳоларнинг ғоялари китобларда абадий

яшайди, улар вақт синовларига сабот билан бардош беради. Улар мангу янгиланиш қудратига эгадирлар. Бунинг боиси шундаки, илмий қадриятлар умуминсоний ахлоқий қадриятлар (ҳалоллик, ростгўйлик) билан боғлиқдир. Самарали илмий – ижодий фаолиятни ахлоқий қадриятларсиз тасаввур этиб бўлмайди. Фақат фан учунгина хос бўлган қадриятлар ичида илмий ҳақиқатни излаш, уни ҳимоя қилиш алоҳида ўрин тутади. Аристотелнинг шу хусусдаги "Платон менинг дўстим, бироқ ундан ҳам ҳақиқат қадрлироқ" ибораси машҳурдир. Бунинг маъноси шундаки, олим ҳақиқатга интилар экан, ўзининг субъектив майл-истакларидан юқори туриши керак.

Адабиётлар:

1. Рўзиев, А. (2020). АМИР ТЕМУР ҚАРАШЛАРИДА СИЁСИЙ-ҲУҚУҚИЙ ҒОЯЛАРНИНГ АКС ЭТИШИ. Научно-просветительский журнал" Наставник".
2. Kulmatov, P. M., & Tajibaev, M. A. (2022). SYNERGETIC AAS A FACTOR FOR THE DEVELOPMENT OF MODERN SCIENCE. Scientific progress, 3(3), 925-929.
3. Tajibaev, M. A., & Kholbekova, M. U. (2022). SYNERGETIC METHODOLOGY SERVES HUMANITY. Scientific progress, 3(3), 934-937.
4. Abdurashidovich, T. M. (2022). YOSHLARDA SINERGETIK DUNYOQARASHNI SHAKLLANTIRISH OMILLARI. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(3), 203-207.
5. Abdurashidovich, T. M. (2022). SINERGETIKA-YOSHLARNING YANGI DUNYOQARASHINI SHAKLLANTIRUVCHI BILIM SIFATIDA. FAN, TA'LIM, MADANIYAT VA INNOVATSIYA, 1(2), 69-73.
6. Azimova, S. Y., & Tojiboev, M. A. (2021). IMPROVEMENT OF SPIRITUAL AND EDUCATIONAL WORK IT IS OUR IMPORTANT TASK. Scientific progress, 2(5), 544-548.
7. Melikuziyevich, K. P., & Abdurashidovich, T. M. (2021). State and community management-as a priority task in the appeal. INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION, 2(2), 133-136.
8. Quvanovich, R. Q. (2021). The Moral Importance of Humanity and Patriotism in Chistiya and Kubraviya. International Journal on Orange Technologies, 3(3), 98-103.
9. Ibodullaevich, K. K., & Mahmatkobil, O. (2022). "Electronic System"-Estonia Is Among the Leaders in The Fight Against Corruption. Eurasian Journal of Humanities and Social Sciences, 5, 152-155.
10. Ibodullaevich, K. K. (2022, April). In the fight against justice and corruption as an effective road. In E Conference Zone (pp. 370-372).

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ВЛИЯНИЕ НЕКОТОРЫХ ФАКТОРОВ НА ЭКОНОМИЧЕСКИЙ РОСТ В ПРИМЕРЕ СТРАНЫ СЕРБИЯ

Аннотация. В данной статье оценивается влияние либерализации торговли на экономический рост Республики Сербия (РС). Цель исследования – доказать гипотезу о том, что либерализация торговли и экспортоориентация положительно скажется на росте ВВП. РС имеет характерно небольшую и открытую экономику.

Степень и характер связей между наблюдаемыми переменными определяли по средства регрессионного анализа. Регрессионный анализ показывает, что существует положительная связь между общим объемом торговли и ростом ВВП. Кроме того, существует заметная положительная корреляция между экспортом и ВВП, то есть рост экспорта способствует росту ВВП. Дефицит внешней торговли сохраняется в отрицательной корреляции с ВВП. Наконец, регрессионный анализ указывает на связь между экономическим ростом Республики Сербия и открытостью ее экономики. Однако бесконтрольное открытие и доступ к иностранной конкурентоспособности также могут вызвать проблемы, которые в некоторых случаях приводят к долгосрочной макроэкономической нестабильности.

Ключевые слова: Либерализация, рост, торговля, экспорт, малая экономика, Республика Сербская

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INFLUENCE OF SOME FACTORS ON ECONOMIC GROWTH IN THE EXAMPLE OF THE COUNTRY OF SERBIA

Abstract. This article assesses the impact of trade liberalization on the economic growth of the Republic of Serbia (RS). The purpose of the study is to prove the hypothesis that trade liberalization and export orientation will have a positive impact on GDP growth. The RS has a characteristically small and open economy.

The degree and nature of relationships between the observed variables were determined using regression analysis. Regression analysis shows that there is a positive relationship between total trade volume and GDP growth. In addition, there is a noticeable positive correlation between exports and GDP, that is, export growth contributes to GDP growth. The foreign trade deficit remains in negative correlation with GDP. Finally, regression analysis indicates a link between the economic growth of the Republic of Serbia and the openness of its economy. However, uncontrolled opening and access to foreign competitiveness can also cause problems, which in some cases lead to long-term macroeconomic instability.

Keywords: Liberalisation, growth, trade, export, small economies, Republic of Srpska.

Введение

Республика Сербия (РС) и Федерация Боснии и Герцеговины составляют государственный союз Боснии и Герцеговины (БиГ). Как и другие страны Балканского полуострова, она вовлечена в процесс европейской интеграции. На пути к Европейскому Союзу (ЕС) существует согласие политики, общественности и граждан.

Страна находится в процессе стабилизации и ассоциации (SAP) в рамках Соглашения о стабилизации и ассоциации (SAA). В ССА и

приложениях к нему значительную роль играет либерализация торговли и создание зоны свободной торговли между БиГ и ЕС.

Возникает вопрос: в какой степени либерализация торговли влияет на малые экономики, такие как РС и БиГ? Трудно найти общее и международно признанное определение маленькой страны, но существуют определенные критерии, стандарты и определения малых стран.

По мнению Всемирного банка и Международного валютного фонда, малыми странами являются страны с населением менее 1,5 миллиона человек. Соответственно, БиГ не является маленькой страной, тогда как РС как субъект удовлетворяет критерию маленькой страны. Что касается Балканского региона, этому критерию соответствует и Черногория. Аналогичным образом было принято определение, предложенное Саймоном Кузнецом, согласно которому критерием малой страны является население менее 10 миллионов человек. После появления множества стран Европы и мира упомянутый предел в 10 миллионов стал также под вопросом. В этом отношении в 2017 году насчитывалось 144 малых страны.

Согласно этому определению, большинство стран Западных Балкан (ВБ) на самом деле являются небольшими странами.

1. Исследования

Рост торговли и ориентация на экспорт оказывают положительное влияние на производство, экономический рост и благосостояние. Внешнеэкономический и экономический баланс взаимозависимы. Балканские страны видят свой шанс на более быстрый экономический рост и развитие в экономической либерализации и единении с ЕС, считая Европейский Союз более безопасным экономическим и социальным «убежищем». Европейская экономическая интеграция также имеет геополитическое измерение, но, тем не менее, она направлена на экономические изменения. Помимо выгод от внутриторгового обмена, будущие государства-члены видят преимущества специализации, эффекты эффекта масштаба, а также более легкий доступ к мировому рынку товаров и финансовых услуг и т. д. Кроме того, европейские фонды являются привлекательными источниками благоприятного финансирования развития.

Хорошим примером является Словения, которая либерализовала торговлю, стабилизировала экономику и достигла среднего уровня развития ЕС. Это пример/модель того, как малые экономики могут использовать свой потенциал и экспортировать их как самое мощное экономическое оружие. Сам процесс европейской интеграции предполагает изменение национального законодательства и его гармонизацию с правовым наследием ЕС. Таким образом, страны-кандидаты быстро либерализуют торговлю, дерегулируют рынки и снижают роль государства. Также важным в этом отношении является CEFTA – соглашение, которое подписали многие европейские государства.

Экономики стран-кандидатов впервые сталкиваются с радикальной либерализацией в этой зоне свободной торговли. Благодаря CEFTA страны Западных Балкан ускорили рост торгового обмена.

Либерализация торгового обмена оказывает большое влияние на экономику каждой страны, а экспортная ориентация стала требованием для более быстрого экономического роста. Экспортно-ориентированные компании порождают более сильную внутреннюю конкуренцию. Многочисленные исследования подтвердили положительную корреляцию между экспортом (и торговым обменом) как независимой переменной и темпами роста экономики малых стран как зависимой переменной.

Экономическая либерализация также имеет свои ограничения. Малые страны имеют высокие издержки государственного сектора и более высокие средние издержки в частном секторе. Аналогичным образом затрудняется доступ к мировым финансовым рынкам и т. д. Правительства этих стран часто «реанимируют» экономики, запускают экономические циклы, тем самым влияя на инвестиционную активность. Малые страны используют механизмы адаптации к внешним потрясениям, несмотря на отсутствие у них всех необходимых инструментов. И вообще, в ходе разработки эффективной денежно-кредитной, фискальной и других политик возникают определенные ограничения, поэтому правительства малых стран часто прибегают к либерализации торговли, несмотря на все риски такой политики.

Принимая во внимание все факты, либерализация торговли и экспортная ориентация стали основой для более быстрого экономического роста. Экспорт все чаще сопровождается «скрытыми» стимулами и другими формами поддержки. За счет оптимального выбора продукции компании укрепляют свои позиции на мировых рынках. Либерализация и экспортная ориентация формируют стратегию достижения более быстрого роста, макроэкономической стабильности и роста экономического благосостояния.

2. Методология исследования

Предметом данной статьи является анализ влияния торгового обмена и экспорта на экономический рост Республики Сербия. Связь между либерализацией торговли и тенденциями ВВП будет проанализирована с помощью простого линейного регрессионного анализа. При этом внешнеторговый обмен, экспорт и внешнеторговый баланс будут являться объясняющими переменными, а ВВП – зависимой переменной, то есть:

$$Y = f(T, X) \quad (1)$$

где: Y – ВВП; T - объем внешнеторгового обмена; X – экспорт. Простая модель линейной регрессии имеет следующий вид:

$$Yi = \beta 0 + \beta 1 \cdot xi + \varepsilon i \ (i = 1,..., n) \quad (2)$$

где: Yi - i-зависимая переменная; xi - i-независимая (объясняющая) переменная; β0, β1 – оцениваемые параметры регрессии; εi – случайная ошибка; n - размер базового набора.

Использована оценочная функция простой линейной регрессии на основе выборки:

$$\hat{Y}i = b0 + b1xi \quad (3)$$

где: $\hat{Y}i$ – значение зависимой переменной на наиболее скорректированной линии регрессии; b0 и b1 – оценки неизвестных параметров регрессии базового набора.

Результаты регрессионного анализа показывают степень влияния либерализации торговли на рост ВВП. Регрессионный анализ – это стандартная статистическая процедура (метод наименьших квадратов/МНК).

Этот метод прост и надежен (например, взаимно исключает положительные и отрицательные ошибки). С целью количественного определения приблизительно линейной связи строится наилучшее направление представления наблюдаемых переменных. Анализ также содержит стандартное отклонение, среднее, максимальное и минимальное значения, асимметрию распределения и меру тенденции распределения рядов. Регрессионный анализ обеспечивает оценку статистической значимости следующих переменных: вероятность (p), t - статистика, стандартная ошибка оценки и коэффициент детерминации R2.

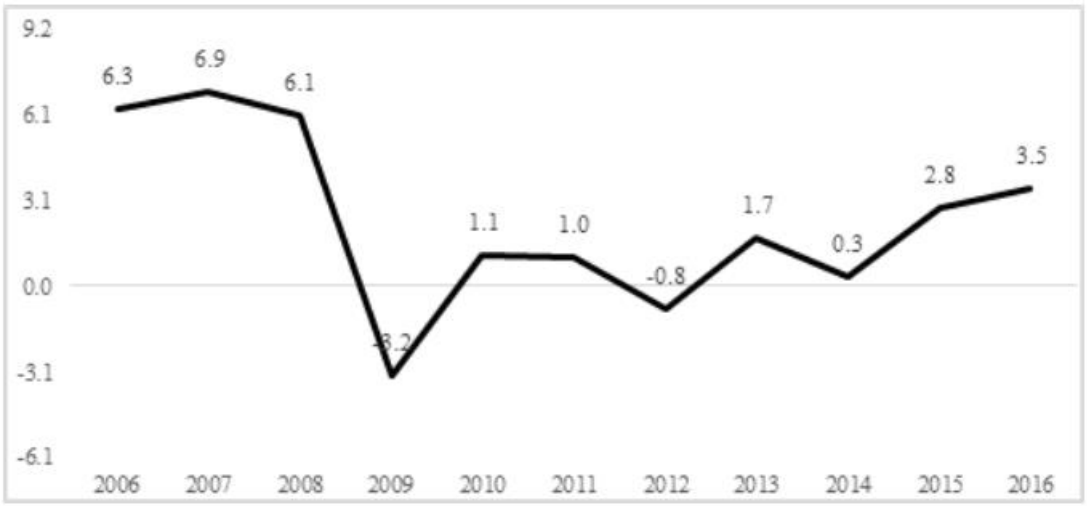
Статистическую базу составляют данные Республиканского института статистики РС (период с 2005 по 2018 год). Этот относительно короткий временной интервал (13 лет) в регрессионной модели является результатом ограниченной доступности источников данных для наблюдаемых переменных.

3. Либерализация торговли и Республика Сербия, экономический рост: статистический анализ.

3.1. Анализ тенденции ВВП

В результате кризиса 2008 года в Республике Сербия наблюдаются неравные и более низкие темпы роста. Помимо снижения темпов роста, неблагоприятными являются и тенденции структуры ВВП. В 2016 году наибольшую долю в ВВП приходится на торговлю, промышленность, государственное управление, сельское хозяйство, лесное хозяйство и т.д. Наибольшее влияние на экономический рост оказывают производство и поставки электроэнергии, за ними следуют сельское хозяйство, лесное хозяйство, промышленность и гражданское строительство. Рост замедляется сектором информационных и коммуникационных технологий, а также общественными услугами (администрирование, вспомогательная сервисная деятельность и др.).

Тенденция темпов роста реального ВВП Республики Сербской (2006–2017 гг.)



До кризиса 2008 года Республика Сербская демонстрировала высокие темпы роста (он упал с 6,3% в 2008 году до -0,3% в 2009 году). В Евросоюзе зафиксировано падение на 4,4%, такая же ситуация и в других странах, с которыми РС и БиГ имеют наибольшее сотрудничество: Германия - 5,6%, Италия -5,5%, Австрия -3, 8%, Хорватия -7,4% и Сербия -3,1%. Эти негативные тенденции замедляют рост ВВП и торговый обмен, и только в 2015 и 2016 годах наступает восстановление (2,8% и 3,5%), связано со значительным ростом экспорта (9,8% в 2016 году).

3.2. Анализ внешнеторговой валюты

Либерализация внешней торговли важна для открытых, небольших и слабых экономик. Доля внешней торговли в мировом ВВП увеличивается, поскольку обмен растет быстрее производства. В следующей таблице показана доля экспорта и импорта в ВВП Республики Сербской.

Таблица 1. Доля импорта и экспорта товаров в ВВП Республики Сербской (ВВП = 100)

Years	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Export of goods and services	29	26	20	22	23	28	30	30	28	30	35	35
Import of goods and services	45	49	43	49	53	52	52	55	47	46	49	49

Источник: анализ авторов (данные получены из RIS RS, CB B&H, AS B&H, FIS) Экспорт товаров Республики Сербия составляет 20-35% ВВП. И хотя эта доля колеблется, стоимость экспорта указывает на резервы и потенциальные возможности роста. Существуют условия для того, чтобы Республика Сербия сосредоточилась на экспорте. Для этого нужны отрасли, конкурентоспособные как на местном, так и на мировом рынке. С другой стороны, чрезмерный импорт ставит под угрозу производство, которое является недостаточным, неэластичным или неконкурентоспособным даже на местном рынке.

Внешнеторговый обмен Республики Сербия представлен в следующей таблице.

Таблица 2. Внешняя торговля товарами Республики Сербской, 2005-2018 гг. (млн BAM/ %4)

Years	Export	Import	Volume	Balance	Export %	Import %	Volume %	Coverage %
2005.	1.131	2.953	4.084	-1.822	4,1	9,3	15,2	38,30%
2006.	1.540	2.760	4.300	-1.220	36,2	-6,5	5,3	55,80%
2007.	1.672	3.348	5.020	-1.676	8,5	21,3	16,7	49,90%
2008.	1.922	4.147	6.068	-2.225	15	23,9	20,9	46,30%
2009.	1.673	3.568	5.241	-1.894	-13	-14	-13,6	46,90%
2010.	2.178	4.053	6.231	-1.875	30,2	13,6	18,9	53,70%
2011.	2.561	4.578	7.138	-2.017	17,6	12,9	14,6	55,90%
2012.	2.375	4.488	6.862	-2.113	-7,3	-2	-3,9	52,90%
2013.	2.604	4.558	7.162	-1.954	9,7	1,6	4,4	57,10%
2014.	2.692	4.946	7.638	-2.254	3,4	8,5	6,7	54,40%
2015.	2.614	4.369	6.983	-1.755	-2,9	-11,7	-8,6	59,80%
2016.	2.869	4.427	7.296	-1.558	9,8	1,3	4,5	64,80%
2017.	3.476	4.900	8.376	-1.424	21,2	10,7	14,8	71%
2018.	3.742	5.222	8.964	-1.480	7,6	6,6	7,02	71,70%

Источник: Институт статистики Республики Сербской.

В таблице показан рост всех благоприятных показателей, кроме валютного баланса со странами зарубежья, который колеблется в период 2005-2018 гг. Средний рост экспорта на 7,6% в 2018 году и импорта на 6,6% свидетельствует о продолжении положительных тенденций. В период с 2005 по 2018 годы экспорт и импорт следовали динамике ВВП. По итогам периода, то есть в 2018 году, рост ВВП на 3,9% сопровождается ростом экспорта на 7,7%. Охват импорта экспортом составляет 71,7%. Из данных можно сделать вывод, что экономика Республики Сербия является открытой, поскольку очевидно, что объем и направление торгового обмена с миром влияют на уровень ВВП.

3.3. Регрессионный анализ внешнеторгового обмена и экономического роста Республики Сербия

В этой части оценивается связь между внешнеторговым обменом как объясняющей переменной и ростом ВВП как зависимой переменной в

модели. Из таблицы 3 видно, что коэффициент детерминации равен 0,80. Таким образом, 80% колебаний ВВП объясняется изменением внешнеторгового обмена со странами зарубежья. Результаты F-теста и вероятность ниже 1% служат аргументами в пользу значимости переменной-предиктора для объяснения темпов роста, хотя при других обстоятельствах они остаются неизменными. Здесь следует отметить, что влияние других факторов на экономический рост было исключено из данного анализа.

Таблица 3. Результаты простого регресионного анализа между внешнеторговым оборотом и ВВП

Variable	Coefficient	Std. Error	t-Statistic	Prob.
b0	6641152	322036.8	20.62234	0.0000
Foreign trade exchange	0.224666	0.039010	5.759107	0.0004
R2	0.805671	Mean dependent variable	8479473.	
Adjusted R2	0.781380	S.D. dependent varable	288333.8	
S.E. of regression	134815.7			
Sum squared resid	1.45E+11			
Log likelihood	-131.1903			
F-statistic	33.16731			
Prob(F-statistic)	0.000425			

Простое уравнение регрессии: Y = 6,641,152 + 0,224666·(торговый обмен) показывает, что изменение внешнеторгового обмена на 1 БАМ (официальной валютой БиГ и РС является конвертируемая марка (БАМ)) приводит к изменению ВВП на 0,225 БАМ. Таким образом, наблюдается прямая линейная связь между внешнеторговым обменом и ВВП, но при остальных условиях она остается неизменной, так как другие факторы, которые могут привести к изменению валового внутреннего продукта, не учтены.

Далее (таблица 4) представлены результаты простой линейной регрессии экспорта как объясняющей переменной и ВВП как зависимой переменной. Коэффициент детерминации составляет 0,65, что означает, что 65% изменений ВВП определяется изменениями экспорта, но без учета других факторов, которые могут повлиять на изменения ВВП. Результаты F-теста (14,86) и вероятность ниже 1% служат аргументами в пользу значимости экспорта в объяснении темпов роста ВВП, хотя остальные условия остаются неизменными.

Таблица 4. Результаты простого регрессионного анализа – экспорт и ВВП

Variable	Coefficient	Std. Error	t-Statistic	Prob.
b0	6990155.	390590.3	17.89639	0.0000
export	0.441044	0.114421	3.854569	0.0048
R2	0.650009	Mean dependent variable	8479473.	
Adjusted R2	0.606260	S.D. dependent varable	288333.8	
S.E. of regression	180925.8			
Sum squared resid	2.62E+11			
F-statistic	14.85771			
Prob(F-statistic)	0.004846			

Source: Author's calculations

Уравнение регрессии в этом случае выглядит следующим образом: Y = 6.990.155.000 + 0,44·(Экспорт)

И показывает, что изменения экспорта на 1 BAM приводят к изменению ВВП на 0,444 BAM. Таким образом, можно сделать вывод, что существует прямая линейная связь между экспортом и ВВП, то есть рост экспорта влияет на рост ВВП (другие факторы, которые могли бы привести к изменению зависимой переменной, не были включены в модель).

В таблице 5 представлены результаты простой линейной регрессии внешнеторгового дефицита в качестве предикторной переменной и ВВП в качестве зависимой переменной. Коэффициент детерминации показывает, что 52% изменений ВВП определяются изменениями дефицита, но без учета других факторов, которые могут повлиять на ВВП. Результаты F-теста (8,55) и вероятность ниже 5% служат аргументами.

О значении объясняющей переменной – внешнеторгового дефицита – в объяснении темпов экономического роста (при прочих неизменных условиях).

Таблица 5. Результаты простого регрессионного анализа – дефицит внешней торговли и ВВП

Variable	Coefficient	Std. Error	t-Statistic	Prob.
b0	7323061.	401055.1	18.25949	0.0000
Trade deficit	-0.809313	0.276706	-2.924810	0.0191
R2	0.516748	Mean dependent variable	8479473	
Adjusted R2	0.456342	S.D. dependent varable	288333.8	
S.E. of regression	212597.7			
Sum squared resid	3.62E+11			
Log likelihood	-135.7452			
F-statistic	8.554516			
Prob(F-statistic)	0.019150			

Source: Authors' calculations

Из уравнения регрессии оно выглядит следующим образом: Y = 7,323,061,000 - 0,809313· (Торговый дефицит)

Можно сделать вывод, что изменения торгового дефицита на 1 BAM изменяют ВВП примерно на 0,809 BAM.

Следует отметить, что эта связь является отрицательной, то есть изменения ВВП находятся в корреляции чрезвычайно сильной интенсивности с изменениями переменной (Дефицит), но с обратным направлением.

Заключение

На развитие малых стран влияют многочисленные факторы. Глобально конкурентоспособная экономическая структура и экспортная ориентация являются основой развития наиболее динамичных экономик.

Помимо многочисленных факторов, таких как капитал и технологический прогресс, внешнеторговый обмен также может иметь решающее значение для ускорения экономического роста. Известно, что сокращение единицы затраты, рост эффекта масштаба и т. д. могут повысить производительность и конкурентоспособность.

Это, безусловно, предпосылки для более быстрого роста ВВП. Таким образом, экспорт, импорт и торговый баланс имеют решающее значение для роста ВВП, независимо от размера экономики и/или ее структуры.

В долгосрочной перспективе Республика Сербия фиксирует отрицательный обмен со странами зарубежья. У него отрицательный баланс не только с ЕС и CEFTA, но и с остальным миром.

Однако, несмотря на этот огромный дефицит в обмене с миром (и ЕС), Республика Сербия фиксирует непрерывный рост экспорта, который растет быстрее, чем импорт, а также быстрее роста ВВП.

Был поднят вопрос: в какой степени внешнеторговый обмен влияет на рост ВВП Республики Сербия? Регрессионный анализ указывает на

положительную корреляцию между общим объемом торгового обмена и ростом ВВП. Кроме того, существует заметная положительная корреляция между экспортом как независимой переменной и ВВП как зависимой переменной, то есть рост экспорта способствует росту ВВП. Дефицит внешней торговли находится в отрицательной (обратной) корреляции с ВВП; следовательно, дефицит внешней торговли замедляет рост ВВП. Наконец, регрессионный анализ указывает на связь между экономическим ростом Республики Сербия и открытостью ее экономики.

Либерализация торговли, близость к Европейскому Союзу, торговля с CEFTA и т. д. могут принести определенные преимущества, прежде всего с точки зрения увеличения торговли и ускорения экономического роста. Однако чрезмерная открытость и подверженность иностранной конкуренции могут вызвать некоторые проблемы, которые при определенных обстоятельствах могут также привести к долгосрочной макроэкономической нестабильности.

Использованные источники:

[1] Баласса, Б. (1965). Либерализация торговли и выявленные сравнительные преимущества. Манчестерская школа экономических и социальных исследований. Том 33: 99–123.

[2] Баласса, Б. (1967). Либерализация торговли между индустриальными странами. Нью-Йорк: Мак. Грау-Хилл.

[3] Бертомье К., Чинголани М. и Ри А. (2016). Инвестиции для роста и развития на Западных Балканах. Исследовательский проект STAREBEI, Институт EIB, Университет Ниццы – София Антиполис (Франция).

[4] Бутерин В.; Шкаре М., Бутерин Д. (2017). Макроэкономическая модель влияния институциональных реформ на экономический рост новых членов ЕС и Республики Хорватия. Экономические исследования – Экономическая истраживања, 30, 1: 1572–1593.

[5] Вукадинович, Р. (2004). Как укладывать дома предложения по праву Европы. Крагуевац: Правни факультет, Центр за право Европейского университета.

[6] Вукадинович Р., Вукадинович Маркович Дж. (2016). Вход в институты и права Европейского университета. Крагуевац: Дружество за европейским правом.

[7] Лопандич, Д. (2010). Мужчины и средние земли у международных односим и у Европейской унии.
Международные проблемы, 62(1):79–112.

[8] Кроули, П. (2002). До и после ЕВС: уроки и перспективы на будущее. Лондон: Раутледж.

[9] Кузнец С. (1960). Экономический рост малых стран, В: Робинсон, Э.А.Г. (ред.). Экономические последствия размера наций. Материалы конференции Международной экономической ассоциации. Издатель Пэлгрейв Макмиллан, Великобритания, 14–32. ISBN 978-1-349-15212-4,

ISBN 978-1-349-15210-0 (электронная книга). DOI: 10.1007/978-1-349-15210-0.
[10] Махмуди М., Махмуди Э. (2016). Прямые иностранные инвестиции, экспорт и экономический рост: данные двух групп развивающихся стран. Экономические исследования – Ekonomska istraživanja, 29, 1: 938–949.
[11] Мано-Бакалинов, В. (2016). Либерализация торговли и экономический рост в Македонии. Юго-Восточноевропейский журнал экономики и бизнеса. 11, 2: 48–60.
[12] Мардас, Д., Никас, Ч. (2008). Экономическая интеграция и внутриотраслевая торговля между Европейским сообществом и странами Западных Балкан. Обзор исследований переходного периода, 15: 511–523.
[13] Мид, Дж. (1955). Теория таможенных союзов. Амстердам: Северная Голландия.
[14] Мехик, Э.; Силайджич С. и Бабич-Ходович В. (2013). Влияние ПИИ на экономический рост: некоторые данные из Юго-Восточной Европы. Финансы и торговля развивающихся рынков, 49, 5–20.
[15] Обстфельд М., Кругман П. (2009). Международная экономика – теория и политика (Превод: Н. Стоянович и М. Гогич). Белград: Датастатус.
[16] Перец, Д.; Румман Ф., Элиавони К. и Оуэн А. (2001). Малые государства в мировой экономике. Вашингтон: Всемирный банк.
[17] Пере, Э. (2015). Влияние надлежащего управления на экономическое развитие стран Западных Балкан. Европейский журнал правительства и экономики, 4: 25–45.
[18] Петрески, М. (2013). Анализ торговли Юго-Восточной Европы: роль эндогенной CEFTA-2006? Финансы и торговля развивающихся рынков. 49: 26–44.
[19] Попович, Г. (2016). Экономика Европейской единой. Источно Ново Сараево: Завод за джбенике и наставна средств.
[20] Сиддикиа Д.А. и Ахмедб К.М. (2013). Влияние институтов на экономический рост:
Глобальный анализ, основанный на динамической панельной оценке GMM. структурные изменения и экономическая динамика, 24: 18–33.
[21] Станивукович, М., Джаич, С. (2008) Споразум о стабилизации и дружбе и прелазни торговый спор Србие и европейских заедниц - правильное действие и значение. Нови Сад: Зборник радова Правног
факультета. 42, 1–2: 391–412.
[22] Стиглиц Дж. и Чарльтон А. (2005). Праведна торговина за све (Превод: И. Гргурич). Загреб: Масмедиа.
[23] Прасад Э., Рогофф К., Вэй Ш. – Дж. и Козе А. (2003). Влияние финансовой глобализации на развивающиеся страны: некоторые эмпирические данные. Периодический доклад МВФ №. 220.
https://www.imf.org/external/np/apd/seminars/2003/newdelhi/prasad.pdf.

[24] Мировые метры. (2017). Страны мира по населению (2017 г.). www.worldometers.info/world-population/population-by-country.

УДК: 616.147.3-007.64(616.89-02-089)

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МОНИТОРИНГ СОСТАВА КРОВИ ПРИ ОЦЕНКЕ СОСТОЯНИЯ НИЖНИХ КОНЕЧНОСТЕЙ У ПАЦИЕНТОВ С ХРОНИЧЕСКИМ ЗАТЕМНЕНИЕМ ВЕН

Резюме. Представлены результаты обследования и лечения 126 больных с хронической венозной недостаточностью нижних конечностей, осложненных трофическими язвами. У больных с хронической венозной недостаточностью нижних конечностей имеются значительные нарушения микрогемо-лимфоциркуляции в конечности в виде вено-и лимфостаза. Включение лимфотропной терапии в традиционное лечение быстрее восстанавливает микроциркуляцию, сроки очищения, грануляции и эпитализации трофических язв.

Ключевые слова: трофическая язва, венозная недостаточность, нижная конечность.

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MONITORING OF BLOOD COMPOSITION IN ASSESSING THE CONDITION OF THE LOWER EXTREMITIES IN PATIENTS WITH CHRONIC VENOUS DARKENING

Resume. The results of examination and treatment of 126 patients with chronic venous insufficiency of the lower extremities complicated by trophic ulcers are presented. In patients with chronic venous insufficiency of the lower extremities, there are significant violations of microhemo-lymphocirculation in the extremity in the form of venous and lymphostasis. The inclusion of lymphotropic therapy in traditional treatment quickly restores microcirculation, the timing of the clearing, granulation and epithelialization of trophic ulcers.

Key words: trophic ulcer, venous insufficiency, lower limb.

Введение. Лечение трофических язв далеко не всегда заканчивается полным заживлением, даже при длительном лечении, а если и удается добиться полной эпителизации, они часто рецидивируют. При хронической венозной недостаточности нижних конечностей в результате венозной гипертензии, в связи с нарушением оттока по магистральным сосудам,

происходят значительные изменения всех звеньев микроциркуляции: сосудистого, лимфатического и тканевого [2], [4], [5], [10].

Нарушения доставки и утилизации белков, электролитов и кислорода приводят к расстройству питания клеток и дистрофическим изменениям тканей [6], [7], [9]. Микроциркуляторному руслу отводят основную роль в поддержании циркуляторного гомеостаза [1], [3] и в этом участвуют и лимфатические сосуды, являющиеся важным звеном функциональной и структурной организации микроциркуляторной системы. Таким образом, в этих условиях значение лимфатической системы с ее дренирующей функцией в патогенезе заболевания чрезвычайно важно [8], [10].

Материал и методы исследования. Нами изучены результаты лечения 126 больного с трофическими язвами нижних конечностей в возрасте от 27 до 72 лет. Из них у 87 диагностирована посттромбофлебитическая болезнь, а у 39 - варикозная болезнь. Продолжительность ранее проводимого лечения составляла от нескольких месяцев до 14 лет и более. В связи с длительным, зачастую эмпирическим местным лечением трофических язв более чем у 50% больных имелась сенсибилизация к ранее применяемым антибиотикам и другим лекарственным препаратам, и мазям.

При изучении микроциркуляции исследовали транскапиллярный обмен продуктов метаболизма - белков, электролитов и кислорода. Гистогематическую проницаемость оценивали по вено-венозному градиенту крови, взятой из локтевой вены и патологически измененной вены нижней конечности. Оценивали содержание капиллярного фильтра, потерю белка и нарушения электролитного баланса.

Уровень напряжения кислорода в ткани зависит от условий кровоснабжения и активности окислительно-восстановительных процессов. Напряжение кислорода в ткани оценивали методом чрескожной контактной полярографии, выполненной на аппарате ТСМ-2 радиометр (Дания) с контактным датчиком типа Кларка. При исследовании датчик устанавливали на среднюю треть медиальной поверхности голени или в области самой язвы.

Состояние микроциркуляторного русла определяли радионуклидным методом. О состоянии функционирующих капилляров судили по очищению тканей от введенного радиоактивного вещества. В качестве радионуклида использовали технефит, меченый технецием 99 ТС. Исследование выполняли на гамма камере МВ 9200 (Венгрия) с ЭВМ «Microsegans». Введение радионуклида производили в 1-й межпальцевый промежуток.

По методу лечения все больные были разделены на 2 группы: 1-ю группу (основную) составил 81 пациент, которым в комплексном лечении проводили лимфотропную терапию; во 2-ю группу (группу сравнения) вошли 45 больных, которые получали традиционное лечение. Лимфотропную терапию выполняли через 1-й межпальцевой промежуток и

через медиальную часть пяточной области. Для лимфотропной терапии использовали: лидазу, лазикс и гепарин. С целью иммуностимуляции использовали иммуномодулин (1 мл 0,01% раствора). В зависимости от тяжести процесса на курс лечения выполняли 7-11 сеансов лимфотропной терапии, при этом конечность бинтовали эластическим бинтом. У 19-ти больных с наличием дерматита, экземы и целлюлита дополнительно проводили лимфотропную антибиотикотерапию.

Результаты и обсуждение. Хорошие результаты лечения отмечены у 61 (76%) больных основной группы, у которых трофические язвы эпителизировались в течение 14 дней. У остальных больных размер трофической язвы уменьшился на 50%. В группе сравнения хорошие результаты достигнуты у 28 пациентов (64%).

Изучение транскапиллярного обмена у больных основной группы с посттромбофлебитическими трофическими язвами выявило существенные нарушения, характеризующиеся достоверным возрастанием количества капиллярного фильтра до 14,1 ±0,4 мл, увеличением потери белка до 4,88±0,5% и снижением содержание натрия в кровотоке до 136±0,5 ммоль/л. У больных с варикозной болезнью, осложненной трофическими язвами, выявлено увеличение капиллярного фильтра до 8,12± 0,31 мл и повышение потери белка до 2,96±0,2%, а содержание натрия составило 138±0,7 ммоль/л. Все это свидетельствует о значительных нарушениях доставки и утилизации белков и электролитов, что в свою очередь указывает на глубокие изменения в тканях у данной группы больных.

Таблица №1.

Состояние транскапилярной проницаемости у больных с хронической венозной недостаточностью осложненой трофическими язвами до и после лимфотропной терапии (n-48)

Клин.формы обсл.гр.	к-во кап.фильтр. (мл)		потер.белка (%)		К-во натрия м.моль/л	
	До леч	После леч	До леч	После леч.	до леч	После леч.
Посттромбофлебитические трофические язвы	14,1±0,4	6,8±0,4 P<0,001	4,88±0,5	3,1±0,7 P<0,1	136±0,5	144±0,3 P<0,01
Варикозные трофические язвы	8,12±0,31	5,2±0,8 P<0,01	2,96±0,24	2,24±0,15 P<0,1	138±0,7	145±0,35 P<0,01
Контр.гр. Здор.лиц (n-22)	2,05±0,11		2,08±0,12		148±0,14	

После проведенного лечения отмечена постепенная нормализация показателей транскапиллярного обмена. Количество капиллярного фильтра у больных с посттромбофлебитическими трофическими язвами достоверно снизилось до 6,8±0,4 мл, у больных с варикозными трофическими язвами -

до 5,2±0,8 мл, что более чем в 2 раза ниже аналогичных показателей до лечения. Также уменьшилась потеря белка - она равнялась соответственно 3,1±0,7% и 2,24±0,15%. Количество натрия у больных с посттромбофлебитическими трофическими язвами колебалось в пределах 144±0,3 ммоль/л, а у больных с варикозными трофическими язвами – 145±0,35 ммоль/л. У пациентов группы сравнения, которым проводили традиционное лечение, количество капиллярного фильтра и потеря белка увеличивались в среднем в 1,2 раза, а количество натрия существенно не менялось.

По мере прогрессирования расстройства микроциркуляции ухудшается трофическое обеспечение тканей, о чем свидетельствуют имеющиеся значительные нарушения доставки и утилизации в них кислорода. При исследовании уровня тканевого напряжения кислорода (TcPO2) у больных с посттромбофлебитическими язвами он снижался и варьировал в пределах от 28 до 46 мм рт ст (у здоровых - 57 мм рт ст). У больных с варикозными трофическими язвами 39-47мм.рт.ст.

Прирост уровня TcPO2 после кислородной нагрузки составлял у больных с постромбофлебитическими язвами от 66 до 73% в группе с варикозными язвами72-80 % (у здоровых - 94 - 95%). Кислородная емкость тканей снизилась соответственно 16,2 - 18,5 мм рт. ст. и 23-28мм.рт.ст.

(у здоровых - 53 мм рт ст). Таким образом, по полученным данным тканевого напряжения кислорода можно сказать, что данная категория больных имеет выраженные нарушения окислительно-восстановительных процессов.

После проведенного лечения отмечено повышение напряжения кислорода в тканях у больных с посттромбофлебитическими язвами от 36 до 53 и у больных с варикозными язвами от 48 - 54 мм рт ст. Прирост уровня TcPO2 при кислородной нагрузке увеличивался в обеих группах и составляло 82- 86%, а кислородная емкость тканей составило соответственно 26-32 и 30 - 36 мм рт ст. У больных группы сравнения уровень чрескожного напряжения кислорода увеличивался до 48 мм рт ст. Уровень прироста его после кислородной нагрузки составил 78%. Кислородная емкость тканей составляла 30 мм рт ст.

Таблица 2

Транскутанное напряжение кислорода в тканях у больных с варикозной и посттромбофлебитической болезнью осложненной трофическими язвами. (n-52)

Клин.формы обслед. гр.	Уров.TcPO2тк. мл.рт.ст.		TcPO2тк.при кис.наг. (%)		Кисл.емк.тканей мл.рт.ст.	
	Исход	посл. леч.	исход	посл. леч.	Исход	Посл.леч
Посттромбофлебитическая болезнь осложн. трофическими язвами	28- 46	36- 53	66- 73	84-85	16,2-18,5	26-32
Варикозная болезнь ослож.троф.язвами	39-47	48-54	72-80	82-86	23-28	30-36
Контр.гр.зд.лиц (n-25)	57		90-95		53	

Радионуклидная лимфосцинтиграфия у больных с посттромбофлебитическими трофическими язвами нижних конечностей выявила, что скорость лимфотока составила 7,5±0,6 мм/мин. На здоровой (контрольной) конечности скорость движения лимфы составила –14 мм/мин, У больных с варикозными трофическими язвами отмечено снижение скорости лимфооттока до 8,2±1,4 мм/мин. Интенсивность выведения радиофармакологического препарата (РФП) из тканевого депо у больных с венозными и посттромбофлебитическими трофическими язвами через 60 минут соответственно составляло 12% и 10%.

Таблица №3

Скорость лимфотока и интенсивность выведения РФП из тканевого депо у больных с посттромбофлебитическими и варикозными трофическими язвами. (n-36)

Клинич.форм обслед.гр.	Скорость лимфотока мм/мин		Интен.вывед.РФП из тканевого депо (%)	
	исходн.	После леч.	исходн.	После леч.
Варикозная болезнь осложненная трофическими язвами	8,2±1,4	10,6±0,8 P<0,01	12	17 P<0,01
Посттромбофлебитическая болезнь осложненная трофическими язвами	7,5±0,6	9,2±0,5 P<0,01	10	16 P<0,01
Контрольная группа здоровые лица (n-20).	14		24	

В группе сравнения здоровых лиц время резорбции РФП из тканевого депо в среднем составляло 24%. После проведенной лимфотропной терапии интенсивность выведения РФП за 1 час увеличивалась у больных основной группы в 1,5 раза, а у больных, которым проводили традиционное лечение - в 1,1 раза.

Заключение: У больных с хронической венозной недостаточностью нижних конечностей, осложненной трофическими язвами имеются значительные нарушения микрогемо-лимфоциркуляции в виде вено лимфостаза. Применение лимфотропной терапии у данной категории больных способствовало более быстрому восстановлению микроциркуляции, ликвидации интерстициального отека и воспаления. Происходит ускорение эпителизации трофических язв, что сокращает сроки пребывания больного в стационаре.

Использованные источники:

1.Алиев С.А., Ибишов К.Г., Алиев Э.С. Некоторые аспекты патогенеза гемореологических и трофических нарушений и их фармакологическая коррекция у больных с хронической венозной недостаточностью. // Вестник хирургии. - 2008. - Т. 167. - № 2. - С. 39 - 43.

2.Богданец Л.И., Смирнова Е.С., Васильев И.М. Повышение эффективности лечения трофических язв венозного генеза. // Российский научно-практический тематический журнал. - 2014. - №1-2. - С. 16-21.

3.Богданец Л.И. Венозные трофические язвы. Возможности современной флебологии в решении старой проблемы. Русский медицинский журнал. 2010; 17: 1060—4.

4.Богомолов М.С., Слободянюк В.В. Лечение трофических язв различной этиологии. Вестник хирургии им. И.И. Грекова 2013;172(5):34—40.

5.Лосев Р.З., Буров Ю.А., Микульская Е.Г., Якушева Е.А. Оценка состояния микроциркуляции у пожилых больных с трофическими венозными язвами // Ангиол. и сосудистая хирургия 2005. № 1. С. 65–74.

6.Оболенский В.Н., Родоман Г.В., Никитин В.Г., Карев М.А. Трофические язвы нижних конечностей - обзор проблемы. РМЖХирургия. Урология, 2009, 25: 1647.

7.Савельев В.С., Покровский А.В., Затевахин И.И., КириенкоА.И.и др. Российскиеклинические рекомендации по диагностике и лечению хронических заболеваний вен. Флебология. 2013; Т 7 № 2. - 47с.

8.Любарский М.С., Жуков В.В., Мустафаев Н.Р., Смагин М.А. Коррекция нарушений гемо-и лимфоциркуляции в ближайшем послеоперационном периоде у больных с трофическими язвами нижних конечностей на фоне посттромботической болезни. Современные проблемы науки и образования. – 2011. – № 1 – С. 19-22

9. 80 лекций по хирургии / Под ред. В. С. Савельева. — М.: «Литера», 2008. — 912с.

10.Junger M, Steins A, Hahn M, Hafner HM. Microcirculatory dysfunction in chronic venous insufficiency (CVI). Microcirc 2000;7:3–12.

11. Meaume S., Couilliet D., Vin F. Prognostic factors for venous ulcer healing in non-selected population of ambulatory patients // J Wound Care. – 2005 Jan. – 4(1). – P. 31-4.

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ЎРТА ОСИЁ ТАРИХИДА МИЛЛИЙ ВА ДИНИЙ ҚАДРИЯТЛАР УЙҒУНЛИГИ

Annotatsiya. Ushbu maqolada turizmda turizm bazasini shakllantirish turizm ma'lumotlarini boshqarish va aylanishda turizm ma'lumotlarini yaratish va hal qilishni o'z ichiga oladi.

Kalit so'zlar: turizmda logistika, turizm bozori, umumiy ma'lumot, turnir haqida ma'lumot, turizm sanoati.

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THE HARMONY OF NATIONAL AND RELIGIOUS VALUES IN THE HISTORY OF CENTRAL ASIA

Abstract. In this article, the formation of the base of tourism in tourism includes the creation and solution of tourism information in the management and circulation of tourism information.

Key words: logistics in tourism, tourism market, general information, information about the tournament, tourism industry.

Ўзбекистон кўп миллатли ва динли мамлакатлар қаторига киради. Унда миллатлараро тотувлик ва динлараро бағрикенглик каби умуминсоний қадриятлар ўзининг чуқур илдизларига эга.

Турли миллат вакилларига ҳурмат, улар билан баҳамжиҳат яшаш, диний бағрикенглик, дунёвий билимларга интилиш, ўзга халқларнинг илғор тажрибалари ва маданиятини ўрганиш каби хусусиятлар ҳам халқимизда азалдан мужассам.

Ўз навбатида Амударё ва Сирдарё оралиғи географик ҳолатининг ўзи буюк тамаддунлар минтақасининг марказида қадимги Шарқ, эллин, ғарбий Эрон, Турк, Хитой маданиятларининг ўзаро фаол ҳамкорлик қилишига имкон туғдирди.

Ўрта Осиё шароитида зардуштийлик турмуш тарзига хос ўтроқ деҳқончилик ва кўчманчи чорвадорлик ўртасида турли зиддиятлар бўлган. У кейинчалик монотеистик ғоялар ривожига шубҳасиз катта ҳисса қўшган. Негаки, “Зардушт одамларни Ахурамаздага сажда қилишга чақириб, инсоният маънавияти тарихида янги босқични бошлаб берди. Биринчидан, у кўпхудоликка (политеизм) қарама-қарши яккахудолик (монотеизм)га,

яъни, диний эътиқоднинг юқори босқичига қадам қўйган эди. Иккинчидан, илгари одамлар худолар қаҳридан, уларнинг даҳшатли вайрон қилувчи қудратлари олдида ожиз, қўрқув даҳшати остида сиғинишган бўлса, эндиликда эса Зардушт одамларга қалби кишиларга меҳр-шафқат билан тўлган, яхшилик томон ундовчи, уларнинг ўлимидан кейин мангу фаровон ҳаёт билан таъминлай оладиган тангри Ахурамаздага ибодат қилишга чақирди".

Ўтган XX асрнинг бошларида Амударёнинг ўнг қирғоғида буддавийликка мансуб кўплаб қимматбаҳо металлар – олтин ёки кумушдан ясалган кўп сонли тангалар, ҳайкалтарошликка оид майда тасвирлар ва бошқа ёдгорликлар топилган.

Айни пайтда буддавийликда азоб-уқубатларнинг сабаблари, улардан қутилиш ҳақида тушунтирилади ҳамда азобларни тугатиш, яъни нирвана ҳолатига эришиш йўли кўрсатиб берилади.

Ўзбекистон ҳудудида зардуштийлар билан бир қаторда буддавийликка эътиқод қилувчилар ҳам яшаганлар. Милоднинг биринчи асрларидан бошлаб, Самарқанд ва Бухорога кириб келган яҳудийлар жамоалари вакиллари ҳозирга қадар ўз динларига эркин эътиқод қилиб келмоқдалар.

Мамлакатимизда яҳудийлик дини вакилларининг истиқомат қилиши халқимизга хос ўзбекона бағрикенглик, этник, маданий ва диний сабр-бардошлиликнинг яна бир юксак намунаси бўлса, ажаб эмас. Хусусан, яҳудийлар жамоасининг вакилларидан бири Р.Бенсман шу ҳақда тўхталар экан, Бухорода дастлабки синагога VIII асрдаёқ қурилгани, бошқа дин вакиллари билан бир қаторда ўз динларига эркин эътиқод қилиш учун ўша пайтда ҳам шароит яратиб берилганини таъкидлаб "Ўрта аср Европаси ва Византия империясида қувғин қилинган яҳудийлик Марказий Осиёда бошқа динлар билан бир хил ҳуқуққа эга эди", – деб ёзади.

"Бундан деярли 1,5 минг йил аввал ҳозирги Марказий Осиёни ўз ичига олган Ғарбий турк хоқонлиги тахтида ўтирган Истами (552–576 йиллар) бағрикенг ҳоким сифатида танилганди. Шу даврда туркий қабилаларда диний тафаккур ўз тараққиётининг энг юқори поғонасига кўтарилган, бош худо – Тангрига сиғиниш кенг миқёсда бошланганди. Шундай бўлса-да, Истами-хоқон ўлкада маълум бўлган барча динларга эркин йўл қўйиб берди".

Ўзбекистон Республикаси Президенти Ислом Каримов "Ўзбекистон XXI аср бўсағасида: хавфсизликка таҳдид, барқарорлик шартлари ва тараққиёт кафолатлари" китобида диннинг жамият ҳаётида тутган ўрни ҳақида, жумладан, шундай дейди: "Биз дин бундан буён ҳам аҳолини олий руҳий, ахлоқий ва маънавий қадриятларидан, тарихий ва маданий меросидан баҳраманд қилиши тарафдоримиз. Лекин биз ҳеч қачон диний даъватлар ҳокимият учун курашга, сиёсат, иқтисодиёт ва қонуншуносликка аралашиш учун байроқ бўлишига йўл қўймаймиз. Чунки бу ҳолни

давлатимизнинг хавфсизлиги, барқарорлиги учун жиддий хавф-хатар деб ҳисоблаймиз”.

Хулоса қилиб айтганда, халқимизнинг миллий ва диний қадриятларининг ҳозирги демократик жамият қадриятлари билан уйғунлашиши республикамизнинг келажакда янада равнақ топиши, жаҳон ҳамжамиятига қўшилишида муҳим омиллардан бири ҳисобланади.

Фойдаланилган адабиётлар:

1. Mirziyoyev Sh. Yangi O‘zbekiston taraqqiyot strategiyasi. Toshkent: “O‘zbekiston”, 2022
2. Mirziyoyev Sh. Niyati ulug‘ xalqning – ishi ham ulug‘, hayoti yorug‘ va kelajagi farovon bo‘ladi– T.:” O‘zbekiston”, 2020.
3. Azimjonovich R. I. ESTABLISHMENT OF THE MINISTRY OF COMMUNITY AND FAMILY SUPPORT IS AN IMPORTANT STEP IN SELF-GOVERNMENT //Epra International Journal of Multidisciplinary Research (IJMR) Impact Faktor: 7.032. Indiya. 2020 June. P. 161. – 2020. – Т. 163.
4. Raximov I. FUQAROLARNING O ‘ZINI-O ‘ZI BOSHQARISH ORGANLARINING-MILLIY DEMOKRATIK INSTITUT SIFATIDAGI O ‘RNI //Scientific journal of the Fergana State University. – 2023. – №. 5. – С. 28-28.
5. Рахимов И. А. ВЕЛИКИЙ ШЕЛКОВЫЙ ПУТЬ, КОТОРЫМ ВОСХИЩАЕТСЯ МИР //Современные научные исследования: тенденции и перспективы. – 2020. – С. 93-102.
6. Ўринбоева М. С. STAGES OF DEVELOPMENT OF ETHICAL APPROACHES TO NATURE AND ENVIRONMENT //Экономика и социум. – 2021. – №. 2-2. – С. 277-280.
7. Ўринбоева М. С. ТАБИАТГА ЭКОЛОГИК МУНОСАБАТЛАР ТАРИХИНИНГ АЙРИМ МАСАЛАЛАРИ //Scientific progress. – 2021. – Т. 2. – №. 1. – С. 1554-1557.
8. Ўринбоева М. С. Табиатга экологик муносабатларнинг маънавий-ахлоқий тамойиллари ва мезонлари //Science and Education. – 2020. – Т. 1. – №. 2. – С. 590-596.

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СУЩНОСТЬ МЕТОДА «ДЕРЕВО ЦЕЛЕЙ» В СТРАТЕГИЧЕСКОМ ПЛАНИРОВАНИИ

Аннотация. Принятие стратегических решений представляет собой сложный многоступенчатый процесс, эффективность которых во многом зависит от применяемых методов и инструментов. Одним из них является метод построения дерева целей. Данная статья посвящена отдельным аспектам данного метода в стратегическом планировании, в частности определению коэффициента относительной важности целей.

Ключевые слова: решение, дерево целей, подцели, коэффициент относительной важности.

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THE ESSENCE OF THE “TREE OF OBJECTIVES” METHOD IN STRATEGIC PLANNING

Abstract. Strategic decision-making is a complex multi-stage process, the effectiveness of which largely depends on the methods and tools used. One of them is the method of building a goal tree. This article is devoted to certain aspects of this method in strategic planning, in particular, the determination of the coefficient of relative importance of goals.

Key words: solution, goal tree, sub-goals, coefficient of relative importance.

Стратегическое управление играет решающую роль в развитии организации. [1] Однако для успешной реализации стратегии необходимо

четко определить цели и подцели, а также спланировать путь к их достижению. В этой статье мы рассмотрим концепцию и применение "дерева целей" в контексте стратегических программ. [2,3]

Дерево целей – это мощный инструмент для разработки и управления стратегической программой. Оно представляет собой иерархическую структуру целей, которые помогают организации определить свою стратегию, приоритеты и путь к достижению успеха. В этой статье мы рассмотрим, что такое дерево целей стратегической программы и как оно может быть использовано для эффективного планирования и реализации стратегии.

Зачем нужно дерево целей стратегической программы? Стратегическая программа – это долгосрочный план действий, который помогает организации достичь своих стратегических целей. Для того чтобы эффективно разрабатывать и управлять такой программой, необходимо четко определить цели, подцели и пути их достижения.

Дерево целей – это инструмент, который помогает разложить стратегические цели на более конкретные и измеримые шаги. Важнейшие преимущества использования дерева целей в стратегической программе заключаются в следующем:

Ясность и структурированность: Дерево целей помогает структурировать стратегические цели и разделить их на более мелкие компоненты. Это делает цели более понятными и конкретными для всех сотрудников организации.

Измеримость и оценка прогресса: Каждая цель и подцель в дереве количественно измеримы. Это позволяет оценивать прогресс в достижении целей и своевременно корректировать стратегию, если необходимо.

Установление приоритетов: Дерево целей помогает организации определить приоритеты. Это важно, так как не все цели могут быть достигнуты одновременно, и необходимо решить, какие из них следует реализовать в первую очередь.

Улучшение коммуникации: Дерево целей служит отличным инструментом для коммуникации стратегии и целей организации с сотрудниками. Оно помогает каждому понять, какой вклад он может внести в достижение общей стратегии.

Создание дерева целей – это процесс, который требует внимания к деталям и вовлечения ключевых заинтересованных сторон. В менеджменте процессный подход представляет собой наличие упорядоченных этапов, которые гарантированно приводят к успеху. Для построения дерева целей рекомендуется следующий порядок: [4]

Определите основные стратегические цели: Начните с определения основных целей вашей стратегической программы. Это могут быть, например, увеличение прибыли, расширение рынка или улучшение уровня обслуживания клиентов.

Разложите цели на подцели: Для каждой основной цели определите несколько более конкретных подцелей, которые помогут вам достичь основной цели. Например, если вашей основной целью является увеличение прибыли, подцели могут включать сокращение издержек и увеличение продаж.

Декомпозируйте подцели: Продолжайте этот процесс, декомпозируя каждую подцель на еще более мелкие шаги, пока не достигнете конкретных и измеримых действий.

Установите приоритеты: Определите, какие из целей и подцелей следует достичь в первую очередь, и установите им приоритеты. Это поможет фокусироваться на самых важных задачах.

Оцените ресурсы и сроки: Для каждой цели и подцели определите необходимые ресурсы (люди, бюджет, технологии) и установите сроки достижения.

Мониторинг и коррекция: После того как дерево целей создано, не забывайте регулярно мониторить прогресс и корректировать стратегию, если это необходимо.

Дерево целей также широко используется в управлении проектами. Оно позволяет определить цели проекта, разложить их на более мелкие задачи и ресурсы, и легко отслеживать прогресс в рамках проекта. Это помогает сократить риски и обеспечить более эффективное управление проектами.

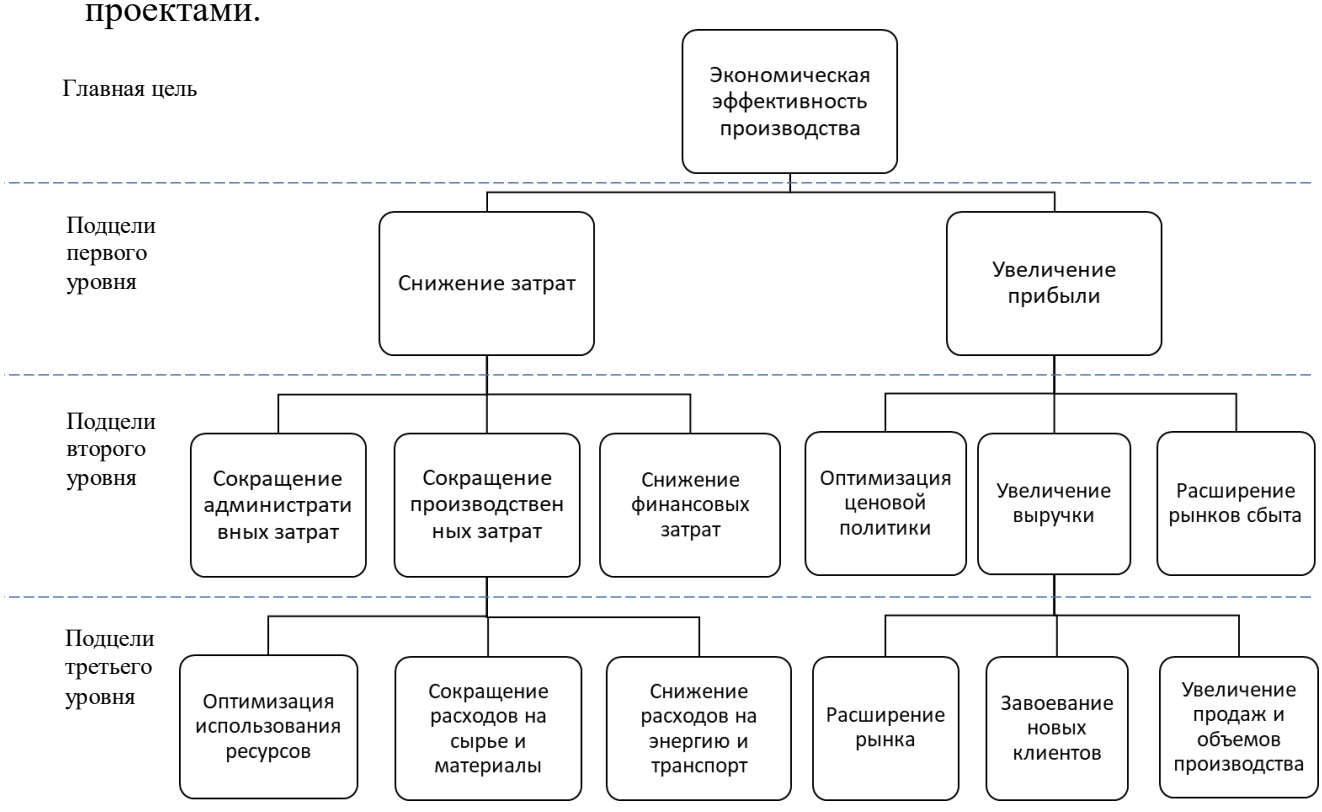

Рисунок 1. Использование дерева целей для решения задачи повышения эффективности производства

Теперь рассмотрим пример составления «дерева целей», скажем, для достижения «экономической эффективности производства». (рис.1) На дереве целей, которая показана на рисунке мы можем увидеть разбиение главной цели до подцелей третьего уровня. Конечно это дерево могло бы и дальше расширяться, но для упрощения мы ограничились трехуровневой структурой. Итак, это дерево начинается, как положено, с главной цели, а именно достижение экономической эффективности производства. Далее идут подцели первого уровня, расходящиеся в обе стороны от главной цели. Как мы знаем, любая организация стремится производить качественные товары или предоставлять качественные услуги, удовлетворяющие потребности потребителей, и при этом увеличивать свою прибыль. Для повышения эффективности с другой стороны она работает над оптимизацией затрат. По этой причине, как подцели первого уровня были приняты «увеличение прибыли» и «снижение затрат».

Следующим этапом является разбиение подцелей первого уровня на более мелкие, то есть на подцели второго уровня. Итак, существует несколько стратегий, которые могут помочь увеличить прибыль в производственной организации. Так, например, для увеличения своей прибыли, организация должна разработать стратегии по оптимизации ценовой политики, по расширению рынков сбыта, стратегии для увеличения объема получаемой выручки, для улучшения качества продукции и услуг, для повышения уровня обслуживания клиентов и т.д. На «дереве целей», вышеперечисленные стратегии приняты, как подцели второго уровня, которые являются важными аспектами для повышения прибыльности организации.

В случае со снижением затрат, на «дереве целей» данная цель достигается путем сокращения различных видов затрат, таких как административных, производственных, финансовых, которые дают совокупный эффект. Переходя на более низкий уровень, мы начинаем уже постепенно представлять точные задачи для выполнения, которые готовы для распределения по отделам и подразделениям.

Итак, рассмотрим по одному примеру на разложение подцели второго уровня, например, сокращение производственных затрат и увеличение выручки.

Сокращение производственных затрат является внутренней проблемой производственных цехов, отделов снабжения транспорта и логистики. Таким образом, распределяем подцели третьего уровня по следующим службам:

Задача оптимизации использования ресурсов поручается начальникам и технологам производственных цехов. Они пересматривают технологические режимы, нормы расхода и находят пути экономии ресурсов;

Задача сокращения расходов на сырьё и материалы поручается службе снабжения и логистики. Для этого анализируются цены, объемы поставок, потери материалов на транспорте и в складах. В итоге разрабатывается программа снижения расходов материалов;

Снижением расходов на энергию и транспорт по долгу службы занимаются отдел энергетика и транспортные службы предприятия. Они разрабатывают программу, которая содержит различные варианты решений по снижению расходов.

Таким образом подцели третьего уровня завершают дерево целей, так как цели доведены до конкретного исполнителя и подробного плана мероприятий.

Выше было сказано, что «дерево целей» формируется путем разложения и группировки целей и подцелей различного уровня. После составления «дерева целей» появляется новая задача, а именно ранжирование целей относительно степени их важности. Это необходимо, для того чтобы было легче фокусироваться на самых важных задачах, и это в свою очередь помогает поддерживать некую последовательность для достижения каждой цели.

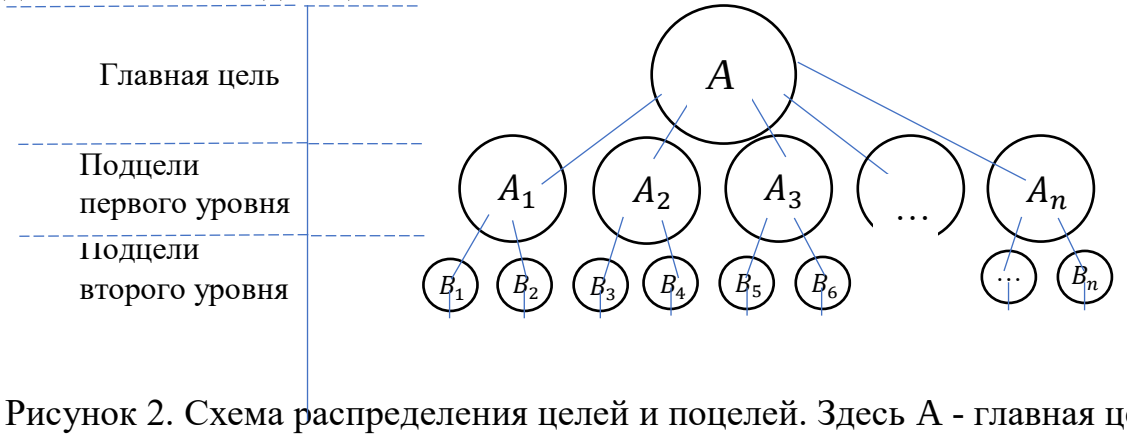

Рисунок 2. Схема распределения целей и поцелей. Здесь А - главная цель, а $A_1, A_2, A_3 \ldots A_n$ – подцели первого уровня.

Для ранжирования целей и подцелей широко применяется коэффициент относительной важности (КОВ). [5] На практике коэффициент относительной важности показывает удельный вес подцелей, то есть их степень влияния на результат достижения цели высшего по рангу. Обычно для оценки коэффициента относительной важности используется экспертный анализ, ежели чем оценка со стороны индивидов. Причиной этого является то, что эксперты имеют больше опыта в данной сфере и скорее дадут более объективную оценку, чем группа индивидов.

Для того чтобы рассчитать коэффициент относительной важности (КОВ), надо найти удельный вес каждой подцели относительно главной цели (рис.2).

Экспертный анализ проводится в несколько этапов. Вначале «дерево целей» передается в руки экспертов, и каждая подцель ранжируется по

степени важности по фиксированной шкале. Полученные ранги суммируются для каждой подцели и выводится их удельный вес. Этот удельный вес и будет являться коэффициентом относительной важности (КОВ), но он состоятелен только для подцелей первого уровня.

Для удобства рассмотрим этот процесс в виде таблицы:

Таблица 1.

Таблица обработки мнений экспертов по КОВ

Подцели	Эксперты						
№	1	2	3	4	… n	Сумма	КОВ
A_1	r_{11}	r_{12}	r_{13}	…	r_{1j}	$\sum_{j=1}^{n} r_{1j}$	$\sum r_{1j} / \sum\sum r_{ij}$
A_2	r_{21}	r_{22}	r_{23}	…	r_{2j}	$\sum_{j=1}^{n} r_{2j}$	$\sum r_{2j} / \sum\sum r_{ij}$
A_3	r_{31}	r_{32}	r_{33}	…	r_{3j}	$\sum_{j=1}^{n} r_{3j}$	$\sum r_{3j} / \sum\sum r_{ij}$
…	…	…	…	…	…	…	
A_n	r_{i1}	r_{i2}	r_{i3}	…	r_{ij}	$\sum_{j=1}^{n} r_{ij}$	$\sum r_{ij} / \sum\sum r_{ij}$
Итого:						$\sum_{i=1}^{n}\sum_{j=1}^{n} r_{ij}$	1

Здесь r_{ij} – ранги, присвоенные экспертами.

Для того чтобы рассчитать КОВ также надо обращать внимание на значения рангов и их положение на шкале.

Методика вычисления коэффициента относительной важности (КОВ), которое показано на таблице 1, применяется в случае, если абсолютное значение ранга будет совпадать с ее смысловым значением, в других случаях используется матрица преобразованных рангов.

В случае матрицы преобразованных рангов, ранги r_{ij} заменяются рангами s_{ij}, так что:

$$s_{ij} = r_{max} - r_{ij}$$

Где r_{max} – максимальное значение ранга;

s_{ij} – значение преобразованного ранга.

Для полного понимания рассмотрим для каждого случая по одному примеру.

Скажем, что у нас есть «дерево целей» так как показано на рисунке 2.

Для упрощения, сделаем допущение, что на дереве всего 3 подцели, то есть A_1, A_2, A_3.

В первом случае, скажем, что эксперты ранжируют подцели по трехбалльной шкале и что наибольшим рангом считается – 3. Количество экспертов – 4. Составим таблицу следующим образом:

Таблица 2.

Пример расчёта коэффициента относительной важности (i =3, j =4)

Подцели	Эксперты					
№	1	2	3	4	Сумма	КОВ
A_1	2	3	3	2	10	10:23 = 0.44
A_2	1	2	2	1	6	6:23 = 0.26
A_3	2	1	2	2	7	7:23 = 0.30
Итого:					23	1

На пересечении строк и столбцов расположены ранги, которые условно подобраны экспертами. В последнем столбце показаны КОВ для трех подцелей, и как вы уже заметили сумма КОВ равна единице, что не требует объяснения. В этом случае, абсолютное значение совпадает с смысловым, то есть 3 – это наибольший ранг. Слово «наибольший» присвоено рангу 3, что является его смысловым значением. С другой стороны, мы знаем, что 3 больше 1 и 2, то оно имеет также наибольшее абсолютное значение.

Относительно КОВ на таблице 2 мы можем определить, что подцель под номером A_1 стоит на первом месте по степени важности, A_3 – на втором, и A_2 – на третьем.

Теперь рассмотрим второй случай и примем за наибольший ранг 1. Следовательно, наименьшим будет считаться 3.

Если мы оставим данные таблицы 2 такими же, как и прежде, то КОВ вычисленный по этому методу даст нам ошибочные значения. Это потому, что абсолютное значение противоречит смысловому, то есть они уже имеют обратную зависимость.

Для решения этой проблемы мы можем поступить двумя способами.

1) Мы можем подсознательно принять подцели с наибольшим КОВ, наоборот, как имеющие самую низкую степень важности и постепенно проранжировать их в обратном порядке. Даже если мы не получим точные значения КОВ, но мы можем получить правильное ранжирование.

Итак, по таблице 2 мы нашли, что КОВ для A_1, A_2, A_3 соответственно равны 0.44, 0.26, 0.30. Но так как максимальный ранг теперь 1, то сумма рангов с наименьшим значением, имеет наименьший КОВ, хотя на самом деле имеет наибольшую степень важности. Поэтому подцель с КОВ равной 0.26, будет на первом месте по степени важности. Последовательность ранжированных подцелей будет выглядеть так: A_2, A_3, A_1.

2) Второй способ использует матрицу преобразованных рангов. В данном случае r_{max} = 3. Постепенно отнимая с r_{max} значение каждого ранга с таблицы 2 можно найти значения s_{ij}. Затем для каждой подцели можно рассчитать КОВ и проранжировать их по степени важности.

В итоге мы получим следующую таблицу:

Таблица 3.

Пример расчёта КОВ с помощью матрицы преобразованных рангов

Подцели	Эксперты					
№	1	2	3	4	Сумма	КОВ
A_1	1	0	0	1	2	2:13 = 0.15
A_2	2	1	1	2	6	6:13 = 0.46
A_3	1	2	1	1	5	5:13 = 0.39
Итого:					13	1

Точно так же, как и в первом способе мы получаем следующую последовательность степеней важности: A_2, A_3, A_1. Преимуществом второго способа заключается в том, что мы имеем точное значение КОВ и это гарантировано, что у нас не возникнут никакие путаницы в процессе ранжирования.

Расчеты коэффициентов относительной важности (КОВ) для подцелей второго и более низкого уровня имеют ту же самую последовательность действий, что и для подцелей первого уровня, то есть здесь вычисляется их удельный вес, но уже не относительно главной цели, а относительно подцелей первого уровня или целей, которые на ранг выше. Поэтому сумма КОВ подцелей второго уровня будет равна уже не единице, а коэффициенту относительной важности подцели первого уровня, к которым они относятся.

Из рисунка 2 видно, что A_1 делится на подцели второго порядка, такие как B_1 и B_2. Рассчитаем коэффициенты относительной важности для B_1 и B_2.

Для удобства составим таблицу 4. Допустим, что подцели B_1 и B_2 ранжируются по двухбалльной шкале, и за наибольший ранг примем 2. Как ранги мы приняли случайные значения.

Таблица 4.

Определение КОВ для подцелей второго уровня

Подцели	Эксперты						
№	1	2	3	4	Сумма	Доля	КОВ
B_1	1	2	1	1	5	5:11 = 0.45	0.45*0.44 = 0.198
B_2	2	1	2	1	6	6:11 = 0.55	0.55*0.44 = 0.242
Итого:					11	1	КОВ(A_1) = 0.44

Как видно из таблицы 4, мы нашли удельный вес каждой подцели B_1 и B_2 в составе A_1. В этом случае КОВ(B_2) больше, чем КОВ(B_1). Из этого следует, что по степени важности B_2 стоит выше, чем B_1.

На данный момент мы рассмотрели более простые формы вычисления коэффициента относительной важности, но в действительности этот процесс весьма трудоемкий. Во время процесса оценивания КОВ эксперты имеют право вести переговоры, но ранжируют они относительно собственного мнения. В итоге могут получится одинаковые или вовсе

различные итоги оценки, что является еще одной проблемой. Для решения этой проблемы сначала находят среднее значение коэффициентов для каждой подцели и за счет этого дополнительно находится степень разброса коэффициентов относительно среднего значения, то есть дисперсия коэффициентов. Далее эксперты начинают объяснять свою точку зрения, до тех пор, пока они не остановятся к одной единой.

Заключение

Дерево целей стратегической программы – это мощный инструмент для разработки и управления стратегией организации. Оно помогает структурировать цели, определить приоритеты, измерить прогресс и обеспечить ясность в коммуникации стратегии с сотрудниками. Создание дерева целей – это важный шаг в разработке стратегической программы, который может значительно повысить шансы на достижение поставленных целей и успех организации в целом.

В данной статье рассмотрены только некоторые из возможностей использования дерева целей в стратегическом управлении. Важно отметить, что дерево целей – это не просто инструмент планирования, но и инструмент управления, который требует постоянной актуализации и адаптации к изменяющимся условиям внешней среды и внутренней динамике организации. Он способствует более эффективному достижению стратегических целей и повышению конкурентоспособности компании в долгосрочной перспективе.

Использованные источники:

1. Зуб, А. Т. Стратегический менеджмент: учебник и практикум для академического бакалавриата / А. Т. Зуб. — 4-е изд., перераб. и доп. — М.: Издательство Юрайт, 2015. — 375 с.
2. Основы менеджмента: Учебник / Р. А. Исаев. — М.: Издательско&торговая корпорация «Дашков и К°», 2010. — 264 с.
3. И. Н. Маврина. Стратегический менеджмент: учебное пособие. – Екатеринбург: УрФУ, 2014. – 134с.
4. С.С. Акимов. Системный анализ, оптимизация и принятие решений. – Оренбург, 2021. – 58с.
5. Коваленко И.И., Швед А.В. Методы экспертного оценивания сценариев: учебное пособие. – Николаев: ЧГУ, 2012. – 154с.
6.Мусаева Ш.А. Маркетинговое исследование. Учебник Издательско-творческий отдел ООО «СТАР-СЭЛ». Самарканд-2023
7.Мусаева Ш.А. Интегрированные маркетинговые коммуникации Учебное пособие Издательство «Маарат», Самарканд - 2022
8.Мусаева Ш.А., Усмонова Д.И. Инновационный маркетинг «TURON EDITION» Учебное пособие на 2021 год.

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ЗНАЧЕНИЕ СЫВОРОТОЧНОГО МАРКЕРА КАРДИАЛЬНОГО ФИБРОЗА И ВОСПАЛЕНИЯ В ПРОГНОЗЕ ПЕРМАНЕНТНОЙ ФОРМЫ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ

Аннотация. Изучены показатели кардиального фиброза медиаторов системного воспаления у пациентов с фибрилляцией предсердий (ФП) в зависимости от формы аритмии. Установлено, что при ФП повышаются уровни сывороточных маркеров фиброза и воспаления: С-концевого пропептида проколлагена типа I (PICP), интерлейкина-6. Имеется зависимость показателей фиброза от формы ФП. Уровень PICP повышается при хронической перманентной форме ФП. У пациентов с рецидивирующей ФП показатель ИЛ-6 по сравнению с таковым у практически здоровых людей имеет более высокие значения и еще больше повышается при перманентной ФП. Уровень фактора некроза опухолей α незначительно повышен при перманентной ФП.

Ключевые слова: фибрилляция предсердий, С-концевой пропептид проколлагена типа I, фактор некроза опухолей-α, интерлейкин-6.

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THE VALUE OF SERUM MARKERS OF CARDIAL FIBROSIS AND INFLAMMATION IN THE PREDICTION OF PERMANENT ATRIAL FIBRILLATION

Abstract. The indicators of cardiac fibrosis and systemic inflammatory mediators in patients with atrial fibrillation (AF) were studied depending on the form of arrhythmia. It has been established that in AF, the levels of serum markers of fibrosis and inflammation increase: C-terminal propeptide of procollagen type I (PICP), interleukin-6. There is a dependence of fibrosis indicators on the form of AF. PICP levels increase in chronic permanent AF. In patients with recurrent AF, the IL-6 index, compared to that in practically healthy people, has higher

values and increases even more with permanent AF. Tumor necrosis factor α levels are slightly elevated in permanent AF.

Key words: atrial fibrillation, C-terminal propeptide of type I procollagen, tumor necrosis factor-α, interleukin-6.

В настоящее время во всем мире фибрилляция предсердий (ФП) является наиболее распространенной устойчивой аритмией у взрослых, которая характеризуется высокой заболеваемостью и смертностью, определяя чрезвычайную значимость социально-экономических последствий для системы здравоохранения любого государства. По оценкам экспертов, распространенность ФП у взрослых составляет от 2% до 4%, при этом количество больных с ФП превышает 5 млн. в США и 30 млн. во всем мире. [3,4] В 2017 году было зарегистрировано 0,75 млн. новых случаев ФП в 54 странах-членах Европейского общества кардиологов (ЕОК), среднее число новых случаев заболевания, стандартизированное по возрасту, составило 44,3 [39,7–47,5] на 100 000 жителей каждой страны-члена [1,2]. К сожалению, следует констатировать, что точных данных о распространении ФП в литературных источниках всё больше.

Цель исследования: изучить показатели кардиального фиброза и системного воспаления у пациентов с различными формами ФП.

Объект и предмет исследования: В исследовании приняли участие 15 человек относительно здоровые люди в возрасте от 35 до 49,6 лет, группа контроля; вторую группу составили больные ФП ишемического генеза в возрасте от 50 до 71года, третья группа – больные ФП идиопатического генеза в возрасте 45 до 69 лет.

Методы и методики исследования: Была проведена оценка клинических параметров соответствующих групп больных ФП различного генеза, по полу, возрасту; в обязательном порядке проведено эхокардиографическое обследование в модальном и двухмерном режимах с расширенной оценкой параметров левого предсердия и суточное мониторирование ЭКГ с оценкой вариабельности сердечного ритма; определение маркера кардиального фиброза С-концевого пропептида проколлагена типа I (PICP) методом иммуноферментного анализа с использованием диагностического набора Metra CIPC EIA Kit («Quidel Corporation», США), определение уровней показателей местного воспаления миокарда: фактор некроза опухолей α (ФНОα) и интерлейкина-6 (ИЛ-6) методом твердофазного иммуноферментного анализа с использованием стандартных тест-систем: DSL-10-42100 серия 07144-A ООО «Биохиммак» (Москва). Полученные результаты обрабатывали статистически с помощью компьютерной программы Statistica 6.1. Количественные признаки с нормальным распределением представлены как $M \pm \sigma$ (среднее ± стандартное отклонение), с ненормальным распределением — в виде медианы и интерквартильного размаха. Корреляционный анализ

проводили с использованием критерия *R* Спирмена для количественных значений. При $p < 0,05$ различия считали статистически значимыми.

Результаты и обсуждение

Наибольшая концентрация PICP определялась при ФП ишемического генеза (131 нг/мл), несколько ниже (125 нг/мл). У пациентов с идиопатической ФП уровень PICP (84 нг/мл) был значительно ниже, чем у пациентов с ФП ишемического генеза ($p = 0,01$). При сравнительной оценке показателей фиброза у пациентов ишемического генеза выявлены более высокие показатели PICP, чем у пациентов с идиопатической ФП (84 нг/мл; $p = 0,001$) и практически здоровых лиц (51 нг/мл; $p = 0,0002$). Следует отметить, что ассоциация PICP с кардиальным фиброзом более изучена при гипертонической болезни и представлена в виде аномального повышения уровня PICP в крови при изолированной АГ, что подтверждается рядом исследований [5]. В литературе имеются описания фиброза и воспаления в тканях предсердий при изолированной ФП [5], но работ именно по изучению PICP мы не встретили.При изучении сывороточных маркеров воспаления концентрация ФНОα у больных с ФП достоверно превышала показатели у практически здоровых лиц (2,1 пг/мл против 1,2 пг/мл; $p = 0,02$), а уровень ИЛ-6 значимо превышал показатели у здоровых лиц (2,5 пг/мл при ФП против 1,6 пг/мл у здоровых ($p = 0,01$).При сравнении значений ФНОα в группах с патологией показатели распределились следующим образом: наибольшая концентрация наблюдалась ФП ишемического генеза (2,1 пг/мл), что превышало значения при идиопатической ФП (0,2 пг/мл; $p = 0,03$).Концентрация ИЛ-6 была наибольшей у пациентов с ФП на фоне ишемии (2,5 пг/мл), что превышало значения при идиопатической (2,1 пг/мл; $p = 0,7$).При перманентной ФП в сравнении с рецидивирующей формой аритмии выявлены значительно более высокие концентрации PICP (85,2 нг/мл против 182,4 нг/мл; $p = 0,01$;). В сравнении же с практически здоровыми лицами явным было лишь повышение уровня PICP при рецидивирующей и в еще большей степени при перманентной ФП ($p = 0,003$ и $p = 0,002$ соответственно). Уровень ФНОα был незначительно выше при перманентной ФП (2,4 пг/мл) по сравнению с рецидивирующей ФП (0,2 пг/мл; $p = 0,73$), не отличаясь при этом от его значений у практически здоровых лиц (1,2 пг/ мл; $p = 0,6$ и $p = 0,3$). Уровень ИЛ-6 также имел незначительную тенденцию к более высоким значениям при перманентной ФП (7,7 пг/мл) по сравнению с рецидивирующей ФП (5,2 пг/мл; $p = 0,43$); при этом от значений у практически здоровых лиц (1,6 пг/мл) уровень ИЛ-6 отличался только при рецидивирующей ФП ($p = 0,007$).

Выводы

1. Фибрилляция предсердий сопровождается повышением уровня сывороточных маркеров кардиального фиброза и воспаления, особенно С-концевого пропептида проколлагена типа I и интерлейкина-6, причем в большей степени ФП ишемического генеза. Сывороточные показатели

фиброза зависят от формы фибрилляции предсердий. Уровень С-концевого пропептида проколлагена типа I повышается при хронической и рецидивирующей формах, более высокие значения отмечены при хроническом течении.

Использованные источники:

1.Camm A., Kirchhof P., Lip G. et al. ESC Guidelines for the Management of Atrial fibrillation (2010 Version). Eur. Heart J. 2010; 6: 1—61.
2.Савченко А.П., Жиров И.В., Руденко Б.А. и др. Эндоваскулярная аппликация устройства WATCHMAN для профилактики тромбоэмболических осложнений у пациентки с фибрилляцией предсердий. Кардиология. 2012; 8: 93—6.
3.Aldhoon B., Melenovsky V., Peichl P., Kautzner J. New insights into mechanisms of atrial fibrillation. Physiol. Res. 2010; 59 (1): 1—12.
4.Nguyen B., Fishbein M., Chen L. et al. Histopathological substrate for chronic atrial fibrillation in humans. Heart Rhythm. 2009; 6 (4): 454—60.
5.Spach M., Boineau J. Microfibrosis produces electrical load variations due to loss of side-to-side cell connections: a major mechanism of structural heart disease arrhythmias. Pacing Clin. Electrophysiol. 1997; 20: 397—413.

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ИСПОЛЬЗОВАНИЕ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В ПРОЦЕССЕ ОБУЧЕНИЯ СВАРКЕ

Аннотация. Статья рассматривает влияние цифровых технологий на сварочное обучение и процессы обучения в индустрии. Автор исследует различные аспекты применения виртуальных тренажеров, 3D-моделирования и интерактивных симуляторов для обучения сварочным навыкам. Аннотация предоставляет читателям обзор эволюции методов обучения в сварочной индустрии, выявляя преимущества цифровых технологий в улучшении доступности, безопасности и эффективности обучения. Статья также рассматривает практические примеры успешного применения цифровых технологий в сварочном образовании, подчеркивая их важность в подготовке будущих специалистов в данной области.

Ключевые слова: виртуальные тренажеры, цифровые курсы, 3D-моделирование.

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THE USE OF INFORMATION TECHNOLOGIES IN THE PROCESS OF WELDING TRAINING

Abstract. The article examines the impact of digital technologies on welding training and education processes in the industry. The author explores various aspects of using virtual simulators, 3D modeling, and interactive simulators for welding skill training. The abstract provides readers with an overview of the evolution of teaching methods in the welding industry, identifying the advantages of digital technologies in improving the accessibility, safety, and effectiveness of training. The article also considers practical examples of successful application of digital technologies in welding education, emphasizing their importance in preparing future professionals in this field.

Keywords: virtual simulators, digital courses, 3D modeling.

Сварочный мир, как и многие другие отрасли, испытывает значительные изменения в связи с развитием цифровых технологий. Одним из ключевых аспектов этих перемен является революционизация обучения в сфере сварки. Традиционно сварщики получали свое образование и опыт на производстве, работая под руководством более опытных мастеров. Однако благодаря развитию цифровых технологий, теперь существуют новые способы обучения, которые лучше соответствуют современным требованиям и возможностям.

Одним из таких способов обучения является использование виртуальной реальности. С помощью специальных симуляторов сварки, студенты могут практиковать свои навыки в безопасной и контролируемой

среде, что позволяет им освоить новые техники и методы без риска для здоровья и безопасности. Кроме того, цифровые технологии также создают возможности для дистанционного обучения. Онлайн курсы, вебинары и интерактивные уроки позволяют студентам из разных регионов и стран обучаться у опытных преподавателей и специалистов, расширяя свои знания и опыт. Также стоит отметить, что цифровые технологии предоставляют новые возможности для мониторинга и оценки прогресса студентов. Специализированные программы и приложения помогают отслеживать успехи каждого студента и адаптировать учебный процесс под его индивидуальные потребности.

Вступление в мир цифровых технологий приносит свежий ветер в традиционную область сварочного дела. Долгое время студенты учились с использованием консервативных методов, и сегодня, в эпоху стремительных изменений, наступает время переосмысления подходов к обучению сварке. Эта статья представляет путеводитель по цифровым технологиям в сфере сварочного обучения и исследует, как эти инновации открывают новые горизонты для будущих сварщиков. Сварочная индустрия, известная своей устойчивостью к изменениям, сталкивается с вызовом адаптации к быстро меняющемуся миру. Введение цифровых технологий не только сбивает с традиционного курса, но и открывает неописанные возможности для более эффективного и прогрессивного обучения. Погрузимся в детали того, как эти технологии революционизируют сварочное образование и как студенты могут воспользоваться этими преимуществами для успешного вхождения в профессиональный мир сварки. В целом, цифровые технологии революционизируют обучение в сварочном мире, делая его более доступным, безопасным и эффективным. Это открывает новые перспективы для развития профессиональных навыков сварщиков и повышает качество обучения в данной отрасли. В эпоху цифровых технологий виртуальные тренажеры становятся неотъемлемой частью обучения сварке, перенося студентов в инновационное пространство практических навыков. Этот раздел обсудит, как виртуальные тренажеры стали ключевым элементом обучения сварке, предоставляя студентам уникальные возможности для улучшения своего мастерства. Долгое время сварщики обучались, сталкиваясь с реальными вызовами на практике, но с появлением виртуальных тренажеров студенты могут вступить в мир сварки, подготовившись заранее. Интерактивные симуляции различных сварочных задач позволяют студентам научиться правильным техникам и стратегиям, прежде чем они приступят к реальным проектам. Это не только увеличивает уровень уверенности у студентов, но и сокращает издержки на материалы и ресурсы обучения. Вместо затрат на большие объемы сварочного оборудования и расходных материалов, школы и учебные центры могут инвестировать в виртуальные обучающие платформы, что делает обучение

сварочному делу более доступным. Использование виртуальных тренажеров также расширяет географические границы обучения. Студенты из отдаленных регионов могут получить доступ к высококачественному обучению сварке, даже не покидая свои места жительства.

Виртуальные тренажеры в сварочном обучении предоставляют уникальные преимущества, преобразуя процесс обучения и принося новые возможности студентам:

1. Безопасная среда для практики: виртуальные тренажеры создают безопасную среду, где студенты могут погружаться в сварочные процессы, не сталкиваясь с рисками, характерными для реальных условий. Это особенно важно при работе с высокотемпературными материалами и опасными веществами.

2. Мгновенная обратная связь: в процессе виртуального обучения студенты получают мгновенную обратную связь о своих действиях. Это позволяет им корректировать свои техники, исправлять ошибки и развиваться в сварочных навыках более эффективно.

3. Экономия ресурсов: виртуальные тренажеры уменьшают затраты на оборудование и материалы, которые могли бы потребоваться в реальных сварочных процессах. Это позволяет учебным заведениям сосредотачиваться на качественном обучении, не сталкиваясь с финансовыми ограничениями.

4. Отработка реалистичных сценариев: студенты могут отрабатывать различные сварочные сценарии, имитирующие реальные рабочие условия. Это подготавливает их к широкому спектру ситуаций, с которыми они столкнутся в своей будущей карьере.

5. Интерактивные уроки и самостоятельное обучение: виртуальные тренажеры предоставляют возможность интерактивного обучения и самостоятельной практики. Студенты могут приступить к обучению в удобное для них время, что повышает эффективность их обучения.

Программы, такие как "WeldSim 3D" и "Virtual Welding Trainer", предоставляют студентам возможность взаимодействовать с трехмерными моделями сварочных сценариев. Они могут проводить виртуальные сварочные работы, испытывать различные материалы и регулировать параметры сварки, получая мгновенную обратную связь о своих действиях.

Зачем цифровые курсы и вебинары становятся важным элементом сварочного обучения?

1. Доступность и гибкость:

Онлайн-курсы и вебинары предоставляют студентам доступ к обучению из любой точки мира. Это особенно важно для тех, кто не может физически присутствовать на занятиях, учитывая географические, временные или финансовые ограничения.

2. Разнообразие материалов:

Цифровые платформы обеспечивают богатство учебных материалов. Это включает в себя видеолекции, интерактивные задания, электронные книги и тесты, что позволяет студентам получать информацию разнообразными способами.

3. Экономия времени и ресурсов:

Онлайн-обучение позволяет сократить время, затрачиваемое на перемещение и подготовку к занятиям. Студенты могут учиться в комфортной обстановке, экономя свои силы и ресурсы.

4. Взаимодействие с экспертами:

Вебинары могут включать в себя презентации от ведущих экспертов сварочной индустрии. Это позволяет студентам получать прямой доступ к знаниям и опыту профессионалов, не выходя из дома.

5. Интерактивные возможности:

Многие цифровые курсы предлагают интерактивные элементы, такие как форумы обсуждений, вебинары в реальном времени и групповые проекты. Это создает виртуальное обучающее сообщество, где студенты могут обмениваться опытом и идеями.

Как 3D-моделирование облегчает понимание сварочных процессов: 3D-моделирование позволяет визуализировать сложные сварочные процессы, которые могут быть трудными для понимания с помощью традиционных учебных материалов. Студенты могут наблюдать каждый этап сварочной операции в трехмерном пространстве, что способствует лучшему пониманию процесса. Технология 3D-моделирования позволяет создавать интерактивные элементы обучения. Студенты могут манипулировать моделями, изменять параметры сварочного оборудования и материалов, наблюдая, как это влияет на результаты сварки. Этот интерактивный подход усиливает усвоение информации. С использованием 3D-моделирования можно создавать виртуальные сценарии, основанные на реальных случаях. Это позволяет студентам анализировать проблемы, возникающие в процессе сварки, и искать эффективные решения в безопасной среде виртуального обучения. 3D-модели позволяют визуализировать внутренние процессы, такие как плавление и стекание металла, динамику сварочной дуги и формирование сварного шва. Это особенно полезно для студентов, которые стремятся глубже понять физические аспекты сварки.

Практические примеры использования технологии 3D-моделирования в обучении:

• Сварка: 3D-моделирование позволяет студентам изучать различные типы сварных соединений, виды сварочных швов и способы их формирования. Студенты могут взаимодействовать с виртуальными сварочными машинами, отработать технику сварки на различных материалах и получить обратную связь о своей технике.

• Машиностроение: в обучении по машиностроению 3D-моделирование позволяет студентам изучать принципы конструирования деталей, их проектирование и сборку. С помощью виртуальной среды студенты могут исследовать различные варианты конструкции и проводить виртуальные испытания на прочность.

• Виртуальная обучающая среда: студенты могут использовать 3D-моделирование для изучения процессов сварки в виртуальном пространстве, что позволяет им понять особенности и требования для каждого типа сварного стыка.

• Симуляция работы с оборудованием: студенты могут использовать 3D-модели для тренировки работы с различным сварочным оборудованием, таким как сварочные аппараты и газовые баллоны, без риска повреждения оборудования.

• Визуализация различных типов сварки: 3D-моделирование позволяет учащимся изучить различные методы сварки и виды сварных соединений, такие как дуговая сварка, газовая сварка, сварка под флюсом и т.д.

• Анализ ошибок: студенты могут использовать 3D-модели для изучения типичных ошибок в сварочных работах и понимания способов их предотвращения или исправления.

• Доступ к обучающим ресурсам: использование 3D-моделей позволяет студентам иметь доступ к обучающим ресурсам и учебным материалам, таким как интерактивные презентации и видеоуроки о сварке.

Использование 3D-моделирования в обучении сварке значительно обогащает учебный процесс, предоставляя студентам более наглядные и интерактивные инструменты для понимания и практики сварочных процессов.

Создание интерактивных симуляторов для обучения сварке представляет собой процесс разработки виртуальных сред, которые имитируют реальные условия сварки. Эти симуляторы могут быть разработаны в виде компьютерных программ, виртуальной реальности или аппаратных устройств, которые позволяют студентам и профессионалам практиковаться в сварке без риска повреждения материалов или оборудования. Описание создания интерактивных симуляторов и их ценность в обучении: первым шагом в создании интерактивного симулятора сварочных ситуаций является разработка реалистичных 3D-моделей сварочного оборудования, рабочего пространства и материалов. Эти модели должны точно отражать реальные объекты для создания максимально реалистичного опыта. Симуляторы могут имитировать различные сварочные сценарии, такие как сварка в вертикальном положении, сварка под углом, сварка в узких пространствах и т.д. Это помогает студентам тренироваться в различных условиях, что важно для подготовки к разнообразным задачам в реальной жизни. Симуляторы должны

предоставлять интерактивные элементы управления, позволяющие студентам регулировать параметры сварки, выбирать типы электродов, изменять ток и напряжение и т.д. Это создает реальные условия управления сварочным процессом. Важным аспектом является предоставление мгновенной обратной связи. Симуляторы должны анализировать действия студента и предоставлять информацию о качестве сварочного соединения, выявлять возможные ошибки и предлагать рекомендации для улучшения навыков. Симуляторы могут включать в себя сценарии с реалистичными дефектами, такими как трещины, поры, неправильное распределение тепла и другие проблемы, которые могут возникнуть в реальной сварке. Это помогает студентам научиться распознавать и устранять дефекты.

Какие реальные ситуации могут быть имитированы для улучшения навыков студентов:

• Сварка в узких пространствах: имитация ситуаций, когда сварщик должен работать в ограниченных пространствах, требует от студентов разработки навыков управления инструментами и выполнения точных движений.

• Сварка под углом: имитация сварки под углом помогает студентам освоить технику выполнения сварочных швов в нестандартных положениях, что может потребоваться в реальных проектах.

• Работа с различными материалами: симуляторы могут предоставлять возможность работать с различными материалами, от обычных металлов до специальных сплавов, позволяя студентам адаптироваться к разнообразным материалам, используемым в промышленности.

• Эмуляция аномальных условий: создание сценариев с аномальными условиями, такими как изменение температуры окружающей среды, может помочь студентам развивать стратегии адаптации к переменным условиям.

Заключение:

Цифровые технологии уже сегодня играют важную роль в современном сварочном обучении, обеспечивая студентов доступом к разнообразным обучающим материалам, симуляторам сварки и виртуальным тренажерам. Они улучшают интерактивность обучения и помогают студентам быстрее освоить навыки сварки. В будущем цифровые технологии могут использоваться еще более широко, включая виртуальную и дополненную реальность, а также анализ данных для персонализированного обучения. Благодаря этим инновациям студенты смогут более эффективно осваивать навыки сварки, что приведет к повышению качества обучения и улучшению подготовки специалистов в этой области. В целом, цифровые технологии обещают изменить образование в целом, в том числе и область сварочного обучения. Они открывают новые возможности для преподавателей и студентов, и,

возможно, станут важной частью будущего образования и профессиональной подготовки.

Использованные источники:

1. Киселев Г. М. Информационные технологии в педагогическом образовании: учебник / Г. М. Киселев, Р. В. Бочкова Москва: Дашков и К°, 2014. 151 с.
2. Кузнецов С. А. Большой толковый словарь русского языка / С. А. Кузнецов. Санкт-Петербург: Норинт, 2000. 1536 с.
3. Abdukaxxarov, A. A., Kenjayev, T. N., Dushabayeva, O. I., & Abdusattorova, S. R. (2023). Payvandlash usullari orqali yeyilgan detallarning o'lchamlarini tiklash va mustahkamlash. *IQRO*, *2*(2), 786-789.
4. Ergashev, M., Abdukaxxarov, A. A., Komilov, I. R., & Kenjayev, T. N. (2023). Yeyilgan detallarni qayta tiklash va mustahkamlash texnologiyalarining samaradorligini taqqoslash. *Science and Education*, *4*(2), 773-778.

УДК 911.372

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ЗАБРОШЕННЫЕ ГОРОДА РОССИИ: ИСТОРИЯ РАЗВИТИЯ И УПАДКА

Аннотация. В статье рассматриваются исчезнувшие города и населенные пункты России, их особенности, географическое положение. История развития города и факторы, способствующее развитию. Также рассмотрены причины убыли населения.

Ключевые слова: город, население, геоурбанистика, заброшенный город.

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ABANDONED CITIES OF RUSSIA: HISTORY OF DEVELOPMENT AND DECAY

Abstract. The article examines the disappeared cities and towns of Russia, their features, and geographical location. History of the city's development and factors contributing to its development. The reasons for population decline are also considered.

Keywords: city, population, geo-urbanism, abandoned city.

Чаще всего городами-призраками в России называются заброшенные населенные пункты, архитектурный ландшафт которых зачастую остается почти в том же самом состоянии, что и в момент, когда их покинули последние жители. Среди причин опустения таких городов − истощение местных природных ресурсов, закрытие градообразующих предприятий, смещение экономической активности в другие места, появление железных и автомобильных дороги в обход города или даже стихийные бедствия. В 2020 году Росстат зафиксировал самое активное сокращение населения в Приволжье, Сибири и на Дальнем Востоке. Например, в Сибирском федеральном округе население сократилось на 54 200 человек.

На территории современной России есть множество городов и поселков-призраков. Населенные пункты, в которых раньше кипела жизнь, сегодня представляют из себя руины − какие-то из них стали не нужны из-за закрытия предприятий, но некоторые люди все равно остались там жить, другие погибли от природной стихии. Их объединяет то, что по сей день они притягивают туристов.

Молога. Ярославская область. Этот город-призрак часто сравнивают с мифическим островом-страной Атлантидой. Первые упоминания о поселении и Моложском княжестве в летописях относятся к XII веку. История небольшого города, в котором к началу XIX века проживало не менее 7000 человек, оборвалась в 1935 году, когда власти СССР приняли решение о строительстве Рыбинского водохранилища и ГЭС, а Молога, согласно планам, подлежала затоплению. Переселение местных жителей из города в Рыбинск, которое длилось почти четыре года, началось весной 1937 года. Помимо этого, города при строительстве Рыбинской ГЭС были затоплено и полностью ушли под воду и разрушились 700 населенных пунктов в районе притоков Волги.

Хальмер-Ю. Республика Коми. Поселение городского типа на реке Хальмер-Ю было создано в 1940-х годах благодаря обнаружению здесь экспедицией под руководством геолога Григория Иванова месторождения угля ценной категории «К». В 1957 году началась добыча полезных ископаемых и топлива. В первые годы среднесуточная добыча могла достигать 250 тонн угля, однако к 1980-1990-м годам шахта перестала быть рентабельной, и власти приняли решение закрыть ее.

Поселок городского типа был практически ликвидирован осенью 1995 года − власти перевезли местных жителей в соседнюю Воркуту, а сам Хальмер-Ю был закрыт. После того, как мертвый город был заброшен, он часто использовался в качестве полигона для военных испытаний.

Иультин. Чукотский автономный округ. В переводе с чукотского название этого ныне заброшенного города означает «длинная льдинка» или «длинное перо». Город появился в 1940-1950 годах благодаря открытию в 1937 году геологом Владимиром Миляевым вблизи будущего Иультина одного из крупнейших в мире полиметаллических месторождений. Строительство жилых зданий в поселке началось только в послевоенный период. К 1959 году здесь жило более 2400 человек.

На то, что к 2000 году поселок был упразднен и полностью покинут местными жителями, повлияло множество разных факторов. Среди главных причин − закрытие местного рудника и горного комбината в 1995 году, суровый климат и слишком большая удаленность от больших городов.

Кадыкчан − город-призрак в Сусуманском районе Магаданской области, основанный в 1943 году. Как и большинство маленьких советских городков и поселков, он возник благодаря промышленному объекту, который находился поблизости, − крупной Аркагалинской ГРЭС. Станция

работала благодаря углю, который добывался в месторождении рядом с Кадыкчаном, − именно в этих шахтах и работало большинство взрослого населения города. В 1996 году в шахтах рядом с городом произошел взрыв, из-за которого погибли шесть человек. После произошедшего власти решили законсервировать месторождение и заморозить предприятие. Из-за фактического отсутствия рабочих мест население начало постепенно уезжать из Кадыкчана. В 2003 году на основании закона Магаданской области № 32403 Кадыкчану присвоили статус неперспективного, жителей было постановлено вывезти. К 2010 году поселок Кадыкчан полностью опустел. Но в 2021 году численность населения увеличилась до четырех человек. По данным на 2022 год, в нем проживают трое человек

Когда-то в Бечевинке на Камчатке располагалась самая удаленная база подводных лодок − она находилась в 80 километрах от Петропавловска-Камчатского, и жили там только военные с семьями. Поселок подводников был основан в 1960-х годах, а в 1996 году его расформировали как морской гарнизон − подводные лодки перевели на другие базы, а личный состав вывезли с Камчатки на Большую землю. В 1998 году все имущество было списано со счетов Минобороны. Какое-то время поселок посещали рыбаки, но постепенно и они перестали там появляться − с тех пор он заброшен.

Бонивур в Хабаровском крае часто называют «последним городом в СССР», хоть в действительности это далеко не последняя крупная союзная городская стройка. Строительство нового города на Амуре началось в 1980 году: советские власти хотели возвести населенный пункт, чтобы в нем жили работники и строители крупнейшего на Дальнем Востоке завода азотных удобрений. Почти сразу после начала стройки у комсомольцев, прибывших в Хабаровский край, появились проблемы с техникой и стройматериалами, а финансирование на возведение Бонивура начали постоянно урезать. В итоге большинство строителей бросили проект, уехав домой или в другие более крупные и развитые города Дальнего Востока, и ни город, ни завод азотных удобрений так и не были открыты.

Использованные источники:

1. Забытая точка на карте: 9 городов-призраков и заброшенных поселков России [Электронный ресурс]// Форбс. URL: https://www.forbes.ru/society/468455-zabytaa-tocka-na-karte-9-gorodov-prizrakov-i-zabrosennyh-poselkov-rossii (дата обращения: 20.01.2024).
2. Даниленко Л.В., Поволкович Ф.А. Город-призрак как объект туристского интереса [Электронный ресурс]// Российские регионы: взгляд в будущее. - 2015. -№3 (4). URL: https://cyberleninka.ru/article/n/gorod-prizrak-kak-obekt-turistskogo-interesa-goroda-prizraki-sahalinskoy-oblasti (дата обращения: 24.01.2024).

УДК 336.6

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ДИНАМИКА РАЗВИТИЯ ПАЕВЫХ ИНВЕСТИЦИОННЫХ ФОНДОВ В РОССИИ

Аннотация. Развитие института коллективных инвестиций в России характеризуется определенными особенностями. Несмотря на сложные экономические и геополитические условия последних лет, розничные инвесторы проявляют значительный интерес к паевым фондам. На фоне ковидных ограничений, активного развития дистанционных услуг, а также агрессивного маркетинга управляющих компаний число пайщиков значительно возросло. В работе проанализированы основные тенденции развития рынка ПИФов за период 2018–2023 гг., сформулированы основные факторы развития коллективных инвестиций.

Ключевые слова: коллективное инвестирование, паевой инвестиционный фонд, ПИФ, управляющая компания, коллективные инвестиции, санкции, эффективность управления.

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DEVELOPMENT DYNAMICS OF MUTUAL INVESTMENT FUNDS IN RUSSIA

Abstract. The development of the collective investment institution in Russia is characterized by certain features. Despite difficult economic and geopolitical conditions of the recent years, retail investors show considerable interest in unit funds. Against the background of COVID restrictions, active development of remote services, and aggressive marketing of management companies, the number of shareholders has increased significantly. The paper analyzes the main trends in the development of UIF market in 2018-2022; the main factors of the development of collective investments are formulated.

Keywords: unit investment fund, UIF, managing company, collective investments, sanctions, management efficiency.

ПИФ играет важную роль в накоплении денежных средств инвесторов и их инвестировании в объекты, которые могут увеличить свою стоимость. Открытые ПИФы имеют больший потенциал развития на российском рынке коллективных инвестиций, так как обладают большим количеством преимуществ для инвесторов, по сравнению с другими фондами.

ПИФы развиваются быстрее других институтов на российском рынке коллективных инвестиций, как показывает динамика количества зарегистрированных фондов по типам в период с 2018 по 2022 годы на рисунке 1.

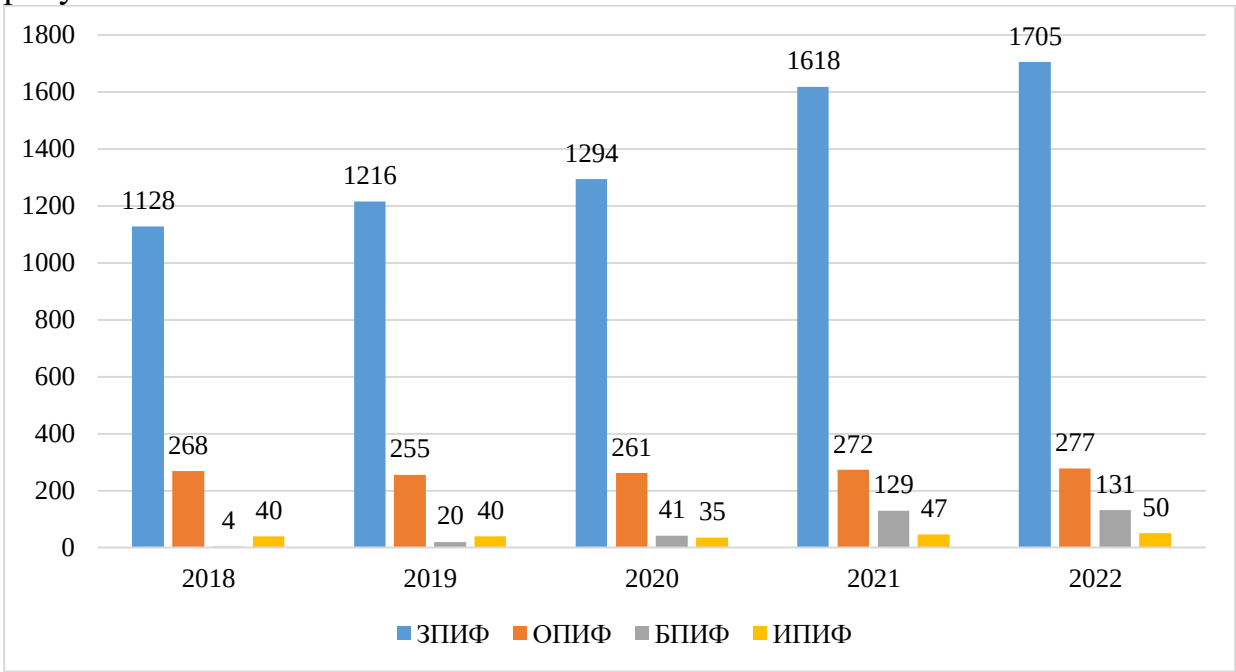

Рисунок 1 – Динамика числа зарегистрированных ПИФов в России по типам в 2018-2022 гг., ед.

Анализируя рисунок 1, можно утверждать, что количество ПИФов постепенно увеличивается, в том числе больше всего растет количество закрытых паевых инвестиционных фондов, благодаря их информационной непрозрачности и широкому набору активов. В ЗПИФ может вступить лишь определённый круг лиц, обычно в таких фондах высокие риски, но и высокая доходность.

Относительно других фондов, также идет быстрое увеличение, в последние кварталы открытые, интервальные и биржевые ПИФы показали хорошую доходность, благодаря чему и привлекли к себе внимание со стороны населения.

В 2021 году произошел прирост количества зарегистрированных ПИФов, даже несмотря на ужесточение денежно-кредитной политики Банка России и увеличение ставок по вкладам в кредитных организациях. Популярность ПИФов обусловлена их возможностью свободной купли-продажи по рыночным ценам в любое время и невысокой стоимостью пая.

Количество закрытых ПИФов выросло на 240 единиц, что на 18,5% больше, чем в 2020 году, а биржевые ПИФы увеличились в три раза. Благодаря их высокой ликвидности, минимальному порогу входа и низким комиссиям, они становятся все более популярны среди инвесторов. Удельный вес закрытых ПИФов составил около 80% от общего числа ПИФов. ПИФы открытого типа остаются на втором месте, доля их в общем количестве составляет всего около 16%.

Стоимость чистых активов (СЧА) является одним из самых важных индикаторов, характеризующих развитие рынка ПИФов. Этот показатель ПИФов имеет тенденцию к росту в долгосрочной перспективе. Однако, макроэкономическая неопределенность в стране вносит свои коррективы. Так, можем заметить, что СЧА ПИФов имела положительную динамику в годы пандемии, однако мы можем наблюдать резкий спад СЧА с первого квартала 2022 года.

По данным Центрального Банка России на 31.12.2022 года общее число СЧА ПИФов было 1 386 трлн рублей. Исходя из таблицы Б.1 (приложение Б) можно проследить динамику СЧА ПИФов по типам фонда за 2019-2022 года. Распределение СЧА по типам фондов от большего к меньшему представлено в таблице 1.

Таблица 1 – Распределение СЧА ПИФов по типам, млн руб. на 31.12.2022

Тип фонда	СЧА, тыс. руб.	Доля, %
Открытые	722 859 340,63	52,13
Закрытые	461 430 478,27	33,28
Биржевые	196 531 329,70	14,17
Интервальные	5 780 181,63	0,42
Всего	1 386 601 330,23	100

СЧА открытых ПИФов составляет около 54% от СЧА всех фондов. Далее идут закрытые фонды с долей 31,29%, биржевые с долей 14,54% и интервальные, доля СЧА которых составляет 0,34% от СЧА всех фондов.

Растущая популярность паевых инвестиционных фондов в России подтверждается значительным увеличением числа пайщиков за последние годы (рисунок 2).

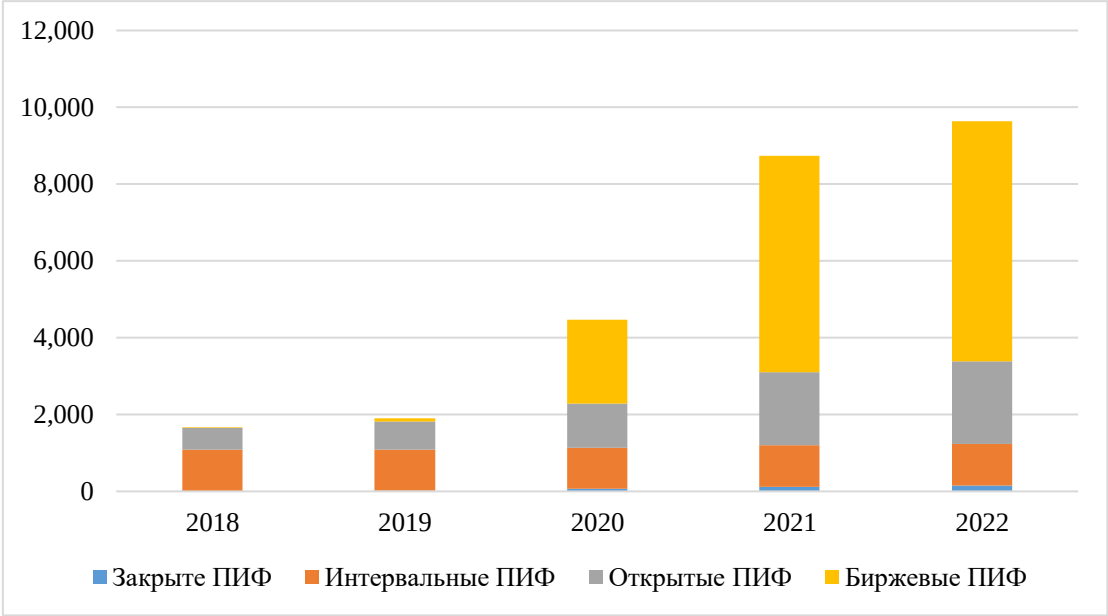

Рисунок 2 – Динамика количества пайщиков ПИФ в 2018-2022 гг., тыс. ед.

Общее количество пайщиков ПИФ в России к 2022 года увеличилось на 7601,3 тыс. ед. или в 5,5 раза, по сравнению с показателями 2018 года, из них в три раза только в 2021 году. Все типы ПИФов демонстрируют рост числа вкладчиков в период с 2018 по 2022 год.

Однако наибольший прирост показали биржевые ПИФы, которые увеличились на 5953,6 тыс. ед. или в 1857 раз, по сравнению с показателями 2018 года. При этом только в 2021 году наблюдался рост количества БПИФ на 4267,5 тыс. ед., что более чем в четыре раза превышает показатели 2020 года, подтверждая их растущую популярность.

Популярность БПИФов среди инвесторов повысилась на фоне поэтапного повышения ключевой ставки Банка России. Такой инструмент является одним из наиболее надежных для частных инвесторов, БПИФ позволяет получать рыночную доходность и защищать сбережения от инфляции.

Рынки ПИФов развиваются активнее. Они предлагают широкий выбор инвестиционных стратегий и активов, что привлекает как индивидуальных, так и институциональных инвесторов. Многократно возросла ценность профессиональной экспертизы, которая поможет определить точки роста, выбрать перспективные сектора и компании, оценить риски того или иного эмитента ценных бумаг.

Использованные источники:

1. Обзор ключевых показателей паевых и акционерных инвестиционных фондов [Электронный ресурс]// Информационно-аналитический материал. URL: http://www.cbr.ru/analytics/rsci/rewiew_pif_aif/ (дата обращения: 25.01.2024).

2. Юзвович М.С. Инвестиции: учебник / под редакцией Л.И. Юзвович. – 3-е изд., стер. – Москва: ФЛИНТА, 2020. – 610 с. URL: [Электронный ресурс]//

Экономика. Интерфакс. – 2023. URL: https://e.lanbook.com/book/151371 (дата обращения: 28.01.2024).

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ДИНАМИКА РАЗВИТИЯ НЕГОСУДАРСТВЕННЫХ ПЕНСИОННЫХ ФОНДОВ В РОССИИ

Аннотация. В нашей стране, несмотря на то что негосударственные пенсионные фонды также становятся все более распространенным явлением, их потенциал используется не в полной мере, правовые основы несовершенны. Необходим комплекс мер, направленных на дальнейшее развитие негосударственных пенсионных фондов в аспекте формирования экосистемы, регулирование со стороны государства. Представлен анализ доходности негосударственных пенсионных фондов, обосновано, что негосударственные пенсионные фонды могли бы стать стратегическими инвесторами экономики России.

Ключевые слова: оптимизация пенсионной системы, негосударственный пенсионный фонд, пенсионная реформа, инвестиции, коллективные инвестиции.

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DEVELOPMENT DYNAMICS OF NON-STATE PENSION FUNDS IN RUSSIA

Abstract. In our country, despite the fa c t that non-state pension funds are also becoming more common, their potential is not fully used, the legal fram ework is not sufficiently perfect. We need a set of measures aimed at further development of non-state pension funds in the aspect of ecosystem formation, regulation by the state. The analysis of the profitability of non-state pension funds is presented, it is proved that non-state pension funds could become strategic investors in the Russian economy.

Keywords: optimization of the pension system, non-state pension fund, pension reform, investments, collective investment.

Несмотря на санкционное давление и некоторые ограничения в финансовой инфраструктуре и, в 2022 году рынок коллективных инвестиций продолжил тенденцию предыдущих лет и продемонстрировал достойные результаты.

В России по данным на 30 сентября 2023 года действует: 2431 паевых инвестиционных фондов (далее – ПИФ), 26 специализированных депозитариев, 37 негосударственных пенсионных фондов (далее – НПФ), 2 акционерных инвестиционных фонда (далее – АИФ) и 277 управляющих компаний (далее – УК).

Институциональные инвесторы, которые имеют свободный капитал, играют значительную роль в динамике фондового рынка. Они включают негосударственные пенсионные фонды, которые капитализируют средне- и долгосрочные финансовые инструменты. Благодаря их работе на рынке ценных бумаг решаются некоторые проблемы финансирования экономики.

Результаты инвестирования НПФ оказались ниже инфляции (11,9% по итогам 2022 г.). При этом за период с 2018 по 2021 г. результаты инвестирования НПФ обгоняли среднюю инфляцию: среднегодовая доходность за этот период составила 5,4% до выплаты вознаграждения, пенсионных резервов – 5,8%, а инфляция – 4,6%.

Даже в такой нестабильный год у НПФ наблюдался прирост инвестиционных портфелей. Несмотря на отрицательную переоценку финансовых инструментов (особенно акций), положительная доходность фондов была обеспечена процентными доходами (преимущественно по корпоративным и государственным облигациям) и дивидендами.

Далее подробно рассмотрим НПФ, их динамику с третьего квартала 2021 года по второй квартал 2023 года представлена на рисунке 1.

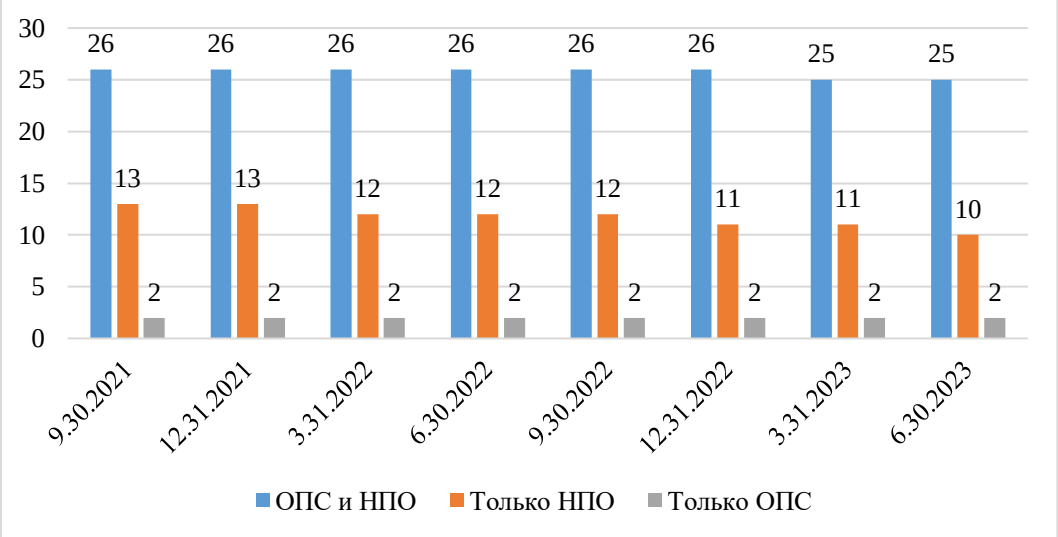

Рисунок 1 – Динамика количества негосударственных пенсионных фондов

Исходя из рисунка 1 видно, что количество НПФ, предоставляющих услуги по негосударственному пенсионному обеспечению (НПО)

снизилось, также, как и фонды обязательного пенсионного страхования (ОПС). Снижение произошло в связи увеличением требований со стороны Центрального Банка и ужесточением требований законодательства РФ. Динамика снижения количества НПФ связана, прежде всего, с низкой эффективностью деятельности большинства НПФ в России, а также со слияниями фондов друг с другом. По данным на 30 сентября 2023 года – 36,3 млн человек участвуют в ОПС и 6,2 млн человек – в НПО.

Доходность НПФ в 2022 г. можно оценивать позитивно с учетом нестабильности на финансовом рынке. Но не совсем корректно рассматривать доходность инвестиционных портфелей фондов за один год, так как в долгосрочном периоде менее консервативные стратегии являются, как правило, более выигрышными.

Более высокие показатели доходности отдельных фондов объясняются большими процентными и купонными поступлениями по облигациям. По итогам прошлого года композитный индекс облигаций Мосбиржи вырос на 5,36%. На рисунке 2 показана динамика доходности НПФ за период с 2018 по 2022 год.

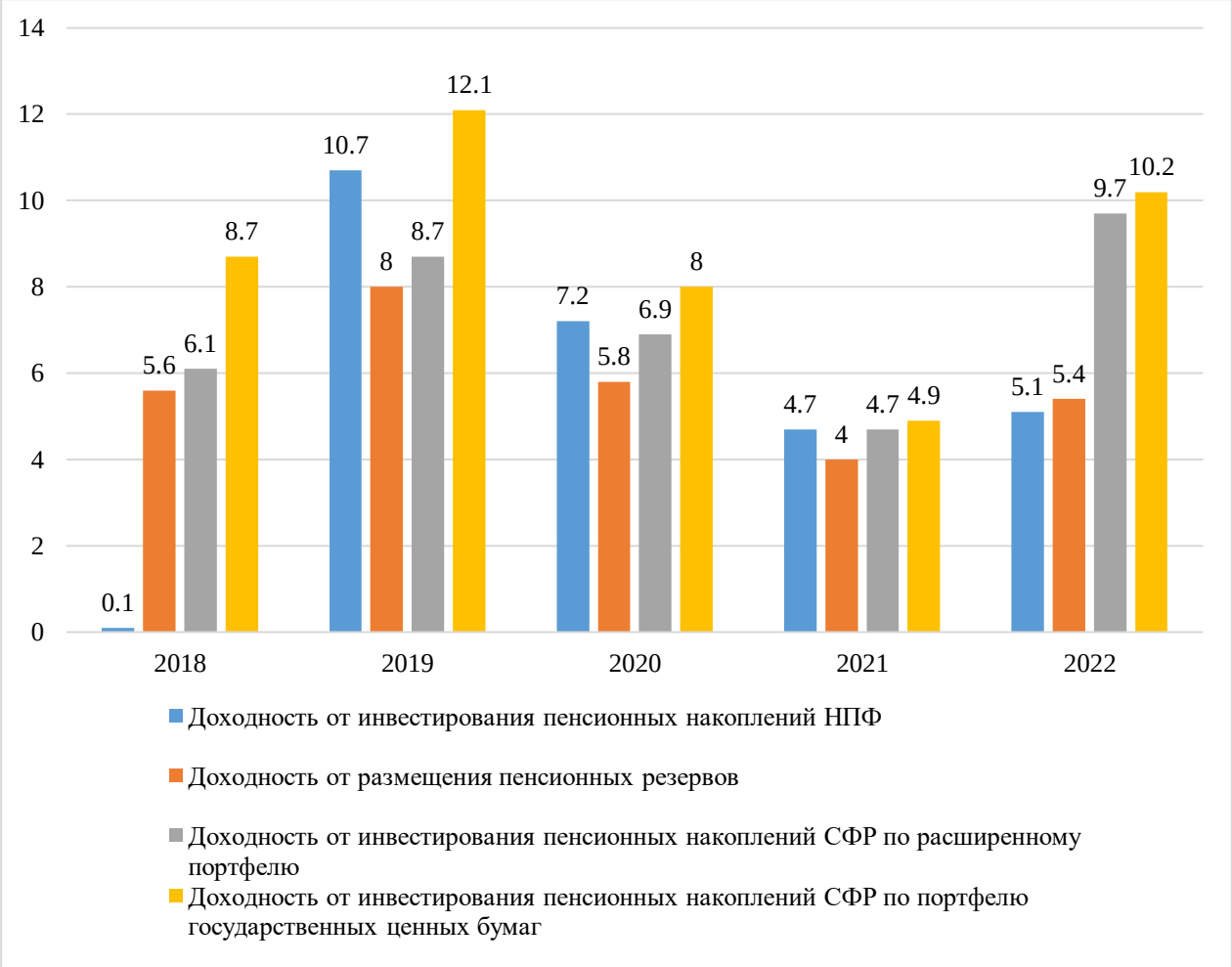

Рисунок 2 – Доходность негосударственных пенсионных фондов за период 2018-2023 гг.

В 2022 г. рынок НПФ разделился на фонды, которые преимущественно вкладывали либо в акции, либо в облигации. Крупнейшие НПФ показали низкую доходность за счет повышенной доли акций. За 2022 г. главный бенчмарк российского рынка акций – индекс Мосбиржи опустился на 43,12%.

Лидерами по доходности в 2022 г. выступили средние и небольшие по объему активов фонды. Небольшие НПФ в своей работе предпочитают более консервативные инвестиционные стратегии, что стало преимуществом в нестабильном 2022 году.

Рейтинг НПФ по объему пенсионных резервов в таблице 1 составлен по данным Банка России.

Таблица 1– Рейтинг НПФ по объему пенсионных резервов в управлении на 31.12.2022

Негосударственный пенсионный фонд	Год основания	Пенсионные резервы, тыс. руб.	Доля на рынке, %	Доходность на 2022, %	Участники, чел.
НПФ БЛАГОСОСТОЯНИЕ (АО)	1996	483704654,46	29,02	3,37	1320462
НПФ ГАЗФОНД	1994	461188234,31	27,67	2,41	228544
НПФ Эволюция (АО)	2000	148904798,99	8,93	5.82	196028
НПФ Транснефть (АО)	1993	123770658,65	7,43	7,40	139236
НПФ Сбербанка (АО)	1995	87903290,67	5,27	3,05	1878417

Как видно из таблицы 2 долю более 78% занимают 5 самых крупных НПФ (НПО). В 2022 году лидерство в объеме пенсионных резервов опять занимает АО «НПФ БЛАГОСОСТОЯНИЕ». Средневзвешенная доходность НПФ (НПО) 5,4%, что выше средней доходности 5 крупнейших НПФ (НПО), которая составила 4,4%. Все фонды за 2022 год продемонстрировали положительную доходность как по пенсионным резервам, так и по пенсионным накоплениям.

Использованные источники:

1. Основные показатели деятельности НПФ за 2022 год [Электронный ресурс]// Информационно-аналитический материал. URL: http://www.cbr.ru/finmarket/supervision/sv_coll/ops_npf/2022/ (дата обращения: 25.01.2024).

2. Российские НПФ показали доходность по пенсионным накоплениям и резервам выше инфляции [Электронный ресурс]// Экономика. Интерфакс. – 2023. URL: https://quote.rbc.ru/news/article/64351b809a79471ba9f74f17 (дата обращения: 28.01.2024).

УДК 314.83

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ПЕРСПЕКТИВЫ ДЕМОГРАФИЧЕСКОГО РАЗВИТИЯ РОССИИ К 2046 ГОДУ ПО ДАННЫМ РОССТАТА

Аннотация. В статье рассматривается демографический прогноз для России на период до 2046 года по данным Росстата.

Ключевые слова: рождаемость, смертность, население, демография, демографический кризис, естественный прирост населения, депопуляция.

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PROSPECTS FOR DEMOGRAPHIC DEVELOPMENT IN RUSSIA BY 2046

Abstract. The article discusses the demographic forecast for Russia for the period until 2046 according to Rosstat.

Keywords: birth rate, mortality, population, demography, demographic crisis, natural population growth, depopulation.

На протяжении последних десятилетий Россия сталкивается с проблемой убыли населения. Этот тревожный тренд связан с различными факторами, включая низкий уровень рождаемости, высокий уровень смертности и миграцию.

Численность постоянного населения России на 1 января 2024 года составила 146,2 млн человек, что на 0,17%, или на 243,8 тыс. человек, меньше, чем годом ранее (без учета ЛНР, ДНР, Херсонской и Запорожской областей.).

Судя по цифрам ведомства, темпы убыли населения РФ снизились: в 2022 году число людей в стране сократилось на 532,6 тыс. человек.

Значительная (более чем в два раза) разница между размерами сокращения населения России в 2023 и 2022 годах вызвана снижением естественной убыли и ростом зарегистрированного миграционного прироста.

Естественная убыль населения в 2023 году сократилась по сравнению с 2022 годом из-за того, что в первые три месяца 2022-го большой вклад в смертность вносила пандемия COVID-19, которая в России закончилась к апрелю 2022 года.

Росстат готовит демографический прогноз страны в трех вариантах - низкий, средний и высокий прогнозы − на основе различных гипотез относительно будущих тенденций рождаемости, смертности и миграции.

Росстат опубликовал высокий и низкий варианты демографического прогноза для России на период до 2046 года. Они стали дополнением к базовому варианту, который был представлен в октябре 2023 года и предполагает сокращение численности населения в ближайшие 22 года на 7,3 млн человек, до 138,8 млн. При этом демографический прогноз составлен без учета населения, проживающего в четырех новых регионах России. Прогнозная численность населения в новых субъектах РФ на 1 января 2024 года определена в количестве 3,2 млн человек.

К 1 января 2046 года, по прогнозу Росстата, население страны в среднем (базовом) сценарии сократится до 138,8 млн человек.

В пессимистичном сценарии статслужба допускает более глубокую убыль населения − на 15,4 млн человек за прогнозный период (упадет до 130,6 млн человек), а в оптимистичном, напротив, закладывает прирост численности на 4,6 млн человек (вырастет до 150,9 млн человек).

Согласно среднему (базовому) прогнозу Росстата, численность населения в РФ в 2024-2032 годах будет сокращаться более чем на 400 тыс. человек в год, в том числе естественная убыль населения будет превышать в эти годы 600 тыс. человек в год, а в некоторые годы и 700 тыс. человек, миграционный прирост на всем протяжении прогнозного периода закладывается в интервале 210-230 тыс. человек в год. Начиная с 2032 года, по среднему прогнозу Росстата, население страны будет сокращаться темпами менее 400 тыс. человек в год (за счет замедления естественной убыли населения), в 2041-2045 годах - менее чем на 200 тыс. человек в год.

В высоком (оптимистичном) сценарии демографического прогноза Росстат ожидает сокращение численности населения темпами менее 200 тыс. человек в год до 2028 года (закладывает в этот период естественную убыль населения в 400-500 тыс. человек в год при высоком миграционном приросте в 315-370 тыс. человек в год). Начиная с 2029 года Росстат ожидает в высоком сценарии рост численности населения с постепенным ускорением до более 500 тыс. человек в год с 2041 года. В этом сценарии Росстат ожидает, что естественная убыль населения прекратится в 2037 году и начнется естественный прирост населения (превышение рождаемости над смертностью). Миграционный прирост после 2033 года в этом сценарии ожидается свыше 400 тыс. человек в год.

Низкий и высокий варианты прогноза представляют собой два крайних и довольно маловероятных сценария, при которых одновременно

совпадает самая плохая или самая хорошая динамика сразу для всех трех составляющих прогноза (смертности, рождаемости и миграции). В реальности чаще всего динамика этих трех показателей комбинируется в разнонаправленных вариантах: например, низкий сценарий рождаемости, высокий для смертности и средний для миграции.

Низкий вариант прогноза может реализоваться, если миграционный прирост стабилизируется на нынешнем уровне, а ожидаемая продолжительность жизни и рождаемость тоже будут близки к стабильным с очень медленным ростом в будущем, допускает эксперт.

В дальнейшем абсолютное число родившихся будет снижаться из-за сокращения числа женщин в активном репродуктивном возрасте. Ожидаемая продолжительность жизни, напротив, будет расти: для России будет актуально старение населения. Прогнозировать миграцию сложно из-за нестабильной внешнеэкономической ситуации: она будет расти, но переломить убыль населения не сможет, считает Росстат.

Использованные источники:

1. Росстат раскрыл альтернативные сценарии по изменению числа жителей России [Электронный ресурс]// РБК. URL: https://www.rbc.ru/economics/09/01/2024/659d29e29a79478b1ff3a39f?utm_source=yxnews&utm_medium=desktop&utm_referrer=https%3A%2F%2Fdzen.ru%2Fnews%2Fstory%2FRosstat_predstavil_tri_varianta_prognoza_chislennosti_naseleniya_RF_k2046_godu--aa4bc48433265f612d2de3a67899827f&from=copy (дата обращения: 20.01.2024).
2. Российский статистический ежегодник [Электронный ресурс]// Федеральная служба государственной статистики (Росстат). М., 2024. URL: http://www.gks.ru/wps/wcm/conne ct/rosstat main/rosstat/ru/statistics/publications/catalog/doc 1135087342078 (28.01.2024).
3. Щербакова Е.М. Динамика населения россии в контексте мировых тенденций [Электронный ресурс]// Проблемы прогнозирования. -2022. -№4 (193). URL: https://cyberleninka.ru/article/n/dinamika-naseleniya-rossii-v-kontekste-mirovyh-tendentsiy (дата обращения: 29.01.2024).

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ПРИНЦИПЫ И МЕТОДЫ ОБУЧЕНИЕ ОБЩЕНИЮ НА РУССКОМ ЯЗЫКЕ КАК ИНОСТРАННОМ

Аннотация. Данная статья посвящена современным методам и инновационным приемам обучению русскому языку как иностранному. Автором анализируется методика обучения русском языку иноязычных группах.

Ключевые слова: русский язык, иностранный, иноязычные, методика, принципы, дисциплина, цель, обучения, изучения, общения.

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PRINCIPLES AND METHODS OF TEACHING COMMUNICATION IN RUSSIAN AS A FOREIGN LANGUAGE

Abstract.This article is devoted to modern methods and innovative techniques of teaching Russian as a foreign language. The author analyzes the methodology of teaching Russian to foreign language groups.

Keywords: Russian, foreign language, foreign languages, methodology, principles, discipline, purpose, teaching, learning, communication.

ВВЕДЕНИЕ

Современным системе образовании, одной из основных категорий любой методики является принцип обучения. Основные принципы определяют требования как к учебному процессу, как и к его важнейшим составляющим (целям, задачам, методам, средствам, организационным формам). Следует отметить что, методика обучения русскому языку как иностранному (РКИ) представляет собой самостоятельную педагогическую дисциплину о законах и правилах обучения языку и способах овладения языком. Отличительными особенностями учебного предмета «русский язык как иностранный» по сравнению с курсом родного языка считаются: язык является одновременно и целью, и средством обучения (средством получения специальности на изучаемом языке); в отличие от родного языка, усвоение которого идет неосознанно и интуитивно (путь «снизу-вверх»), усвоение иностранного языка осуществляется осознанно и намеренно (путь

«сверху вниз») (Л.С. Выготский); изучение языка сводится к овладению новыми способами выражения мыслей; учитывается опыт овладения учащимися родным языком; в качестве ведущей рассматривается практическая цель обучения, направленная на овладение языком как средством общения и приобретения умений, необходимых для успешного владения языком [1]. Такая характеристика пути овладения иностранным языком особенно применима к языковому вузу, где осознание и систематизация средств и способов формирования мыслей сопровождает весь курс практического овладения языком.

ОБСУЖДЕНИЕ И РЕЗУЛЬТАТЫ

Базовыми науками для методики РКИ являются педагогика, лингвистика и психология. Без них методика РКИ не может существовать и плодотворно развиваться. Способствует также развитию методики взаимодействие её с другими областями научного знания. К ним относятся: теория коммуникации, информации, общая теория систем, математическая статистика и др. У методики РКИ имеются общие черты с методикой обучения русскому языку как родному. Однако отличия этих методик так существенны, что не позволяют считать их одной наукой. Язык должен стать инструментом общения, позволяющим проникнуть в другую культуру, определить для себя ее характерные черты и усвоить тип поведения для данной культуры [2]. Только таким образом будущие студенты могут стать полноценными участниками межкультурного диалога. Овладение языком – длительный, трудоёмкий и индивидуальный процесс. В программу изучения русского языка, как и других иностранных, входит углубленное изучение грамматики, фонетики и лексического состава языка. Главным становится функциональный принцип обучения. Необходимо научить студентов не только основам иностранного языка, но и научить их с интересом и правильно общаться на другом языке, как в рамках профессиональной тематики, так и в ситуациях повседневной жизни. Ученики должны не только понимать обращенную к ним речь на иностранном языке, но и правильно построить свой ответ, который будет соответствовать культуре собеседника. Поэтому помимо изучения явлений языка, необходимо изучать особенности культур – участников диалога, их характерные черты, сходства и различия. Изучение культурных традиций составной частью входит в процесс обучения иностранному языку. Обучение иностранному языку одновременно является обучением межличностному общению. В процессе работы на занятиях студенты должны подтверждать и отстаивать свою точку зрения, пользоваться аргументацией, научиться анализировать содержание ответного сообщения и находить пути взаимопонимания в процессе диалога на изучаемом языке [3]. Таким образом расширяются границы обучения, что позволяет оптимизировать сам процесс общения между людьми. Инновационный подход к обучению позволяет реализовать современные цели обучения –

формирование коммуникативной компетенции учащихся и воспитание толерантности в мультикультурном обществе. Новый подход к обучению русского языка, как иностранного, опирается на методы и приемы, способствующие эффективному обучению. Известно, что некоторые могут овладеть языком сразу, некоторым овладение языка дается с трудом. При всей сложности процесса обучения иностранных языков учитель ищет такие пути, способы, при которых обучение языка будет эффективным и полезным для каждого. Преподаватель должен уметь придавать уроку живость и увлекательность. В арсенале искусства преподавания должен быть индивидуальный набор методов, средств и приёмов обучения. Сюда входит правильное построение урока, учет психологии учащихся, незамысловатая шутка учителя, применение наглядного и аудио материалов.

Существуют основные принципы, которыми стоит руководствоваться в преподавании русского языка как иностранного. Они представляют собой цельную систему из общедидактических, лингвистических и методических составляющих. Исходными при определении содержания обучения и наиболее эффективных методов и приемов работы над учебным материалом являются общедидактические принципы. Они отражают основные положения теории образования и обучения, разрабатываемые в дидактике. Принцип научности предполагает соответствие учебного предмета «Русский как иностранный» достоверным лингвистическим сведениям о русском языке и особенностям его функционирования в разных ситуациях речевого общения, что обеспечивается соблюдением соответствующих образовательных стандартов. В целях обеспечения доступности, систематичности и последовательности традиционная дидактика предполагает преподавание и усвоение знаний в определенном порядке, требует логического построения как содержания, так и процесса обучения. Изучаемый материал должен представлять собой систему, состоящую из логических тем, в каждой из которых необходимо установить содержательные центры, выделить главные понятия. При изложении учебного материала и организации учебной деятельности рекомендуется идти от простого к сложному, от легкого к трудному, от известного к неизвестному, от конкретного к абстрактному, от фактов к обобщениям и т.п. Это актуально для всех, кто изучает русский язык. Также основным из принципов является - принцип наглядности [4]. В обучении РКИ выделяют языковую и неязыковую наглядность. К первому виду можно отнести:

1.Коммуникативно-речевую наглядность – наглядную демонстрацию коммуникативно-смысловой функции языкового явления в речи (устной и письменной).

2.Демонстрацию языковых явлений в изолированном виде (фонем, морфем, слов, предложений) в устной или письменной форме.

3.Лингвистическую и грамматическую схемную наглядность (схемы, таблицы и т.д.). К неязыковой наглядности относятся все способы предъявления экстралингвистических факторов окружающей действительности: естественная, изобразительная наглядность (картины, диафильмы, кинофильмы).

В зависимости от вида анализатора различают 1) слуховую; 2) зрительную; 3) двигательно-моторную. Будучи «золотым правилом» дидактики по Я.А. Коменскому, наглядность может обеспечить эффективность обучения русскому языку, если использовать на занятиях различные ее виды: изобразительную (картины, фотографии, рисунки), звукоизобразительную (кинофильмы, видеоматериалы, телепрограммы), звуковую (аудиозаписи), графическую (таблицы, схемы) и, конечно, вербальную (образные словесные описания событий, фактов, действий). Принцип сознательности и активности обучаемых – один из главных принципов современной дидактической системы, благодаря которому обучение становится наиболее эффективным. Активности и сознательности в преподавании РКИ можно добиться, использовав такие методы обучения, как дидактические игры, дискуссии, стимулировать коллективные формы работы, взаимодействие инофонов в процессе обучения, например, через организацию диалогов. Реализация этого принципа в обучении означает сознательное отношение обучающегося к самому процессу обучения и приемами самостоятельную работу. Проявляя интеллектуальную, познавательную активность, обучаемый лучше усваивает материал, он становится частью их сознания, основой речевого поведения. Осмысление должно обеспечиваться через ситуативную обусловленность, контекст, языковые средства (синонимы, антонимы и т.д.), через наглядность, через выделение характерных признаков. Сознательность учеников проявляется в понимании изучаемого материала, умении пользоваться приобретаемыми навыками в решении коммуникативных задач, во владении приемами самостоятельных работ, а также формирования контроля и самоконтроля.

ЗАКЛЮЧЕНИЕ

Таким образом, соблюдение принципа активности тесно связано с принципом прочности результатов обучения. Он выражается в том, что вводимые в память слова, грамматические структуры должны удерживаться в ней, сохраняться, чтобы инофон мог извлекать из нее нужные единицы в необходимый момент. Прочность усвоения достигается за счет яркого преподнесения материала, интенсивной тренировки материала сразу после ознакомления и позже, за счет самостоятельного творческого применения материала. Основные правила этого принципа, которые необходимо учитывать в методике РКИ, можно сформулировать так: для прочного усвоения надо правильно организовать необходимое количество и периодичность репродуктивных и творческих упражнений, а также систематическое повторения материала; прочность знаний обеспечивает

структурированный материал, в котором выделяется главное, обозначаются логические связи; систематический контроль над результатами обучения, проверкой и оценкой уровня сформированности языковых и коммуникативных компетенций обучающихся – важнейшее звено в процессе формирования прочных знаний и умений. Обучение русскому языку немыслимо без учета лингвистических принципов РКИ, которые базируются на данных языкознания как базисной для методики науки. Принцип системности рассматривает русский язык как системное образование, состоящее из взаимосвязанных элементов разных уровней, объединенных в единое целое.

Использованные источники:

1. Акишина А.А. Учимся учить. Для преподавателя русского языка как иностранного / А.А. Акишина, О.Е. Каган. – М.: Русский язык. Курсы, 2010. – 256 с.
2. Балыхина Т.М. Лингвокультурологический методический словарь / Н.Ю. Oriental Renaissance: Innovative, educational, natural and social sciences (E)ISSN:2181-1784 www.oriens.uz SJIF 2023 = 6.131 / ASI Factor = 1.7 3(6), June, 2023 244 Горчакова, А.А. Денисова. – М.: РУДН, 2008.
3. Бердичевский А.Л. Урок иностранного языка без проблем. Методический портфель учителя иностранного языка / А.Л. Бердичевский. – Рига, 2006.
4. Вагнер В.Н. Синтаксис русского языка как иностранного и его преподавание / В.Н. Вагнер. – М.: Флинта: Наука, 2007.

УДК 159.9

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К ВОПРОСУ О МОТИВАЦИИ СОТРУДНИКОВ В СИСТЕМЕ ОРГАНОВ ВНУТРЕННИХ ДЕЛ

Аннотация. В статье рассмотрены понятие и сущность мотивации сотрудников. Охарактеризованы особенности мотивации сотрудников в системе органов внутренних дел. Показаны некоторые современные проблемы мотивации сотрудников в системе органов внутренних дел.

Ключевые слова: мотивация, сотрудники, система мотивации, заработная плата.

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ON THE ISSUE OF EMPLOYEE MOTIVATION IN THE SYSTEM OF INTERNAL AFFAIRS BODIES

Abstract. The article discusses the concept and essence of employee motivation. The features of employee motivation in the system of internal affairs bodies are characterized. Some modern problems of employee motivation in the system of internal affairs bodies are shown.

Keywords: motivation, employees, motivation system, salary.

Мотивация сотрудников является важнейшим фактором успеха любой организации. Мотивированные сотрудники более вовлечены, удовлетворены и продуктивны, что приводит к повышению уровня производительности и улучшению бизнес-результатов.

Мотивация сотрудников относится к факторам, которые побуждают человека вести себя определенным образом или предпринимать конкретные действия. Это процесс активизации, направления и поддержания усилий сотрудников, направленных на достижение целей организации. Мотивация может быть обусловлена различными внутренними и внешними факторами,

включая личное удовлетворение, признание, вознаграждения и чувство достижения.

Мотивация – это фундаментальный аспект человеческого поведения, который побуждает людей достигать своих целей и работать наилучшим образом. В контексте организаций мотивированные сотрудники с большей вероятностью будут вовлечены, продуктивны и удовлетворены своей работой. Следовательно, понимание взаимосвязи между мотивацией и эффективностью управления персоналом имеет решающее значение для организаций, стремящихся повысить свою эффективность и оптимизировать свои человеческие ресурсы [1].

Одним из ключевых мотивационных факторов является осознание значимости и важности работы, которую выполняют сотрудники ОВД. Ведь их деятельность направлена на обеспечение правопорядка в обществе, защиту граждан и предотвращение преступности. Причем непосредственное влияние на жизнь и безопасность людей делает задачи, стоящие перед ОВД, особенно важными и значимыми.

Следующий фактор мотивации – это возможность профессионального роста и развития внутри органов внутренних дел. Перспективы карьерного роста и повышения должностей являются мощным стимулом для сотрудников ОВД. При этом важно обеспечить объективность и прозрачность процесса оценки персонала, чтобы каждый сотрудник имел равные возможности для развития и продвижения по службе. Также мотивацию можно усилить путем проведения специализированного обучения и тренингов, которые помогут сотрудникам развивать свои профессиональные навыки и добиваться новых результатов в работе.

Также важным мотивационным фактором является социальный пакет, который предоставляется сотрудникам ОВД. К нему относятся выплаты, дополнительные льготы, забота о здоровье и социальное обеспечение сотрудников и их семей. Создание комфортных условий для службы и жизни сотрудников также влияет на их мотивацию и готовность проявлять высокую профессиональную активность.

В условиях проведения специальной военной операции в Российской Федерации наблюдаются тенденции развития криминогенной обстановки, негативно сказывающейся на внутренней безопасности и социально-экономическом развитии страны. Масштабы и темпы роста данного асоциального явления с каждым месяцем набирают невиданные обороты, что обусловлено негативными последствиями санкционного давления, ухудшением финансового положения граждан России, а также действиями диверсионных групп в приграничных районах государства. В результате все большее количество граждан становится вовлеченными в противоправную деятельность общественной жизни, что отражается на количестве неправомерных действий и уровне преступности в целом.

В этих условиях система внутренних дел, которая играет жизненно важную роль в поддержании правопорядка в обществе, требует квалифицированной и мотивированной рабочей силы.

Подбор и мотивация сотрудников в системе внутренних дел имеют решающее значение для общества. Используя различные методы подбора персонала, такие как конкурс, внутреннее продвижение по службе и сотрудничество с учебными заведениями, органы внутренних дел могут привлекать нужных людей. Кроме того, мотивация сотрудников за счет конкурентоспособной заработной платы, возможностей карьерного роста, признания и вознаграждений, а также благоприятной рабочей среды может привести к повышению удовлетворенности работой и общей эффективности в системе внутренних дел. Постоянные усилия по подбору персонала и мотивации сотрудников будут способствовать успеху и эффективности организации в целом.

В настоящее время можно отметить следующие проблемы мотивации сотрудников в системе органов внутренних дел: высокий уровень текучести сотрудников; недостаточное количество квалифицированных кандидатов; недостаточная осведомленность о возможностях и преимуществах, предлагаемых органами внутренних дел; высокий уровень стресса и эмоционального выгорания.

МВД уже более пяти лет испытывает нехватку кадров. В ноябре 2022-го Колокольцев отмечал, что дефицит составляет 90 тыс. человек, сейчас некомплект уже критический. Он предупреждал, что это может сказаться на уровне преступности [2]. Давление на трудовые ресурсы в экономике оказывает продолжающийся набор в Вооруженные силы России. Сотни тысяч потенциальных рабочих для других секторов экономики были призваны в армию или подписали контракт.

Таким образом, мотивация сотрудников в системе органов внутренних дел является сложной и многогранным процессом, требующим постоянного внимания и усилий.

Использованные источники:

1. Белова А.А. Мотивация в системе управления человеческими ресурсами организации в России и за рубежом // Современные научные исследования: актуальные вопросы, достижения и инновации. – 2020. – №10. – С. 46-49.
2.Глава МВД заявил о критической нехватке полицейских и следователей [Электронный ресурс] // РБК. – URL: https://www.rbc.ru/politics/10/08/2023/64d4d2629a7947695baea197?from=copy (дата обращения: 14.01.2024).

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ВЛИЯНИЕ ФАКТОРОВ НА ЦЕНООБРАЗОВАНИЕ АВТОМОБИЛЕЙ

Аннотация. В настоящей работе было проведено исследование комплексного набора данных — файла, состоящего из 16 734 строк и 19 колонок, для изучения автомобильного рынка Австралии. Целью является определение наиболее важных особенностей, влияющих на цены на автомобили, и то, как они различаются в зависимости от марки и модели, используя корреляционный и регрессионный анализ.

Ключевые слова: влияние, фактор, цена, ценообразование, автомобиль.

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INFLUENCE OF FACTORS ON CAR PRICING

Abstract. This paper examined a complex data set, a file consisting of 16,734 rows and 19 columns, to study the Australian automobile market. The goal is to determine the most important features that influence car prices and how they vary by make and model using correlation and regression analysis.

Key words: influence, factor, price, pricing, car.

Введение

Автомобильная индустрия играет значительную роль в экономике страны, и понимание факторов, влияющих на цены автомобилей, может быть полезным для принятия решений в этой отрасли.

Полученные результаты анализа регрессии позволят нам оценить влияние каждого из факторов на цены автомобилей и определить их статистическую значимость.

Этот набор данных расскажет вам о ценах на автомобили в Австралии в 2023 году. Он содержит данные о различных типах автомобилей и их характеристиках. Это поможет понять, как работает авторынок в Австралии.

Методология

В данном анализе мы будем использовать данные, собранные из различных источников, включая базы данных автомобильных продаж, а также информацию о рыночной конъюнктуре и экономических показателях. Мы применим статистические методы и техники, чтобы выявить связи и сделать выводы на основе полученных результатов. Для анализа данных использовалась программа Python 3.0, были применены статистические методы и техники, чтобы выявить связи и сделать выводы на основе полученных результатов.

Для оценки факторов, влияющих на стоимость автомобилей, мы взяли следующие факторы:

Year: *Год изготовления или выпуска.*

Model: *Название или код модели автомобиля.*

Car/Suv: *Тип автомобиля (легковой автомобиль или внедорожник).*

UsedOrNew: *состояние автомобиля (б/у или новый).*

Transmission: *Тип коробки передач (механическая или автоматическая)*

Engine: *Объем или мощность двигателя (в литрах или киловаттах).*

DriveType: *тип привода (передний, задний или полный).*

FuelType: *тип топлива (бензин, дизельное топливо, гибрид или электричество).*

Kilometres: *Расстояние, пройденное автомобилем (в километрах).*

CylindersinEngine: К*оличество цилиндров в двигателе.*

BodyType: *Форма или стиль кузова автомобиля (седан, хэтчбек, купе и т.д.).*

Doors: *Количество дверей в автомобиле*

Seats: *Количество мест в автомобиле*

Price: *Цена автомобиля (в австралийских долларах)*

Таким образом, наша модель регрессии выглядит следующим образом:

Таблица №1

OLS Regression Results

Dep. Variable:	Price	**R-squared:**	0.868
Model:	OLS	**Adj. R-squared:**	0.861
Method:	Least Squares	**F-statistic:**	132.1
Date:	Wed, 13 Dec 2023	**Prob (F-statistic):**	0.00
Time:	22:24:22	**Log-Likelihood:**	-1.6190e+05
No. Observations:	14921	**AIC:**	3.252e+05
Df Residuals:	14214	**BIC:**	3.306e+05
Df Model:	706		
Covariance Type:	nonrobust		

	coef	**std err**	**t**	**P>|t|**	**[0.025**	**0.975]**
const	-3.911e+06	8.55e+04	-45.727	0.000	-4.08e+06	-3.74e+06
Year	2003.9317	43.053	46.546	0.000	1919.543	2088.320
Engine	147.3256	454.426	0.324	0.746	-743.410	1038.061
FuelConsumption	526.3528	93.633	5.621	0.000	342.820	709.885
Kilometres	-0.0755	0.002	-30.961	0.000	-0.080	-0.071
CylindersinEngine	6210.1742	332.989	18.650	0.000	5557.472	6862.877
Doors	1112.8662	352.764	3.155	0.002	421.402	1804.330
Seats	916.2085	244.567	3.746	0.000	436.825	1395.592
Brand_Alfa	-5.467e+04	2006.374	-27.249	0.000	-5.86e+04	-5.07e+04
Brand_Aston	3.162e+04	3407.483	9.280	0.000	2.49e+04	3.83e+04
Brand_Audi	-7.66e+04	2279.448	-33.605	0.000	-8.11e+04	-7.21e+04
Brand_BMW	-1.061e+05	7263.493	-14.613	0.000	-1.2e+05	-9.19e+04
Brand_Bentley	7.577e+04	4517.085	16.774	0.000	6.69e+04	8.46e+04
Brand_Caterham	-2.967e+04	4731.780	-6.271	0.000	-3.89e+04	-2.04e+04
Brand_Chery	-8.459e+04	4652.123	-18.183	0.000	-9.37e+04	-7.55e+04
Brand_Chevrolet	2.743e+04	4781.762	5.737	0.000	1.81e+04	3.68e+04
Brand_Chrysler	-9.03e+04	7217.601	-12.512	0.000	-1.04e+05	-7.62e+04
Brand_Citroen	-8.507e+04	1.18e+04	-7.201	0.000	-1.08e+05	-6.19e+04
Brand_Cupra	-7.183e+04	4275.312	-16.800	0.000	-8.02e+04	-6.34e+04
Brand_Daewoo	-4.23e+04	6402.380	-6.607	0.000	-5.48e+04	-2.97e+04
Brand_Dodge	-7.984e+04	3577.510	-22.318	0.000	-8.69e+04	-7.28e+04
Brand_FPV	-6.141e+04	5210.373	-11.787	0.000	-7.16e+04	-5.12e+04
Brand_Ferrari	1.086e+05	1.2e+04	9.024	0.000	8.5e+04	1.32e+05
Brand_Fiat	-1.666e+05	9580.695	-17.391	0.000	-1.85e+05	-1.48e+05
Brand_Ford	-9.721e+04	2270.580	-42.815	0.000	-1.02e+05	-9.28e+04
Brand_Foton	-7.986e+04	5445.583	-14.665	0.000	-9.05e+04	-6.92e+04
Brand_GWM	-9.655e+04	5847.728	-16.510	0.000	-1.08e+05	-8.51e+04
Brand_Genesis	-6.454e+04	3278.592	-19.685	0.000	-7.1e+04	-5.81e+04
Brand_Great	-6.196e+04	1946.609	-31.827	0.000	-6.58e+04	-5.81e+04
Brand_HSV	-6.239e+04	7032.648	-8.872	0.000	-7.62e+04	-4.86e+04
Brand_Haval	-1.013e+05	4293.992	-23.595	0.000	-1.1e+05	-9.29e+04
Brand_Hino	-6.547e+04	8634.949	-7.582	0.000	-8.24e+04	-4.85e+04
Brand_Holden	-7.654e+04	5102.093	-15.003	0.000	-8.65e+04	-6.65e+04
Brand_Honda	-9.772e+04	2465.502	-39.635	0.000	-1.03e+05	-9.29e+04
Brand_Hyundai	-1.057e+05	2071.903	-51.004	0.000	-1.1e+05	-1.02e+05
Brand_Ineos	-3.734e+04	3400.067	-10.981	0.000	-4.4e+04	-3.07e+04
Brand_Infiniti	-7.238e+04	5360.443	-13.503	0.000	-8.29e+04	-6.19e+04

Brand_Isuzu	-3.127e+04	3414.210	-9.160	0.000	-3.8e+04	-2.46e+04
Brand_Iveco	2.022e+04	2450.689	8.251	0.000	1.54e+04	2.5e+04
Brand_Jaguar	-7.539e+04	2898.793	-26.008	0.000	-8.11e+04	-6.97e+04
Brand_Jeep	-8.616e+04	4140.702	-20.808	0.000	-9.43e+04	-7.8e+04
Brand_Kia	-9.532e+04	4450.014	-21.421	0.000	-1.04e+05	-8.66e+04
Brand_LDV	-9.898e+04	2728.256	-36.280	0.000	-1.04e+05	-9.36e+04
Brand_Lamborghini	2.349e+05	6164.352	38.105	0.000	2.23e+05	2.47e+05
Brand_Land	-3.995e+04	1202.198	-33.230	0.000	-4.23e+04	-3.76e+04
Brand_Lexus	-8.235e+04	2342.919	-35.150	0.000	-8.69e+04	-7.78e+04
Brand_Lotus	-1.607e+04	5445.787	-2.952	0.003	-2.67e+04	-5399.320
Brand_MG	-1.549e+05	1.58e+04	-9.792	0.000	-1.86e+05	-1.24e+05
Brand_Mahindra	-1.01e+05	3748.415	-26.942	0.000	-1.08e+05	-9.36e+04
Brand_Maserati	-3.146e+04	3705.353	-8.491	0.000	-3.87e+04	-2.42e+04
Brand_Mazda	-1.376e+05	1.45e+04	-9.516	0.000	-1.66e+05	-1.09e+05
Brand_McLaren	1.97e+05	4657.626	42.295	0.000	1.88e+05	2.06e+05
Brand_Mercedes-Benz	-7.859e+04	2042.374	-38.480	0.000	-8.26e+04	-7.46e+04
Brand_Mini	-1.463e+05	1.6e+04	-9.138	0.000	-1.78e+05	-1.15e+05
Brand_Mitsubishi	-1.039e+05	2292.177	-45.311	0.000	-1.08e+05	-9.94e+04
Brand_Nissan	-9.22e+04	2313.514	-39.852	0.000	-9.67e+04	-8.77e+04
Brand_Opel	-8.064e+04	8839.276	-9.123	0.000	-9.8e+04	-6.33e+04
Brand_Peugeot	-1.046e+05	2902.747	-36.038	0.000	-1.1e+05	-9.89e+04
Brand_Porsche	-2716.0700	2694.776	-1.008	0.314	-7998.183	2566.043
Brand_Proton	-5.933e+04	6398.824	-9.272	0.000	-7.19e+04	-4.68e+04
Brand_Ram	-4.05e+04	1872.058	-21.636	0.000	-4.42e+04	-3.68e+04
Brand_Renault	-1.044e+05	2662.362	-39.208	0.000	-1.1e+05	-9.92e+04
Brand_Rolls-Royce	7.495e+04	6445.245	11.629	0.000	6.23e+04	8.76e+04
Brand_Saab	-5.771e+04	6398.688	-9.018	0.000	-7.02e+04	-4.52e+04
Brand_Skoda	-1.038e+05	2522.299	-41.150	0.000	-1.09e+05	-9.88e+04
Brand_Smart	-5.296e+04	6438.603	-8.225	0.000	-6.56e+04	-4.03e+04
Brand_Ssangyong	-1.013e+05	2777.157	-36.483	0.000	-1.07e+05	-9.59e+04
Brand_Subaru	-1.054e+05	2045.730	-51.539	0.000	-1.09e+05	-1.01e+05
Brand_Suzuki	-8.241e+04	4687.980	-17.578	0.000	-9.16e+04	-7.32e+04
Brand_Tata	-5.927e+04	6427.949	-9.221	0.000	-7.19e+04	-4.67e+04
Brand_Toyota	-9.491e+04	2153.243	-44.077	0.000	-9.91e+04	-9.07e+04
Brand_Volkswagen	-7.805e+04	4592.932	-16.995	0.000	-8.71e+04	-6.91e+04
Brand_Volvo	-1.026e+05	3025.516	-33.920	0.000	-1.09e+05	-9.67e+04
Model_118D	2853.2386	9365.629	0.305	0.761	-1.55e+04	2.12e+04
Model_118I	4429.9150	8013.716	0.553	0.580	-1.13e+04	2.01e+04
Model_120D	9543.6995	1.48e+04	0.646	0.518	-1.94e+04	3.85e+04
Model_120I	1128.4311	1.48e+04	0.076	0.939	-2.78e+04	3.01e+04
Model_121	4.878e+04	1.97e+04	2.479	0.013	1.02e+04	8.73e+04
Model_125I	-1957.8888	9773.084	-0.200	0.841	-2.11e+04	1.72e+04
Model_128TI	4561.9783	1.17e+04	0.390	0.697	-1.84e+04	2.75e+04
Model_135I	-4991.4293	1.18e+04	-0.424	0.672	-2.81e+04	1.81e+04
Model_1500	-4.05e+04	1872.058	-21.636	0.000	-4.42e+04	-3.68e+04
Model_190	1.134e+04	1.28e+04	0.889	0.374	-1.37e+04	3.64e+04
Model_2	2.157e+04	1.49e+04	1.450	0.147	-7589.722	5.07e+04
Model_2008	-1.515e+04	5463.216	-2.774	0.006	-2.59e+04	-4445.512
Model_207	-8327.6534	7257.883	-1.147	0.251	-2.26e+04	5898.747

Model_208	-1.26e+04	7233.772	-1.742	0.082	-2.68e+04	1580.197
Model_218D	-5299.5296	1.17e+04	-0.452	0.651	-2.83e+04	1.77e+04
Model_218I	6136.6557	9086.525	0.675	0.499	-1.17e+04	2.39e+04
Model_220D	6131.9079	1.49e+04	0.413	0.680	-2.3e+04	3.53e+04
Model_220I	5735.2765	8340.522	0.688	0.492	-1.06e+04	2.21e+04
Model_225I	-1863.1196	1.05e+04	-0.178	0.859	-2.24e+04	1.87e+04
Model_228I	5414.5761	1.18e+04	0.460	0.646	-1.77e+04	2.85e+04
Model_230I	5274.5898	1.18e+04	0.448	0.654	-1.78e+04	2.84e+04
Model_3	2.663e+04	1.5e+04	1.777	0.076	-2746.673	5.6e+04
Model_3-Sep	-5.771e+04	6398.688	-9.018	0.000	-7.02e+04	-4.52e+04
Model_300	-1.746e+04	7834.108	-2.229	0.026	-3.28e+04	-2108.469
Model_3008	-8207.3719	4708.026	-1.743	0.081	-1.74e+04	1020.975
Model_300C	-2.915e+04	9644.391	-3.023	0.003	-4.81e+04	-1.02e+04
Model_300ZX	3.223e+04	1.23e+04	2.616	0.009	8082.450	5.64e+04
Model_307	3833.6552	1.2e+04	0.319	0.750	-1.98e+04	2.74e+04
Model_308	-8929.2533	3851.092	-2.319	0.020	-1.65e+04	-1380.609
Model_316I	-2052.7140	1.48e+04	-0.139	0.889	-3.1e+04	2.69e+04
Model_318I	2.765e+04	1.17e+04	2.362	0.018	4707.771	5.06e+04
Model_320CI	-2319.6666	1.49e+04	-0.156	0.876	-3.14e+04	2.68e+04
Model_320D	7645.8432	8383.173	0.912	0.362	-8786.274	2.41e+04
Model_320I	1.009e+04	7897.143	1.278	0.201	-5385.012	2.56e+04
Model_323	4.436e+04	1.75e+04	2.539	0.011	1.01e+04	7.86e+04
Model_323I	-2441.8864	1.05e+04	-0.232	0.816	-2.3e+04	1.82e+04
Model_325I	174.9339	1.18e+04	0.015	0.988	-2.29e+04	2.33e+04
Model_328I	6616.0475	8672.495	0.763	0.446	-1.04e+04	2.36e+04
Model_330CI	1.223e+04	1.49e+04	0.823	0.411	-1.69e+04	4.14e+04
Model_330D	-4584.1669	1.48e+04	-0.310	0.757	-3.36e+04	2.44e+04
Model_330I	2.569e+04	8215.299	3.128	0.002	9591.429	4.18e+04
Model_335I	5330.2035	1.18e+04	0.452	0.651	-1.78e+04	2.84e+04
Model_340I	6441.0280	1.48e+04	0.436	0.663	-2.25e+04	3.54e+04
Model_350Z	-4396.9570	1.24e+04	-0.354	0.724	-2.88e+04	2e+04
Model_360	-3.112e+04	1.71e+04	-1.815	0.070	-6.47e+04	2493.694
Model_370Z	-1.36e+04	5376.726	-2.530	0.011	-2.41e+04	-3065.857
Model_380	-1.116e+04	7008.982	-1.592	0.111	-2.49e+04	2577.293
Model_3D	4.94e+04	1.72e+04	2.880	0.004	1.58e+04	8.3e+04
Model_4008	-1.58e+04	7271.319	-2.173	0.030	-3.01e+04	-1545.199
Model_407	-1480.1432	8682.762	-0.170	0.865	-1.85e+04	1.55e+04
Model_420	3378.1597	1.28e+04	0.265	0.791	-2.16e+04	2.84e+04
Model_420D	8423.2397	1.49e+04	0.567	0.571	-2.07e+04	3.76e+04
Model_420I	1.489e+04	8723.016	1.707	0.088	-2211.154	3.2e+04
Model_428I	7941.6328	1.05e+04	0.753	0.451	-1.27e+04	2.86e+04
Model_430I	2.493e+04	9361.029	2.663	0.008	6578.995	4.33e+04
Model_435I	72.8521	1.17e+04	0.006	0.995	-2.29e+04	2.3e+04
Model_5	6.895e+04	1.18e+04	5.866	0.000	4.59e+04	9.2e+04
Model_500	4.909e+04	9153.605	5.363	0.000	3.11e+04	6.7e+04
Model_5008	-7710.9232	8720.285	-0.884	0.377	-2.48e+04	9381.976
Model_500X	4.338e+04	1.59e+04	2.730	0.006	1.22e+04	7.45e+04
Model_508	-1.085e+04	1.2e+04	-0.903	0.367	-3.44e+04	1.27e+04
Model_520D	1.32e+04	1.17e+04	1.128	0.259	-9736.991	3.61e+04
Model_520I	5.305e+04	1.48e+04	3.589	0.000	2.41e+04	8.2e+04

Model_525I	1687.8988	1.48e+04	0.114	0.909	-2.73e+04	3.07e+04
Model_530D	1297.4213	1.48e+04	0.088	0.930	-2.77e+04	3.03e+04
Model_530E	6.488e+04	1.48e+04	4.383	0.000	3.59e+04	9.39e+04
Model_530I	1.947e+04	9789.178	1.989	0.047	284.495	3.87e+04
Model_540C	-6.746e+04	1.13e+04	-5.977	0.000	-8.96e+04	-4.53e+04
Model_560	3.609e+04	1.29e+04	2.795	0.005	1.08e+04	6.14e+04
Model_570S	-3.101e+04	8541.709	-3.631	0.000	-4.78e+04	-1.43e+04
Model_595	-1.114e+05	9143.736	-12.189	0.000	-1.29e+05	-9.35e+04
Model_5D	3.321e+04	1.69e+04	1.962	0.050	34.239	6.64e+04
Model_6	2.862e+04	1.5e+04	1.903	0.057	-860.292	5.81e+04
Model_600LT	1.071e+05	1.13e+04	9.466	0.000	8.49e+04	1.29e+05
Model_612	-1.9e+04	1.73e+04	-1.101	0.271	-5.28e+04	1.48e+04
Model_650S	2580.2545	1.13e+04	0.228	0.819	-1.96e+04	2.47e+04
Model_700	1.307e+05	1.24e+04	10.543	0.000	1.06e+05	1.55e+05
Model_718	-2282.4916	4558.743	-0.501	0.617	-1.12e+04	6653.241
Model_720S	1.858e+05	7351.392	25.270	0.000	1.71e+05	2e+05
Model_730D	4.48e+04	1.48e+04	3.028	0.002	1.58e+04	7.38e+04
Model_740I	9.931e+04	8864.467	11.203	0.000	8.19e+04	1.17e+05
Model_740LI	3275.8049	1.48e+04	0.222	0.825	-2.57e+04	3.22e+04
Model_8	2.003e+05	1.48e+04	13.506	0.000	1.71e+05	2.29e+05
Model_812	2.867e+05	1.73e+04	16.599	0.000	2.53e+05	3.21e+05
Model_86	-8199.5419	3238.598	-2.532	0.011	-1.45e+04	-1851.465
Model_911	1.397e+05	3731.842	37.436	0.000	1.32e+05	1.47e+05
Model_A1	-3.435e+04	2882.948	-11.914	0.000	-4e+04	-2.87e+04
Model_A170	-2.739e+04	1.28e+04	-2.147	0.032	-5.24e+04	-2385.416
Model_A180	-2.048e+04	4029.406	-5.084	0.000	-2.84e+04	-1.26e+04
Model_A190	-1.65e+04	1.28e+04	-1.294	0.196	-4.15e+04	8496.088
Model_A200	-2.221e+04	3167.110	-7.014	0.000	-2.84e+04	-1.6e+04
Model_A250	-2.575e+04	3505.168	-7.346	0.000	-3.26e+04	-1.89e+04
Model_A3	-3.473e+04	2232.130	-15.560	0.000	-3.91e+04	-3.04e+04
Model_A35	-1.48e+04	1.27e+04	-1.162	0.245	-3.98e+04	1.02e+04
Model_A4	-2.956e+04	2570.585	-11.500	0.000	-3.46e+04	-2.45e+04
Model_A45	-1.208e+04	4417.248	-2.735	0.006	-2.07e+04	-3421.751
Model_A5	-2.963e+04	3135.257	-9.450	0.000	-3.58e+04	-2.35e+04
Model_A6	-2.779e+04	3723.721	-7.463	0.000	-3.51e+04	-2.05e+04
Model_A7	-5046.6367	8936.857	-0.565	0.572	-2.26e+04	1.25e+04
Model_A8	-2.551e+04	1.24e+04	-2.058	0.040	-4.98e+04	-1208.564
Model_AMG	1.186e+05	1.28e+04	9.256	0.000	9.35e+04	1.44e+05
Model_APV	-2551.1376	1.34e+04	-0.190	0.849	-2.89e+04	2.38e+04
Model_ASX	-1.537e+04	1961.924	-7.835	0.000	-1.92e+04	-1.15e+04
Model_Acadia	-4.975e+04	5973.366	-8.328	0.000	-6.15e+04	-3.8e+04
Model_Accent	-1.025e+04	1972.373	-5.198	0.000	-1.41e+04	-6386.911
Model_Accord	-8681.2229	2794.576	-3.106	0.002	-1.42e+04	-3203.489
Model_Actyon	-1.672e+04	6474.085	-2.582	0.010	-2.94e+04	-4027.308
Model_Adventra	-3.501e+04	8001.378	-4.376	0.000	-5.07e+04	-1.93e+04
Model_Almera	-1.843e+04	1.22e+04	-1.504	0.133	-4.24e+04	5585.001
Model_Alpina	4.252e+04	1.18e+04	3.613	0.000	1.95e+04	6.56e+04
Model_Altima	-2.447e+04	7213.223	-3.392	0.001	-3.86e+04	-1.03e+04
Model_Alto	-2.533e+04	7143.790	-3.546	0.000	-3.93e+04	-1.13e+04
Model_Amarok	-3.501e+04	4551.843	-7.692	0.000	-4.39e+04	-2.61e+04

Model_Arkana	-1.787e+04	3625.494	-4.928	0.000	-2.5e+04	-1.08e+04
Model_Arnage	-5.893e+04	1e+04	-5.883	0.000	-7.86e+04	-3.93e+04
Model_Arteon	-2.232e+04	5071.284	-4.402	0.000	-3.23e+04	-1.24e+04
Model_Astra	-3.767e+04	5215.867	-7.222	0.000	-4.79e+04	-2.74e+04
Model_Ateca	-3.091e+04	6650.907	-4.647	0.000	-4.39e+04	-1.79e+04
Model_Aumark	-2.85e+04	9221.488	-3.091	0.002	-4.66e+04	-1.04e+04
Model_Aurion	-2.305e+04	2984.548	-7.721	0.000	-2.89e+04	-1.72e+04
Model_Avalanche	-4.092e+04	1.44e+04	-2.848	0.004	-6.91e+04	-1.28e+04
Model_Avalon	-6137.9183	8821.682	-0.696	0.487	-2.34e+04	1.12e+04
Model_Avensis	-9168.3218	6329.112	-1.449	0.147	-2.16e+04	3237.567
Model_Aventador	2.184e+05	9634.562	22.668	0.000	2e+05	2.37e+05
Model_B180	-3.455e+04	7430.196	-4.649	0.000	-4.91e+04	-2e+04
Model_B200	-3.05e+04	4957.165	-6.152	0.000	-4.02e+04	-2.08e+04
Model_B250	-2.87e+04	9053.357	-3.171	0.002	-4.64e+04	-1.1e+04
Model_B2500	3.71e+04	1.97e+04	1.879	0.060	-1603.802	7.58e+04
Model_B4000	1.968e+04	1.98e+04	0.996	0.319	-1.9e+04	5.84e+04
Model_BRZ	203.3112	3856.961	0.053	0.958	-7356.837	7763.460
Model_BT-50	2.729e+04	1.51e+04	1.810	0.070	-2263.418	5.68e+04
Model_Baleno	-4.201e+04	5042.397	-8.331	0.000	-5.19e+04	-3.21e+04
Model_Barina	-3.876e+04	5179.124	-7.484	0.000	-4.89e+04	-2.86e+04
Model_Beetle	-3.039e+04	9715.039	-3.129	0.002	-4.94e+04	-1.14e+04
Model_Berlingo	-2.295e+04	1.31e+04	-1.747	0.081	-4.87e+04	2803.108
Model_Boxster	-6.011e+04	5216.522	-11.522	0.000	-7.03e+04	-4.99e+04
Model_C-HR	-2.141e+04	2252.505	-9.505	0.000	-2.58e+04	-1.7e+04
Model_C180	-1.974e+04	5893.053	-3.349	0.001	-3.13e+04	-8184.036
Model_C200	-1.69e+04	2195.035	-7.699	0.000	-2.12e+04	-1.26e+04
Model_C220	-1.486e+04	6462.875	-2.299	0.022	-2.75e+04	-2190.089
Model_C230	-3.305e+04	1.27e+04	-2.595	0.009	-5.8e+04	-8088.912
Model_C250	-1.623e+04	2622.716	-6.189	0.000	-2.14e+04	-1.11e+04
Model_C3	-2.946e+04	1.72e+04	-1.715	0.086	-6.31e+04	4215.092
Model_C30	-1.336e+04	7205.466	-1.854	0.064	-2.75e+04	764.582
Model_C300	-5550.3045	2921.593	-1.900	0.057	-1.13e+04	176.400
Model_C350	-2.35e+04	1.28e+04	-1.843	0.065	-4.85e+04	1496.097
Model_C4	-3.322e+04	1.72e+04	-1.928	0.054	-6.7e+04	553.415
Model_C43	-8848.3742	4410.871	-2.006	0.045	-1.75e+04	-202.490
Model_C5	-3.622e+04	1.39e+04	-2.604	0.009	-6.35e+04	-8954.140
Model_C63	3.557e+04	3279.075	10.848	0.000	2.91e+04	4.2e+04
Model_CC	-3.197e+04	1.3e+04	-2.461	0.014	-5.74e+04	-6510.513
Model_CLA	-8494.7380	5327.715	-1.594	0.111	-1.89e+04	1948.281
Model_CLA200	-2.46e+04	4954.692	-4.965	0.000	-3.43e+04	-1.49e+04
Model_CLA250	-2.835e+04	4199.042	-6.752	0.000	-3.66e+04	-2.01e+04
Model_CLA35	6544.5732	1.27e+04	0.514	0.607	-1.84e+04	3.15e+04
Model_CLA45	-3275.9875	3870.760	-0.846	0.397	-1.09e+04	4311.209
Model_CLC200	-2.71e+04	5494.395	-4.932	0.000	-3.79e+04	-1.63e+04
Model_CLK280	-3.683e+04	1.29e+04	-2.864	0.004	-6.2e+04	-1.16e+04
Model_CLK320	-2.075e+04	6594.661	-3.147	0.002	-3.37e+04	-7825.601
Model_CLK500	-2.365e+04	1.29e+04	-1.840	0.066	-4.89e+04	1545.767
Model_CLK63	-1.35e+04	1.28e+04	-1.052	0.293	-3.86e+04	1.17e+04
Model_CLS250	-4404.2698	6470.587	-0.681	0.496	-1.71e+04	8278.927
Model_CLS350	-2.999e+04	9048.407	-3.315	0.001	-4.77e+04	-1.23e+04

Model_CLS500	-3.033e+04	9055.783	-3.349	0.001	-4.81e+04	-1.26e+04
Model_CLS53	3.697e+04	9038.915	4.090	0.000	1.93e+04	5.47e+04
Model_CR-V	-1.452e+04	2421.191	-5.996	0.000	-1.93e+04	-9772.502
Model_CR-Z	-1.854e+04	8505.274	-2.180	0.029	-3.52e+04	-1867.962
Model_CT	-2.477e+04	9014.020	-2.748	0.006	-4.24e+04	-7097.604
Model_CT200H	-3.027e+04	5875.372	-5.152	0.000	-4.18e+04	-1.88e+04
Model_CX-3	1.748e+04	1.51e+04	1.157	0.247	-1.21e+04	4.71e+04
Model_CX-30	1.508e+04	1.52e+04	0.993	0.320	-1.47e+04	4.48e+04
Model_CX-5	2.099e+04	1.51e+04	1.392	0.164	-8569.973	5.06e+04
Model_CX-60	2.048e+04	1.98e+04	1.035	0.301	-1.83e+04	5.93e+04
Model_CX-7	2.464e+04	1.53e+04	1.609	0.108	-5381.414	5.47e+04
Model_CX-8	2.559e+04	1.52e+04	1.680	0.093	-4260.705	5.54e+04
Model_CX-9	2.558e+04	1.51e+04	1.693	0.090	-4030.505	5.52e+04
Model_CX-90	5.198e+04	1.98e+04	2.628	0.009	1.32e+04	9.08e+04
Model_Cabrio	3.349e+04	2.04e+04	1.645	0.100	-6423.364	7.34e+04
Model_Caddy	-2.754e+04	4915.239	-5.602	0.000	-3.72e+04	-1.79e+04
Model_Calais	-4.084e+04	5148.889	-7.932	0.000	-5.09e+04	-3.07e+04
Model_California	7607.9692	9815.649	0.775	0.438	-1.16e+04	2.68e+04
Model_Camry	-1.747e+04	1625.167	-10.749	0.000	-2.07e+04	-1.43e+04
Model_Caprice	-4.182e+04	6145.895	-6.805	0.000	-5.39e+04	-2.98e+04
Model_Captiva	-4.776e+04	5083.451	-9.395	0.000	-5.77e+04	-3.78e+04
Model_Captur	-1.966e+04	3569.079	-5.510	0.000	-2.67e+04	-1.27e+04
Model_Caravelle	-1.362e+04	9682.379	-1.407	0.160	-3.26e+04	5359.345
Model_Carnival	-1.889e+04	4123.472	-4.581	0.000	-2.7e+04	-1.08e+04
Model_Cascada	-4.51e+04	8947.269	-5.040	0.000	-6.26e+04	-2.76e+04
Model_Cayenne	-6.048e+04	3197.584	-18.915	0.000	-6.68e+04	-5.42e+04
Model_Cayman	6.503e+04	1.13e+04	5.741	0.000	4.28e+04	8.72e+04
Model_Celerio	-3.277e+04	1.33e+04	-2.461	0.014	-5.89e+04	-6672.890
Model_Celica	9403.1158	1.24e+04	0.757	0.449	-1.49e+04	3.37e+04
Model_Cerato	-2.31e+04	4053.986	-5.698	0.000	-3.1e+04	-1.52e+04
Model_Challenger	-2016.0197	4523.268	-0.446	0.656	-1.09e+04	6850.179
Model_Cherokee	-3.882e+04	4592.328	-8.454	0.000	-4.78e+04	-2.98e+04
Model_City	-1.824e+04	6095.571	-2.993	0.003	-3.02e+04	-6293.612
Model_Civic	-9543.2872	2318.135	-4.117	0.000	-1.41e+04	-4999.439
Model_Clio	-1.301e+04	4497.948	-2.891	0.004	-2.18e+04	-4188.790
Model_Clubman	3.925e+04	1.65e+04	2.380	0.017	6917.885	7.16e+04
Model_Clubsport	-2.718e+04	7435.315	-3.656	0.000	-4.18e+04	-1.26e+04
Model_Coaster	7.649e+04	9934.608	7.699	0.000	5.7e+04	9.6e+04
Model_Colorado	-3.246e+04	5010.975	-6.479	0.000	-4.23e+04	-2.26e+04
Model_Combo	-2.408e+04	1.04e+04	-2.319	0.020	-4.44e+04	-3728.963
Model_Commander	-3.8e+04	8060.369	-4.714	0.000	-5.38e+04	-2.22e+04
Model_Commodore	-3.604e+04	4876.746	-7.389	0.000	-4.56e+04	-2.65e+04
Model_Compass	-3.136e+04	4054.489	-7.734	0.000	-3.93e+04	-2.34e+04
Model_Continental	1.27e+04	5850.897	2.170	0.030	1230.782	2.42e+04
Model_Convertible	3.425e+04	1.67e+04	2.057	0.040	1607.618	6.69e+04
Model_Cooper	4.336e+04	1.62e+04	2.677	0.007	1.16e+04	7.51e+04
Model_Corolla	-1.958e+04	1511.471	-12.957	0.000	-2.25e+04	-1.66e+04
Model_Corsa	-3.138e+04	1.54e+04	-2.044	0.041	-6.15e+04	-1293.171
Model_Corvette	1.072e+05	8781.465	12.210	0.000	9e+04	1.24e+05
Model_Countryman	3.972e+04	1.62e+04	2.450	0.014	7937.276	7.15e+04

Model_Coupe	4.218e+04	1.22e+04	3.443	0.001	1.82e+04	6.62e+04
Model_Courier	1.202e+04	6380.131	1.884	0.060	-486.356	2.45e+04
Model_Crafter	-1.178e+04	5558.179	-2.120	0.034	-2.27e+04	-889.719
Model_Crewman	-3.015e+04	7119.340	-4.235	0.000	-4.41e+04	-1.62e+04
Model_Cruze	-3.884e+04	5048.661	-7.693	0.000	-4.87e+04	-2.89e+04
Model_D-MAX	-7.335e+04	2877.700	-25.487	0.000	-7.9e+04	-6.77e+04
Model_D90	-2.502e+04	3744.937	-6.681	0.000	-3.24e+04	-1.77e+04
Model_DS3	-3.49e+04	1.72e+04	-2.030	0.042	-6.86e+04	-1203.761
Model_DS4	-3.274e+04	1.72e+04	-1.906	0.057	-6.64e+04	926.517
Model_Daily	-9.796e+04	2637.529	-37.143	0.000	-1.03e+05	-9.28e+04
Model_Deliver	-1480.8735	8054.363	-0.184	0.854	-1.73e+04	1.43e+04
Model_Doblo	5.431e+04	1.35e+04	4.023	0.000	2.78e+04	8.08e+04
Model_Dualis	-2.034e+04	2753.101	-7.387	0.000	-2.57e+04	-1.49e+04
Model_E-Pace	-3.612e+04	4712.765	-7.665	0.000	-4.54e+04	-2.69e+04
Model_E200	-922.0023	4226.366	-0.218	0.827	-9206.232	7362.228
Model_E2000	7.488e+04	1.77e+04	4.239	0.000	4.03e+04	1.1e+05
Model_E220	-1548.8228	9053.416	-0.171	0.864	-1.93e+04	1.62e+04
Model_E240	-3.013e+04	1.27e+04	-2.367	0.018	-5.51e+04	-5176.189
Model_E250	-1.755e+04	3532.493	-4.968	0.000	-2.45e+04	-1.06e+04
Model_E300	1.242e+04	6511.048	1.908	0.056	-339.998	2.52e+04
Model_E350	-9974.9576	4385.387	-2.275	0.023	-1.86e+04	-1379.024
Model_E400	-1.491e+04	5312.531	-2.807	0.005	-2.53e+04	-4499.911
Model_E500	-3.587e+04	7436.937	-4.823	0.000	-5.04e+04	-2.13e+04
Model_E53	7282.2039	1.27e+04	0.571	0.568	-1.77e+04	3.23e+04
Model_E55	-7531.9590	9137.911	-0.824	0.410	-2.54e+04	1.04e+04
Model_E63	1.424e+05	1.27e+04	11.180	0.000	1.17e+05	1.67e+05
Model_EOS	-3.048e+04	7234.449	-4.214	0.000	-4.47e+04	-1.63e+04
Model_ES250	-1.137e+04	4503.247	-2.524	0.012	-2.02e+04	-2541.280
Model_ES300	-2.203e+04	1.26e+04	-1.747	0.081	-4.68e+04	2690.884
Model_ES300H	-1.686e+04	4629.033	-3.643	0.000	-2.59e+04	-7790.702
Model_ES350	-2.386e+04	1.26e+04	-1.894	0.058	-4.86e+04	831.232
Model_Echo	-2901.5164	4871.147	-0.596	0.551	-1.24e+04	6646.569
Model_Eclipse	-1.49e+04	2417.664	-6.162	0.000	-1.96e+04	-1.02e+04
Model_Ecosport	-2.387e+04	4098.050	-5.824	0.000	-3.19e+04	-1.58e+04
Model_Elantra	-9031.0312	2275.222	-3.969	0.000	-1.35e+04	-4571.297
Model_Elise	-5.195e+04	9149.940	-5.678	0.000	-6.99e+04	-3.4e+04
Model_Endura	-1.514e+04	3603.479	-4.202	0.000	-2.22e+04	-8077.680
Model_Epica	-4.069e+04	1.01e+04	-4.021	0.000	-6.05e+04	-2.09e+04
Model_Equinox	-4.543e+04	5932.610	-7.659	0.000	-5.71e+04	-3.38e+04
Model_Escape	-2.297e+04	2607.101	-8.811	0.000	-2.81e+04	-1.79e+04
Model_Everest	-3157.4758	2230.318	-1.416	0.157	-7529.191	1214.239
Model_Evora	3.588e+04	7493.651	4.788	0.000	2.12e+04	5.06e+04
Model_Expert	-1.259e+04	9021.417	-1.396	0.163	-3.03e+04	5088.545
Model_Express	6736.4582	4975.933	1.354	0.176	-3017.022	1.65e+04
Model_F	6.738e+04	2.09e+04	3.225	0.001	2.64e+04	1.08e+05
Model_F-Pace	-1.563e+04	4299.665	-3.634	0.000	-2.41e+04	-7199.056
Model_F-Type	3.522e+04	5786.088	6.087	0.000	2.39e+04	4.66e+04
Model_F250	4.527e+04	1.24e+04	3.638	0.000	2.09e+04	6.97e+04
Model_F430	6.452e+04	1.71e+04	3.765	0.000	3.09e+04	9.81e+04
Model_F6	-9846.4781	1.04e+04	-0.949	0.343	-3.02e+04	1.05e+04

Model_FJ	-1.053e+04	4099.141	-2.568	0.010	-1.86e+04	-2492.855
Model_FRD	-5395.8794	1.22e+04	-0.441	0.659	-2.94e+04	1.86e+04
Model_FRR	-1.599e+04	5857.392	-2.730	0.006	-2.75e+04	-4507.720
Model_FSR	1.953e+04	7320.532	2.668	0.008	5183.070	3.39e+04
Model_FTS	6.369e+04	1.23e+04	5.195	0.000	3.97e+04	8.77e+04
Model_FVD	6.76e+04	8838.246	7.648	0.000	5.03e+04	8.49e+04
Model_FVL	5.495e+04	1.22e+04	4.486	0.000	3.09e+04	7.9e+04
Model_FYJ	1.003e+05	1.23e+04	8.128	0.000	7.61e+04	1.24e+05
Model_FYX	1.54e+05	1.23e+04	12.476	0.000	1.3e+05	1.78e+05
Model_Fabia	-1.371e+04	5049.675	-2.714	0.007	-2.36e+04	-3807.101
Model_Fairlane	-1.337e+04	8807.686	-1.518	0.129	-3.06e+04	3890.722
Model_Fairmont	1.093e+04	1.23e+04	0.886	0.375	-1.32e+04	3.51e+04
Model_Falcon	-1.046e+04	2116.814	-4.942	0.000	-1.46e+04	-6312.497
Model_Festiva	7068.3636	1.23e+04	0.574	0.566	-1.71e+04	3.12e+04
Model_Fiesta	-1.393e+04	2637.150	-5.281	0.000	-1.91e+04	-8757.916
Model_Focus	-1.3e+04	2194.004	-5.925	0.000	-1.73e+04	-8698.300
Model_Forester	-1.269e+04	1650.697	-7.689	0.000	-1.59e+04	-9456.296
Model_Formentor	-2.287e+04	6117.683	-3.738	0.000	-3.49e+04	-1.09e+04
Model_Fortuner	-3595.5354	2968.069	-1.211	0.226	-9413.338	2222.268
Model_Fortwo	-5.296e+04	6438.603	-8.225	0.000	-6.56e+04	-4.03e+04
Model_Freemont	4.758e+04	1.11e+04	4.305	0.000	2.59e+04	6.92e+04
Model_G10	-1.522e+04	3028.588	-5.026	0.000	-2.12e+04	-9284.513
Model_G10+	-1.516e+04	4929.853	-3.076	0.002	-2.48e+04	-5499.136
Model_G350	2.808e+04	1.28e+04	2.202	0.028	3081.843	5.31e+04
Model_G63	2.78e+05	9168.066	30.318	0.000	2.6e+05	2.96e+05
Model_G70	-1.909e+04	6464.954	-2.953	0.003	-3.18e+04	-6421.225
Model_G80	-1.399e+04	6487.442	-2.157	0.031	-2.67e+04	-1274.902
Model_GL320	-3.292e+04	1.28e+04	-2.581	0.010	-5.79e+04	-7924.250
Model_GL500	-5.281e+04	1.28e+04	-4.137	0.000	-7.78e+04	-2.78e+04
Model_GL63	-2.576e+04	9094.879	-2.833	0.005	-4.36e+04	-7935.320
Model_GLA	-1.416e+04	7443.237	-1.903	0.057	-2.88e+04	426.591
Model_GLA180	-2.92e+04	5363.733	-5.444	0.000	-3.97e+04	-1.87e+04
Model_GLA200	-2.633e+04	7449.947	-3.534	0.000	-4.09e+04	-1.17e+04
Model_GLA220	-2.703e+04	9069.163	-2.980	0.003	-4.48e+04	-9251.457
Model_GLA250	-3.336e+04	3906.339	-8.539	0.000	-4.1e+04	-2.57e+04
Model_GLA35	-2449.2118	7443.021	-0.329	0.742	-1.7e+04	1.21e+04
Model_GLA45	-8129.3057	5351.003	-1.519	0.129	-1.86e+04	2359.360
Model_GLB	-1.786e+04	9076.388	-1.967	0.049	-3.56e+04	-64.987
Model_GLC	2609.8354	3441.245	0.758	0.448	-4135.456	9355.127
Model_GLC200	-1.834e+04	5344.876	-3.432	0.001	-2.88e+04	-7864.473
Model_GLC220	-1.224e+04	1.27e+04	-0.960	0.337	-3.72e+04	1.27e+04
Model_GLC250	-2.053e+04	3645.530	-5.630	0.000	-2.77e+04	-1.34e+04
Model_GLC300	-9816.4134	7442.528	-1.319	0.187	-2.44e+04	4771.916
Model_GLC350	-2.129e+04	1.27e+04	-1.670	0.095	-4.63e+04	3696.037
Model_GLC43	-1.239e+04	5833.876	-2.123	0.034	-2.38e+04	-951.047
Model_GLC63	3.276e+04	5392.805	6.074	0.000	2.22e+04	4.33e+04
Model_GLE	2.862e+04	5378.135	5.321	0.000	1.81e+04	3.92e+04
Model_GLE250	-2.201e+04	9062.852	-2.429	0.015	-3.98e+04	-4249.477
Model_GLE300	2.341e+04	1.27e+04	1.837	0.066	-1568.696	4.84e+04
Model_GLE350	-2.205e+04	5360.915	-4.114	0.000	-3.26e+04	-1.15e+04

Model_GLE400	-2550.5210	9062.912	-0.281	0.778	-2.03e+04	1.52e+04
Model_GLE43	-8836.2787	1.27e+04	-0.693	0.488	-3.38e+04	1.61e+04
Model_GLE450	5362.4027	9065.741	0.592	0.554	-1.24e+04	2.31e+04
Model_GLE53	7.195e+04	1.28e+04	5.635	0.000	4.69e+04	9.7e+04
Model_GLE63	4.863e+04	6510.855	7.470	0.000	3.59e+04	6.14e+04
Model_GLS	8.296e+04	1.28e+04	6.497	0.000	5.79e+04	1.08e+05
Model_GLS350	-6224.7985	7460.001	-0.834	0.404	-2.08e+04	8397.781
Model_GLS500	-1.705e+04	9088.104	-1.876	0.061	-3.49e+04	761.140
Model_GR	-1259.9917	4397.162	-0.287	0.774	-9879.006	7359.022
Model_GR86	-1.532e+04	7380.131	-2.076	0.038	-2.98e+04	-856.557
Model_GS250	-2.6e+04	1.26e+04	-2.063	0.039	-5.07e+04	-1300.868
Model_GS350	-1.804e+04	1.26e+04	-1.432	0.152	-4.27e+04	6654.108
Model_GS450H	-2.288e+04	1.26e+04	-1.814	0.070	-4.76e+04	1841.537
Model_GT	-2.826e+04	1.04e+04	-2.723	0.006	-4.86e+04	-7914.776
Model_GT-R	1.711e+05	1.23e+04	13.899	0.000	1.47e+05	1.95e+05
Model_GTC4	2.586e+05	1.73e+04	14.978	0.000	2.25e+05	2.92e+05
Model_GTS	2782.6781	8929.010	0.312	0.755	-1.47e+04	2.03e+04
Model_GV70	-3.137e+04	6464.055	-4.854	0.000	-4.4e+04	-1.87e+04
Model_GV80	-81.0301	5810.991	-0.014	0.989	-1.15e+04	1.13e+04
Model_Genesis	-1.218e+04	7178.392	-1.696	0.090	-2.62e+04	1895.415
Model_Getz	2585.0287	3287.680	0.786	0.432	-3859.255	9029.312
Model_Ghibli	-4.528e+04	6926.051	-6.537	0.000	-5.89e+04	-3.17e+04
Model_Ghost	7.495e+04	6445.245	11.629	0.000	6.23e+04	8.76e+04
Model_Gladiator	-1.755e+04	5365.958	-3.270	0.001	-2.81e+04	-7029.425
Model_Golf	-3.155e+04	4263.654	-7.400	0.000	-3.99e+04	-2.32e+04
Model_Grancabrio	1.001e+04	8274.600	1.209	0.227	-6214.256	2.62e+04
Model_Grand	-2.897e+04	3289.204	-8.809	0.000	-3.54e+04	-2.25e+04
Model_Grange	-1.11e+04	1.43e+04	-0.775	0.438	-3.92e+04	1.7e+04
Model_Granturismo	3.759e+04	6329.853	5.939	0.000	2.52e+04	5e+04
Model_Granvia	9014.6998	1.24e+04	0.727	0.467	-1.53e+04	3.33e+04
Model_Grenadier	-3.734e+04	3400.067	-10.981	0.000	-4.4e+04	-3.07e+04
Model_Gtsr	7.504e+04	9350.437	8.025	0.000	5.67e+04	9.34e+04
Model_H2	-3.038e+04	6366.904	-4.772	0.000	-4.29e+04	-1.79e+04
Model_H6	-2.33e+04	1.07e+04	-2.185	0.029	-4.42e+04	-2394.243
Model_H8	-2.807e+04	1.07e+04	-2.631	0.009	-4.9e+04	-7161.336
Model_H9	-1.955e+04	5509.829	-3.549	0.000	-3.04e+04	-8753.529
Model_HDT	2.319e+05	1.57e+04	14.786	0.000	2.01e+05	2.63e+05
Model_HR-V	-1.857e+04	2815.969	-6.594	0.000	-2.41e+04	-1.3e+04
Model_HS	2.835e+04	1.65e+04	1.722	0.085	-3912.671	6.06e+04
Model_Haval	-3.662e+04	5822.968	-6.288	0.000	-4.8e+04	-2.52e+04
Model_HiAce	9404.1845	2920.118	3.220	0.001	3680.371	1.51e+04
Model_Hiace	8798.1135	3416.543	2.575	0.010	2101.243	1.55e+04
Model_Hilux	-5068.1227	1811.021	-2.798	0.005	-8617.961	-1518.285
Model_I20	-7505.0366	2765.594	-2.714	0.007	-1.29e+04	-2084.110
Model_I30	-9283.9438	1317.383	-7.047	0.000	-1.19e+04	-6701.701
Model_I40	-7590.3439	3699.963	-2.051	0.040	-1.48e+04	-337.933
Model_I45	-2058.7536	4764.829	-0.432	0.666	-1.14e+04	7280.935
Model_IS200T	-1.698e+04	5845.305	-2.904	0.004	-2.84e+04	-5517.728
Model_IS250	-2.84e+04	5374.594	-5.284	0.000	-3.89e+04	-1.79e+04
Model_IS250C	-3.138e+04	1.27e+04	-2.462	0.014	-5.64e+04	-6399.050

Model_IS300	-9768.1944	8987.089	-1.087	0.277	-2.74e+04	7847.677
Model_IS300H	-1.917e+04	5419.115	-3.537	0.000	-2.98e+04	-8542.962
Model_IS350	-1.73e+04	4722.548	-3.663	0.000	-2.66e+04	-8041.209
Model_IX35	-1.015e+04	2194.063	-4.626	0.000	-1.44e+04	-5848.080
Model_Ignis	-5.586e+04	4961.258	-11.259	0.000	-6.56e+04	-4.61e+04
Model_Iload	7785.4034	3052.659	2.550	0.011	1801.793	1.38e+04
Model_Imax	3103.3862	2985.604	1.039	0.299	-2748.788	8955.561
Model_Impreza	-9744.1098	1824.293	-5.341	0.000	-1.33e+04	-6168.258
Model_Integra	3.704e+04	8492.152	4.361	0.000	2.04e+04	5.37e+04
Model_J11	-3.227e+04	8638.266	-3.735	0.000	-4.92e+04	-1.53e+04
Model_Jackaroo	-2.885e+04	1.35e+04	-2.139	0.032	-5.53e+04	-2416.836
Model_Jazz	-1.353e+04	2774.790	-4.875	0.000	-1.9e+04	-8087.023
Model_Jetta	-3.428e+04	5855.633	-5.854	0.000	-4.58e+04	-2.28e+04
Model_Jimny	-3.527e+04	4733.928	-7.450	0.000	-4.45e+04	-2.6e+04
Model_Journey	-4.984e+04	4340.818	-11.482	0.000	-5.83e+04	-4.13e+04
Model_Juke	-2.726e+04	3104.943	-8.780	0.000	-3.33e+04	-2.12e+04
Model_K2700	1.725e+04	1.33e+04	1.292	0.196	-8913.561	4.34e+04
Model_Kadjar	-1.915e+04	1.18e+04	-1.625	0.104	-4.23e+04	3951.299
Model_Kamiq	-1.68e+04	3548.802	-4.735	0.000	-2.38e+04	-9846.358
Model_Kangoo	-5046.8980	4276.523	-1.180	0.238	-1.34e+04	3335.648
Model_Karoq	-1.247e+04	4185.498	-2.979	0.003	-2.07e+04	-4264.027
Model_Kizashi	-2.869e+04	9914.005	-2.893	0.004	-4.81e+04	-9252.554
Model_Kluger	-2.123e+04	1938.195	-10.952	0.000	-2.5e+04	-1.74e+04
Model_Kodiaq	-8643.5738	3273.650	-2.640	0.008	-1.51e+04	-2226.792
Model_Koleos	-1.571e+04	2691.954	-5.837	0.000	-2.1e+04	-1.04e+04
Model_Kona	-1.504e+04	1845.418	-8.152	0.000	-1.87e+04	-1.14e+04
Model_Korando	-2.585e+04	4259.872	-6.067	0.000	-3.42e+04	-1.75e+04
Model_Kuga	-2.293e+04	3599.070	-6.372	0.000	-3e+04	-1.59e+04
Model_LC500	4.712e+04	1.27e+04	3.716	0.000	2.23e+04	7.2e+04
Model_LS460	-2.694e+04	1.26e+04	-2.138	0.033	-5.16e+04	-2237.674
Model_LS500	1.193e+05	1.26e+04	9.457	0.000	9.45e+04	1.44e+05
Model_LS500H	9.41e+04	1.28e+04	7.332	0.000	6.89e+04	1.19e+05
Model_LX450D	1.994e+04	9032.876	2.207	0.027	2231.983	3.76e+04
Model_LX470	-1.457e+04	1.27e+04	-1.148	0.251	-3.94e+04	1.03e+04
Model_LX500D	8.817e+04	7431.064	11.865	0.000	7.36e+04	1.03e+05
Model_LX570	1.859e+04	7474.078	2.487	0.013	3936.614	3.32e+04
Model_LX600	1.023e+05	1.26e+04	8.116	0.000	7.76e+04	1.27e+05
Model_Laguna	-1.288e+04	1.18e+04	-1.092	0.275	-3.6e+04	1.02e+04
Model_Lancer	-7059.3427	2132.330	-3.311	0.001	-1.12e+04	-2879.696
Model_Landcruiser	1.403e+04	1762.372	7.962	0.000	1.06e+04	1.75e+04
Model_Lanos	-4.23e+04	6402.380	-6.607	0.000	-5.48e+04	-2.97e+04
Model_Laser	6133.8705	1.23e+04	0.498	0.619	-1.8e+04	3.03e+04
Model_Leon	-1.805e+04	9945.087	-1.815	0.070	-3.75e+04	1446.219
Model_Levante	1.296e+04	7032.230	1.843	0.065	-821.188	2.67e+04
Model_Levorg	-8241.0283	5887.962	-1.400	0.162	-1.98e+04	3300.148
Model_Liberty	-1.321e+04	2053.985	-6.434	0.000	-1.72e+04	-9188.374
Model_M135I	666.2884	9776.882	0.068	0.946	-1.85e+04	1.98e+04
Model_M140I	3410.5451	9773.869	0.349	0.727	-1.57e+04	2.26e+04
Model_M2	3.404e+04	9191.592	3.703	0.000	1.6e+04	5.21e+04
Model_M235I	883.1978	9851.535	0.090	0.929	-1.84e+04	2.02e+04

Model_M240I	5003.1890	1.18e+04	0.424	0.671	-1.81e+04	2.81e+04
Model_M3	6.461e+04	8691.459	7.433	0.000	4.76e+04	8.16e+04
Model_M340I	1.489e+04	1.48e+04	1.006	0.315	-1.41e+04	4.39e+04
Model_M4	4.651e+04	1.06e+04	4.408	0.000	2.58e+04	6.72e+04
Model_M440I	3.34e+04	1.49e+04	2.245	0.025	4238.440	6.26e+04
Model_M5	6.79e+04	9107.631	7.455	0.000	5e+04	8.58e+04
Model_M6	8235.1296	1.5e+04	0.550	0.582	-2.11e+04	3.76e+04
Model_M8	1.637e+05	1.18e+04	13.911	0.000	1.41e+05	1.87e+05
Model_MB100	-1.042e+04	9359.884	-1.113	0.266	-2.88e+04	7930.906
Model_MG3	1.734e+04	1.64e+04	1.057	0.291	-1.48e+04	4.95e+04
Model_ML250	-2.954e+04	5830.577	-5.066	0.000	-4.1e+04	-1.81e+04
Model_ML300	-4.141e+04	1.27e+04	-3.248	0.001	-6.64e+04	-1.64e+04
Model_ML320	-3.391e+04	7454.073	-4.549	0.000	-4.85e+04	-1.93e+04
Model_ML350	-3.965e+04	4054.678	-9.779	0.000	-4.76e+04	-3.17e+04
Model_ML400	-3.712e+04	1.27e+04	-2.913	0.004	-6.21e+04	-1.21e+04
Model_ML500	-4.984e+04	9083.147	-5.487	0.000	-6.76e+04	-3.2e+04
Model_ML63	-3.117e+04	6517.939	-4.783	0.000	-4.39e+04	-1.84e+04
Model_MPV	2.268e+04	1.63e+04	1.389	0.165	-9320.801	5.47e+04
Model_MU-X	-7.006e+04	3331.209	-21.033	0.000	-7.66e+04	-6.35e+04
Model_MX-30	6453.0943	1.68e+04	0.385	0.700	-2.64e+04	3.93e+04
Model_MX-5	3.723e+04	1.56e+04	2.384	0.017	6623.987	6.78e+04
Model_Macan	-8.635e+04	3385.052	-25.509	0.000	-9.3e+04	-7.97e+04
Model_Magna	-1.058e+04	8491.641	-1.245	0.213	-2.72e+04	6069.336
Model_Malibu	-4.016e+04	7946.066	-5.055	0.000	-5.57e+04	-2.46e+04
Model_Maloo	-1.851e+04	1e+04	-1.846	0.065	-3.82e+04	1142.302
Model_Marco	2.589e+04	1.28e+04	2.030	0.042	887.065	5.09e+04
Model_Martin	3.162e+04	3407.483	9.280	0.000	2.49e+04	3.83e+04
Model_Master	3326.2752	8648.114	0.385	0.701	-1.36e+04	2.03e+04
Model_Maverick	3.104e+04	1.24e+04	2.512	0.012	6823.553	5.53e+04
Model_Maxima	-2.955e+04	4037.531	-7.320	0.000	-3.75e+04	-2.16e+04
Model_Maybach	2.31e+05	9081.738	25.440	0.000	2.13e+05	2.49e+05
Model_Mazda2	914.4943	1.75e+04	0.052	0.958	-3.34e+04	3.52e+04
Model_Mazda3	3137.3273	1.63e+04	0.192	0.848	-2.89e+04	3.51e+04
Model_Megane	-6012.8007	3303.447	-1.820	0.069	-1.25e+04	462.388
Model_Micra	-1.773e+04	3921.059	-4.521	0.000	-2.54e+04	-1e+04
Model_Mirage	-1.178e+04	3969.864	-2.968	0.003	-1.96e+04	-3999.954
Model_Monaro	-8913.9303	8042.443	-1.108	0.268	-2.47e+04	6850.311
Model_Mondeo	-1.601e+04	2940.762	-5.443	0.000	-2.18e+04	-1.02e+04
Model_Mulsanne	1.22e+05	8285.754	14.724	0.000	1.06e+05	1.38e+05
Model_Multivan	-1.348e+04	4896.624	-2.753	0.006	-2.31e+04	-3881.498
Model_Murano	-3.189e+04	4954.525	-6.438	0.000	-4.16e+04	-2.22e+04
Model_Musso	-2.84e+04	3188.993	-8.906	0.000	-3.47e+04	-2.21e+04
Model_Mustang	-7953.9672	2789.353	-2.852	0.004	-1.34e+04	-2486.470
Model_NLR	-6.348e+04	7376.475	-8.605	0.000	-7.79e+04	-4.9e+04
Model_NLS	-7.187e+04	8946.559	-8.033	0.000	-8.94e+04	-5.43e+04
Model_NMR	-5.605e+04	9323.681	-6.012	0.000	-7.43e+04	-3.78e+04
Model_NNR	-6.117e+04	7360.454	-8.311	0.000	-7.56e+04	-4.67e+04
Model_NPR	-4.993e+04	8804.814	-5.671	0.000	-6.72e+04	-3.27e+04
Model_NQR	-2.405e+04	9060.052	-2.654	0.008	-4.18e+04	-6286.363
Model_NX200T	-2.57e+04	5022.974	-5.117	0.000	-3.55e+04	-1.59e+04

Model_NX250	-5674.5994	1.26e+04	-0.450	0.653	-3.04e+04	1.9e+04
Model_NX300	-1.613e+04	4137.434	-3.899	0.000	-2.42e+04	-8021.265
Model_NX300H	-2.275e+04	5855.025	-3.885	0.000	-3.42e+04	-1.13e+04
Model_NX350	-1645.9995	6478.708	-0.254	0.799	-1.43e+04	1.11e+04
Model_NX350H	-9231.6306	6522.819	-1.415	0.157	-2.2e+04	3553.948
Model_Navara	-1.667e+04	2209.701	-7.545	0.000	-2.1e+04	-1.23e+04
Model_Niro	-2.628e+04	8410.996	-3.124	0.002	-4.28e+04	-9788.400
Model_Nitro	-3e+04	6266.837	-4.787	0.000	-4.23e+04	-1.77e+04
Model_Octavia	-7745.9166	2804.170	-2.762	0.006	-1.32e+04	-2249.377
Model_Odyssey	-8587.3064	3126.986	-2.746	0.006	-1.47e+04	-2458.004
Model_Omoda5	-5.232e+04	5118.292	-10.223	0.000	-6.24e+04	-4.23e+04
Model_Optima	-1.635e+04	5612.436	-2.914	0.004	-2.74e+04	-5353.730
Model_Outback	-1.286e+04	1757.231	-7.321	0.000	-1.63e+04	-9420.029
Model_Outlander	-1.464e+04	1888.307	-7.750	0.000	-1.83e+04	-1.09e+04
Model_PIK-UP	-3.205e+04	4962.424	-6.459	0.000	-4.18e+04	-2.23e+04
Model_PT	-7073.2031	1.45e+04	-0.487	0.626	-3.56e+04	2.14e+04
Model_Paceman	4.092e+04	2.03e+04	2.018	0.044	1173.791	8.07e+04
Model_Pajero	1070.1070	2069.022	0.517	0.605	-2985.448	5125.662
Model_Palisade	1.088e+04	3686.636	2.952	0.003	3656.392	1.81e+04
Model_Panamera	1773.0541	5046.976	0.351	0.725	-8119.679	1.17e+04
Model_Panda	5.494e+04	1.59e+04	3.463	0.001	2.38e+04	8.6e+04
Model_Passat	-3.391e+04	4468.828	-7.587	0.000	-4.27e+04	-2.51e+04
Model_Pathfinder	-2.924e+04	2411.150	-12.128	0.000	-3.4e+04	-2.45e+04
Model_Patriot	-2.847e+04	5625.770	-5.061	0.000	-3.95e+04	-1.74e+04
Model_Patrol	1610.7072	2458.649	0.655	0.512	-3208.567	6429.981
Model_Picanto	-3.003e+04	4464.375	-6.726	0.000	-3.88e+04	-2.13e+04
Model_Polo	-3.833e+04	4458.499	-8.596	0.000	-4.71e+04	-2.96e+04
Model_Prius	-1.465e+04	4588.742	-3.192	0.001	-2.36e+04	-5650.848
Model_Prius-C	-2.445e+04	1.24e+04	-1.973	0.048	-4.87e+04	-162.787
Model_Pulsar	-1.734e+04	2794.439	-6.204	0.000	-2.28e+04	-1.19e+04
Model_Puma	-2.14e+04	3078.164	-6.951	0.000	-2.74e+04	-1.54e+04
Model_Punto	5.553e+04	1.59e+04	3.503	0.000	2.45e+04	8.66e+04
Model_Pursuit	-2.33e+04	8229.036	-2.832	0.005	-3.94e+04	-7173.195
Model_Q2	-3.434e+04	3216.031	-10.678	0.000	-4.06e+04	-2.8e+04
Model_Q3	-3.228e+04	2402.004	-13.439	0.000	-3.7e+04	-2.76e+04
Model_Q5	-3.034e+04	2190.952	-13.846	0.000	-3.46e+04	-2.6e+04
Model_Q50	-3.053e+04	7438.983	-4.104	0.000	-4.51e+04	-1.59e+04
Model_Q60	-4.186e+04	9111.262	-4.594	0.000	-5.97e+04	-2.4e+04
Model_Q7	-3.391e+04	2483.528	-13.656	0.000	-3.88e+04	-2.9e+04
Model_Q8	791.8169	5775.487	0.137	0.891	-1.05e+04	1.21e+04
Model_Qashqai	-2.471e+04	2210.232	-11.182	0.000	-2.9e+04	-2.04e+04
Model_Quattroporte	-4.674e+04	1.1e+04	-4.260	0.000	-6.83e+04	-2.52e+04
Model_R300	-4.85e+04	1.27e+04	-3.804	0.000	-7.35e+04	-2.35e+04
Model_R320	-4.436e+04	1.27e+04	-3.479	0.001	-6.94e+04	-1.94e+04
Model_R8	1.96e+05	8954.327	21.886	0.000	1.78e+05	2.14e+05
Model_RAV4	-1.551e+04	1796.750	-8.632	0.000	-1.9e+04	-1.2e+04
Model_RC	1.028e+04	1.27e+04	0.811	0.417	-1.46e+04	3.51e+04
Model_RC200T	-6392.7327	1.27e+04	-0.504	0.614	-3.12e+04	1.85e+04
Model_RC350	-1.447e+04	5981.716	-2.419	0.016	-2.62e+04	-2744.102
Model_RCZ	-6788.4639	1.21e+04	-0.561	0.575	-3.05e+04	1.69e+04

Model_RIO	-2.031e+04	4299.789	-4.723	0.000	-2.87e+04	-1.19e+04
Model_RS	3.093e+04	3817.828	8.101	0.000	2.34e+04	3.84e+04
Model_RS3	-1.551e+04	7250.337	-2.139	0.032	-2.97e+04	-1297.679
Model_RS4	2.05e+04	8841.437	2.318	0.020	3165.362	3.78e+04
Model_RS5	3.027e+04	1.24e+04	2.443	0.015	5985.928	5.46e+04
Model_RS6	4.124e+04	8852.581	4.659	0.000	2.39e+04	5.86e+04
Model_RX-8	4.769e+04	1.99e+04	2.400	0.016	8742.572	8.66e+04
Model_RX270	-2.144e+04	7424.229	-2.887	0.004	-3.6e+04	-6884.338
Model_RX300	-1.263e+04	6479.844	-1.949	0.051	-2.53e+04	75.160
Model_RX330	-3.158e+04	7453.234	-4.237	0.000	-4.62e+04	-1.7e+04
Model_RX350	-2.617e+04	3584.930	-7.299	0.000	-3.32e+04	-1.91e+04
Model_RX350L	-1.54e+04	7422.220	-2.075	0.038	-3e+04	-854.447
Model_RX450H	-2.096e+04	3858.789	-5.433	0.000	-2.85e+04	-1.34e+04
Model_RX450HL	-1.202e+04	9016.663	-1.333	0.183	-2.97e+04	5658.479
Model_RX500H	5.376e+04	1.26e+04	4.262	0.000	2.9e+04	7.85e+04
Model_Ranger	-9429.4519	1980.338	-4.762	0.000	-1.33e+04	-5547.730
Model_Rapid	-1.949e+04	6883.751	-2.831	0.005	-3.3e+04	-5993.214
Model_Renegade	-3.557e+04	7190.518	-4.946	0.000	-4.97e+04	-2.15e+04
Model_Rexton	-1.977e+04	3761.519	-5.255	0.000	-2.71e+04	-1.24e+04
Model_Rodeo	-2.112e+04	5648.294	-3.739	0.000	-3.22e+04	-1e+04
Model_Romeo	-5.467e+04	2006.374	-27.249	0.000	-5.86e+04	-5.07e+04
Model_Rondo	-1.554e+04	7408.990	-2.097	0.036	-3.01e+04	-1015.365
Model_Roomster	527.5837	1.16e+04	0.045	0.964	-2.22e+04	2.33e+04
Model_Rover	-3.995e+04	1202.198	-33.230	0.000	-4.23e+04	-3.76e+04
Model_S-Cross	-4.241e+04	5747.664	-7.379	0.000	-5.37e+04	-3.11e+04
Model_S16	-5.933e+04	6398.824	-9.272	0.000	-7.19e+04	-4.68e+04
Model_S3	-2.671e+04	3339.151	-8.000	0.000	-3.33e+04	-2.02e+04
Model_S350	69.3360	9038.187	0.008	0.994	-1.76e+04	1.78e+04
Model_S4	-2.357e+04	6325.203	-3.726	0.000	-3.6e+04	-1.12e+04
Model_S40	-1.342e+04	1.19e+04	-1.131	0.258	-3.67e+04	9833.856
Model_S430	-2.805e+04	1.27e+04	-2.202	0.028	-5.3e+04	-3085.897
Model_S450	5.942e+04	5319.990	11.169	0.000	4.9e+04	6.98e+04
Model_S450L	1.213e+05	1.27e+04	9.520	0.000	9.64e+04	1.46e+05
Model_S5	-2.461e+04	6345.225	-3.878	0.000	-3.7e+04	-1.22e+04
Model_S60	-6842.1697	5121.394	-1.336	0.182	-1.69e+04	3196.432
Model_S63	8.176e+04	1.28e+04	6.381	0.000	5.66e+04	1.07e+05
Model_S65	-1817.1507	1.28e+04	-0.142	0.887	-2.69e+04	2.32e+04
Model_SC430	-1.072e+04	1.28e+04	-0.840	0.401	-3.57e+04	1.43e+04
Model_SL350	-8215.9804	1.29e+04	-0.636	0.525	-3.35e+04	1.71e+04
Model_SL500	-7995.2008	1.29e+04	-0.618	0.536	-3.33e+04	1.74e+04
Model_SL55	1.268e+04	1.29e+04	0.984	0.325	-1.26e+04	3.8e+04
Model_SLC	1214.9538	1.29e+04	0.094	0.925	-2.4e+04	2.65e+04
Model_SLK350	-2.727e+04	1.29e+04	-2.119	0.034	-5.25e+04	-2047.657
Model_SQ2	-2.133e+04	8851.056	-2.410	0.016	-3.87e+04	-3977.901
Model_SQ5	-2.533e+04	3270.753	-7.744	0.000	-3.17e+04	-1.89e+04
Model_SQ7	1.447e+04	6402.641	2.259	0.024	1916.287	2.7e+04
Model_SQ8	5.976e+04	1.24e+04	4.806	0.000	3.54e+04	8.41e+04
Model_SX4	-3.067e+04	6751.652	-4.542	0.000	-4.39e+04	-1.74e+04
Model_Santa	-8324.5358	1775.398	-4.689	0.000	-1.18e+04	-4844.523
Model_Scala	-1.974e+04	5484.931	-3.599	0.000	-3.05e+04	-8988.157

Model_Scirocco	-2.184e+04	7448.302	-2.932	0.003	-3.64e+04	-7241.854
Model_Scorpio-N	-4.546e+04	7292.593	-6.234	0.000	-5.98e+04	-3.12e+04
Model_Scudo	5.496e+04	1.35e+04	4.057	0.000	2.84e+04	8.15e+04
Model_Sebring	-3.274e+04	1.15e+04	-2.851	0.004	-5.52e+04	-1.02e+04
Model_Seltos	-2.387e+04	5396.627	-4.423	0.000	-3.44e+04	-1.33e+04
Model_Senator	-2.133e+04	9352.607	-2.281	0.023	-3.97e+04	-3000.109
Model_Seven	-2.967e+04	4731.780	-6.271	0.000	-3.89e+04	-2.04e+04
Model_Sierra	8553.8275	1.33e+04	0.646	0.519	-1.74e+04	3.45e+04
Model_Silverado	-7.979e+04	5418.904	-14.725	0.000	-9.04e+04	-6.92e+04
Model_Sonata	-1.061e+04	2674.542	-3.968	0.000	-1.59e+04	-5370.573
Model_Sorento	-1.968e+04	4394.141	-4.480	0.000	-2.83e+04	-1.11e+04
Model_Soul	-1.872e+04	9734.173	-1.923	0.054	-3.78e+04	358.968
Model_Spectra	-36.2568	1.32e+04	-0.003	0.998	-2.59e+04	2.58e+04
Model_Sportage	-2.057e+04	4334.721	-4.746	0.000	-2.91e+04	-1.21e+04
Model_Sprinter	7166.1943	4614.430	1.553	0.120	-1878.692	1.62e+04
Model_Staria	-3671.1794	6247.404	-0.588	0.557	-1.59e+04	8574.551
Model_Statesman	-3.382e+04	7047.448	-4.799	0.000	-4.76e+04	-2e+04
Model_Stavic	-1.059e+04	7803.732	-1.357	0.175	-2.59e+04	4709.587
Model_Steed	-2.663e+04	1.06e+04	-2.519	0.012	-4.74e+04	-5909.294
Model_Stinger	-5326.2244	4521.574	-1.178	0.239	-1.42e+04	3536.652
Model_Stonic	-3.15e+04	4991.872	-6.311	0.000	-4.13e+04	-2.17e+04
Model_Stralis	1.182e+05	3089.128	38.258	0.000	1.12e+05	1.24e+05
Model_Superb	-5729.6896	3522.797	-1.626	0.104	-1.26e+04	1175.454
Model_Supra	2.764e+04	5886.741	4.696	0.000	1.61e+04	3.92e+04
Model_Swift	-3.851e+04	4577.077	-8.413	0.000	-4.75e+04	-2.95e+04
Model_T-Cross	-4.193e+04	4698.612	-8.924	0.000	-5.11e+04	-3.27e+04
Model_T-ROC	-4.11e+04	4751.815	-8.650	0.000	-5.04e+04	-3.18e+04
Model_T60	-2.906e+04	2778.001	-10.461	0.000	-3.45e+04	-2.36e+04
Model_TT	-1.598e+04	4533.948	-3.525	0.000	-2.49e+04	-7094.033
Model_Tank	-3.008e+04	7160.944	-4.201	0.000	-4.41e+04	-1.6e+04
Model_Tarago	-1.139e+04	2745.170	-4.151	0.000	-1.68e+04	-6013.719
Model_Terracan	4871.6138	5660.793	0.861	0.389	-6224.282	1.6e+04
Model_Territory	-2.376e+04	2149.108	-11.056	0.000	-2.8e+04	-1.95e+04
Model_Tiguan	-3.738e+04	4372.207	-8.550	0.000	-4.6e+04	-2.88e+04
Model_Tiida	-1.316e+04	4897.638	-2.687	0.007	-2.28e+04	-3558.988
Model_Touareg	-2.395e+04	4865.761	-4.922	0.000	-3.35e+04	-1.44e+04
Model_Trafic	1625.2133	3923.152	0.414	0.679	-6064.679	9315.105
Model_Trailblazer	-3.471e+04	5551.327	-6.252	0.000	-4.56e+04	-2.38e+04
Model_Trajet	-3868.8528	1.23e+04	-0.315	0.753	-2.8e+04	2.02e+04
Model_Transit	7694.2323	4092.721	1.880	0.060	-328.036	1.57e+04
Model_Transporter	-1.597e+04	5249.753	-3.043	0.002	-2.63e+04	-5682.350
Model_Trax	-4.442e+04	5362.287	-8.285	0.000	-5.49e+04	-3.39e+04
Model_Tribeca	-2.875e+04	5324.061	-5.400	0.000	-3.92e+04	-1.83e+04
Model_Tribute	2.434e+04	1.61e+04	1.511	0.131	-7240.225	5.59e+04
Model_Triton	-7324.4741	2048.006	-3.576	0.000	-1.13e+04	-3310.115
Model_Trucks	1.116e+04	4771.588	2.339	0.019	1806.793	2.05e+04
Model_Tucson	-1.195e+04	1642.303	-7.276	0.000	-1.52e+04	-8730.922
Model_Tunland	-5.136e+04	7490.125	-6.857	0.000	-6.6e+04	-3.67e+04
Model_UTE	-3.413e+04	5388.246	-6.335	0.000	-4.47e+04	-2.36e+04
Model_UX200	-2.243e+04	4751.874	-4.720	0.000	-3.17e+04	-1.31e+04

Model_Urus	1.65e+04	9598.316	1.719	0.086	-2317.780	3.53e+04
Model_V	6.76e+04	1.28e+04	5.293	0.000	4.26e+04	9.26e+04
Model_V250	9977.6845	6519.645	1.530	0.126	-2801.673	2.28e+04
Model_V40	-9586.6426	5408.322	-1.773	0.076	-2.02e+04	1014.376
Model_V50	-4034.8180	1.19e+04	-0.340	0.734	-2.73e+04	1.92e+04
Model_V60	-1.089e+04	1.19e+04	-0.917	0.359	-3.42e+04	1.24e+04
Model_V80	-1.304e+04	4433.125	-2.941	0.003	-2.17e+04	-4348.979
Model_Valente	-1.412e+04	9106.253	-1.550	0.121	-3.2e+04	3730.812
Model_Vectra	-1.844e+04	1.35e+04	-1.371	0.171	-4.48e+04	7931.879
Model_Veloster	-933.1738	2550.137	-0.366	0.714	-5931.776	4065.429
Model_Venue	-2.361e+04	3081.186	-7.664	0.000	-2.97e+04	-1.76e+04
Model_Verada	-1.685e+04	1.19e+04	-1.417	0.157	-4.02e+04	6458.418
Model_Viano	-5161.3497	1.28e+04	-0.404	0.686	-3.02e+04	1.99e+04
Model_Vitara	-3.703e+04	4491.747	-8.244	0.000	-4.58e+04	-2.82e+04
Model_Vito	-1.169e+04	3979.003	-2.937	0.003	-1.95e+04	-3886.407
Model_Viva	-3.525e+04	1.35e+04	-2.620	0.009	-6.16e+04	-8883.361
Model_WRX	-5535.9428	2065.121	-2.681	0.007	-9583.850	-1488.036
Model_Wall	-6.196e+04	1946.609	-31.827	0.000	-6.58e+04	-5.81e+04
Model_Wrangler	-1.891e+04	3800.911	-4.975	0.000	-2.64e+04	-1.15e+04
Model_X	-3.738e+04	7073.198	-5.284	0.000	-5.12e+04	-2.35e+04
Model_X-Trail	-2.339e+04	1977.739	-11.825	0.000	-2.73e+04	-1.95e+04
Model_X1	-2509.0647	7880.550	-0.318	0.750	-1.8e+04	1.29e+04
Model_X2	2066.8577	8696.942	0.238	0.812	-1.5e+04	1.91e+04
Model_X250	-2.703e+04	6564.086	-4.118	0.000	-3.99e+04	-1.42e+04
Model_X3	5842.2870	7722.418	0.757	0.449	-9294.663	2.1e+04
Model_X350	-2.772e+04	7501.689	-3.696	0.000	-4.24e+04	-1.3e+04
Model_X4	6058.8162	8178.783	0.741	0.459	-9972.669	2.21e+04
Model_X5	9852.4211	7811.836	1.261	0.207	-5459.800	2.52e+04
Model_X6	-1737.2935	8872.946	-0.196	0.845	-1.91e+04	1.57e+04
Model_X7	4.832e+04	1.06e+04	4.548	0.000	2.75e+04	6.91e+04
Model_XC40	-6092.0371	3812.677	-1.598	0.110	-1.36e+04	1381.309
Model_XC60	-5698.6450	3179.904	-1.792	0.073	-1.19e+04	534.383
Model_XC70	-2.698e+04	1.19e+04	-2.261	0.024	-5.04e+04	-3593.614
Model_XC90	-5713.6355	3882.151	-1.472	0.141	-1.33e+04	1895.889
Model_XE	-1.986e+04	5036.812	-3.942	0.000	-2.97e+04	-9983.032
Model_XF	-2.763e+04	5010.074	-5.515	0.000	-3.75e+04	-1.78e+04
Model_XJ8	-1.44e+04	8483.080	-1.697	0.090	-3.1e+04	2229.169
Model_XKR	2.092e+04	1.18e+04	1.779	0.075	-2136.747	4.4e+04
Model_XL-7	-3.278e+04	1.32e+04	-2.475	0.013	-5.87e+04	-6814.504
Model_XUV500	-2.348e+04	7294.311	-3.219	0.001	-3.78e+04	-9180.649
Model_XV	-1.459e+04	1902.388	-7.672	0.000	-1.83e+04	-1.09e+04
Model_Xenon	-5.927e+04	6427.949	-9.221	0.000	-7.19e+04	-4.67e+04
Model_Xjsc	1.948e+04	1.19e+04	1.635	0.102	-3874.907	4.28e+04
Model_Yaris	-1.878e+04	1759.688	-10.670	0.000	-2.22e+04	-1.53e+04
Model_Z	1.505e+04	7337.425	2.052	0.040	671.582	2.94e+04
Model_Z4	1.681e+04	1e+04	1.681	0.093	-2793.970	3.64e+04
Model_ZR-V	-2.455e+04	1.18e+04	-2.080	0.038	-4.77e+04	-1410.256
Model_ZS	1.719e+04	1.66e+04	1.035	0.301	-1.54e+04	4.97e+04
Model_ZST	2.124e+04	1.65e+04	1.287	0.198	-1.11e+04	5.36e+04
UsedOrNew_NEW	-4112.0899	802.737	-5.123	0.000	-5685.560	-2538.620

UsedOrNew_USED	-1.159e+04	717.183	-16.154	0.000	-1.3e+04	-1.02e+04
Transmission_Automatic	-5726.9736	2426.936	-2.360	0.018	-1.05e+04	-969.861
Transmission_Manual	-4415.2115	2457.649	-1.797	0.072	-9232.526	402.103
DriveType_AWD	3929.5508	632.257	6.215	0.000	2690.245	5168.857
DriveType_Front	-3503.8159	636.659	-5.503	0.000	-4751.751	-2255.881
DriveType_Other	555.2073	9510.131	0.058	0.953	-1.81e+04	1.92e+04
DriveType_Rear	-8463.9091	642.753	-13.168	0.000	-9723.788	-7204.030
FuelType_Diesel	-4799.8888	1286.246	-3.732	0.000	-7321.100	-2278.677
FuelType_Hybrid	7094.6812	1377.709	5.150	0.000	4394.192	9795.171
FuelType_LPG	-9447.1536	3769.079	-2.506	0.012	-1.68e+04	-2059.265
FuelType_Leaded	-9.237e+04	8420.299	-10.969	0.000	-1.09e+05	-7.59e+04
FuelType_Other	5395.2670	1.29e+04	0.419	0.675	-1.98e+04	3.06e+04
FuelType_Premium	-2837.1202	1259.779	-2.252	0.024	-5306.452	-367.788
FuelType_Unleaded	-4720.9827	1240.001	-3.807	0.000	-7151.547	-2290.418
BodyType_Convertible	9704.5367	3373.566	2.877	0.004	3091.906	1.63e+04
BodyType_Coupe	5501.1800	3077.412	1.788	0.074	-530.950	1.15e+04
BodyType_Hatchback	-1020.7966	2669.413	-0.382	0.702	-6253.195	4211.602
BodyType_Other	9208.6596	3981.043	2.313	0.021	1405.294	1.7e+04
BodyType_People Mover	3870.1424	4620.789	0.838	0.402	-5187.208	1.29e+04
BodyType_SUV	3254.7004	2779.936	1.171	0.242	-2194.337	8703.738
BodyType_Sedan	1624.1181	2654.474	0.612	0.541	-3578.998	6827.234
BodyType_Ute / Tray	6961.5098	2406.839	2.892	0.004	2243.790	1.17e+04
BodyType_Wagon	2115.9651	2637.975	0.802	0.422	-3054.812	7286.742

Omnibus:	11272.242	**Durbin-Watson:**	2.002
Prob(Omnibus):	0.000	**Jarque-Bera (JB):**	2417694.894
Skew:	2.684	**Prob(JB):**	0.00
Kurtosis:	65.129	**Cond. No.**	1.28e+23

Вот несколько показателей с высоким влиянием на цену:

1. Марки автомобилей и их соответствующие коэффициенты:

Brand_Hyundai: -1.057e+05: Бренд Hyundai значительно снижает цену автомобиля.

Brand_Ferrari: 1.086e+05: Бренд Ferrari значительно увеличивает цену автомобиля.

Brand_Lamborghini: 2.349e+05: Бренд Lamborghini оказывает большое положительное влияние на цену. Это означает, что марка Lamborghini связана с существенным увеличением цены на автомобиль по сравнению с базовой категорией. Высокий коэффициент и статистическая значимость (p-value < 0.05) говорят о том, что марка Lamborghini имеет одну из самых сильных положительных связей с ценой автомобиля

Brand_McLaren: 1.97e+05: Бренд McLaren также значительно увеличивает цену, что подтверждается значением коэффициента и его статистической значимостью.

Brand_Rolls-Royce: 7.495e+04: Roll-Royce положительно сказывается на цене автомобиля.

2.Тип топлива:

FuelType_Leaded: -9.237e+04: Это говорит о том, что автомобили, использующие этилированный бензин, находятся в более низком ценовом сегменте на значимую величину этого коэффициента.

3.Привод автомобиля:

DriveType_Rear: -8463.9091: Автомобили с задним приводом обычно дешевле.

4.Кузов автомобиля:

BodyType_Convertible: 9704.5367: Кабриолеты, как правило, дороже.

Параметр R-squared показывает, что модель объясняет примерно 86.8% вариации цены

Эти переменные показывают наиболее заметное статистическое влияние на цену автомобиля в регрессионном анализе

Для дальнейшей работы проверим нашу регрессию на мультиколлинеарность, ибо она может стать причиной неустойчивости коэффициентов, а также затруднить оценку и анализ общего результата.

Таблица №2

Проверка на наличие мультиколлинеарности

```
Price                1.00
Year                 0.42
CylindersinEngine    0.39
Engine               0.33
FuelConsumption      0.07
Seats               -0.04
Doors               -0.20
Kilometres          -0.41
Name: Price, dtype: float64
```

Year 0.42: Умеренно положительная корреляция с "годом" означает, что более новые автомобили имеют тенденцию быть дороже.

Cylinders in Engine 0.39: Довольно близкая к умеренной положительная корреляция указывает на то, что автомобили с большим числом цилиндров в двигателе чаще всего стоят дороже.

Engine 0.33: Невысокая положительная корреляция с размером двигателя говорит о том, что машины с более мощными двигателями обычно имеют более высокую стоимость.

Fuel Consumption 0.07: Значение близкое к нулю может указывать на то, что расход топлива почти не влияет на стоимость автомобиля или данная связь очень слаба.

Seats -0.04: Такая близкая к нулю отрицательная корреляция с количеством сидений означает, что нет существенной связи между количеством сидений и ценой, но если и есть, то автомобили с большим количеством сидений могут стоить чуть меньше.

Doors -0.20: Это небольшая отрицательная корреляция может говорить о том, что машины с большим количеством дверей могут стоить меньше, но в целом связь не слишком выражена.

Kilometres -0.41: Средне выраженная отрицательная корреляция с количеством километров на одометре указывает на то, что, как правило, более использованные автомобили с большим пробегом продадутся за меньшую стоимость.

Так как взятое нами значение ниже общепринятого значения, равного 8, можно сделать вывод об отсутствии мультиколлинеарности в нашей регрессии. Следовательно, независимые переменные регрессии не коррелируют друг с другом.

Выводы

На основе проведенного исследования комплексного набора данных автомобильного рынка Австралии можно сделать следующие выводы:

Бренд автомобиля имеет значительное влияние на его цену. Бренды, такие как Ferrari, Lamborghini, McLaren и Rolls-Royce, оказывают положительное влияние на цену автомобиля, в то время как бренд Hyundai снижает цену автомобиля.

Тип топлива также влияет на цену автомобиля. Автомобили, использующие этилированный бензин, находятся в более низком ценовом сегменте.

Привод автомобиля оказывает влияние на цену. Автомобили с задним приводом обычно дешевле.

Форма или стиль кузова автомобиля также может влиять на цену. Например, кабриолеты обычно дороже других типов кузовов.

Год выпуска автомобиля оказывает положительное влияние на его цену. Более новые автомобили имеют тенденцию быть дороже.

Размер двигателя (количество цилиндров) также оказывает положительное влияние на цену автомобиля. Автомобили с более мощными двигателями обычно имеют более высокую стоимость.

Количество пройденных километров оказывает отрицательное влияние на цену автомобиля. Более использованные автомобили с большим пробегом чаще продаются за меньшую стоимость.

Другие факторы, такие как тип коробки передач, состояние автомобиля (б/у или новый), тип топлива и т. д., могут также влиять на цены на автомобили, но их влияние не было подробно рассмотрено в данной работе.

В целом, проведенный анализ помогает понять, какие факторы оказывают наибольшее влияние на цены автомобилей в Австралии. Эти результаты могут быть полезными для принятия решений в автомобильной индустрии, включая прогнозирование цен, планирование производства и маркетинговые стратегии.

Использованные источники:

[1] Баласса, Б. (1965). Либерализация торговли и выявленные сравнительные преимущества. Манчестерская школа экономических и социальных исследований. Том 33: 99–123.

[2] Баласса, Б. (1967). Либерализация торговли между индустриальными странами. Нью-Йорк: Мак. Грау-Хилл.

[3] Бертомье К., Чинголани М. и Ри А. (2016). Инвестиции для роста и развития на Западных Балканах. Исследовательский проект STAREBEI, Институт EIB, Университет Ниццы – София Антиполис (Франция).

[4] Бутерин В.; Шкаре М., Бутерин Д. (2017). Макроэкономическая модель влияния институциональных реформ на экономический рост новых членов ЕС и Республики Хорватия. Экономические исследования – Экономическая истраживања, 30, 1: 1572–1593.

[5] Вукадинович, Р. (2004). Как укладывать дома предложения по праву Европы. Крагуевац: Правни факультет, Центр за право Европейского университета.

[6] Вукадинович Р., Вукадинович Маркович Дж. (2016). Вход в институты и права Европейского университета. Крагуевац: Дружество за европейским правом.

[7] Лопандич, Д. (2010). Мужчины и средние земли у международных односим и у Европейской унии.
Международные проблемы, 62(1):79–112.

[8] Кроули, П. (2002). До и после ЕВС: уроки и перспективы на будущее. Лондон: Раутледж.

[9] Кузнец С. (1960). Экономический рост малых стран, В: Робинсон, Э.А.Г. (ред.). Экономические последствия размера наций. Материалы конференции Международной экономической ассоциации. Издатель Пэлгрейв Макмиллан, Великобритания, 14–32. ISBN 978-1-349-15212-4, ISBN 978-1-349-15210-0 (электронная книга). DOI: 10.1007/978-1-349-15210-0.

[10] Махмуди М., Махмуди Э. (2016). Прямые иностранные инвестиции, экспорт и экономический рост: данные двух групп развивающихся стран. Экономические исследования – Ekonomska istraživanja, 29, 1: 938–949.

[11] Мано-Бакалинов, В. (2016). Либерализация торговли и экономический рост в Македонии. Юго-Восточноевропейский журнал экономики и бизнеса. 11, 2: 48–60.
[12] Мардас, Д., Никас, Ч. (2008). Экономическая интеграция и внутриотраслевая торговля между Европейским сообществом и странами Западных Балкан. Обзор исследований переходного периода, 15: 511–523.
[13] Мид, Дж. (1955). Теория таможенных союзов. Амстердам: Северная Голландия.
[14] Мехик, Э.; Силайджич С. и Бабич-Ходович В. (2013). Влияние ПИИ на экономический рост: некоторые данные из Юго-Восточной Европы. Финансы и торговля развивающихся рынков, 49, 5–20.
[15] Обстфельд М., Кругман П. (2009). Международная экономика – теория и политика (Превод: Н. Стоянович и М. Гогич). Белград: Датастатус.
[16] Перец, Д.; Румман Ф., Элиавони К. и Оуэн А. (2001). Малые государства в мировой экономике. Вашингтон: Всемирный банк.
[17] Пере, Э. (2015). Влияние надлежащего управления на экономическое развитие стран Западных Балкан. Европейский журнал правительства и экономики, 4: 25–45.
[18] Петрески, М. (2013). Анализ торговли Юго-Восточной Европы: роль эндогенной CEFTA-2006? Финансы и торговля развивающихся рынков. 49: 26–44.
[19] Попович, Г. (2016). Экономика Европейской единой. Источно Ново Сараево: Завод за джбенике и наставна средств.
[20] Сиддикиа Д.А. и Ахмедб К.М. (2013). Влияние институтов на экономический рост:
Глобальный анализ, основанный на динамической панельной оценке GMM. структурные изменения и экономическая динамика, 24: 18–33.
[21] Станивукович, М., Джаич, С. (2008) Споразум о стабилизации и дружбе и прелазни торговый спор Србие и европейских заедниц - правильное действие и значение. Нови Сад: Зборник радова Правног
факультета. 42, 1–2: 391–412.
[22] Стиглиц Дж. и Чарльтон А. (2005). Праведна торговина за све (Превод: И. Гргурич). Загреб: Масмедиа.
[23] Прасад Э., Рогофф К., Вэй Ш. – Дж. и Козе А. (2003). Влияние финансовой глобализации на развивающиеся страны: некоторые эмпирические данные. Периодический доклад МВФ №. 220.
https://www.imf.org/external/np/apd/seminars/2003/newdelhi/prasad.pdf.
[24] Мировые метры. (2017). Страны мира по населению (2017 г.). www.worldometers.info/world-population/population-by-country.

УДК 37

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ПРИМЕНЕНИЕ ИНТЕРАКТИВНЫХ МЕТОДОВ ОБУЧЕНИЯ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ

Аннотация. В статье рассматриваются особенности применение интерактивных методов обучения в высших учебных заведениях. Использование интерактивных методов обучения в учебном процесс в высших учебных заведениях рассматривается как приоритетная стратегия и тактика университетского образования, которая будет способствовать развитию компетенций и самореализации студентов в учебно-профессиональной деятельности.

Ключевые слова: система, учебный процесс, компетенция, система, метод, вопросы, принцип.

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APPLICATION OF INTERACTIVE TEACHING METHODS IN HIGHER EDUCATION INSTITUTIONS

Annotation. The article discusses the features of the use of interactive teaching methods in higher educational institutions. The use of interactive teaching methods in the educational process in higher educational institutions is considered a priority strategy and tactics of university education, which will contribute to the development of competencies and self-realization of students in educational and professional activities.

Key words: system, educational process, competence, system, method, questions, principle., method, questions, principle.

В настоящее время современные требования, предъявляемые к системе высшего образования, диктуют новые условия к организации учебного процесса. На сегодняшний день одна из актуальных задач,

стоящая перед преподавателем высшего учебного заведения – внедрение новых подходов к организации учебных занятий. Это в первую очередь связано с ориентацией обучения на развитие компетенций обучающихся.

Использование интерактивных методов обучения в высшем учебном заведении рассматривается как приоритетная стратегия и тактика университетского образования, способствующая развитию компетенций и самореализации студентов в учебно-профессиональной деятельности.

Интерактивный («Inter» – это взаимный, «act» – действовать) – означает взаимодействовать, находиться в режиме беседы, диалога с кем-либо. Интерактивные методы ориентированы на более широкое взаимодействие студентов не только с преподавателем, но и друг с другом и на доминирование активности студентов в процессе обучения

«Интерактивные методы» можно перевести как «методы, позволяющие студентам взаимодействовать между собой» [3].

Основными задачами интерактивных методов обучения в высших учебных заведениях является:

✓ включить каждого студента в активный процесс освоения знаний;

✓ внедрить дифференцированный и индивидуальный подхода к студентам;

✓ формировать навыков общения, например, как умение слушать строить диалог, задавать вопросы, работать в команде;

✓ развивать умения самостоятельно добывать знания.

К основным принципам интерактивного метода обучения;

- равенство всех участников.
- отсутствие критики личности.
- любой ответ — не истина, а информация для размышления [1].

В интерактивных методах широко используются различные технологии: для постановки проблемы применяют аудио и видео, для поиска и оформления результатов — компьютеры. Современные технологии делают обучение более эффективным.

К самым распространенным интерактивным методам можно отнести:

✓ мозговые штурмы (brainstorm);

✓ круглые столы (дискуссия, дебаты);

✓ case-study (анализ конкретных ситуаций, ситуационный анализ);

✓ деловые и ролевые игры;

✓ мастер-классы.

Однако есть и другие популярные методики, например, сократические диалоги, обсуждения в группе, тренинги, интерактивные конференции и многое другое.

Преимущества интерактивных методов обучения:

✓ обучение становится индивидуальным, учитывающим особенности личности, интересы и потребности каждого ученика;

✓ появляется возможность емко и сжато представить любой объем учебной информации;

✓ в несколько раз улучшается визуальное восприятие, значительно упрощается процесс усвоения учебного материала;

✓ активизируется познавательная деятельность учеников, они получают теоретические знания и практические навыки.

В данный момент не существует четкой классификации интерактивных методов обучения. Возможно, это связано с тем, что нет четкого разграничения активных и интерактивных методов обучения, одни и те же виды методов относят как к активным, так и к интерактивным [2].

В настоящее время все большее внимание в процессе обучения уделяется деловым играм. Деловые игры дает возможность студентам рассмотреть реальную ситуацию, принимать самостоятельные решения, т.к. целью обучения является подготовка стратегов, способных на риск, предвидение, умеющих делать выбор, людей готовых к личной и социальной жизни.

Таким образом, использование интерактивных методовв учебном процессе позволит формировать интерес студентов с целью достижения определенных целей и выполнения образовательных задач. Следовательно, интерактивные формы обучения необходимо внедрять в практику высших учебных заведений.

Использованные источники:

1. Голованова И.И. Практики интерактивного обучения: метод. пособие / И.И. Голованова, Е.В. Асафова, Н.В. Телегина. – Казань: Казан. ун-т, 2014. – 288 с.

2. Тихомирова И.И., Тихомирова Г.Ю., Лазаренко Н.И. Использование интерактивных методов обучения в высшем учебном заведении // Научные исследования и разработки молодых ученых. – 2015. – С.76-79

3. Хамидова, Н. Ю. Применение интерактивных методов обучения в процессе преподавания иностранного (французского) языка в вузах / Н. Ю. Хамидова. — Текст: непосредственный // Молодой ученый. — 2020. — № 10 (300). — С. 151-153.

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ЖАМИЯТДА КАМБАҒАЛЛИККА ҚАРШИ КУРАШИШ – КОРРУПЦИЯНИНГ ОЛДИНИ ОЛИШНИНГ ОБЪЕКТИВ ОМИЛИДИР

Аннотация. Ушбу мақолада жамиятнинг долзарб масаласи ҳисобланган камбағалликни тугатиш, унинг салбий омиллари, келиб чиқиш сабаблари, таърифлари ва тушунчаларда акс этиши, бу иллатни бартараф этиш борасида жаҳон амалиётида кўрилаётган чора-тадбирлар ҳақида сўз юритилган.

Калит сўзлар: Дунё, халқаро, камбағаллик, салбий иллат, даромад, ресурс, адолат, соғлиқни сақлаш, таълим, камбағал, фақирона, ишсизлик, иш ҳақининг пастлиги, меҳнат унумдорлигининг пастлиги, касалланишнинг юқори даражаси, демографик, таълим малакаси, мажбурий миграция ва ҳ.к.

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FIGHT AGAINST POVERTY IN SOCIETY - PREVENT CORRUPTION IS THE OBJECTIVE FACTOR

Annotation. The article deals with the elimination of poverty and poverty, which is a pressing issue of society, its negative factors, causes, definitions and concepts, and the measures taken in world practice to eliminate this scourge.

Keywords: World, international, poverty, poverty, negative vices, income, resource, justice, health, education, poor, destitute, unemployment, low wages, low productivity, high morbidity, demographics, educational skills, forced migration and so on.

Дунёда инсонларни яхши яшашга интилгани учун айблаб бўлмайди. Айни вақтда, камбағаллик домига тушиб қолган ҳар бир фуқародан ҳам ўз ҳаётини ўзгартиришга бўлган кучли хоҳиш, янгиланишлардан қўрқмаслик ва доимо олдинга интилиш талаб этилади. Зеро, қарс икки қўлдан чиқади.

Қашшоқлик88 деб инсоннинг нормал ҳаёт кечириши учун зарур бўлган даромад ва ресурсларнинг адолатсиз тарзда тақсимланиши туфайли етишмаслиги, соғлиқни сақлаш, таълим ёки бошқа асосий хизматлардан фойдаланишда асоссиз чекловларнинг ўрнатилганлиги, яшаш учун тураржойнинг йўқлиги туфайли ижтимоий тенгсизлик шароитида яшаётган инсонларнинг фақирона турмуш-тарзига айтилади.

Камбағаллик89-бу индивидуал ёки ижтимоий гуруҳнинг тирикчилик учун керакли нарсаси етарли бўлмаган, меҳнат қилиш ва авлодини давом эттириш қобилиятини сақлаб қолишига имконият яратилмаган муҳтожликда яшовчи қашшоқ, фақир, бечора кишиларнинг яшаш тарзидир - деган таърифларни берган. Шунга мувофиқ тарзда камбағаллик ва қашшоқликнинг жамиятда коррупциянинг мавжудлик шаклларига қараб келиб чиқиш сабабларини қуйидаги: иқтисодий (ишсизлик, иқтисодий тенгсизлик, шу жумладан, иш ҳақининг пастлиги, меҳнат унумдорлигининг пастлиги); ижтимоий ва тиббий (ногиронлик, қарилик, касалланишнинг юқори даражаси); демографик (тўлиқ бўлмаган оилалар, оилада қарамоғида бўлганларнинг кўплиги, аҳоли сонининг кўпайиши); таълим малакаси (таълимнинг паст даражаси, касбий тайёргарликнинг етарли эмаслиги); сиёсий (ички ва ташқи можаролар, мажбурий миграция); минтақавий-географик (минтақаларнинг нотекис ривожланиши); диний, фалсафий ва психологик (ҳаёт тарзи сифатида аскетизм, аҳмоқлик) каби гуруҳларга ажратган. Шунга кўра, дунёда камбағаллик ва қашшоқликнинг ижтимоий тенгсизликни келтириб чиқариши ва унинг ўсиб боришига: бадавлат кишиларнинг солиқ тўлашдан бўйин товлаши; ишчилар иш ҳақининг камайтирилиши; иш ҳақининг минимал ва максимал даражалари ўртасидаги фарқнинг ошиши сабаб эканлиги аниқланган.

Дунё мамлакатларидаги ҳаёт қийматидаги тафовутлар ортиб боргани сабабли Жаҳон банки глобал камбағаллик кўрсаткичини вақти-вақти билан қайта кўриб чиқиш заруриятига дуч келди. 2005 йилда банк дунёнинг энг қашшоқ мамлакатларида қабул қилинган камбағаллик даражаси асосида ана шу кўрсаткични қайта ҳисоблади. Натижада глобал қашшоқлик чегараси 1,25 долларгача кўтарилди. 2015 йилда чегара қайта кўриб чиқилди ва 1,9 долларгача ортди. Бундан ташқари, Жаҳон банкида ўртадан паст, ўрта ва юқори– 3,2 доллар, 5,5 доллар ва 21,7 доллар даромадларга эга мамлакатлар учун камбағалликнинг юқори даражалари қабул қилинган. Банк мутахассислари бу кўрсаткичлар пул мезонларига асосланган ва улар

88 Қашшоқ-ўта камбағал, фақир; фақирона деган маъноларни англатиб инсонларнинг қашшоқ ҳолати, қашшоқ турмуш тарзи тушунилади.// Ўзбек тилининг изоҳли луғати. 5-жилд. – Т.: “Ўзбекистон миллий энциклопедияси” Давлат илмий нашриёти, 2008. – Б.269.

89 Камбағал [форс-араб. – қашшоқ, йўқсил]. 1. Муҳтожликда яшовчи, тирикчилик учун керакли нарсаси етарли бўлмган, қашшоқ, фақир, бечора. 2. Етарли бўлмаган; кам, етишмайдиган. 3. Кўчма маънода. Мушкул ёки аянчли аҳволга тушиб қолган киши; шўрлик; бояқиш, бечора. // Ўзбек тилининг изоҳли луғати. 2-жилд. – Т.: “Ўзбекистон миллий энциклопедияси” Давлат илмий нашриёти, 2006. – Б.306.

таълим олиш, соғлиқни сақлаш хизматлари ва сув ҳамда электр энергияси билан таъминланганлик каби жиҳатларни ҳисобга олмаслигини таъкидлашади.

1990 йилдан бошлаб ҳар йили Жаҳон банкининг «Камбағаллик ва ялпи фаровонлик» маърузалари эълон қилинади. Сўнгги маъруза 2018 йилнинг октябр ойида чиқарилган. Ундаги асосий кўрсаткич қашшоқликнинг халқаро чегараси бир киши учун кунига 1,9 доллар миқдорида эканидир. Бироқ қашшоқлик бўйича янги таъриф ва ўлчамлар киритилмоқда. Жумладан, ижтимоий камбағаллик. Бу кўрсаткич мутлақ ва нисбий камбағаллик консепсиясини бирлаштиради. Бундан ташқари, камбағаллик даромадлар даражаси бўйича коммунал хизматлар (сув, электр энергияси), соғлиқни сақлаш ёки таълим олиш имкониятини акс эттирмагани учун кўп ўлчамли камбағаллик кўрсаткичи киритилди. Ана шу тушунчага мос равишда глобал даражадаги камбағаллар улуши монетар камбағаллик билан таққослаганда тахминан 50 фоизга юқорироқ.

Жаҳон банки маълумотларига кўра, 736 миллион киши (аҳолининг 10 фоизи) ўта қашшоқлик шароитида (кунига 1,9 доллардан кам киримга эга), дунё аҳолисининг деярли ярми – 3,4 млрд киши – кунига 5,5 доллардан кам тушумга эга. Қашшоқлик даражаси энг юқори қитъа Африка, сайёрадаги энг қашшоқ мамлакатлар – Конго демократик республикаси (ўта қашшоқлик даражаси – 77,1 фоиз) ва Мадагаскар (77,6 фоиз).

Ўзбекистон камбағалликни қисқартириш бўйича Жаҳон банки ва БМТ Тараққиёт дастури билан биргаликда дастур ишлаб чиқишни режалаштирмоқда. Уни амалга ошириш учун 700 миллион доллар маблағ йўналтирилади. «Дастлабки ҳисоб-китобларга кўра, 12-15 фоиз ёки 4-5 миллион аҳолимиз камбағал. Бу уларнинг бир кунлик даромади 10-13 минг сўмдан ошмаяпти, дегани. Ёки бир оилада машина ҳам, чорва ҳам бўлиши мумкин, лекин бир киши оғир касал бўлса, оила даромадининг камида 70 фоизи уни даволатишга кетади. Президент сифатида мени одамларимизнинг овқатланиши, даволаниши, болаларини ўқитиши, кийинтириши каби ҳаётий эҳтиёжлари нима бўлаяпти, деган савол ҳар куни қийнайди», – деганди Шавкат Мирзиёев.

Камбағалликка қарши курашиш бўйича Европа ташкилоти (ЕАПН) инсонларни камбағалликка олиб келувчи бир нечта муҳим омилларни кўрсатади. Жумладан, ишсизлик, таълимнинг паст даражаси, ногиронлик, тиббий хизматдан фойдаланиш имконияти ва ҳ. Мутахассислар фикрича, ушбу барча ҳолатлар камбағалликка қарши курашишда эътиборга олиниши лозим.

Хулоса қилиб айтганда, Ўзбекистон Республикаси Президенти Ш.Мирзиёевнинг камбағалликка қарши кураш борасидаги халқаро доирадаги ушбу ташаббуси, шубҳасиз, ўзининг долзарблиги ва айни вақтида билдирилгани билан диққатга сазовордир. Зеро, Ер юзида пандемия

давом этаётган мураккаб шароитда масаланинг бундай қўйилиши барча давлатлар учун муҳимдир.

Фойдаланилган **адабиётлар рўйхати:**

1. Ўзбекистон Республикаси Президенти Фармони. Ўзбекистон Республикасида коррупцияга қарши курашиш тизимини такомиллаштириш бўйича қўшимча чора тадбирлар тўғрисида. ПФ-6013-сон 29.06. 2020. https://Lex.uz/ru/docs/4875784
2. Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасини янада ривожлантириш бўйича ҳаракатлар стратегияси тўғрисида”ги Фармони. Тошкент, “Адолат”, 2018 йил, 112 бет.
3. Мирзиёев Ш.М. Буюк келажагимизни мард ва олижаноб халқимиз билан бирга қурамиз. Тошкент, Ўзбекистон, 2017. 491 б.
4. Raximova, D., & Ibodullaevich, K. K. Obedience to the Law is High Culture, Spirituality, IT is a Sign of Enlightenment. JournalNX, 234-236.
5. Хидиров, Х., & Обилкошимов, М. (2021). Kambag ‘allik va qashshoqlikka qarshi kurashish: oldini olish yo ‘llari, usullari va mazmun-mohiyati. Общество и инновации, 2(11/S), 97-104.
6. Ibodullaevich, K. K., & Bahromovna, T. D. (2020). Corruption: Concept, genesis, evolution and survival trends. International Journal of Discourse on Innovation, Integration and Education, 1(5), 409-413.
7. Khidirov, K. I., & Gofurova, S. S. (2021). The United Kingdom has a special textbook for detecting facts of corruption. Scientific progress, 2(1), 121-124.

УДК616-001.36-02:616-089

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ДИАГНОСТИКА И ЛЕЧЕНИЕ ЭРОЗИВНО-ЯЗВЕННЫХ ИЗМЕНЕНИЙ ГАСТРОДУОДЕНАЛЬНОЙ ЗОНЫ У ПАЦИЕНТОВ С ПАТОЛОГИЯМИ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ

Резюме. Патологические изменения верхнего отдела желудочно - кишечного тракта (ЖКТ) выявляются у этой категории больных с частотой от 33,0% до 47,1% случаев. При этом в большинстве случаев у них присутствует одновременно целый комплекс причинных факторов язвообразования: Helicobacter pylori (H. pylori), применение НПВП, антиагрегантов и/или антикоагулянтов, физический и ментальный стресс. Вместе с тем, стандартный алгоритм дифференцированного лечения для этой группы больных с учетом влияния всех перечисленных факторов до сих пор не разработан.

Ключевая слова: гастродуоденальная зона, язва желудка, искусственная кровообращения.

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DIAGNOSIS AND TREATMENT OF EROSIVE AND ULCERATIVE CHANGES IN THE GASTRODUODENAL ZONE IN PATIENTS WITH PATHOLOGIES OF THE CARDIOVASCULAR SYSTEM

Resume. Pathological changes in the upper gastrointestinal tract (GI tract) are detected in this category of patients with a frequency of 33.0% to 47.1% of cases. At the same time, in most cases, they simultaneously have a whole complex of causal factors of ulceration: Helicobacter pylori (H. pylori), the use of NSAIDs,

antiplatelet agents and/or anticoagulants, physical and mental stress. At the same time, a standard algorithm for differentiated treatment for this group of patients, taking into account the influence of all these factors, has not yet been developed.
Keywords: gastroduodenal zone, gastric ulcer, artificial hemorrhage.

Актуальность. Эрозии и язвы гастродуоденальной зоны (ГДЗ) зоны по-прежнему являются распространенным заболеванием, при этом у кардиохирургических пациентов они встречаются в 1,7-5,4 раз чаще, чем в общей популяции населения [2,4]. Патологические изменения верхнего отдела желудочно - кишечного тракта (ЖКТ) выявляются у этой категории больных с частотой от 33,0% до 47,1% случаев. При этом в большинстве случаев у них присутствует одновременно целый комплекс причинных факторов язвообразования: Helicobacter pylori (H. pylori), применение НПВП, антиагрегантов и/или антикоагулянтов, физический и ментальный стресс. Вместе с тем, стандартный алгоритм дифференцированного лечения для этой группы больных с учетом влияния всех перечисленных факторов до сих пор не разработан [3]. Актуальность проблемы также определяется использованием новых технологий в сердечно - сосудистой хирургии и ежегодным увеличением количества операций, выполняемых с использованием искусственного кровообращения (ИК).

Клиническая диагностика гастродуоденальных кровотечений в послеоперационном периоде является сложной ввиду медикаментозного изменения сознания пациента, возможного наличия анемии, связанной с оперативным вмешательством, это осложнение диагностируется в основном при наличии рвоты «кофейной гущей» (или выделения крови по зонду в отделении интенсивной терапии), мелены и подтверждается результатами эндоскопического исследования [1,5]. В настоящее время в клинической практике отсутствуют маркеры, которые позволяют на ранних этапах выявить острую деструкцию клеток слизистой оболочки желудка и двенадцатиперстной кишки неинвазивными методами и принять меры для её лечения [7]

Из изложенного следует необходимость комплексного многоуровневого исследования патогенеза эрозивно-язвенных поражений гастродуоденальной зоны (ГДЗ) у кардиохирургических больных и разработки алгоритма мероприятий по диагностике, профилактике и лечению этого состояния.

Цель исследования: сформулировать алгоритм диагностики и принципы дифференцированного патогенетически обоснованного лечения эрозивно-язвенных изменений слизистой оболочки верхнего отдела желудочно-кишечного тракта у пациентов на этапе подготовки к кардиохирургическим вмешательствам и комплекс мер, направленных на профилактику и раннюю диагностику возникновения гастродуо-денальных

кровотечений в послеоперационном периоде хирургических вмешательств в условиях искусственного кровообращения.

Методология и методы исследования. Методы исследования: клинические, инструментальные (ФЭГДС, электрокардиография, эхокардиография, pH-метрия желудочного содержимого), морфологические, психологические, лабораторные (определение плазменной концентрации пепсиногенов 1 и 2, их соотношения, плазменной концентрации кортизола, исследование коагуляционного гемостаза), статистические, фармакоэкономические.

Пациентам на этапе подготовки к операции в условиях ИК проводился клинический осмотр, а также стандартные дополнительные обследования, утвержденные для сердечно - сосудистых заболеваний и патологии верхнего отдела ЖКТ.

Результаты исследования. Критерии исключения: возраст менее 16 лет, оперативное вмешательство на работающем сердце без использования ИК, отсутствие возможности в полном объеме провести дополнительные методы обследования (клинические, психологические, биохимические, лабораторные, инструментальные, морфологические) для решения поставленных задач.

Дополнительная контрольная группа включала пациентов общехирургичесого профиля (критерии включения - наличие желудочно - кишечного кровотечения, подтвержденного данными ФЭГДС, возраст 16 лет и старше; критерии исключения - кишечное кровотечение с локализацией вне ГДЗ, возраст менее 16 лет).

Клиническая характеристика пациентов I этапа исследования. На I этапе были проанализированы все клинические случаи пациентов, оперированных в отделении кардиохирургии БУЗОО «ОКБ» за период «январь 2003 г. - декабрь 2005 г.» Из 559 человек было 378 мужчин и 181 женщина в возрасте 16-74 лет (средний возраст 48,76+13,21 (M+o) лет).

Обследованные больные I этапа имели следующие сердечно-сосудистые заболевания, послужившие основанием для госпитализации их в стационар отделения кардиохирургии: ишемическая болезнь сердца (n=250, 44,7%), пороки сердечных клапанов различной этиологии (n=257, 45,0%), врожденные пороки сердца (n=76, 13,6%), образования сердца (n=16, 2,9%), тромбоэмболия легочной артерии (n=3, 0,5%). У 235 (42%) пациентов перечисленные заболевания сердца и магистральных сосудов сочетались с гипертонической болезнью. Нарушения ритма сердца и проводимости в различных комбинациях осложняли течение основного заболевания у 309 (55,3%) пациентов.

Характеристика недостаточности кровообращения (НК) выявила следующие частотные показатели по классификации Н.Д. Стражеско и В.Г. Василенко: I стадия

- 150 (26,8%) случаев, ПА стадия - 330 (59,0%), IIB стадия - 69 (12,3%), III стадия -10 (1,8%); по классификации Российского кардиологического общества: функциональный класс 1-48 (8,6%), II - 362 (64,8%), III - 121 (21,6%), IV-28 (5%).

При расспросе только 11 (2,0%) пациентов предъявляли жалобы, которые могли быть расценены как клинические проявления патологического состояния верхнего отдела ЖКТ: боль в эпигастрии, ассоциированная с приёмом пищи, изжога, горечь во рту, отрыжка, ощущение вздутия и урчания в животе. При этом во всех случаях, при наличии клинических проявлений, выявлялись деструктивные изменения слизистой оболочки желудка или двенадцатиперстной кишки при ФЭГДС.

Вывод. Эндоскопическое исследование было выполнено на этапе подготовки к кардиохирургическому вмешательству 390 (69,8%) пациентов. При этом у 116 пациентов (29,7%) были выявлены эрозии желудка и двенадцатиперстной кишки (хронические - 75 (64,7%), острые - 41 (35,3%)): в 26 случаев (22,4%) они были единичные, в 50 (43,1%) присутствовали в умеренном количестве, в 40 - множественные или сливные (32,5%). У 40 пациентов (34,5%) в области эрозий был налёт фибрина, у 4 (3,5%) - гематина. Кроме того, в 10 случаях были обнаружены язвы (50% - с локализацией в желудке, 50% - в луковице двенадцатиперстной кишки). У одного пациента язвы желудка были множественные (три) по типу «острых». Эрозии и/или язвы были выявлены в общей сложности у 122 (21,82%) больных. У кардиохирургических пациентов была отмечена специфика эрозивно-язвенных изменений слизистой оболочки, выражающаяся в их значительной распространённости (в среднем у одной трети обследуемых) и асимптомном течении в подавляющем большинстве случаев.

Выполнение ФЭГДС на этапе подготовки пациентов к операции на сердце повышало вероятность диагностики эрозивно-язвенных изменений приблизительно в 10 раз. При этом наличие таких клинических симптомов как абдоминальная боль, ассоциированная с приёмом пищи, изжога, отрыжка практически всегда свидетельствовали о наличии этих изменений.

Использованные источники:

1. Белобородов В.А., Кельчевская Е.А. Рецидивы кровотечения из острых язв и эрозий верхних отделов пищеварительного тракта // Acta Biomedica Scientifica. – 2012. – № 4–1 (86). – С. 21–24.
2. Гельфанд Б.Р., Гурьянов А.В., Мартынов А.Н., Попов Т.В., Шипилова О.С. Профилактика стресс-повреждений желудочно-кишечного тракта у больных в критических состояниях // Consilium medicum. – 2005. – Т. 7, № 6. – С. 464–67.
3. Давыдкин В.И., Богдашкин П.М. Лечебно-диагностическая тактика при кровотечениях из острых эрозивно-язвенных повреждений слизистой

желудка // Вестник Мордовского университета. – 2013. – № 1–2. – С. 113–120.
4. Окунев А.Ю., Эргашев О.Н., Виноградов Ю.М., Зиновьев Е.В., Лагвилава Т.О., Романенков Н.С. Патогенетическое обоснование путей профилактики и лечения кровотечений из острых эрозивно-язвенных поражений верхних отделов желудочно-кишечного тракта у тяжелообожженных // Фундаментальные исследования. – 2012. – № 7. – С. 449–455.
5. Шаповальянц С.Г., Чернякевич С.А., Михалев А.И., Юдин О.И., Бабкова И.В., Сторожук Г.Н., Маят Е.К., Чернякевич П.Л. Эффективность пантопразола при парентеральном введении у больных с острыми язвенными гастродуоденальными кровотечениями с высоким риском рецидива // Российский журнал гастроэнтерологии, гепатологии, колопроктологии. – 2012. – Т. 22, № 2. – С. 22–28.
6. Fennerty M.B. Pathophysiology of the upper gastrointestinal tract in the critically ill patient: rationale for the therapeutic benefits of acid suppression // Crit. Care. Med. – 2002. – Vol. 30. – S. 351–355.
7. Forrest J.A.N., Finlaysen N.D.L., Shear man D.J.L. Endoscopy in gastrointestinal bleending // Lancet. – 1974. Vol. 11. – P. 395–397.

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МНОГОЛЕТНИЕ ИЗМЕНЕНИЯ МИНЕРАЛИЗАЦИИ ГРУНТОВЫХ ВОД НА ОРОШАЕМОЙ ТЕРРИТОРИИ РЕСПУБЛИКИ КАРАКАЛПАКСТАН

Аннотация. В статье рассмотрены проблемы изучения, анализа и мониторинга существующих данных о гидрогеологическом, гидроэкологическом и мелиоративном состоянии динамики подземных вод на орошаемых землях Республики Каракалпакстан. Предлагаются практические и научные рекомендации для решения этих проблем.

Ключевые слова: дельта Амударья, гидрохимический режим, гидроэкологический мониторинг, гидрогеологический маниторинг, антропогенные факторы.

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LONG-TERM CHANGES IN GROUNDWATER MINERALIZATION IN THE IRRIVATED TERRITORY OF THE REPUBLIC OF KARAKALPAKSTAN

Abstract. The article discusses the problems of studying, analyzing and monitoring existing data on the hydrogeological, hydroecological and reclamation state of groundwater dynamics in irrigated lands of the Republic of Karakalpakstan. Practical and scientific recommendations are offered to solve these problems.

Key words: Amudarya delta, hydrochemical regime, hydroecological monitoring, hydrogeological monitoring, anthropogenic factors.

Введение. Геологическое строение дельты Амударьи на территории Республики Каракалпакстан состоит из многих видов и типов отложений мелового, третичного и четвертичного периодов. Меловые отложения имеют место на правом берегу реки. Третичные отложения встречаются у Тюямуюня, Кызылкумов, Устюрта и в других районов в виде отложений красных и красно-желтых глин.

Четвертичные отложения широко распространены повсеместно на территории современной и формирующейся дельты р.Амударьи и состоят из песков, супесей, суглинков и глин приносимых водой. Эти отложения имеют сравнительно хорошую водопроницаемость, рыхлость строения, неустойчивость к процессам разлива. Четвертичные отложения являются объектом мелиорации в которых формируются грунтовые воды и их режим.

Основная часть.Анализ имеющихся данных гидрогеологическо-мелиоративной обстановки по динамике грунтовых вод на орошаемых землях показал, что высокие уровни грунтовых вод наблюдаются в марте и апреле, в период интенсивных промывных поливов, по окончании промывов происходит некоторое падение уровня. По условиям формирования грунтовых вод низовья р. Амударьи отличаются от остальных оазисов Узбекистана тем, что главная речная артерия здесь проходит по командным отметкам территории, формируя потоки грунтовых вод, движущиеся от реки в глубь оазиса.

На орошаемой площади размером 515,3 тыс.га грунтовые воды на глубине 0-1 м занимают 7,8 тыс. га; 1-1,5 м – 48,9 тыс.га; 1,5-2 м - 267,8 тыс. га; 2-3 м – 120,9 тыс.га; 3-5 м – 66,9 тыс.га; более 5 м – 2,25 тыс.га. Минерализация грунтовых вод изменяется следующим образом: 0-1 г/л занимает 2,7 тыс.га; 1-3 г/л занимает 439,7 тыс. га; 3-5 г/л – 72,8 тыс.га; 5-10 г/л - 6,06 тыс. га и более 10 г/л – 0,3 тыс.га.

Грунтовые воды, насыщающие толщу дельтовых отложений и почти лишенные общего стока, образуют обширный бассейн с неоднородными гидрогеологическими условиями. Неоднородность выражается в различии глубины залегания грунтовых вод, их минерализации, условий местного стока и зависит от питания, рельефа и литологического строения пород. В формировании подземных вод дельты основную роль играют сама река и ее притоки. Атмосферные осадки в питании грунтовых вод заметную долю составляют только весной на участках неглубокого залегания. Грунтовые воды расходуются преимущественно на испарение. Подземный сток имеет подчиненное значение, находясь в зависимости от местных литолого-геоморфологических условий. Участки более или менее хорошо выраженного местного подземного стока расположены у реки и ее притоков. [1-3]

Периферические части дельты, вблизи Устюрта на западе и в Тахтакупырском районе на востоке, характеризуются обычно глубоким (ниже 10 м) залеганием грунтовых вод; испарение крайне ослаблено.

В пределах площадей вблизи Аральского моря, характеризующихся обилием часто меняющихся протоков реки, разливами и озерами, грунтовые воды залегают неглубоко (обычно не глубже 3 м). Местный подземный сток в этих частях дельты заметно выражен вдоль действующих русел (реки и ее протоков), играющих роль источников, питания грунтовых вод. Подземный сток, направляющийся от русел в глубь береговой полосы, быстро затухает (у протоков на расстоянии нескольких сотен метров, а у главного русла реки—1—2 км), так как в большинстве случаев он осуществляется при неглубоком залегании грунтовых вод, которые на пути стока в значительном количестве испаряются.

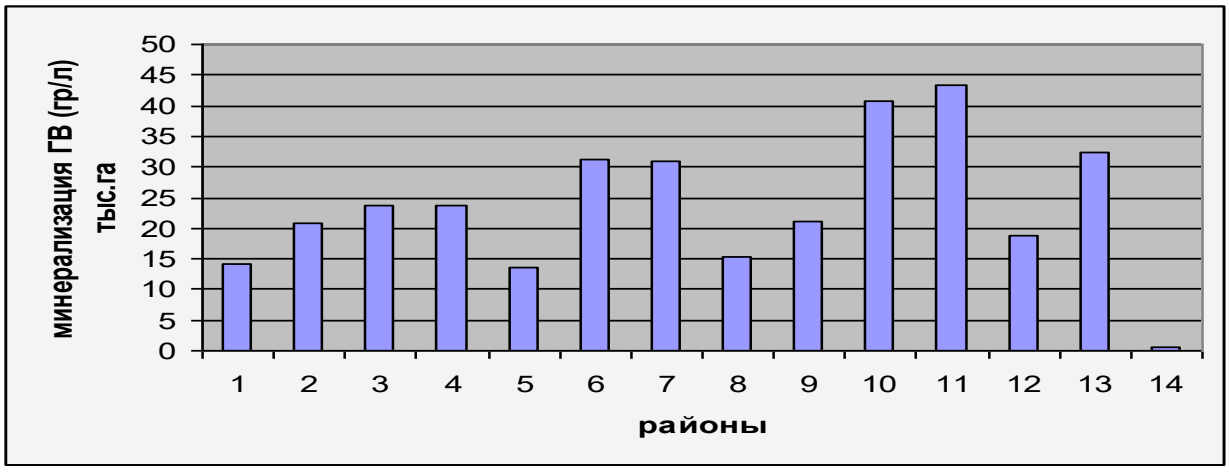

Рисунок 3.2. Минерализация грунтовых вод (1-3 г/л), осредненная за вегетационный период 2018 г. по районам Республики Каракалпакстан

Номера районов: *1- Турткуль, 2 – Элликкала, 3 – Беруни, 4 – Амударья, 5 – Ходжейли, 6 – Шуманай, 7 – Канлыкуль, 8 – Кунград, 9 – Нукус, 10 – Кегейли, 11 – Чимбай, 12 – Караузяк, 13 – Тахтакупир, 14 – Муйнак.*

Структура регионального баланса грунтовых вод всей дельты от Тюямуюна до Арала (без учета орошения) характеризует бассейн как территорию естественного соленакопления приведена в табл.1.

Минерализация грунтовых вод в зоне застоя пестрая, наблюдается неравномерное распределение солей, которое зависит в основном от наличия местного подземного стока. [2-3]

Таблица 1.

Структура регионального баланса ($м^3/с$) грунтовых вод всей дельты от Тюямуюна до Арала (без учета орошения) характеризует бассейн как территорию естественного соленакопления

Приход		Расход	
Потери из р. Амударьи (без учета разливов)	320	Подземный отток	0
Атмосферные осадки	30	Суммарное испарение, повышение уровня грунтовых вод и возврат в реку	350
Подземный приток	0		
Итого	350		350

Наименьшей минерализацией обладают грунтовые воды приречной полосы и участков, прилегающих к протокам. При этом превалирующее значение имеют гидрокарбонатно-сульфатные кальциевые, а в непосредственной близости к водотокам гидрокарбонатные кальциевые воды. По мере возрастания общего содержания солей в воде, что особенно резко выражено в средних частях межрусловых понижений, повышается содержание сульфатов и хлоридов, а в сильно минерализованных (40— 60 г/л) водах превалируют хлориды. Из катионов преобладают натрий и магний.

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В вертикальном профиле минерализация грунтовых вод также изменчива. Их опресняют через местный подземный сток фильтрационные воды Амударьи и ее притоков. Наконец, соленосные, особенно третичные, породы коренного ложа обусловливают часто повышенную минерализацию грунтовых вод в нижней части водоносной толщи. Поэтому в одних случаях с глубиной наблюдается пониженная минерализация, в других — повышенная.

При рассмотрении условий залегания грунтовых вод нетрудно заметить особенность строения водоносной толщи дельтовых отложений. В теле дельты широко развиты песчаные образования русловых фаций. В результате блуждания реки и ее притоков русловые фации погребались под фациями разливов и озер, представленных слоистым комплексом супесей,

суглинков и глин, содержащих прослои мелкозернистого песка. Отложения русел в теле дельты имеют ярусное строение.

В результате изменчивости направлений гидрографической сети на протяжении всей истории ее развития горизонтальные проекции древних погребенных и современных русел сложно пересекались.

Русловые фации представляют большой интерес как участки возможных естественных коллекторов (в случае создания в них районного понижения зеркала грунтовых вод при помощи откачек из скважин). Эти участки наиболее благоприятны и для локализации подземного, хотя и слабого, стока.

На территории бассейна выделяется согласно работам Н.Н.Ходжибаева несколько групп потоков грунтовых вод. А. Группа потоков грунтовых вод левобережья Амударьи. Располагается в западной части бассейна, на территории Приаральской части дельты Амударьи. Границы ее на востоке и юго-востоке проходят по Амударье, на юге – выходам коренных пород через выступ «Назымхан» до плато «Аккелин», на западе по чинку Устюбрта, на северо-западе по сороковой гидроизогипсе, являющейся границей описываемого потока с потоком грунтовых вод со стороны оз. Судочье, на севере (условно) по линии современной формирующейся дельты.

Источники питания грунтовых вод фильтрационные потери поверхностного стока и инфильтрация атмосферных осадков. На отдельных участках в старых руслах в отложениях мела и четвертичного возраста наблюдаются линзы пресных вод с минерализацией до 1 г/л. Минерализация грунтовых вод увеличивается от зоны питания к зоне разгрузки от пресных до горько-соленых (от 0,5 до 50—60 г/л). Б. Группа потоков грунтовых вод современной Аральской дельты. Находится в северо-западной части бассейна. На западе она ограничена Амударьей, на севере современной формирующейся дельтой, на северо-востоке граница проходит вдоль юго-западного склона возвышенности Бельтау, на юго-востоке по пескам Табакум. Источники питания грунтовых вод фильтрационные воды временно и постоянно действующих водотоков и в некоторой степени инфильтрация атмосферных осадков.

Глубина залегания грунтовых вод колеблется от 1—5 до 10—20 м. Минерализация изменяется от 0,5.(в зоне питания) до 10—50 г/л (в зоне разгрузки). В районе группы потоков преобладает процесс вертикального водообмена. Территория естественно слабо дренирована, а в нижней части, где испарение преобладает над стоком, недренирована.

Группа потоков грунтовых вод северных склонов гор Султан-Уиз-Даг. Располагается в юго-восточной части описываемого бассейна. Источники питания грунтовых вод поверхностные воды Амударьи, атмосферные осадки и перелив вод коренных отложений. Воды, отличаются

слабой минерализацией (от 0,5 до 1,5 г/л) в старых руслах Амударьи и повышенной (до 10—15 г/л) —на песчаной равнине. [2-4]. В зонах питания грунтовые воды залегают на отметках 95—105 м, в зонах разгрузки — 40 м. Направление движения потока — с юга на север и северо-восток. Благодаря затрудненному подземному стоку, а также климатическим условиям района грунтовые воды расходуются в основном на испарение и транспирацию растениями. Незначительное количество вод расходуется на подземный отток в сторону Сарыкамышской впадины. Несколько улучшен отток по руслам староречий. Минерализация грунтовых вод оазиса зависит от характера питания и расходования грунтовых вод и их связи с рекой. Минерализация варьирует от 0,5 до 5 г/л и выше.

Наименее минерализованные воды развиты вдоль Амударьинских староречий Дарьялыка и Даудана, наиболее минерализованные распространены главным образом за пределами оазиса. Это свидетельствует о существенном перемещении водных масс, следовательно, и солей внутри дельты под действием естественных геологических факторов.

Гидрохимический профиль на всей территории Присарыкамышской дельты имеет одну форму: некоторое повышенное значение минерализации у зеркала грунтовых вод, уменьшение ее в интервале 5—15—25 м и вновь увеличение с глубиной.

По химическому составу грунтовые воды изменяются от гидрокарбонатно-сульфатных до хлоридно-сульфатных. Соотношение питания грунтовых вод с испарением определило особенности химического состава интенсивное накопление в грунтовых водах оазиса хлоридов.

Для территории бассейна характерно распространение грунтовых вод с глубиной залегания зеркала от 1—2 до 30 м. Наиболее близкое залегание уровня наблюдается в приамударьинской полосе; с удалением к ее периферии он погружается и в пустынной части дельты находится: на глубине свыше 15м.

Разгрузка грунтовых вод в левобережье происходит за счет испарения, транспирации и подземного оттока в сторону Сарыкамышской котловины, частичная путем выклинивания в районе озер юга Хорезма, на Акчадарьинской дельте испарением, транспирацией и частично выклиниванием в оз. Ащиккуль.

В вертикальном профиле минерализация грунтовых вод также изменчива. Их опресняют через местный подземный сток фильтрационные воды Амударьи и ее притоков.

По данным мелиоративной службы МВХ РУз, земли со средней и сильной степенью засоления в Республике Каракалпакстан составляли в разные годы от 40 до 50% орошаемой территории, сильного - от 22,7 до 64,5 тыс. га, в Хорезме - от 12 до 39 тыс. га. Если такие земли оставить без промывки, то на них вообще невозможно получить урожай. Сезонное засоление зависит от глубины грунтовых вод, режима и технологии поливов

в вегетацию хлопчатника. При недостатке подачи оросительной воды сверху
и неудовлетворительном дренировании территорий к концу вегетации в верхнем корнеобитаемом слое накапливаются соли. Засоление - результат неоптимального управления водными ресурсами, вследствие которого имеются значительные потери урожая хлопчатника и других сельскохозяйственных культур. Неудовлетворительное водоотведение способствует застою грунтовых вод, но основная причина подъем уровня грунтовых вод – большие потери воды из каналов и на полях, при поливах сельхоз культур.

Средний уровень грунтовых вод орошаемой зоны по Республике Каракалпакстан за 2018 г. приведен в табл. 3.3. Видно, что в пределах мелиоративных систем средний годовой уровень грунтовых вод изменяется от 157 до 561 см.

Изменения уровня и минерализация грунтовых вод в 2017-2019гг. В процессе работы нами были собраны материалы по глубине залегания

(УГВ) и минерализация грунтовых вод орошаемой территории по административным районам с 1990 по 2019 гг.

В Турткульском районе за прошедшие годы уровень грунтовых вод изменялся от 171 см до 235 см, при этом среднегодовая минерализация равна 3,08 г/л.; При этом наименьшие глубины грунтовых вод наблюдались в апреле-августе: 170-189см.

В Элликальинском районе за прошедшие годы уровень грунтовых вод изменялся от 179 см до 258 см, при этом среднегодовая минерализация равна 2,46 г/л.; При этом наименьшие глубины грунтовых вод наблюдались в апреле-августе: 142-176 см.

В Берунийском районе за прошедшие годы уровень грунтовых вод изменялся от 133 см до 195 см, при этом среднегодовая минерализация равна 2,78 г/л.; При этом наименьшие глубины грунтовых вод наблюдались в апреле-августе: 115-151 см.

В Амударьинском районе за прошедшие годы уровень грунтовых вод изменялся от 137 см до 188 см, при этом среднегодовая минерализация равна 2,63 г/л.; При этом глубины грунтовых вод в течение года изменялись от 138 до 195 см.

В Шуманайском районе за прошедшие годы уровень грунтовых вод изменялся от 179 см до 488 см, при этом среднегодовая минерализация равна 3,12 г/л.; При этом глубины грунтовых вод в течение года изменялись от 197 до 214 см.

В Канлыкульском районе за прошедшие годы уровень грунтовых вод изменялся от 160 см до 428 см, при этом среднегодовая минерализация равна 2,62 г/л.; При этом глубины грунтовых вод в течение года изменялись от 175 до 228 см. [3]

В Кунградском районе за прошедшие годы уровень грунтовых вод изменялся от 176 см до 378 см, при этом среднегодовая минерализация равна 2,29 г/л.; При этом глубины грунтовых вод в течение года изменялись от 150 до 221 см.

В Муйнакском районе за прошедшие годы уровень грунтовых вод изменялся от 252 см до 743 см, при этом среднегодовая минерализация равна 6,00 г/л; При этом глубины грунтовых вод в течение года изменялись от 521 до 568 см.

В Нукуском районе за прошедшие годы уровень грунтовых вод изменялся от 185 см до 297 см, при этом среднегодовая минерализация равна 2,33 г/л.; При этом глубины грунтовых вод в течение года изменялись от 170 до 243 см.

В Кегейлиском районе за прошедшие годы уровень грунтовых вод изменялся от 165 см до 365 см, при этом среднегодовая минерализация равна 2,98 г/л.; При этом глубины грунтовых вод в течение года изменялись от 207 до 265 см.

В Бузатауском районе за прошедшие годы уровень грунтовых вод изменялся от 215 см до 485 см, при этом среднегодовая минерализация равна 2,98 г/л.; При этом глубины грунтовых вод в течение года изменялись от 409 до 612 см.

В Чимбайском районе за прошедшие годы уровень грунтовых вод изменялся от 172 см до 390 см, при этом среднегодовая минерализация равна 3,29 г/л.; При этом глубины грунтовых вод в течение года изменялись от 209 до 245 см.

В Караузякском районе за прошедшие годы уровень грунтовых вод изменялся от 175 см до 452 см, при этом среднегодовая минерализация равна 2,93 г/л.; При этом глубины грунтовых вод в течение года изменялись от 163 до 214 см.

В Тахтакупырском районе за прошедшие годы уровень грунтовых вод изменялся от 192 см до 411 см, при этом среднегодовая минерализация равна 2,49 г/л.; При этом глубины грунтовых вод в течение года изменялись от 202 до 232 см.

За рассмотренные годы в целом по республике глубина грунтовых вод от185 до 357 см, при этом среднегодовая минерализация равна 3,00 г/л.;При этом глубины грунтовых вод в течение года изменялись от 202 до 234 см.

Выводы:

На орошаемой площади размером 515,3 тыс.га грунтовые воды на глубине
0-1 м занимают 7,8 тыс. га; 1-1,5 м – 48,9 тыс.га; 1,5-2 м - 267,8 тыс. га; 2-3 м – 120,9 тыс.га; 3-5 м – 66,9 тыс.га; более 5 м – 2,25 тыс.га. Минерализация грунтовых вод изменяется следующим образом: 0-1 г/л занимает 2,7 тыс.га;

1-3 г/л занимает 439,7 тыс. га; 3-5 г/л – 72,8 тыс.га; 5-10 г/л - 6,06 тыс. га и более 10 г/л – 0,3 тыс.га.

Проведенный анализ гидрохимических данных подземных вод за последние годы показывает, что минерализация и содержание отдельных ионов и микроэлементов превышает допустимое их содержание по нормативам «Вода питьевая» и «Вода для орошения», перечень ПДК института НИГМИ, классификация НИИИВП, что приводят к нарушению гидроэкологического состояния орошаемых территорий.

Использованные источники:

1. Чембарисов Э.И., Хожамуратова Р.Т. Коллекторно-дренажные воды Республики Каракалпакстан / - Нукус, «Билим», 2008. – 56с.
2. Чембарисов Э.И., Хожамуратова Р.Т. Гидрологическая экология Узбекистана и ее задачи // Вестник КГУ им. Бердаха. – Нукус, № 3 – 4, 2010. -С. 27-29.
3. Чембарисов Э.И., Лесник Т., Насрулин А., Хожамуратова Р.Т. Генезис, формирование и режим поверхностных вод Узбекистана и их влияние на засоление и загрязнение агроландшафтов (на примере бассейна р. Амударьи) /- Нукус «Каракалпакстан», 2016. – 208с.
4. Отчет. ФА-Ф5-Т126. Генезис, формирование и режим поверхностных вод Узбекистана и их влияние на загрязнение и засоление агроландшафтов//- Ташкент, -2012. – 91с.
5. Qaldibaevich I. A. et al. ASSESSMENT OF HAZARDOUS HYDROMETEOROLOGICAL PHENOMENA AFFECTING AGRICULTURAL CROPS //British Journal of Global Ecology and Sustainable Development. – 2022. – Т. 10. – С. 125-131.
6. Abdullaev T. Qishloq Xo'jaligiga ta'sir etuvchi xavfli gidrometeorologik hodisalarni baholash (Qoraqalpog'iston Respublikasi) misolinda //еспубликанской научно-практической конференции «ГИДРОЛОГИЧЕСКИЕ И ГИДРОЭКОЛОГИЧЕСКИЕ ПРОБЛЕМЫ ЮЖНОГО ПРИАРАЛЬЯ: НАСТОЯЩЕЕ И БУДУЩЕЕ. – Scienceweb-National database of scientific research of Uzbekistan, 2023.
7. Qaldibaevich I. A. et al. Assessment of Dangerous Hydrometeorological Events Affecting Agricultural Crops with a Modern Program //INTERNATIONAL JOURNAL OF BIOLOGICAL ENGINEERING AND AGRICULTURE. – 2023. – Т. 2. – №. 2. – С. 12-17.
8. Qaldibayevich I. A. et al. Qishloq xo ‘jaligi ekinlariga ta’sir etuvchi xavfli gidrometeorologik hodisalarni baholash //ГЕОГРАФИЯ: ПРИРОДА И ОБЩЕСТВО. – 2022. – №. 2.
9. Турдимамбетов И. Р. и др. Аҳоли турмуш сифатининг таркибий тузилиши //Science and Education. – 2022. – Т. 3. – №. 11. – С. 1285-1293.
10. Иманмурзаев А. Қ. и др. ОЦЕНКА ОПАСНЫХ ГИДРОМЕТЕОРОЛОГИЧЕСКИХ ЯВЛЕНИЙ, ВЛИЯЮЩИХ НА

СЕЛЬСКОХОЗЯЙСТВЕННЫЕ КУЛЬТУРЫ,(НА ПРИМЕРЕ РЕСПУБЛИКИ КАРАКАЛПАКСТАН) //Экономика и социум. – 2023. – №. 3-1 (106). – С. 336-343.
11. Imanmurzaev A. Q. et al. JANUBIY OROL BOYI IQLIM SHAROITI //INTERNATIONAL CONFERENCES. – 2022. – Т. 1. – №. 21. – С. 73-77.
12. Qaldibaevich I. A. et al. Dangerous Hydrometeorological Phenomena Observed in Lower Amudarya Region //Texas Journal of Agriculture and Biological Sciences. – 2023. – Т. 23. – С. 49-53.

УДК 616.36-003.826

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ЭПИДЕМИОЛОГИЯ, ТЕЧЕНИЕ И ПРОФИЛАКТИКА НЕАЛКОГОЛЬНОГО СТЕАТОГЕПАТИТА

Резюме. Неалкогольный стеатогепатит (НАСГ) - заболевание, сопровождающееся воспалительной инфильтрацией паренхимы и стромы печени с наличием очагового некроза. NASG-это промежуточное звено между последовательными стадиями одного патологического процесса (неалкогольный стеатоз и неалкогольный стеатофиброз), форма независимого метаболического заболевания - неалкогольной жировой болезни печени (НАЖБП). Поскольку в списке заболеваний КХТ-10 нет единого кода, отражающего полноту диагноза НАЖБП, наиболее часто используемым в настоящее время является: k 76.0 – жировая дегенерация печени, не классифицированная в других названиях.

Ключевая слова: стеатогепатит, профилактика, лечения, неалкоголная поражения печени.

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EPIDEMIOLOGY, COURSE AND PREVENTION OF NON-ALCOHOLIC STEATOHEPATITIS

Resume. Non-alcoholic steatohepatitis (NASH) is a disease accompanied by inflammatory infiltration of the liver parenchyma and stroma with the presence of focal necrosis. NAZG is an intermediate link between the successive stages of one pathological process (non-alcoholic steatosis and non-alcoholic steatofibrosis), a form of independent metabolic disease - non-alcoholic fatty liver disease (NAFLD). Since there is no single code in the list of KXT-10 diseases reflecting the completeness of the diagnosis of NAFLD, the most commonly used one is currently: k 76.0 – fatty liver degeneration, not classified in other names.

Keywords: steatohepatitis, prevention, treatment, non-alcoholic liver damage.

Актуальность. Стеатогепатиты представляют собой этиологически гетерогенную группу патологических изменений печени, характеризующихся воспалительной инфильтрацией паренхимы печени на фоне жировой дистрофии гепатоцитов [3]. Клиническое значение

стеатогепатита, независимо от этиологической причины, заключается в повышенном риске образования фиброза печени и, как следствие, развития цирроза печени и гепатоцеллюлярной карциномы, которые являются опасными для жизни состояниями [1]. Принято выделять следующие этиологические варианты стеатогепатитов: метаболические (55-65% случаев), алкогольные (45-55% случаев) и лекарственные (около 5% случаев) [4].

При метаболическом стеатогепатите патогенетической основой являются механизмы увеличения липолиза, увеличения пула свободных жирных кислот и снижения р-окисления на основе ожирения и инсулинорезистентности. Проблема поражения печени у пациентов с метаболическим синдромом актуальна для клинической практики, так как достигает 25% [5].

Диагностика фиброза важна для оценки стадии и риска развития патологического процесса в печени. Биопсия печени остается золотым стандартом диагностики диффузных заболеваний печени, включая НАЖБП. Однако технические трудности и противопоказания к процедуре биопсии вынудили исследователей искать возможность неинвазивной диагностики фиброза [2].

УЗИ брюшной полости (УЗИ) в настоящее время является наиболее распространенным методом диагностики заболеваний печени и используется практически во всех лечебных учреждениях. Большинство ультразвуковых аппаратов имеют возможность исследовать кровоток с помощью допплерометрии, и результаты могут быть использованы клиницистами не только в диагностических целях, но и для разработки дальнейшей тактики лечения. Однако в настоящее время эффективность диагностики состояния печени этими методами у пациентов с метаболическим синдромом не изучалась [6]. Диагностика фиброза важна для оценки стадии и риска развития патологического процесса в печени. Биопсия печени остается золотым стандартом диагностики диффузных заболеваний печени, включая НАЖБП (Павлов С. S., 2006). Однако технические трудности и противопоказания к процедуре биопсии вынудили исследователей искать возможность неинвазивной диагностики фиброза [2].

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Цель исследования. Оценка эффективности ультразвуковой допплерометрии селезеночной артерии с определением показателей пульсации и сопротивления при неинвазивной диагностике фиброза печени у пациентов с синдромом НАСГ.

Материалы и методы исследования. Чтобы выполнить поставленную задачу, мы обследовали 55 человек в возрасте от 18 до 60 лет, которые обратились в отделение гепатологии клиники АГМИ. При выборе учитывались следующие параметры:

1. Не употреблять алкоголь в опасных дозах (среднее суточное потребление этилового спирта более или равно 40 г для мужчин и 20 г для женщин в течение 5 и более лет).
2. Подтвержденный гепатит/цирроз вирусного происхождения, алкоголь, отсутствие другой этиологии.
3. Отсутствие рака.
4. Отсутствие врожденных заболеваний печени. Каждый пациент, отвечающий критериям приемлемости, был приглашен на двойное обследование с шестинедельными интервалами.

Результаты и методы исследования. Неалкогольный стеатогепатит характеризуется легкими цитолитическими и холестатическими синдромами, развитием признаков жировой дистрофии гепатоцитов и повышением их митотической активности, а также умеренной воспалительной инфильтрацией воротных ходов с ранними признаками фиброза органа. Одним из патогенетических механизмов неалкогольной стеатогепатии является повреждение цепи переноса электронов митохондрий гепатоцитов, прежде всего в области ее над-зависимого комплекса, при котором в дыхательной цепи митохондрий наблюдается значительное (70%) снижение активности цнснхромоксидазы.

При гистологическом исследовании биопсии печени у обследованных во всех случаях выявлены морфологические признаки воспаления воротных ходов различной степени выраженности. Сходные морфологические проявления поражения печени выявлены у лиц с латентным и манифестным течением неалкогольной стеатогепатита; наличие гранулярной и вакуолевой дистрофии, воспалительной инфильтрации и незначительных стадий некрозов, что позволяет рассматривать клинические варианты заболевания как стадии единого патологического процесса. Использование snmvastatnn в ноалкогольном стеатогепатите не приводит к усилению повреждения органов. Действие препарата не повреждает микросомально-окислительную систему и предотвращает повреждение над-зависимой части дыхательной цепи митохондрий гепатоцитов, при этом значительно снижается выраженность жировой дистрофии печени. Кроме того, симвасгатин обладает гнполипидемическим действием, снижает проявления внутрипеченочного холестаза, н не приводит к обострению цитольнтического синдрома.

Вывод. Таким образом, спектр фармакотерапевтического действия Холудексана широк и, естественно, не ограничивается НАСГ. Показаниями к назначению холудексана наряду с НАСГ являются: неосложненная желчнокаменная болезнь (желчнокаменная глина; растворение холестериновых камней в желчном пузыре при невозможности их удаления хирургическими или эндоскопическими методами; профилактика камнеобразования после холецистэктомии); хронический активный гепатит; токсическое (в том числе лекарственное) поражение печени; АБП; первичный билиарный процессор; первичный склерозирующий холангит; муковисцидоз; внутрипеченочная атрезия желчных протоков, врожденная атрезия желчных протоков; дискинезия желчных протоков, эффективность УДКА доказана при всех этих заболеваниях.

Использованные источники:

1.Бадалян Л.О., Медведев М.И., Гусева П.И. и др. Неонатальные судороги (клиника, диагностика, лечение). Метод. рекомендации. М., 1990; 32 с.

2.Вельтищев Ю.Е., В.П.Петров. Объективные показатели нормального развития и состояния здоровья ребёнка (нормативы детского возраста) // Рос. вест. перинатол. и педиатр. Приложение. М.: 2000, 96с.; с. 21-25

УДК 611.37:613.67:611-084.2

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ФАКТОРЫ РИСКА РАЗВИТИЯ НЕДЕРЖАНИЯ МОЧИ У ЖЕНЩИН (ОБЗОР ЛИТЕРАТУРЫ)

Аннотация. Оценить истинную распространенность недержания мочи представляется затруднительным, так как многие пациенты не обращаются за медицинской помощью из-за смущения, неправильного восприятия своего заболевания, а также в связи с неосведомленностью о возможностях и методах лечения.

Ключевые слова: мочевой пузырь, заболевание, недержание мочи, инконтиненция, факторы риска.

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RISK FACTORS FOR THE DEVELOPMENT OF URINARY INCONTINENCE IN WOMEN (LITERATURE REVIEW)

Annotation. It is difficult to estimate the true prevalence of urinary incontinence, as many patients do not seek medical help due to embarrassment, misperceptions of their condition, and lack of awareness of treatment options and options.

Key words: bladder, disease, urinary incontinence, incontinence, risk factors.

Актуальность. Недержание мочи (НМ) – это патологическое состояние, характеризующееся любым непроизвольным выделением, мочи из уретры. Недержание мочи не представляет угрозу для жизни, но значительно нарушает ее качество, функциональную активность, приводит к развитию социальной изоляции и депрессии, повышает риск развития падений и пролежней [1, 2, 3, 8, 9]. Такая проблема может встречаться у мужчин, но именно женщины более склонны к недержанию [1, 3, 5]. Связано это с рядом анатомических особенностей строения мочевыводящих путей.

Распространенность недержания мочи в молодом возрасте составляет 20-30%, постепенно увеличиваясь до 40% среди пожилых женщин. Недержание мочи воздействует на многие сферы жизни пациентки:

социальную, психологическую, рабочую, сексуальную. К основным факторам, влияющим на появление данного заболевания, а также на степень его выраженности, относят возраст, беременность и роды, ожирение [7, 8, 9].

Причины недержания у женщин до сих пор не изучены до конца. Примерно 70 лет назад развитие патологии связывали с абдоминальным давлением, которому подвергается мочевой пузырь и уретра. Именно эта причина стала основой для теории «трансмиссии давления» [3, 9, 10].

Дальнейшие исследования привели к появлению теории «сфинктерной недостаточности». В этом случае причину инконтиненции связывают с неспособностью сфинктера создавать необходимое сопротивление для удержания мочи в мочевом пузыре (в особенности это касается активных физических нагрузок) [4, 5, 6].

Интегральная теория. Согласно ей, из-за имеющихся патологий соединительной ткани, образующей связочный аппарат таза, происходит нарушение процесса удержания урины. Именно эта теория в последнее время считается наиболее доказательной и принимается врачами во всем мире.

К другим факторам, провоцирующим возникновение недержания мочи, относятся избыточный вес и ожирение. По данным 2011-2014 гг., среди женского населения США у 38,6% имеется ожирение [9]. Статистика штата Луизиана показывает, что в 2016 г. у 69% жителей выявлен избыточный вес или ожирение. Среди россиян эти показатели более утешительные: по итогам исследования, проведенного Росстатом в 2018 г., у 24,5% женщин выявлена та или иная степень ожирения, у 34,7% - избыточный вес. Лишь 38,1% россиянок соответствуют характеристикам нормы [1, 2]. Повышение индекса массы тела на 5 увеличивает риск возникновения стрессового недержания мочи на 20-70% [2, 3, 5].

Заключение. Недержание мочи может быть спровоцировано различными факторами, включая заболевания со стороны женских половых органов, центральной и периферической нервной систем, органов эндокринной системы и др. Для проведения полного обследования пациентки и выявления факторов, приведших или, возможно, усугубивших состояние больной, а также для определения тактики и назначения адекватного лечения привлекают врачей-специалистов - акушеров-гинекологов, неврологов и нейрохирургов, эндокринологов и др.

Использованные источники:

1. Касян Г.Р. Недержание мочи: современные стандарты лечения и новые перспективы // Урология. -2013. - № 6. - С. 111-117

2. Краснопольский В.И. и др., Патогенетические подходы к лечению мочевой инконтиненции у женщин // Патогенез. -2011. - Т. 9,- № 1. – С. 50-54.

3. Кучкаров Ж., Садикова Д.И., Шадманов М.А. Недержание мочи у женщин – социальная проблема// «Экономика и социум», 2023, №7(110).
4. Садикова Д.И. и соавт. Клиническая характеристика больных с лейкоплакией мочевого пузыря// Журнал «Новый день в медицине», Ташкент, 2020, С. 193-197
5. Садикова Д.И. и соавт. Особенности лечения мочевой инфекции в условиях пандемии COVID-19// Спец. выпуск журнала «Вестник ТМА», Ташкент, 2022, С.66-69.
6. Садикова Д.И., Косимхожиев М.И. Профилактика рецидивов хронического цистита// Спец. выпуск журнала «Вестник ТМА», Ташкент, 2022, С.167-169.
7. Садикова Д.И., Ибрагимов М. Влияние эстрогенного дефицита на недержание мочи у женщин// «Экономика и социум», 2023, №5(108).
8. Шадманов М.А., Рустамов У.М., Садикова Д.И., Ибрагимов М. Уродинамические исследования в диагностике и лечении нарушений мочеиспускания// «Вестник НУУз», Ташкент, 2023, 3/2/1, С.170-174
9. DeLancey JO. Stress urinary incontinence: where are we now, where should we go? Am J Obstet Gynecol. 2011;175:311-319
10. Sadikova D.I. et all Features of treatment of leukoplakia of the bladder// Academicia. An International Multidisciplinary Research Journal. ISSN: 2249-7137, Vol. 11, 2, 2021.

УДК. 339.138

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ЎЗБЕКИСТОН ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИДА ИНКЛЮЗИВ ТАЪЛИМ САМАРАДОРЛИГИНИ ОШИРИШ ЙЎЛЛАРИ

Аннотация. Мақолада Ўзбекистон олий таълим муассасаларида инклюзив таълим самарадорлигини ошириш йўллари таҳлил қилинган. Ўзбекистон республикаси олий таълим муассаларида инклюзив таълимни ривожлантиришниг аҳамияти ва зарурияти ўрганилган. Республика олий таълим тизимида охирги йилларда олиб борилаётган ислоҳотлар таҳлил қилиниб, таълимнинг ушбу шаклини самарадорлигини ошириш бўйича тавсиялар ишлаб чиқилган.

Калит сўзлар: инклюзив таълим, ногиронлиги бўлган шахслар, олий таълим, таълим хизматлари, адаптив технологиялар, электрон таълим, масофавий таълим.

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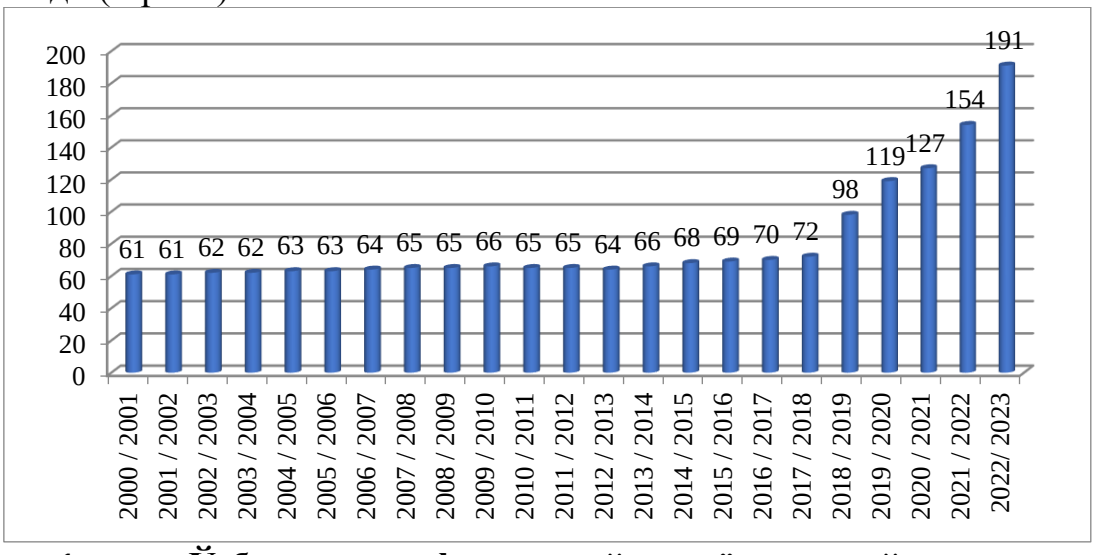
WAYS TO INCREASE THE EFFETIVENES OF INCLUSIVE EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS OF UZBEKISTAN

Annotation. The article analyzes ways to increase the effectiveness of inclusive education in higher educational institutions of Uzbekistan. The importance and need for the development of inclusive education in higher educational institutions of the Republic of Uzbekistan has been studied. The reforms carried out in the higher education system of the republic in recent years have been analyzed and recommendations have been developed to improve the efficiency of this form of education.

Key words: inclusive education, persons with disabilities, higher education, educational services, adaptive technologies, e-learning, distance learning.

Кириш. Олий ўқув юртларининг рақобатбардошлигини оширишнинг асосий омилларидан бири - бу олий таълим муассасалари фаолиятини

давлат томонидан тартибга солиш ҳисобланади. Шу сабабли, таълим хизматлари бозорида давлат томонидан тартибга солишнинг таъсири билан боғлиқ муаммоларни ҳал қилиш таълим хизматлари бозорининг иқтисодий ривожланиш имкониятларини таъминлашнинг устувор йўналиши ҳисобланади. Ўзбекистон Республикаси Президентининг 2017 йил 7 февралдаги ПФ-4947 сонли “Ўзбекистон Республикасини янада ривожлантириш бўйича ҳаракатлар стратегияси тўғрисида”ги Фармони90 билан тасдиқланган 2017-2021 йилларга мўлжалланган Ҳаракатлар стратегиясида, шунингдек Ҳаракатлар стратегиясининг мантиқий давоми сифатида 2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг Тараққиёт стратегиясида91 олий таълим муассасаларига академик92 ва молиявий бошқарув93 соҳасида мустақиллик бериш, рақобат муҳитини шакллантириш мақсадида олий таълим муассасалари сонини кўпайтириш мақсад ва вазифалари белгилаб берилган. Мазкур чора-тадбирларнинг амалга оширилиши натижасида 2022-2023 ўқув йили ҳисобига Ўзбекистонда фаолият кўрсатаётган олий таълим муассасалари сони 191 тага етди (1-расм).



1-расм. Ўзбекистонда фаолият кўрсатаётган олий таълим муассасалари сони, бирлик (2022-2023 ўқув йили ҳолатига)94

90 Ўзбекистон Республикаси Президентининг 2017 йил 7 февралдаги ПФ-4947 сонли “Ўзбекистон Республикасини янада ривожлантириш бўйича ҳаракатлар стратегияси тўғрисида”ги Фармони, https://lex.uz/docs/3107036

91 Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги ПФ-60 сонли “ 2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг Тараққиёт стратегияси тўғрисида”ги Фармони, https://lex.uz/docs/5841063

92 Ўзбекистон Республикаси Президентининг 24.12.2021 йилдаги ПҚ-60-сон “Давлат олий таълим муассасаларининг академик ва ташкилий-бошқарув мустақиллигини таъминлаш бўйича қўшимча чора-тадбирлар тўғрисида”ги Қарори, https://lex.uz/docs/5793261

93 Ўзбекистон Республикаси Президентининг 24.12.2021 йилдаги ПҚ-61-сон “Давлат олий таълим муассасаларига молиявий мустақиллик бериш чора-тадбирлар тўғрисида”ги Қарори, https://lex.uz/docs/5793251

94 Ўзбекистон Республикаси Президенти ҳузуридаги Статистика агентлиги маълумотлари асосида тузилган.

Шундан келиб чиққан ҳолда, Ўзбекистон Республикаси Президентининг 08.10.2019 йилдаги ПФ-5847-сонли “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”95ги Фармони билан тасдиқланган “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш Концепцияси”96да, шунингдек, Ўзбекистон Республикаси Президентининг 03.07.2023 йилдаги ПҚ-200-сон “Маъмурий ислоҳотлар доирасида олий таълим, фан ва инновациялар соҳасида давлат бошқарувини самарали ташкил қилиш чора-тадбирлари тўғрисида”ги Қарори97да имконияти чекланган талабаларга кўрсатиладиган таълим хизматлари турларини кўпайтириш ва уларнинг сифатини яхшилаш, таълимда инклюзив жараёнларни ривожлантириш, адаптив технологияларни жорий этиш, имконияти чекланган талабаларнинг ижтимоий мослашуви учун кенг шароитлар яратиш, инклюзивлик ғояларини тарғиб қилиш олий таълим тизимини ривожлантиришнинг устувор вазифалари сифатида белгилаб берилган.

Тадқиқот методологияси. Мазкур ишнинг услубий асоси бўлиб Ўзбекистон Республикасининг инклюзив таълимни ривожлантириш соҳасидаги меъёрий-ҳуқуқий ҳужжатлари, диалектик ва статистик методлар, адабиётлар ва даврий маълумотлар таҳлили, шунингдек, тадқиқотга шахсий ва ижодий ёндашув хизмат қилади.

Таҳлил ва натижалар. Ўзбекистон республикасида 2023 йил сентябрдан бошлаб, инклюзив таълим олувчилар учун шарт-шароитлар яратиш, кўриш, эшитиш ва нутқида нуқсони бўлган шахсларнинг саводхонлигини ошириш ҳамда сурдотаржимонлар тайёрлаш тизимини такомиллаштириш кўзда тутилган98. Шуни алоҳида таъкидлаш лозимки, бугунги кунда олий таълимда таҳсил олаётган ногиронлиги мавжуд шахсларнинг статистикасини юритиш талабга мутлақо жавоб бермайди. Ўзбекистон Республикаси Президентининг 2017 йил 1 декабрдаги ПФ-5270-сон Фармони99, Вазирлар Маҳкамасининг 2018 йил 2 июндаги 417-сон қарори100 асосида олий таълим муассасаларига абитуриентларни қабул

95Ўзбекистон Республикаси Президентининг 08.10.2019 йилдаги ПФ-5847- сонли “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”ги Фармони, https://lex.uz/docs/4545884

96 “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш Концепцияси”, https://lex.uz/docs/4545884

97 Ўзбекистон Республикаси Президентининг 03.07.2023 йилдаги ПҚ-200-сон “Маъмурий ислоҳотлар доирасида олий таълим, фан ва инновациялар соҳасида давлат бошқарувини самарали ташкил қилиш чора-тадбирлари тўғрисида”ги Қарори, https://lex.uz/docs/6518515

98 https://lex.uz/docs/6518515

99 Ўзбекистон Республикаси Президентининг 01.12.2017 йилдаги ПФ-5270-сон “Ногиронлиги бўлган шахсларни давлат томонидан қўллаб-қувватлаш тизимини тубдан такомиллаштириш чора-тадбирлари тўғрисида”ги Фармони, https://lex.uz/docs/3436192

100 Ўзбекистон Республикаси Вазирлар Маҳкамасининг 02.06.2018 йилдаги 417-сон “Олий таълим муассасаларига ногиронлиги бўлган шахсларни қўшимча давлат гранти квоталари асосида ўқишга қабул қилиш тартиби тўғрисидаги низомни тасдиқлаш ҳақида”ги Қарори, https://lex.uz/docs/3765153

қилишнинг умумий сонидан ногиронлиги бўлган шахслар учун қўшимча равишда икки фоизли квота ажратилиши кўзда тутилганлигини инобатга олсак, бугунги кунда мамлакат олий таълим муассасаларида таҳсил олаётган ногиронлиги мавжуд талабаларнинг статистикаси ўсиш тенденциясига эгалигини кузатишимиз мумкин, аммо ногирон талабалар учун ажратилган ўринлар тўлдирилмасдан қолмоқда.

Ногиронлиги мавжуд шахсларнинг жамият ҳаётининг барча жабҳаларидан фаол иштирокини таъминлаш замонавий Ўзбекистоннинг ижтимоий-иқтисодий жиҳатдан тараққиётини таъминлашнинг устувор вазифаларидан бири ҳисобланади. Ногиронлиги мавжуд шахслар ижтимоий-сиёсий ҳаётда фаол иштирок этиши, эркин ҳаракатланиши, тиббий хизмат олиши, самарали меҳнатда банд бўлиши, реабилитация ва таълим курсларидан фойдаланишлари лозим.

Имконияти чекланган шахсларни ўқитиш муаммоси инклюзив таълим, шунингдек, махсус таълимнинг ҳам марказий муаммоларидан бири ҳисобланади.

Халқаро амалиётга инклюзив таълим тизимининг жорий этилиши интеграцияни ўзини ҳам, унинг усулларининг ҳам турли шаклларини шакллантириш ва ривожлантиришга ёрдам берди, бу эса ушбу тизимни янада мослашувчан ва таълим жараёнининг замонавий талабларига мослаштирди101.

Ногирон болалар ва катта ёшдаги имконияти чекланган шахсларнинг ижтимоий инклюзияси ногиронлиги мавжуд шахсларга соғлиқни сақлаш, реабилитация ва реабилитация учун ёрдамчи воситалари, иқтисодий ва ижтимоий таъминот, ўқитиш ва кўникмаларни ривожлантириш билан боғлиқ асосий эҳтиёжларини қондириш, шунингдек, ногиронлар жамоасида биргаликда кун кечиришга имкон яратган ҳолда, институционал ва таркибий тўсиқларни бартараф этувчи кўп секторли ёндашувдан фойдаланиш ва кенг кўламли ўзгаришларни амалга оширишни талаб қилади.

Ушбу йўналишдаги стратегия ижтимоий ҳимоя, шунингдек ижтимоий хизматларнинг асосий дастурларига, ҳамда ногиронлар учун янги дастур ва хизматларга сармоя киритишга қаратилган бўлиши керак:

- ушбу тоифадаги фуқароларни ҳимоя қилиш соҳасидаги Қонунчилик ва давлат дастурларини БМТнинг ногиронлар ҳуқуқлари тўғрисидаги Конвенцияси қоидалари ва тамойилларига мувофиқлаштириш талаб қилинади; ногиронлар билан боғлиқ статистика ва маълумотларни йиғиш тизимини умумқабул қилинган тушунчалар ва воситалар асосида уйғунлаштириш; шунингдек, БМТнинг ногиронлар ҳуқуқлари тўғрисидаги Конвенциясининг миллий даражадаги қоидаларини идоралараро

101 Шоев, А. Х. (2023). ПРОБЛЕМЫ ОХВАТА ВЫСШИМ ОБРАЗОВАНИЕМ И ТРУДОУСТРОЙСТВА ЛИЦ С ОГРАНИЧЕННЫМИ ВОЗМОЖНОСТЯМИ ЗДОРОВЬЯ В УЗБЕКИСТАНЕ. *ББК 1 Р76*, 258. https://scholar.google.com/scholar?oi=bibs&hl=ru&cites=18385108158787370340&as_sdt=5

мувофиқлаштириш ва бажарилишини назорат қилиш механизмларини кучайтириш;

- ногиронлиги мавжуд шахсларни кенгроқ қамраб олиш борасида ногиронлиги мавжуд шахсларнинг манфаатларини ифодаловчи маҳаллий нодавлат-нотижорат ташкилотлари (ННТ) имкониятларини кенгайтириш тавсия қилинади;

- мазкур тоифадаги фуқароларга нисбатан меъёрлар ва ҳатти-ҳаракатларни ўзгартириш, барча, шу жумладан ногиронлар учун ҳаммабоп муҳит (инфратузилма) тамойилини жорий этиш муҳим саналади;

- ногиронларга ғамхўрлик қилиш бўйича ижтимоий хизматларни фаол ривожлантириш ва Жаҳон соғлиқни сақлаш ташкилоти (ЖССТ) тавсиялари асосида маҳаллий ҳамжамият даражасида маҳалла институтидан фойдаланган ҳолда, ногиронлиги мавжуд шахсларни реабилитация қилиш амалиётини жорий этиш; шунингдек, ногиронларни таълим ва ишга кенг жалб этиш амалиётини рағбатлантириш ногиронларни фаол ижтимоийлаштириш дастурининг бир қисмига айланиши лозим;

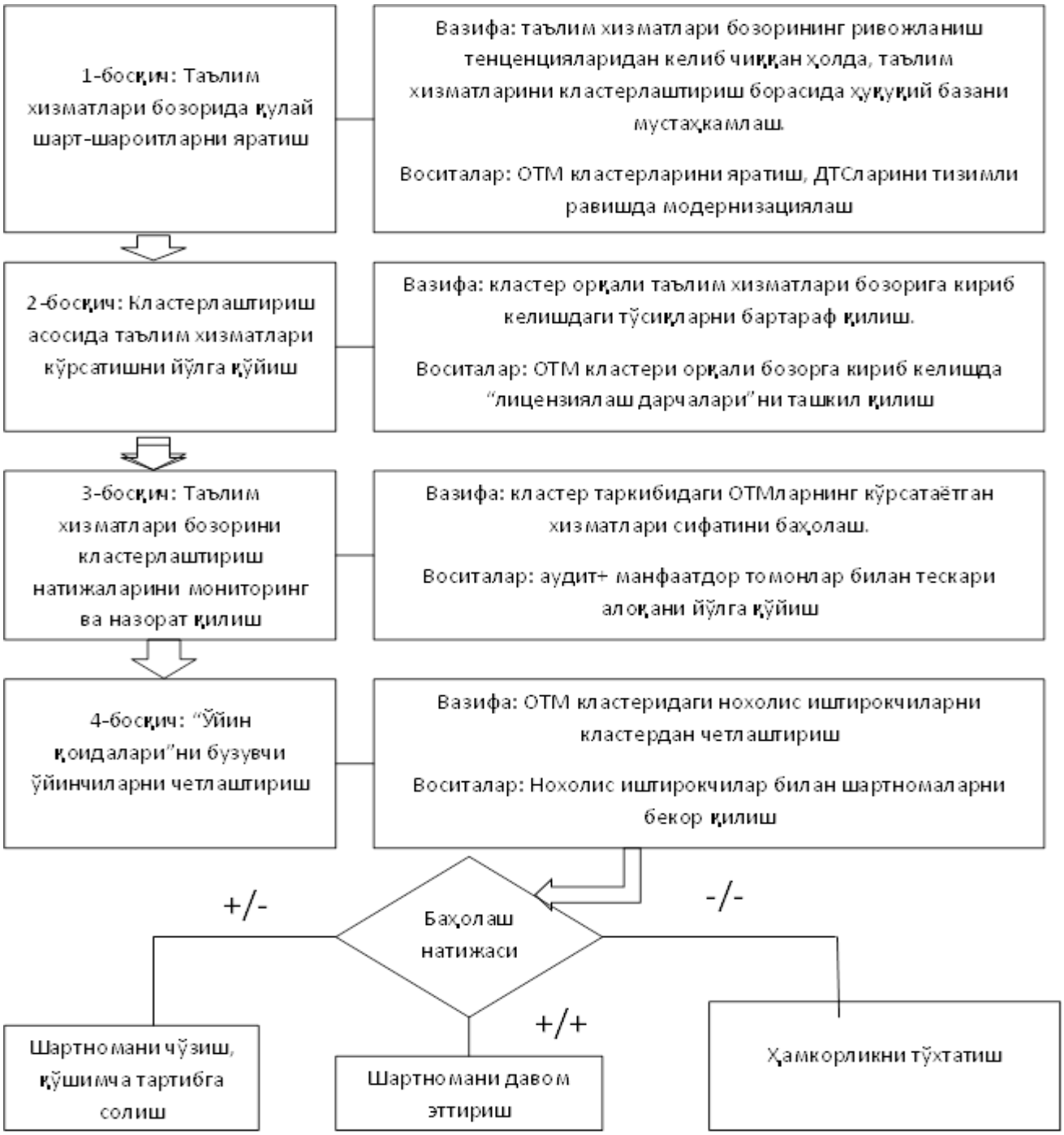
- ногирон болалар ва ёшларни таълимга кенгроқ жалб қилишда бино ва иншоотлар, олий ўқув юртлари аудиторияларини ногиронлиги мавжуд шахсларнинг эҳтиёжларига мослаштириш масаласини ҳал этиш муҳим аҳамият касб этади;

- ногиронларни қўллаб-қувватлаш бўйича махсус хизматларнинг ташкил этилиши ижтимоийлашув ва ҳаётий кўникмаларни эгаллашга ёрдам беради. Инклюзив таълим ғоясини ҳаётга изчил жорий этишда “Биз турлича бўлсакда, аммо тенгмиз” тамойилидан келиб чиқиб иш кўриш тавсия этилади.

Бугунги кундаги ҳолат Ўзбекистонда ногиронлиги мавжуд шахсларнинг жамиятда мустақил кун кечира олишларига имкон бермайди, бу эса ўз навбатида ижтимоий соҳада давлатнинг ислоҳотчилик ўрнини мустаҳкамлашни талаб қилади. Мустақил ҳаётга қадам қўйиш ва инклюзия миллий манфаатлар ва ижтимоий-иқтисодий шароитларни ҳисобга олган ҳолда, тегишли тавсиялар асосида амалга оширилиши лозим, бунда ногирон ёшларни таълим олиш имкониятини таъминлаш йўлидаги тўсиқларни бартараф этишга алоҳида эътибор қаратиш лозим.

Юқорида тилга олиб ўтилган жиҳатлар юқори кириш тўсиқларини келтириб чиқаради ва шу билан бир қаторда, таълим хизматларини маркетинг воситалари ва усулларидан фойдаланган ҳолда тадқиқ қилиш имкониятларининг чекланишига олиб келади.

Шу мақсадда олий таълим муассасалари томонидан кўрсатилаётган таълим хизматлари, шу жумладан инклюзив таълим самарадорлигини ошириш борасида таълим кластерини йўлга қўйишга асосланган таълим хизматларини мақбуллаштириш алгоритми тавсия қилинади.



2-расм. Маркетинг воситаларидан фойдаланган ҳолда, олий таълим муассасаларида инклюзив таълим самарадорлигини мақбуллаштириш алгоритми102

Таклиф этилаётган алгоритмнинг марказида (2-расм) олий таълим хизматлари, шу жумладан инклюзив олий таълим сифатини оширишга қаратилган маркетинг маҳсулоти сифатида маркетинг воситалари жойлаштирилган.

102 Муаллиф ишланмаси.

Таълим хизматлари бозорининг иқтисодий ривожланишини таъминлаш манфаатларини кўзлаб тартибга солиш мақсадида ишлаб чиқилган мақбуллаштириш алгоритмининг биринчи босқичи таълим хизматлари бозорида қулай шарт-шароитларни яратишда ўз ифодасини топади. Хусусан, таълим кластери субъектларининг кластерли ўзаро таъсирини қўллаб-қувватлаш борасида норматив-ҳуқуқий жиҳатдан қўллаб-қувватловчи ҳужжатлар ишлаб чиқилиши лозим. Бу борада таълим тизимини модернизация қилиш, таълим муассасалари ва таълим дастурларининг ўзаро интеграциясини назарда тутувчи Давлат таълим стандартларини такомиллаштириш муҳим ўрин тутади.

Ушбу соҳадаги асосий меъёрий-ҳуқуқий ҳужжат қўшимча касбий таълим дастурларини амалга оширишда электрон таълим, масофавий ўқитиш технологияларидан фойдаланиш бўйича қабул қилинган ҳукумат қарори ҳисобланади103. Ўзбекистон Республикаси Вазирлар Маҳкамасининг 03.10.2022 йилдаги 559-сон “Олий таълим ташкилотларида масофавий таълим шаклини жорий этиш чора-тадбирлари тўғрисида”ги Қарори билан тасдиқланган “Олий таълим ташкилотларида масофавий таълимни ташкил этиш тартиби тўғрисида”ги низомда масофавий таълимни ташкил этишда ногиронлиги мавжуд шахсларнинг имкониятлари эътиборга олинмаган. Шу билан бир қаторда, ўқув-методик ресурслар Ўзбекистон Республикаси давлат стандарти O‘zDSt 36.2030 - “Электрон таълим” миллий тизимига киритиладиган электрон методик комплекслар ва бошқа таълим ресурсларига ягона талаблар”га мувофиқ бўлиши лозимлиги белгиланган бўлсада, юқорида тилга олиб ўтилган стандартда инклюзив таълим жиҳатлари эътиборсиз қолдирилган.

Шу билан бир қаторда, ўқитиш муддатлари ва ҳажмлари, олий таълим муассасаларининг электрон ахборот-таълим муҳити, шунингдек ўқув дастурларининг моддий-техник ва ўқув-услубий таъминоти соҳасида масофавий ўқитиш шаклига қўшимча талаблар қўйилиши лозим. Бу масофавий шаклда таълим хизматларини кўрсатиш жараёни ва натижаларига қўйиладиган талабларни аниқ белгилаш, ниҳоят уни бошқа таълим шакллари билан бир қаторда белгилаш имконини беради.

Алгоритмнинг иккинчи босқичи кластерлаштириш жараёнини йўлга қўйишни кўзда тутади. Ушбу босқичнинг вазифаси олий таълим муассасалари кластери орқали бозорга кириш борасида тўсиқларни камайтириш ва уларнинг паст даражасини сақлаб қолишда намоён бўлади. Бунда кластер орқали бозорга кириш тўсиқларини бартараф қилишда “лицензия дарчалари” ни яратиш муҳим восита ҳисобланади. Ташкилий нуқтаи назардан, таълим фаолиятини лицензиялаш унинг юқори сифатини

103 Ўзбекистон Республикаси Вазирлар Маҳкамасининг 03.10.2022 йилдаги 559-сон “Олий таълим ташкилотларида масофавий таълим шаклини жорий этиш чора-тадбирлари тўғрисида”ги Қарори, https://lex.uz/docs/6221502

кафолатлашни кўзда тутса, аммо иқтисодий нуқтаи назардан, ушбу сифатга эришиш учун зарур бўлган шарт-шароитлар технологик жараённинг ўзига хос хусусиятларига қараб ўзгаришга юз тутади.

Алгоритмнинг учинчи босқичи-таълим хизматлари бозорини кластерлаштириш жараёнини кузатиш ва назорат қилишдан иборатдир. Ушбу босқичнинг вазифаси кластер таркибига кирган олий таълим муассасалари ва иштирокчи ташкилотлар томонидан кўрсатилаётган таълим хизматлари сифатини баҳолашни кўзда тутади. Маълумотларни йиғиш ва манфаатдор томонлар (талабалар, ходимлар, битирувчилар, иш берувчилар) билан тескари алоқани йўлга қўйиш бунда муҳим восита сифатида хизмат қилади. Бунинг учун эндигина амалиётга кириб келаётган таълим хизматлари аудитини йўлга қўйиш муҳим саналади. Таълим хизматлари аудити олий таълим муассасалари фаолиятини замонавий шароитда лицензиялашда амалга ошириладиган анъанавий мониторинг ва назорат-текшириш фаолиятини назарда тутади.

Ишлаб чиқилган алгоритм доирасида уларни олий таълим муассасалари томонидан кўрсатилаётган таълим хизматлари, жумладан инклюзив таълим сифатини баҳолаш чоралари билан тўлдириш тавсия қилинади. Ушбу тавсиянинг мантиғи шундан иборатки, Ўзбекистондаги кўпгина олий таълим муассасалари (миқдорий кўрсаткичлар бўйича) ўз фаолиятини лицензиялаш талабларига жавоб берсада, амалда эса, уларнинг аксарияти (сифат кўрсаткичлари бўйича) давлат таълим стандарти талабларига тўлиқ жавоб бермайди.

Шу муносабат билан олий таълим муассасаси фаолиятини нафақат миқдорий, балки сифат кўрсаткичлари асосида ҳам мониторинг ва назорат қилиш зарур. Бунинг учун олий таълим муассасаси фаолиятидан манфаатдор томонларнинг фикр-мулоҳазаларини тўплаш борасида электрон ҳукумат портали имкониятларидан кенг фойдаланиш тавсия этилади. Тескари алоқа бўйича маълумотларни тўплаш ва олий таълим муассасаси фаолиятини сифатли баҳолаш натижалари асосида маълумотларни автоматлаштирилган қайта ишлаш ва жамлаш натижалари ҳамма учун очиқ бўлиши лозим.

Шу билан бирга, таълим хизматлари, шу жумладан инклюзив таълим самарадорлигини назорат қилишга масъул бўлган идора ва ташкилотлар тескари алоқа ташаббускорлари билан тўғридан-тўғри боғланиш, ўрганиш давомида вужудга келган саволларга ойдинлик киритиш имкониятига эга бўлишлари лозим. Ушбу жараёнларнинг очиқлигини таъминлаш мақсадида қуйидаги жадвал намуналаридан фойдаланиш таклиф қилинади (1-5-жадваллар). Баҳолашни беш балли шкала бўйича синов усулида ўтказиш таклиф этилади, бунда 1-энг ёмон натижа (энг паст балл), 5-энг яхши натижа (энг юқори балл).

1-жадвалдан кўриниб турибдики, мазкур олий таълим муассасаси талабалари томонидан олий таълим хизматлари (инклюзив таълим) сифатини баҳолаш қуйидаги мезонлардан фойдаланишни назарда тутади:

• фанларни ўқитиш даражаси: ўқув материаллари, моддий-техник жиҳозларнинг мавжудлиги, қулайлиги ва бойитилганлиги, профессор-ўқитувчиларнинг касбий маҳорати ва шу кабилар;

• талабалар билимини баҳолаш тизимининг шаффофлиги: талабаларнинг амалда ўзлаштирган билимларининг уларга берилган баҳоларга мослиги;

1-жадвал.

Олий таълим муассасалари талабалари томонидан олий таълим (инклюзив таълим) хизматларини баҳолаш учун сўровнома шакли104

Олий таълим муассасаси томонидан кўрсатилувчи таълим хизматларини баҳолаш мезонлари	Баллар асосида баҳолаш (1-энг ёмон натижа, 5-энг яхши натижа)					Изоҳлар
	1	2	3	4	5	
Фанларни ўқитиш даражаси						
Талабалар билимини баҳолаш тизимининг шаффофлиги						
Талабаларга (шу жумладан ногиронлиги мавжуд талабалар) хизмат кўрсатиш даражаси						
Санитария меъёрларига риоя қилиш						
Таълим хизматлари кўрсатиш нархи ва сифати нисбати						
Мазкур олий таълим муассасасида таълим олиш кутилмаларига амалдаги ҳолатнинг мослиги						

• хизмат кўрсатиш даражаси (ўқув жараёнидан ташқари): олий таълим муассасаси хизмат кўрсатувчи тузилмалар (деканат, ҳисобхона, ректорат, ходимлар билан ишлаш бўлими, ошхона, ётоқхона, кутубхона ва шу кабилар) иш фаолиятининг талабалар учун қулайлиги;

• санитария меъёрларига риоя қилиш, ногиронлиги мавжуд шахслар учун ўқув ва ёрдамчи биноларнинг мослаштирилганлиги: биноларни тозалаш ва шамоллатиш сифати, уларнинг ёритилиши, ногирон ёки алоҳида таълим эҳтиёжи мавжуд шахслар учун бинолар ва ўқув хоналарининг мослаштирилганлиги ва бошқалар;

• таълим хизматларининг нархи ва сифати нисбати: мазкур олий таълим муассасасида таълим олишнинг истеъмол қиймати;

• ушбу олий таълим муассасасида таҳсил олишнинг кутилмаларга мослиги: олий таълим муассасасининг талабалар ўртасидаги бозор обрўси ва унинг амалдаги фаолиятини қиёслаш.

104 Муаллиф ишланмаси.

2-жадвал.

Олий таълим муассасаси профессор-ўқитувчилари томонидан олий таълим хизматлари сифатини баҳолаш учун сўровнома шакли105

Олий таълим муассасаси томонидан кўрсатилувчи таълим хизматларини баҳолаш мезонлари	Баллар асосида баҳолаш (1-энг ёмон натижа, 5-энг яхши натижа)					Изоҳлар
	1	2	3	4	5	
Модий-техник жиҳозланиш ҳолати						
Санитария меъёрларига риоя қилиш						
Меҳнат муҳофазаси ва қулай меҳнат шароитлари						
Олий таълим муассасасини бошқариш сифати						
Талабалар контингенти						
Талабалар билимини баҳолашнинг шаффофлиги						
Иш ҳақи ва меҳнат юкламасининг нисбати						
Мазкур олий таълим муассасасида ишлашнинг кутилмаларга мослиги						

2-жадвалдан кўриниб турибдики, олий таълим муассасаси профессор-ўқитувчилари томонидан олий таълим хизматлари сифатини баҳолаш учун таклиф этилаётган сўровнома шакли қуйидаги мезонлардан фойдаланишни назарда тутади:

- моддий-техник жиҳозланиш ҳолати: бинолар, асбоб-ускуна ва жиҳозлар, ногиронлиги мавжуд шахсларнинг улардан фойдаланишлари борасида яратилган қулайликлар ва бошқалар;
- санитария меъёрларига риоя қилиш: биноларни тозалаш ва шамоллатиш сифати, уларнинг ёритилиши, ногиронлиги мавжуд шахслар учун меъёр ва стандартлардан келиб чиққан ҳолда яратилган санитария шарт-шароитлари ва шу кабилар;
- меҳнат шарт-шароитлари: жадвалларнинг қулайлиги, иш ҳажми даражаси, меҳнат стандартлари ва меҳнатни рағбатлантириш тизимларининг объективлиги ва бошқалар;
- олий таълим муассасасини бошқариш сифати: кузатув кенгашлари, маъмурият тузилмаларининг фаолияти;
- талабалар контингенти: бирламчи (олий таълимгача) тайёргарлик даражаси, ўрганиш қобилияти, тартиб-интизом, ногирон ва алоҳида таълим эҳтиёжлари мавжуд талабалар сони ва шу кабилар;

105 Муаллиф ишланмаси.

3-жадвал.

Олий таълим муассасаси битирувчилари томонидан кўрсатилаётган олий таълим хизматлари сифатини баҳолаш учун сўровнома шакли106

Олий таълим муассасаси томонидан кўрсатилувчи таълим хизматларини баҳолаш мезонлари	Баллар асосида баҳолаш (1-энг ёмон натижа, 5-энг яхши натижа)					Изоҳлар
	1	2	3	4	5	
Олинган таълим асосида ишга жойлашиш имконияти						
Касбий фаолиятни амалга оширишга тайёрлик даражаси						
Олинган таълим даражаси асосида мансаб бўйича ўсиш имкониятлари						
Ўқитиш нархи ва сифати нисбати						
Олий таълим муассасасида таълим олишнинг бирламчи кутилмаларга мослиги						
Олий таълим муассасасида таълимни давом эттиришга тайёрлик						
Олий таълим муассасасида яратилган инклюзив муҳит						

• талабаларнинг билимларини баҳолаш тизимининг объективлиги: талабаларнинг амалда ўзлаштирган билимларининг уларга берилган баҳоларга мувофиқлиги;

• иш ҳақи ва меҳнат юкламасининг нисбати: мазкур олий таълим муассасасида меҳнат қилишнинг қабул қилинган қиймати;

• ушбу олий таълим муассасасида меҳнат қилишнинг кутилмаларга мувофиқлиги: олий таълим муассасасининг ўқитувчилар ўртасидаги бозор обрўси ва унинг амалдаги фаолиятини қиёслаш.

3-жадвалдан кўриниб турибдики, ушбу олий таълим муассасаси битирувчилари томонидан олий таълим хизматлари сифатини баҳолаш шакли қуйидаги мезонлардан фойдаланишни назарда тутади:

• таълим билан боғлиқ ҳолда, ишга жойлашиш имкониятлари: меҳнат бозорида олинган касб бўйича бўш иш ўринларининг мавжудлиги, потенциал ва мавжуд иш берувчиларнинг мазкур олий таълим муассасаси битирувчиларига муносабати ва бошқалар;

106 Муаллиф ишланмаси.

4-жадвал.

Иш берувчилар томонидан олий таълим муассасаси томонидан кўрсатилаётган таълим хизматлари сифатини баҳолаш учун сўровнома шакли107

Олий таълим муассасаси томонидан кўрсатилувчи таълим хизматларини баҳолаш мезонлари	Баллар асосида баҳолаш (1-энг ёмон натижа, 5-энг яхши натижа)					Изоҳлар
	1	2	3	4	5	
Касбий фаолиятни амалга оширишга тайёрлик даражаси						
Бошқа олий таълим муассасалари битирувчилари билан солиштирганда касбий фаолиятни амалга оширишга тайёрлик даражаси						
Таълим тўғрисидаги ҳужжат (диплом) бўйича олинган билим, ўзлаштирилган кўникмаларнинг ҳақиқатга мослиги						
Битирувчиларни ишга қабул қилишнинг бирламчи кутилмаларга мослиги						
Олий таълим муассасасида таълим олишнинг бирламчи кутилмаларга мослиги						
Олий таълим муассасасининг бошқа битирувчиларини ишга қабул қилишга тайёрлик						

- касбий фаолиятни амалга оширишга тайёрлик: талаб қилинувчи компетенцияларнинг мавжудлиги (назарий билимлар, амалий кўникма ва тажрибалар);
- таълим билан боғлиқ ҳолда, мансаб бўйича ўсиш имкониятлари: мартаба учун зарур компетенцияларнинг мавжудлиги;
- таълим хизматлари нархи ва сифатининг нисбати: мазкур олий таълим муассасасида таълим афзалликларининг харажатларга нисбати;
- ушбу олий таълим муассасасида таълим олиш натижаларининг дастлабки тахминларга мослиги: олий таълим муассасасининг талабалар ўртасидаги бозор обрўсини битирувчилар учун ҳақиқий натижалар билан таққослаш;
- мазкур олий таълим муассасасида ўқишни давом эттиришга тайёрлик: қўшимча олий маълумот олиш, малака ошириш ва шу кабилар.

олий таълим муассасасида яратилган инклюзив муҳит: олий таълим муассасасида таҳсил олувчи ўғил ва қиз бола талабалар нисбати, ногиронлиги мавжуд бўлган талабаларга бўлган муносабат ва уларни ижтимоий жиҳатдан қўллаб-қувватлаш.

4-жадвалдан кўриниб турибдики, олий таълим муассасаси битирувчиларининг иш берувчилари томонидан олий таълим хизматлари

107 Муаллиф ишланмаси.

сифатини баҳолаш шакли қуйидаги мезонлардан фойдаланишни назарда тутади:

• касбий фаолиятни амалга оширишга тайёрлик: барча зарур компетенцияларнинг мавжудлиги (назарий билимлар, амалий кўникма ва тажрибалар);

• бошқа олий таълим муассасаларининг битирувчилари билан таққослаганда касбий фаолиятни амалга оширишга тайёрлик: умуман олганда меҳнат бозори ва шу билан бир қаторда, ушбу корхона доирасида битирувчиларнинг рақобатбардошлиги;

• таълим тўғрисидаги ҳужжат (диплом) мазмуни (ўзлаштирилган фанлар ва улар бўйича олинган баҳолар)нинг ҳақиқатга мослиги: талаб қилинувчи компетенцияларнинг қай даражада ўзлаштирилганлигини баҳолаш;

• олий таълим муассасаси битирувчиларини ишга қабул қилиш натижаларининг дастлабки тахминларга мувофиқлиги: олий таълим муассасасининг иш берувчилар ўртасидаги бозор обрўси ва битирувчиларининг касбий тайёргарлиги даражасини таққослаш:

• мазкур олий таълим муассасасининг бошқа битирувчиларини ҳам ишга ёллашга тайёрлик: мазкур олий таълим муассасаси битирувчиларини ёллаш бўйича тўпланган тажриба ва унинг янги битирувчилари борасида кутилмалар.

Тескари алоқа учун мўлжалланган алоқа каналлари ёки портал орқали манфаатдор шахсларнинг тегишли тоифаларининг вакиллари томонидан тўлдирилган шакллардаги маълумотларни автоматлаштирилган қайта ишлашда қуйидаги жадвал шаклидан фойдаланиш тавсия қилинади (5-жадвал).

5-жадвал.

Олий таълим (шу жумладан инклюзив таълим) хизматлари сифатини баҳолаш натижаларини қайта ишлаш ва хулоса қилиш шакли108

Баҳолашларнинг умумий сонида “1” ва”2” баҳоларнинг улуши	Баҳолашларнинг ўртача арифметик қиймати (бутун сонгача яхлитланади)				
	1	2	3	4	5
30 фоиздан кам	жуда паст сифат	паст сифат	ўртача сифат	юқори сифат	жуда юқори сифати
30 фоиздан кўп			паст сифат	ўртача сифат	юқори сифати

Жадвалдан кўриниб турибдики, олий таълим муассасаси томонидан тақдим этилаётган таълим хизматлари сифатини баҳолаш натижаларини автоматлаштирилган қайта ишлаш уларнинг ўртача арифметик қийматини топишни ўз ичига олади. Бироқ, баҳолаш натижаларини талқин қилишда нафақат кўрсаткичларнинг умумий қийматлари, балки уларнинг тузилмаси

108 Муаллиф ишланмаси.

ҳам ҳисобга олинади. “1” ва “2” баҳолар манфаатдор томонларнинг олий таълим муассасаси фаолиятидан қониқмаслигини кўрсатади. Шунинг учун, агар ушбу баҳоларнинг умумий сонидаги улуши 30% дан ошса, бу олий таълим муассасаси фаолиятидан норози бўлган кўплаб манфаатдор томонларнинг мавжудлигини кўрсатади ва унинг сифати паст баҳоланади. Олий таълим муассасаси томонидан тақдим этилаётган таълим хизматлари сифатининг чегара даражаси сифатида ўртача сифатни белгилаш тавсия қилинади.

Алгоритмнинг тўртинчи босқичи олий таълим муассасалари кластеридан умумий “ўйин қоидаларини” бузган ўйинчиларни чиқариб ташлашни кўзда тутади. Ушбу босқичда таълим хизматлари самарадорлигини оширишга тўсқинлик қилаётган иштирокчилар аниқлаштирилади ва улар умумий жараёндан чиқариб юборилади.

Бу шуни англатадики, агар мониторинг натижалари анъанавий аудит (миқдорий баҳолаш) натижаларига кўра ҳам, олий таълим муассасаси фаолиятини сифат жиҳатдан баҳолаш натижаларига кўра ҳам салбий бўлса(3-расмда “- / - “ белгиси билан кўрсатилган), олий таълим муассасасининг кластердаги иштироки тугатилади ёки узайтирилмайди. Агар мониторинг натижалари анъанавий аудит (миқдорий баҳолаш) натижаларига кўра ҳам, университет фаолиятини сифат бўйича баҳолаш натижаларига кўра ҳам ижобий бўлса (3-расмда “+ / + “ белгиси билан кўрсатилган), олий таълим муассасасининг кластерда иштирок этиш шартномаси узайтирилади ва олий таълим муассасаси фаолияти устидан қўшимча назорат талаб қилинмайди.

Агар натижалар фақат баҳолаш турларидан бири (сифат ёки миқдорий) натижаларига кўра ижобий бўлса (3-расмда бу “+ / -“ белгиси билан кўрсатилган), унда олий таълим муассасасининг кластердаги иштироки тўғрисидаги шартнома узайтирилади, аммо келгусида унинг фаолияти қўшимча тартибга солинади.

Бундай тартибга солиш қуйидаги чора-тадбирларни амалга оширишни ўз ичига олади:

- олий таълим муассасаси фаолиятидаги муаммоларни аниқ ва ишончли аниқлаш мақсадида олий таълим муассасаси талабалари ва ўқитувчилари ўртасида қўшимча аудит ва қўшимча социологик сўровларни ўтказиш орқали, олий таълим муассасаси устидан чуқурлаштирилган мониторинг ва назоратни кучайтириш;
- олий таълим муассасаси раҳбариятига аниқланган камчиликларни бартараф этиш бўйича консалтинг ёрдами кўрсатиш;
- олий таълим муассасаси фаолиятида аниқланган муаммолар ва камчиликлар тўғрисида барча манфаатдор томонларни хабардор қилиш, уни жиддий камчиликлар аниқланган олий таълим муассасалари расмий реестрига киритиш орқали электрон порталда эълон қилиш;

• аниқланган муаммоларни муваффақиятли ҳал қилиш ва олий таълим муассасаси ишидаги муҳим камчиликларни бартараф этиш учун талаб қилинувчи (муаммоларнинг мураккаблиги ва уларни ҳал қилиш учун зарур бўлган вақтга қараб) муайян вақтдан кейин такрорий мониторинг ва назорат ўтказиш;

• аниқланган муаммоларни ҳал этиш ва олий таълим муассасаси фаолиятидаги камчиликларни бартараф этиш натижалари тўғрисида барча манфаатдор томонларни электрон портал орқали хабардор қилиш.

Юқорида баён қилинган алгоритм Ўзбекистонда қўлланилувчи олий таълим хизматлари бозорини давлат томонидан тартибга солиш борасидаги алгоритмга нисбатан қуйидаги афзалликларни таъмин этади:

• рақобатни рағбатлантириш: таълим хизматлари бозорига янги ўйинчиларнинг кириб келишидаги тўсиқларда “лицензия дарчалари”нинг яратилиши ушбу бозорда юқори даражадаги рақобатни ошириш ва қўллаб-қувватлаш учун қулай шароит яратади;

• таълим хизматлари бозорининг такомиллаштирилган мониторинги ва назорати: ушбу баҳолаш жараёнига турли тоифадаги манфаатдор томонлар вакилларини жалб қилиш ва анъанавий миқдорий усулларни сифатли баҳолаш усуллари билан қўшиш янада тўлиқ, аниқ, объектив ва ишончли натижаларга эришишга имкон беради.

Хулоса. Ўзбекистонда инклюзив олий таълим тизимини ривожлантиришда ижтимоий маркетинг воситаларидан самарали фойдаланиш истиқболларини тадқиқ қилиш асосида қуйидаги хулосалар шакллантирилди:

1. Олий таълимнинг давлат таълим стандартларидан келиб чиққан ҳолда, инклюзив таълим шароитида рақамли технологиялардан фойдаланиш ахборот муҳитидан ўқиш ва ўрганиш воситаси сифатида фойдаланиш лаёқатига эга бўлиш; ахборот муҳитида меҳнат фаолиятини амалга ошириш қобилиятини шакллантириш; ахборотлашган жамиятда рақобатбардош, мустақил ҳаёт кечиришга тайёр шахсни шакллантириш; ўз таълим траекториясини режалаштириш ва амалга ошириш каби вазифаларни ҳал этишга имкон беради.

2. Инклюзия шароитида рақамли таълим муҳитининг ҳолатини таҳлил қилиш асносида, уни ривожлантириш учун ўқув жараёнининг барча иштирокчилари, шу жумладан алоҳида таълим эҳтиёжлари мавжуд шахсларнинг электрон таълим орқали ўзаро таъсирини таъминлаш лозим.

3. Электрон таълимда масофавий ўқитиш жараёнининг барча иштирокчиларининг педагогик ўзаро таъсирининг турли усуллари ва технологиялари орқали синхрон ва асинхрон режимда ишлашнинг комбинациясини, шунингдек гуруҳли ва якка тартибдаги таълим шаклларини таъминлаш муҳимдир.

4. Ногирон ёшларни меҳнат фаолияти билан шуғулланувчилари таркибига киритиш уларнинг касбий реабилитацияси ва жамиятга

интеграциялашуви самарадорлигининг асосий кўрсаткичи эканлигини таъкидлаш муҳимдир.

5. Маҳаллий бозорда олий таълим муассасасини маркетинг тамойиллари асосида бошқариш самарадорлигини оширишда таълим кластерларини ташкиллаштириш муҳим ўрин эгаллайди, бундай ёндашув олий таълим муассасалаларининг рақобатбардошилигини ошириш, инклюзив таълим муҳитини яратишга хизмат қилади.

Фойдаланилган адабиётлар рўйхати:

1. Ўзбекистон Республикаси Президентининг 2017 йил 7 февралдаги ПФ-4947 сонли “Ўзбекистон Республикасини янада ривожлантириш бўйича ҳаракатлар стратегияси тўғрисида”ги Фармони, https://lex.uz/docs/3107036
2. Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги ПФ-60 сонли “ 2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг Тараққиёт стратегияси тўғрисида”ги Фармони, https://lex.uz/docs/5841063
3. Ўзбекистон Республикаси Президентининг 24.12.2021 йилдаги ПҚ-60-сон “Давлат олий таълим муассасаларининг академик ва ташкилий-бошқарув мустақиллигини таъминлаш бўйича қўшимча чора-тадбирлар тўғрисида”ги Қарори, https://lex.uz/docs/5793261
4. Ўзбекистон Республикаси Президентининг 24.12.2021 йилдаги ПҚ-61-сон “Давлат олий таълим муассасаларига молиявий мустақиллик бериш чора-тадбирлар тўғрисида”ги Қарори, https://lex.uz/docs/5793251
5. Ўзбекистон Республикаси Президентининг 08.10.2019 йилдаги ПФ-5847-сонли “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”ги Фармони, https://lex.uz/docs/4545884
6. “Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш Концепцияси”, https://lex.uz/docs/4545884
7. Ўзбекистон Республикаси Президентининг 03.07.2023 йилдаги ПҚ-200-сон “Маъмурий ислоҳотлар доирасида олий таълим, фан ва инновациялар соҳасида давлат бошқарувини самарали ташкил қилиш чора-тадбирлари тўғрисида”ги Қарори, https://lex.uz/docs/6518515
8. Ўзбекистон Республикаси Президентининг 01.12.2017 йилдаги ПФ-5270-сон “Ногиронлиги бўлган шахсларни давлат томонидан қўллаб-қувватлаш тизимини тубдан такомиллаштириш чора-тадбирлари тўғрисида”ги Фармони, https://lex.uz/docs/3436192
9. Ўзбекистон Республикаси Вазирлар Маҳкамасининг 02.06.2018 йилдаги 417-сон “Олий таълим муассасаларига ногиронлиги бўлган шахсларни қўшимча давлат гранти квоталари асосида ўқишга қабул қилиш тартиби тўғрисидаги низомни тасдиқлаш ҳақида”ги Қарори, https://lex.uz/docs/3765153
10. Ўзбекистон Республикаси Вазирлар Маҳкамасининг 03.10.2022 йилдаги 559-сон “Олий таълим ташкилотларида масофавий таълим шаклини жорий этиш чора-тадбирлари тўғрисида”ги Қарори, https://lex.uz/docs/6221502

11. Шоев, А.Х. “ПРОБЛЕМЫ ОХВАТА ВЫСШИМ ОБРАЗОВАНИЕМ И ТРУДОУСТРОЙСТВА ЛИЦ С ОГРАНИЧЕННЫМИ ВОЗМОЖНОСТЯМИ ЗДОРОВЬЯ В УЗБЕКИСТАНЕ” Polish Journal of Science № 35-2, стр.29 2021 г.

УДК 608.2

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ПРОЕКТИРОВАНИЕ ДЕЯТЕЛЬНОСТИ ФИТНЕС-ЦЕНТРА ПРИ ПОМОЩИ ДИАГРАММ БИЗНЕС-ПРОЦЕССОВ

Аннотация. В данной статье авторами проектируется деятельность существующего фитнес-центра, выявляются его достоинства и недостатки.

Ключевые слова: проектирование, фитнес-центр, автоматизация.

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DESIGNING THE ACTIVITIES OF A FITNESS CENTER USING BUSINESS PROCESS DIAGRAMS

Abstract. In this article, the authors design the activities of an existing fitness center, identifying its advantages and disadvantages.

Key words: design, fitness center, automation.

Актуальность работы определяется тем, что современный мир все больше ориентирован на использование информационных технологий в бизнесе. Информационные системы помогают упростить и оптимизировать процессы управления, проводить анализ данных и формировать отчеты, а также повышает качество обслуживания клиентов.

Проектирование ИС осуществлялась с помощью Diagrams.net.

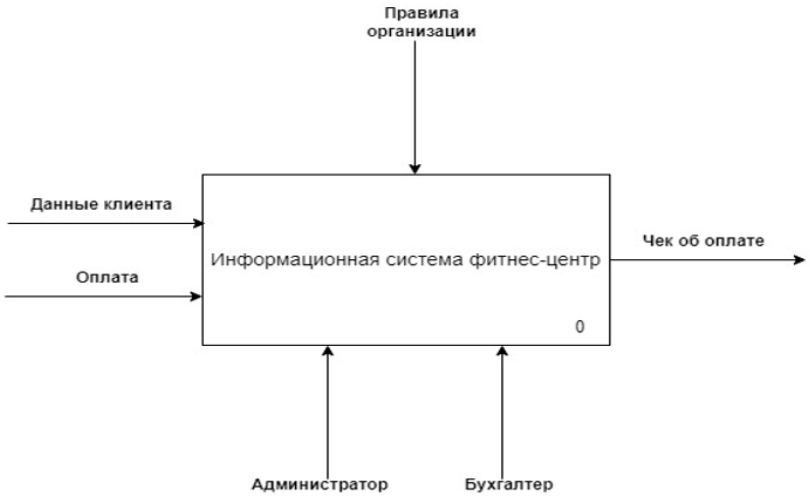

Рис.1. Контекстная диаграмма «КАК ЕСТЬ»

На основе анализа была разработана контекстная диаграмма «Информационная система фитнес-центр». Контекстная диаграмма — это графическое представление системы, которое помогает описать ее контекст и взаимодействие с внешней средой (Рис. 1.).

Ниже была разработана диаграмма декомпозиции «КАК ЕСТЬ». Диаграмма декомпозиции — это графическое представление процесса разбиения сложной системы на более простые компоненты, подсистемы или модули. Она используется для упрощения проектирования и анализа системы, чтобы легче было понять ее структуру и взаимодействие компонентов (Рис. 2.).

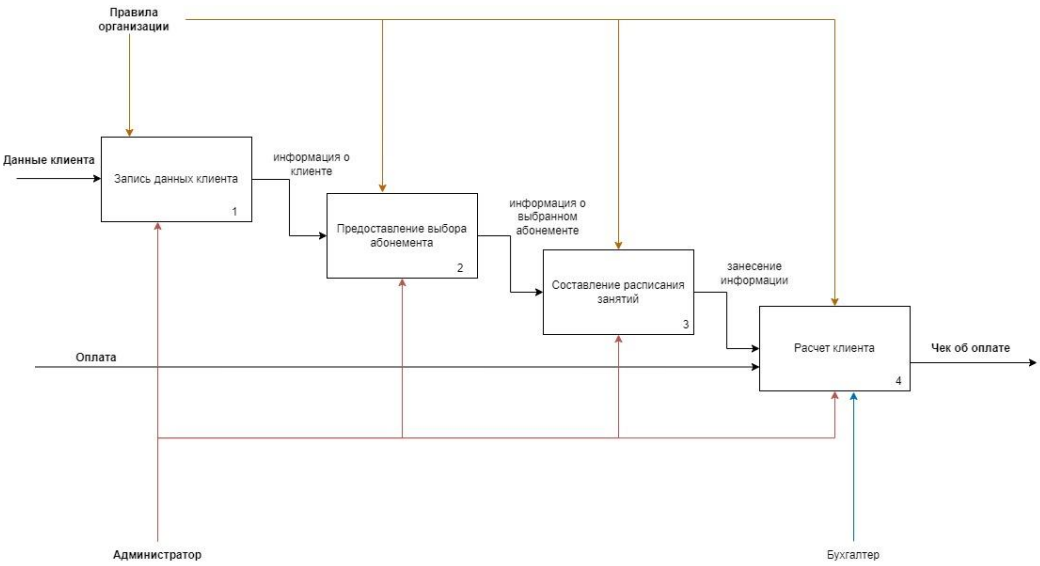

Рис. 2. Диаграмма декомпозиции «КАК ЕСТЬ»

Ниже представлена контекстная диаграмма «КАК БУДЕТ» предметной области (Рис. 3.).

Рис. 3. Контекстная диаграмма «КАК БУДЕТ»

Следующей была разработана диаграмма декомпозиции «КАК БУДЕТ» (Рис. 4.).

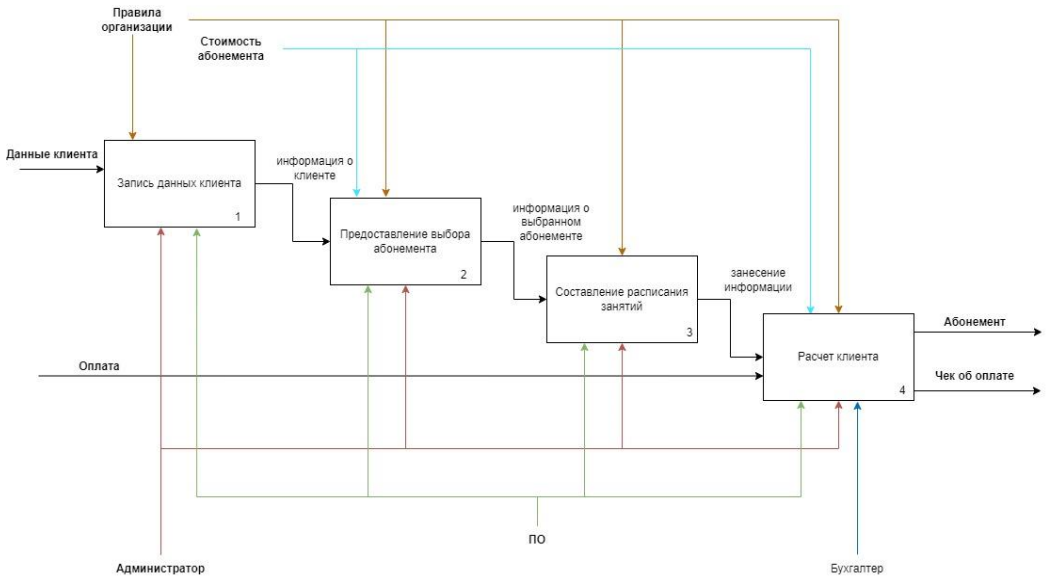

Рис. 4. Диаграмма декомпозиции «КАК БУДЕТ»

Произведем описание информационной и функциональной составляющей улучшенного бизнес-процесса с помощью создания диаграмм.

Основной диаграммой описания системы идет диаграмма последовательности. Диаграмма последовательности — это вид диаграммы, который отображает взаимодействие между объектами в рамках определенной последовательности действий. Она показывает, как объекты обмениваются сообщениями между собой, кто инициирует эти сообщения и какие операции выполняются в процессе взаимодействия (Рис. 5.).

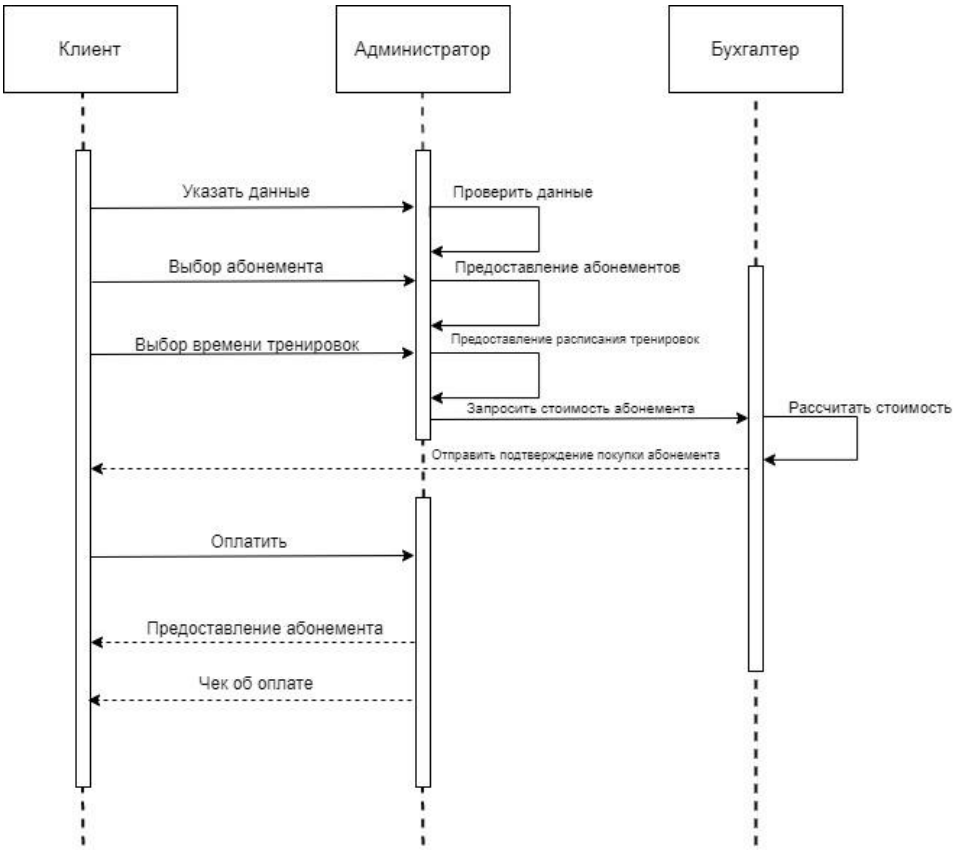

Рис. 5. Диаграмма последовательности

Все перечисленные элементы позволяют сделать работу фитнес-центра более эффективной и удобной для клиентов, что, в свою очередь, может привести к увеличению клиентской базы и повышению уровня прибыли.

В результате разработки информационной системы для фитнес-центра в 1С: Предприятии было создано удобное и функциональное программное обеспечение для автоматизации основных бизнес-процессов данного центра. Система позволяет управлять клиентами, записывать их на занятия, вести учет услуг, контролировать расписание и производить расчеты за услуги. Также были реализованы функции отчетности, что дает возможность получать информацию о работе фитнес-центра.

Разработка такой системы помогает оптимизировать работу фитнес-центра и повышает удобство для клиентов. Одной из наиболее важных функций такой системы является возможность введения автоматизации процесса записи на тренировки.

С помощью такой системы клиенты фитнес-центра могут быстро и удобно записываться на занятия, выбирая удобное для них время и тренера. Кроме того, она дает возможность осуществлять удобный и быстрый контроль за оплатой услуг и учетом занятий.

Использование информационных технологий в фитнес-бизнесе помогает увеличить эффективность работы и конкурентоспособность

центра. С помощью автоматизации бизнес-процессов возможно сокращение времени на их выполнение, снижение риска ошибок в учете и удобное ведение отчетности.

Использованные источники:

1. Абрамов, Г. В**.** Проектирование и разработка информационных систем: учебное пособие для СПО / Г. В. Абрамов, И. Е. Медведкова, Л. А. Коробова. — Саратов: Профобразование, 2020. — 169 с. — ISBN 978-5-4488-0730-5. — Текст: электронный // Электронный ресурс цифровой образовательной среды СПО PROFобразование: [сайт]. — URL: https://profspo.ru/books/88888

2. Алхасов, Д. С. Организационно-методические основы физкультурно-спортивной работы: учебник для среднего профессионального образования / Д. С. Алхасов. — Москва: Издательство Юрайт, 2023. — 144 с. — (Профессиональное образование). — ISBN 978-5-534-15486-3. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/520487

3. Долганова, О. И. Моделирование бизнес-процессов: учебник и практикум для вузов / О. И. Долганова, Е. В. Виноградова, А. М. Лобанова; под редакцией О. И. Долгановой. — Москва: Издательство Юрайт, 2023. — 289 с. — (Высшее образование). — ISBN 978-5-534-00866-1. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/511418

УДК 618.5-085/-089.888.11-078

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ОЦЕНКА РАЗЛИЧНЫХ МЕТОДОВ ИНДУКЦИИ В АКУШЕРСКОЙ ПРАКТИКЕ

Резюме. Неблагоприятные влияние на здоровье матери и плода, и ее новорожденного могу оказывать осложнения беременности (гестоз, фетоплацентарная недостаточность, иммунологический конфликт по резусу- фактору, перенашивание), экстрагенитальные заболевания женщины. В связи с этим для обеспечения безопасного материнства, рождение живого, здорового ребенка нередко приходится решать вопрос о необходимости до срочного родоразрешения.

Ключевые слова: индукция родов, мизопростол, амниотомия окситоцин.

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EVALUATION OF VARIOUS INDUCTION METHODS IN OBSTETRIC PRACTICE

Resume. Pregnancy complications (gestosis, fetoplacental insufficiency, immunological conflict over the Rh factor, overexposure), extragenital diseases of a woman can have an adverse effect on the health of the mother and fetus and her newborn. In this regard, in order to ensure safe motherhood, the birth of a living, healthy child often has to be resolved before an urgent delivery.

Keywords: labor induction, misoprostol, amniotomy, oxytocin.

Актуальность. Современная демографическая ситуация в США, характерными чертами которой является снижение рождаемости на фоне увеличения смертности, неудовлетворительные показатели здоровья женщин, растущие показатели акушерской патологии и неблагоприятных перинатальных исходов во многом определяют необходимость проведения мероприятий, направленных на поиск новых эффективных методов профилактики материнских и перинатальных осложнений [2].

Одно из основных направлений решения этой проблемы - разработка оптимальной тактики ведения родов, являющихся наиболее ответственным

этапом реализации репродуктивной функции [5]. В частности, плановое досрочное родоразрешение представляется логичным и целесообразным методом профилактики патологического течения родового акта [4]. Индукция родовой деятельности в последние годы стала явлением обычным, число программируемых заранее родов неуклонно растет и составляет, по данным различных авторов, от 4% в России до 18% и более в США [7].

Показаниями для их проведения могут быть акушерские осложнения и экстрагенитальные заболевания: перенашивание беременности, гестозы, макро-сомия плода, преждевременное излитие околоплодных вод, плацентарная недостаточность, иммунологический конфликт между матерью и плодом, заболевания сердечно-сосудистой системы матери, сахарный диабет.

Индуцированные роды сегодня представляются одним из потенциальных путей для снижения частоты кесарева сечения, особенно при субкомпенсиро-ванных формах плацентарной недостаточности. В то же время, не все исследователи согласны с этой точкой зрения, считая оптимальным методом родоразрешения при внутриутробном страдании плода — кесарево сечение.

Положительными моментами индуцированных родов можно считать психологический настрой женщины на роды, ее уверенность в оказании квалифицированной помощи [1]. Присутствие на родах определенного заранее круга лиц, мониторинг в родах, возможность быстрого взаимодействия с другими службами в дневное время позволяют снизить риск перинатальных потерь и акушерских осложнений.

Нельзя, однако, не отметить определенной агрессивности современного акушерства, проявляющегося не всегда обоснованным активным вмешательством в естественный ход беременности и родов.

Течение индуцированных родов, их пусковые механизмы должны быть максимально приближены к спонтанным. Но многие аспекты развития родовой деятельности, к сожалению, до настоящего времени остаются не до конца изученными [6].

При наличии показаний для досрочного родоразрешения путем индукции необходимо, прежде всего, убедиться в отсутствии противопоказаний для проведения родов через естественные родовые пути (неполноценный рубец на матке, аномалии прикрепления плаценты, неправильное положение плода и т.д.). Учитывая решающее значение в исходе родов антенатального состояния компенсаторных механизмов плода, необходимо тщательно оценить их накануне родовозбуждения.

Второе важное условие — собственно согласие пациентки на проведение вмешательства. Третье, которое скорее является не условием для родовозбуж-дения, а скорее определяет его методику,- готовность организма к родам. Используемые традиционно и внедряемые в последнее

время критерии (цитология мазка из влагалища, ультразвуковые критерии зрелости плода, плаценты, кон-трактильные тесты) не всегда оказываются информативными [5].

Таким образом, проблема проведения индуцированных родов, а также эффективности и безопасности использования различных методов индукции родов является актуальной, требует проведения дальнейших исследований с учетом состояния беременной и ее внутриутробного плода.

Цель исследования. Определение эффективности различных методов родовозбуждения и влияния индукции родов на акушерские и перинатальные исходы.

Материалы и методы исследования. Для выпольнение поставленную задачу, мы отобрали для обследования в общей сложности 75 женщин в послеродовом периоде, проживающих в нашем регионе, и изучили особенности протекания у них беременности и родов

Результаты исследования. Исходы индуцированных родов, несмотря на то, что они проводятся у беременных с высоким риском акушерских и перинатальных осложнений, сопоставимы со спонтанно развившимися. Показаниями для родовозбуждения наиболее часто являются фетоплацентарная недостаточность (58,2%) и длительно текущий гестоз (14,2%).

При зрелых родовых путях наиболее эффективным и безопасным методом индукции родов является амниотомия: родовая деятельность развивается быстро, редко встречаются акушерские осложнения, отсутствует отрицательное влияние индукции на плод и новорожденного, частота абдоминального родоразрешения составляет 4,5%.

При незрелых родовых путях, особенно при крупных размерах плода, родо-возбуждение в 1/3 случаев бывает неэффективно, что требует более тщательного подхода к определению возможности проведения индукции родов у этих беременных. Использование простагландинов F2a при незрелых родовых путях, независимо от паритета родов малоэффективно, в 41% случаев сопровождается развитием осложнений родового акта, требующих проведения экстренного кесарева сечения.

Особенностями индуцированных родов по сравнению со спонтанно начавшимися являются:

- более высокая частота стремительных родов у первородящих при проведении родовозбуждения путем амниотомии при зрелой шейке матки;
- уменьшение частоты первичной слабости родовой деятельности с увеличением вторичной гипофункции при индукции мизопростолом;
- удлинение продолжительности безводного промежутка при амниотомии, использовании простагландинов Pg F2a и их сочетании с окситоци-ном, не сопровождающееся увеличением частоты послеродовых гнойно-септических осложнений.

Течение пуэрперия и послеродовая инволюция матки, независимо от метода индукции, не имеет каких-либо особенностей по сравнению со спонтанными родами.

Интранатальная и постнатальная адаптация плода при проведении индуцированных родов различными методами принципиально не отличается от таковой при спонтанных родах.

Вывод. Определено, что при плацентарной недостаточности, за исключением декомпенсированных форм, индуцированные роды не оказывают отрицательного влияния на течение интранатальной и ранней постнатальной адаптации плода и новорожденного. Предпочтительным методом родовозбуждения у этих пациенток при зрелых родовых путях является амниотомия.

Показано, что проведение родовозбуждения при недостаточно зрелых родовых путях хотя и не ухудшает перинатальных исходов, однако характеризуется низкой эффективностью, независимо от способа индукции.

Выявлена необходимость тщательного контроля за сократительной деятельностью матки с целью проведения дополнительных мероприятий по ее коррекции при индукции родов на зрелых родовых путях в связи с высоким риском развития быстрых и стремительных родов.

Использование кардиотокографического контроля на протяжении всего периода индуцированных родов позволяет своевременно выявить декомпенсацию плацентарных нарушений и закончить роды абдоминальным путем.

Использованные источники:

1. Александров Р.И. Современные организационные технологии в условиях перинатального центра. // Матер. 5-го Рос. научн. форума «Охрана здоровья матери и ребенка 2003». – М.: «Авиаиздат», 2003. - С. 15-16.
2. Бондаренко К.В. Программированные роды — резерв снижения материнской и перинатальной заболеваемости и смертности: Автореф. дисс. канд. мед. наук. М., 2007. - 23 с.
3. Подтетенев А.Д. Прогнозирование, профилактика и лечение слабости идискоординации родовой деятельности): Автореф. дис.. док. мед. наук. - М., 2003. – 44 с.
4. Радзинский В.Е., Костин И.Н. Акушерская агрессия как причина снижения качества родовспоможения // Вестник РУДН. 2005. - №4 (32). -С.9 -12.
5. Baskett T.F., Allen V.M., O'Connell C.M. et al. Predictors of respiratory depression at birth in the term infant // BJOG. 2006. - V.l 13, №7. - P.769-774.
6. Urban L., Lemancewicz A. The Doppler cerebroplacental rations and perinatal outcome in post-term pregnancy // Gynecol. Pol. 2000. - V.71, №4. -P.317-321.
7. Verrotti C., Bedocchi L., Piantelli G. et al. Amniotic fluid index versus largest vertical pocket in the prediction of perinatal outcome in post-term pregnancies // Acta Biomed. 2004. - V.75 Suppl 1. - P.67-70.

УДК 621.382.3

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ПРИБОРЫ НА ОСНОВЕ ГЕТЕРОСТРУКТУР И ПЕРСПЕКТИВНЫЕ ТРАНЗИСТОРНЫЕ СТРУКТУРЫ

Аннотация. В данной статье полностью раскрыта физическая сущность устройств на основе гетероструктур и перспективных транзисторных структур, сравниваются и анализируются характеристики устройств на основе гетероструктур и перспективных транзисторных структур.

Ключевые слова: GaAs-гетероструктура, DA-DpHEMT, нанопленка.

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DEVICES BASED ON HETEROSTRUCTURES AND PROMISING TRANSISTOR STRUCTURES

Annotation. This article fully reveals the physical essence of devices based on heterostructures and promising transistor structures, compares and analyzes the characteristics of devices based on heterostructures and promising transistor structures.

Keywords: GaAs heterostructure, DA-DpHEMT, nanofilm.

Введение

Гетеропереходы Активное продвижение мощных полупроводниковых приборов в миллиметровый диапазон длин волн связано, в основном, с совершенствованием эпитаксиальных технологий нитрида галлия. В миллиметровом диапазоне длин волн полевые транзисторы на основе AlGaN – GaN гетероструктур демонстрируют крайне впечатляющие характеристики и продвинулись почти до терагерц [1]. В то же время, одним из основных недостатков мощных нитридгаллиевых приборов являются высокий уровень нелинейности, и он до сих пор не устранён. Промышленное применение таких приборов на частотах заметно выше 100 ГГц выглядит пока достаточно проблематичным. Кроме того, существует высокая вероятность того, что типовые транзисторы на гетероструктурах на основе GaN без появления принципиально новых

технических решений достигли своего максимума в предельных частотах [2]. В свою очередь, при проектировании транзисторов на основе GaAs псевдоморфных гетероструктур имеются возможности существенного улучшения их характеристик - увеличения удельной выходной мощности, коэффициента усиления и предельных частот. В России в 2012 г. был создан новый тип транзисторных гетероструктур: гетероструктуры с донорно – акцепторным легированием (DA-DpHEMT) [3,4]. Донорно-акцепторное легирование позволило сформировать у границ квантовой ямы дополнительные потенциальные барьеры, оптимизированные для уменьшения поперечного пространственного переноса электронов и увеличения эффекта размерного квантования. Первые результаты разработки мощных полевых транзисторов на GaAs гетероструктурах с донорно-акцепторным легированием продемонстрировали двукратное увеличение удельной мощности транзисторов, а также рост малосигнального коэффициента усиления на 3 – 4 дБ [5]. В 2020 году транспортные свойства псевдоморфных AlGaAs/GaAs/InGaAs гетероструктур с двухсторонним донорно – акцепторным легированием DA-DpHEMT были существенно улучшены за счет введения дополнительных цифровых потенциальных барьеров из AlAs/GaAs короткопериодных сверхрешеток вокруг легированных областей. 123 В работе приведены результаты теоретических исследований применения цифровых барьеров для улучшения характеристик GaAs псевдоморфных транзисторных гетероструктур. Расчеты производились по модели, представленной в [6] для следующих гетероструктур: с двухсторонним донорно-акцепторным легированием и системами чередующихся тонких слоев AlAs/GaAs, образующих дополнительные цифровые потенциальные барьеры; обращенных гетероструктур с донорно-акцепторным легированием и дополнительными цифровыми потенциальными барьерами; двухканальных гетероструктур с донорно – акцепторным легированием и дополнительными цифровыми потенциальными барьерами [7].

В гетеропереходах *p*- и *n*-области сформированы из полупроводников с различной шириной запрещенной зоны. Необходимое условие — одинаковый тип решетки, близкие периоды решетки (a_0) и близкие ТКН.

Таблица 1.1. Параметры некоторых полупроводников, пригодных для создания гетеропереходов

Полупроводник		$A^{III}B^{V}$						A^{IV}	
		GaAs	lAs	nP	nAs	nSb	aSb	e	i
Тип решетки		Цинковая обманка						Алмаз	
Период решетки a_0, нм		5,65	5,66	5,87	6,06	6,48	6,1	5,65	5,43
Электронное сродство χ, эВ		4,07	2,62	5,34	4,9	4,59	4,1	4,13	4,01
Ширина запрещенной зоны E_g, эВ		1,43	2,16	1,35	0,36	0,18	0,73	0,66	1,12
Положение E_c в зоне Бриллюэна		Г	X	Г	Г	Г	Г	L	Δ
Эффективные массы	m_n/m_0	0,07	0,78	0,08	0,023	0,01	0,04	0,55	1,18

	m_p/m_0	0,57	0,86	0,74	0,41	0,41	0,44	0,2	0,8

Хорошие пары:

GaAs / $Al_xGa_{1-x}As$ ($x < 0,4$): $\Delta E_g < 0,3$ эВ; $\Delta\chi < 0,58$ эВ

В зависимости от соотношения знаков ΔE_c и ΔE_v различают гетеропереходы I –го иII-го рода:

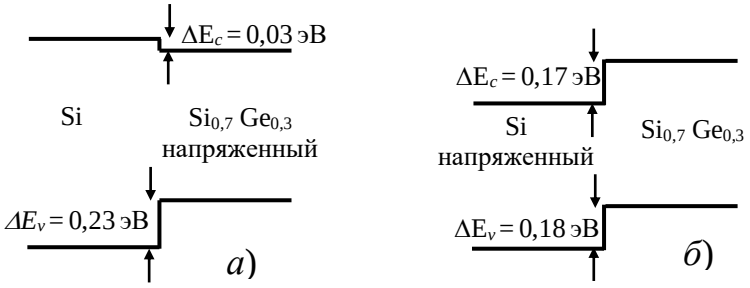

Рис. 1.1. Энергетические диаграммы гетеропереходов $Si/Si_{0,7}Ge_{0,3}$:

а – напряженный слой $Si_{0,7}Ge_{0,3}$; края зон смещаются в противоположных направлениях; *б* - напряженный слой Si; края зон смещаются в одном направлении.

Простейшая модель гетероперехода предполагает, что уровень энергии свободного электрона на гетеропереходе непрерывен и разрыв зоны проводимости определяется разностью электронных сродств полупроводников [8] (модель Андерсона):

$$\begin{cases} \Delta E_c = \Delta\chi. \\ \Delta E_v = \Delta E_g - \Delta\chi. \end{cases}$$

Реально величина разрыва зон зависит от механизма формирования межатомных связей на границе раздела и может быть как больше, так и меньше величины $\Delta\chi$.

Ввиду чрезвычайно малой эффективной массы электронов (и, следовательно, высокой подвижности) в индии весьма перспективными для гетеропереходных транзисторов являются тройные полупроводниковые соединения InGaAs, InGaP, InAlAs и InP (табл. 7.1). Введение индия в GaAs существенно повышает подвижность электронов [9,10]. В соединении $In_xGa_{1-x}As$ подвижность электронов возрастает с увеличением мольной доли In x примерно по закону $\mu_n \approx 5000(1+2x)$ $см^2/В{\cdot}с$. Постоянные решетки InGaAs, InGaP, InAlAs и InP-подложки хорошо согласуются, что позволяет довести мольную долю In до $x \approx 0,6$ и увеличить подвижность электронов при 300 К примерно вдвое. Введение In в GaAs сужает запрещенную зону, причем разрыв зоны проводимости в гетероструктуре $In_{0,53}Ga_{0,47}As/GaAs$ составляет около 0,5В (вдвое больше, чем в $Al_{0,3}Ga_{0,7}As/GaAs$) [11].

Рассогласование постоянных решетки Ge и Si составляет 4,2%, что вызывает механические напряжения в более тонком слое гетероструктуры. На рисунке 7.1 показаны энергетические диаграммы гетеропереходов $Si/Si_{0,7}Ge_{0,3}$, в которых напряженными являются слои $Si/Si_{0,7}Ge_{0,3}$ (а) или Si (б) [12,13]. В последнем случае разрывы зоны проводимости и валентной зоны примерно одинаковы при почти одинаковой ширине запрещенной зоны ($\Delta E_g = 0{,}1$ эВ), что позволяет создавать на ее основе комплементарные пары полевых транзисторов с высокими подвижностями как электронов, так и дырок в канале: $\mu_n = 1270\text{-}2830$ см^2/В·с, $\mu_p = 800 - 1000$ см^2/В·с.

Наиболее совершенными технологическими методами изготовления гетеропереходов являются молекулярно-лучевая эпитаксия (MBE), позволяющая создавать сверхтонкие (вплоть до моноатомных) полупроводниковые слои, и эпитаксия металлоорганических соединений из газовой фазы (MOCVD) [14].

Сшивка энергетических диаграмм:

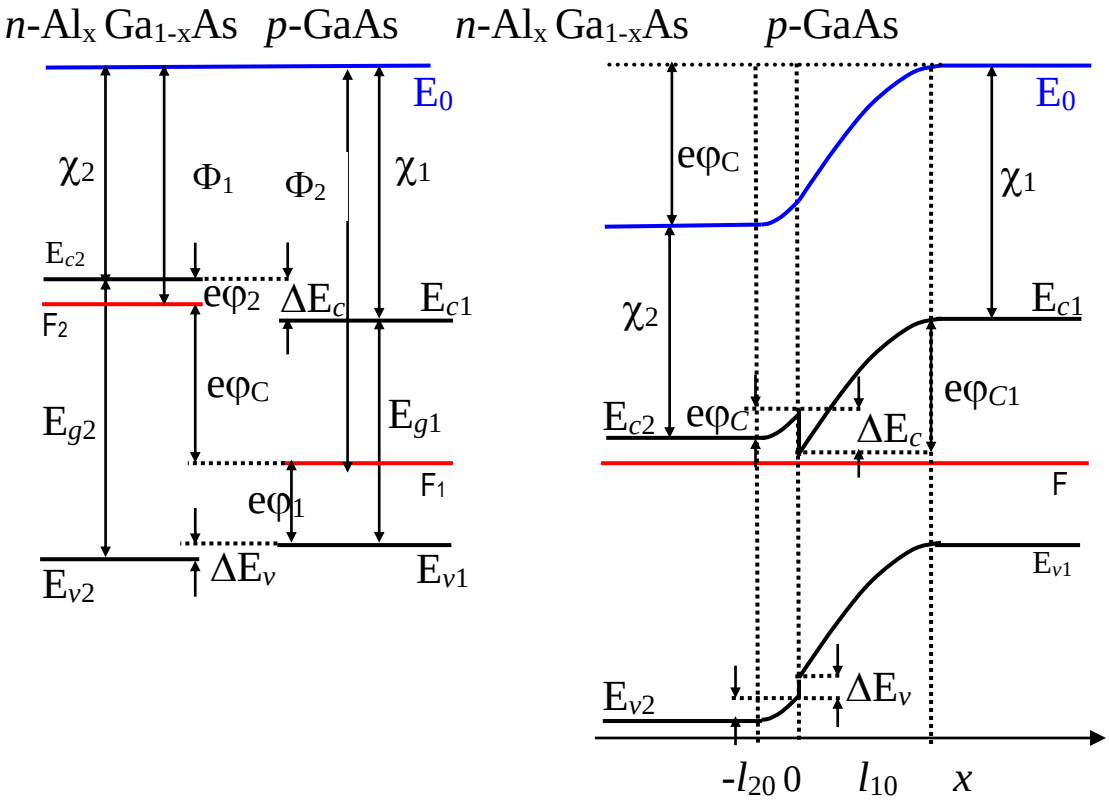

Рис.1.2 Зонные диаграммы полупроводников n-$Al_x Ga_{1-x}As$, p-GaAs (*а*) и равновесная энергетическая диаграмма p-n перехода n-$Al_x Ga_{1-x}As$ – p-GaAs (*б*).

Суммарный разрыв запрещенной зоны складывается из разрыва зоны проводимости и разрыва валентной зоны:

$$\Delta E_g = \Delta E_c - \Delta E_v .$$

В первом приближении разрыв зоны проводимости, как и ΔE_g, пропорционален мольной доле гетерокомпонента [15]:

$\Delta E_c + x\Delta E_{c0}$.

При отсутствии вырождения расстояния $\varphi_{1,2}$ между уровнем Ферми и ближайшей к нему границей запрещенной зоны в электронейтральных областях определяются степенью их легирования (концентрации примеси N_1 и N_2 предполагаются постоянными) [16]:

$$p_{10} = N_1 = N_{v1} e^{-\varphi_1/\varphi_T};\ \varphi_1 = \varphi_T \ln(N_{v1}/N_1);\quad (1.1а)$$

$$n_{20} = N_2 = N_{c2} e^{-\varphi_2/\varphi_T};\ \varphi_2 = \varphi_T \ln(N_{c2}/N_2).\quad (1.1б)$$

Контактная разность потенциалов определяется из левого рисунка 7.2 и (1.1):

$$\varphi_C = (F_2 - F_1)/e;\ \varphi_C = (E_{g1} + \Delta E_c)/e - (\varphi_1 + \varphi_2).$$

$$\varphi_C = (E_{g1} + \Delta E_c)/e - \varphi_T \ln(N_{v1}N_{c2}/N_1N_2).\quad (1.2)$$

Двойное интегрирование уравнений Пуассона в *p*- и *n*- областях ОПЗ дает:

$$\left.\begin{aligned} &\varphi_{C1} = eN_1 l_{10}^2/2\varepsilon_1\varepsilon_0;\\ &\varphi_{C2} = eN_2 l_{20}^2/2\varepsilon_2\varepsilon_0;\\ &\varphi_C = \varphi_{C1} + \varphi_{C2}; \end{aligned}\right\} \varphi_C = e(N_1 l_{10}^2/\varepsilon_1 + N_2 l_{20}^2/\varepsilon_2)/2\varepsilon_0.\quad (1.3)$$

Суммарный заряд в ОПЗ равен нулю: $N_1 l_{10} = N_2 l_{20}$.(1.4)

Из (1.3) и (1.4) можно найти l_{10} и l_{20}. Замена $\varphi_C \to \varphi_C - V$ дает значения l_1, l_2 и $l = l_1 + l_2$ при напряжении на переходе V:

$$l(V) = \sqrt{\frac{2\varepsilon_0(\varphi_C - V)}{e} \cdot \frac{(N_1 + N_2)^2}{N_1N_2(N_1/\varepsilon_1 + N_2/\varepsilon_2)}};\quad (1.5а)$$

$$l(V) \approx \sqrt{\frac{2\varepsilon_0\varepsilon(\varphi_C - V)}{e} \cdot (N_1^{-1} + N_2^{-1})};\quad (1.5б)$$

$$l_1(V) = l(V)N_2/(N_1 + N_2);\quad (1.6а)\qquad l_2(V) = l(V)N_1/(N_1 + N_2);\quad (1.6б)$$

Приближение (1.5б) соответствует обычно выполненному условию $\varepsilon_1 \approx \varepsilon_2 \approx \varepsilon$.

Формулы (1.5б) и (1.6а,б) совпадают с аналогичными формулами для гомогенного ступенчатого перехода.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.

2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).
14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.

15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

УДК: 616.155.194.8-036.15-053.2

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СОВРЕМЕННЫЙ ПОДХОД К ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ ЖЕЛЕЗОДЕФИЦИТНОЙ АНЕМИИ У ДЕТЕЙ И ПОДРОСТКОВ

Резюме. Анемия у детей в большинстве случаев оказывается железодефицитной и обуславливается дефицитом железа в организме, возникающим ввиду нарушений его поступления с пищей, усвоения в кишечнике или излишних потерь. Возникновению анемии, в большинстве случаев, предшествует возникновение скрытого недостатка железа, который рассматривается как функциональное нарушение и выражается уменьшением резервного запаса железа в организме и понижением его уровня в тканях, при этом — отсутствием анемии. Главная причина железодефицитной анемии, по ВОЗ — это несбалансированная диета, бедная железом. Значительно реже железодефицитная анемия у детишек развивается из-за различных кровотечений, (такая анемия называется — хроническая постгеморрагическая, или из-за глистных инвазий (в регионах с низкой культурой).

Ключевые слова: дети, железодефицитные состояния, железодефицитная анемия, сульфат железа, препараты железа (III) на основе гидроксид полимальтозного комплекса.

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A MODERN APPROACH TO THE TREATMENT AND PREVENTION OF IRON DEFICIENCY ANEMIA IN CHILDREN AND ADOLESCENTS

Resume. Anemia in children in most cases is iron deficient and is caused by a deficiency of iron in the body, arising from violations of its intake from food, absorption in the intestines or excessive losses. The occurrence of anemia, in most cases, is preceded by the occurrence of a latent lack of iron, which is considered as a functional disorder and is expressed by a decrease in the reserve supply of iron in the body and a decrease in its level in the tissues, with the absence of anemia. The main cause of iron deficiency anemia, according to WHO - is an unbalanced diet, poor in iron. Much less frequently, iron deficiency anemia in

children develops due to various bleeding, (this anemia is called chronic posthemorrhagic, or due to helminthic invasions (in regions with a low culture).

Key words: children, iron deficiency states, iron deficiency anemia, iron sulfate, iron (III) preparations based on polymaltose hydroxide complex.

Кириш. Ҳозирги вақтда анемия бутун дунёда кенг тарқалган. Ушбу мавзуни муҳокама қилишнинг долзарблиги жуда катта, чунки анемия жуда кўп турли сабаблар билан боғлиқ бўлган жуда кенг тарқалган касалликдир. Темир ионлари инсон организмида жуда муҳим вазифани бажаради. Улар кислород ташувчи оқсиллар, цитохромлар ва темир-серопротеинлар, темир таркибидаги ферментлар таркибига киради. Шунинг учун организмда темир моддасининг етишмаслиги кўпгина салбий оқибатларга олиб келади [2,6]. Танадаги ортиқча темир миқдори ҳам хавфлидир. Бу токсикознинг ривожланишига, реактив кислород турларининг патологик ўсишига олиб келади.

Анемия инсон ҳаётининг барча даврларида, нафақат турли касалликларда, балки маълум физиологик шароитларда, масалан, ҳомиладорлик даврида, ўсиш, лактация даврида ҳам содир бўлади. Ёш болаларда камқонлик муаммоси катта ижтимоий аҳамиятга эга, чунки бу ёшдаги камқонлик жисмоний ривожланиш ва темир моддаси алмашинувининг бузилишига олиб келиши мумкин [3,5].

Муддатидан олдин туғилган ёки тана вазни дефицити бўлган болаларга, шунингдек, ҳомиладорлик даврида камқонликдан азият чеккан оналарнинг фарзандларига алоҳида эътибор бериш талаб этилади. Анемия ривожланишининг олдини олиш учун боланинг овқатланишини, шу жумладан темир ўз ичига олган озиқ-овқатларни, шунингдек менюда мева ва сабзавотларни қатъий назорат қилиш керак. Рацион қанчалик хилма-хил бўлса, болада маълум бир витамин ёки минерал етишмаслиги шунчалик кам бўлади [3,5,6]. Фарзандларингиз анемия каби муаммога дуч келадими ёки йўқми, ҳар қандай ҳолатда ҳам боланинг тўлиқ ривожланиши учун фаол ўйин ва жисмоний фаолиятни рағбатлантириш керак, ҳатто бунинг учун телевизор, турли ўйин ва интернетга киришни чеклашингиз керак. Кўп ота-оналар болани видео ўйинлар банд болани ушлаб қолиш учун осон йўл кўринади, лекин технология ривожланиши туфайли, замонавий болалар ҳақида 30% ҳаракатсиз ҳаёт тарзи олиб келади. Бу нафақат анемия, балки ортиқча вазн олиш, жисмоний ривожланишни секинлаштириш, умуртқа поғонаси, кўриш ва қон айланиши билан боғлиқ муаммолар билан ҳам боғлиқ [1,2,4].

Тадқиқотнинг мақсади. Темир танқислиги анемиясини даволашда замонавий ёндашувни ўрганиш ва таҳлил қилиш.

Тадқиқот материаллари ва усуллари: 94 ёш ТТА 5 ойликдан 17 ёшгача бўлган болалар кузатув остига олинди, жумладан: 16 ёшгача бўлган

болалар (17,0%) 1, 64 ёшгача бўлган болалар (68,1%) 1-3, 4 kishi (4,3%) 4-12 ва 10 ёшдан катта бўлган ўсмирлар 12 (10,6%).

Тадқиқот натижалари. Кузатилган болаларда анте ва ингранатал сабабларини таҳлил ТТА, у ҳомиладор аёл ва гестосис гипосидероз мос равишда 51,6 ва 59,4%, ҳомиладорлик кузатилган - 48,4%, кесар кесиш - 31,3%, ҳайз кўп келиши - 23,4%, она ортиқ 5 ҳомиладорлик мавжудлиги - 14,1%, ҳомиладорлик ўртасидаги танаффус кам 3 йил - 20,3%, спорт - 12,5%%, сурункали инфекциялари - 10,9%, бир неча ҳомиладорлик 6,3%, вегетарианлик - 6,3% ва совға - 6,3%.

Болаларнинг 31.0% муддатидан олдин туғилган, кейинчалик ортиқча вазнга ега бўлган, бу эса темир учун тана эҳтиёжининг ошишига олиб келган, болаларнинг 24.1% баланссиз овқатланиш натижасида катта вазн, алиментар темир танқислиги (эрта сунъий озиқлантириш, шу жумладан суциз аралашмалар, кеч кириш ёки гўшт маҳсулотларининг йўқлиги) аниқланди) болаларнинг 39.1% да. Болаларнинг 1/3 қисмидан кўпроғи моддий бойлиги кам бўлган яхши оилалардан бўлиб, 100% қизларда ҳайз цикли бузилишлари аниқланган.

Интенсив ўсиш ўсмирларнинг 40% да қайд этилди, спорт - 20% да алиментар омил 20% ТТА генезисида барча беморларда юқоридаги сабабларнинг бир нечтаси комбинацияси кузатилди.

Ўтказилган тадқиқот ТТА ёш болаларда ҳомиладорлик ва туғилишнинг ноқулай кечиши, акушерлик-гинекологик ва ижтимоий тарихнинг юкланиши ва алиментар омил ва боланинг интенсив ўсиш даврида темирдан ортиб бораётган эҳтиёжлари каби сабаблар мажмуасидан далолат беради.

Озиқлантириш нуқсонлари болаларнинг ярмидан камроқ қисмида қайд этилган, бу кўплаб маҳаллий тадқиқотчиларнинг оналар саломатлиги, ҳомиладорликнинг патологик курси ва ҳомиладор аёлларнинг анемияси ТТА ривожланишида чақалоқларда ва ёш болаларда алиментар етишмовчиликдан кўра муҳим рол ўйнаши ҳақида фикрларга қўшилишга имкон беради. Ўсмирларда, ТТА ривожланиш сабаблари юқори ўсиш суръатлари, sport, шунингдек, қиз болаларда ҳайз бузилишлари ҳисобланади.

ТТА клиник кўринишларини таҳлил қилиш шуни кўрсатдики, болаларда турли хил анемик ва сидеропеник белгилар мавжуд бўлиб, уларнинг частотаси ва зўравонлиги беморларнинг ёшига, камқонликнинг оғирлиги ва давомийлигига боғлиқ.

Барча текширилган болаларнинг клиник кўринишида биз кўрган ягона аломат тери ва шиллиқ пардаларнинг оқариши эди. Кўпгина беморларда аниқланган яна бир аломат бўшашиш ёки ланжлик эди. Ушбу камқонлик белгилари тўқималарга кам кислород етказиб бериш билан боғлиқ, уйқу бузилиши ва ҳиссий бефарқлик текширилган болаларнинг яримида топилган. Боланинг мия темир танқислигига жуда сезгир ва

аниқланган клиник белгиларга касалликлар сидеропениа учун биринчи навбатда, 10 нафар болалар ўртача жисмоний ривожланиш ҳолати бўлган.

Ҳаётнинг дастлабки уч йилида болаларда сидеропениянинг одатда намоён бўлиши камайди ва/ёки иштаҳа ўзгариши, тахикардия ва функционал систолик шовқин, ичак диспепсияси, мушак гипотензияси, шу жумладан қорин бўшлиғи мушаклари ва диафрагма гипотензияси кузатилди. Бундан ташқари жигар ва талоқнинг нисбатан паст жойлашишига олиб келди ва баъзи ҳолларда уларнинг кўпайиши ҳақида нотўғри таассурот қолдирди. Болаларнинг ярмидан кўпида биз томонимиздан аниқланган гепатомегали ва спленомегалия бу ёш гуруҳининг ўзига хос белгилари эди.

Беморларнинг ярми қуруқ тери, сочлар, уларнинг хиралашиши ва йўқолиши, камроқ бурчакли стоматит ва глоссит бўлди. Ошқозон-ичак тракти, тери, унинг ортиқлари, шунингдек миокард, шу жумладан, мушак заифлиги, трофик ўзгаришлар ҳужайраларида метаболик касалликлар учун етакчи, тўқима темир танқислиги сабаб бўлди.

Хулосалар. Темир танқислиги анемияси темир танқислиги натижасида гемоглобин синтезининг бузилиши, турли патологик (физиологик) жараёнлар фонида ривожланиб, анемия ва сидеропения белгилари билан намоён бўлган клиник ва гематологик синдромдир.

Даволаш учун темир препаратлари суюқ шакллари чақалоқларда темир танқислигини олдини олиш учун ишлатилади: бу темир сулфат (Астиферрин), темир (III)-гидроксид полималтосат (Малтофер, Феррум Лек), темир, марганец, мис (Totem), (Ферлатум) глюконат ўз ичига олган оғиз орқали юбориш учун еритмалар ёки томчилар бўлиши мумкин; шу дорилар сироп (Астиферрин, Малтофер, Феррум Лек) шаклида мавжуд. парентарал ферропрепаратлар темир танқислигининг олдини олиш учун ишлатилмайди.

Адабиётлар рўйхати:

1.Азимжанова М.М. Особенности эритроцитарной системы и развития детей, рожденных от матерей с ЖДА Ташкент,2013.
2. Железодефицитная анемия в педиатрической практики. СПВ// Журнал Медикал экспресс. 2014.
3. Таточенко В.К. педиатру на каждый день. Справочник по лекарственной терапии. Москва 2013
4. Новый подход к лечению анемии у новорожденных // Информационное письмо. МЗ РУз УМС. Отдел научной медицинской информации ГНМБ 2014.
5.Детские болезни Под.ред. Н.П.Шабалов Л.2008
6.Новые педагогические технологии в подготовке врача общей практики. Методическая рекомендация. Ташкент 2012 г.

УДК 616 – 009.12 – 053.2

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ОСНОВНЫЕ ОСОБЕННОСТИ ПАРОКСИЗМАЛЬНЫХ РАССТРОЙСТВ У ДЕТЕЙ

Резюме. Проблема судорожных состояний у детей раннего возраста – одна из важных проблем современной неврологии, педиатрии и психиатрии.

Судорожный синдром у детей – неспецифическая реакция организма ребенка на внешние и внутренние раздражители, характеризующаяся внезапными приступами непроизвольных мышечных сокращений. Судорожный синдром у детей протекает с развитием парциальных или генерализованных судорог клонического и тонического характера с потерей или без потери сознания.

Для установления причин судорожного синдрома у детей необходимы консультации педиатра, невролога, травматолога; проведение ЭЭГ, НСГ, РЭГ, рентгенографии черепа, КТ головного мозга и пр. Купирование судорожного синдрома у детей требует введения антиконвульсантов и проведения терапии основного заболевания.

Ключевые слова: судорожная состояния, эпилепсия, факторы риска, детской возрасть, профилактика, абсансы.

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THE MAIN FEATURES OF PAROXYSMAL DISORDERS IN CHILDREN

Resume. The problem of convulsive states in young children is one of the important problems of modern neurology, pediatrics and psychiatry.

Convulsive syndrome in children is a nonspecific reaction of the child's body to external and internal stimuli, characterized by sudden attacks of involuntary muscle contractions. Convulsive syndrome in children proceeds with the development of partial or generalized clonic and tonic seizures with or without loss of consciousness.

To determine the causes of convulsive syndrome in children, consultations of a pediatrician, neurologist, traumatologist are necessary; EEG, NSG, REG, X-

ray of the skull, CT of the brain, etc. The relief of convulsive syndrome in children requires the introduction of anticonvulsants and the treatment of the underlying disease.

Key words: convulsive states, epilepsy, risk factors, children's age, prevention, absences.

Долзарблиги. Ёш болаларда талваса ҳолатлари муаммоси замонавий неврология, педиатрия ва психиатриянинг муҳим муаммоларидан биридир [2,5,8].

Болалар орасида талваса ҳолатларининг тарқалиши 5,0 -10,0% ни ташкил этади [4,6,11]. Ушбу ҳолатлар катталардаги эпилепсиянинг асосий манбаи бўлиб, болаларда уларнинг пайдо бўлишининг олдини олиш эпилепсияни олдини олишнинг калитидир. Айниқса, бу жиҳатдан илк болалик даврида (3 ёшгача) талваса ҳолатларни ўрганиш муҳим аҳамиятга эга [1,3,7].

Эрта ёшдаги болаларда касал боланинг ота-онаси ва дўстлари она, туғруқдан кейинги даврдаги ўзгаришлар ва [2,9,10] ҳомиладорлик ва туғиш ҳақида шифокор аниқ маълумот айтиш мумкин, чунки талваса давлатлар, катталарга нисбатан батафсил ўрганиб мумкин сабаб бўлади.

Тадқиқотнинг мақсади: ушбу тадқиқотнинг мақсади эрта болалик даврида конвулсион ҳолатларнинг юзага келишида хавф омиллари (пре-, пери-, постнатал таъсирлар) ва оила тарихининг ролини ўрганишдан иборат бўлди.

Текшириш материаллари ва усуллари: вазифаларни ҳал этиш учун 60 нафар талвасали нуқсонли ёш болаларни клиник-эпидемиологик текшириш ўтказилди. Шундан 40 ўғил (66,7%), 20 қиз (33,3%)ни ташкил қилди.

Барча беморлар тутқаноқ бошланган вақт ҳақида аниқ маълумот олинган. Туғилгандан кейинги дастлабки кунларда талваса ҳолатлари дастлаб 8 та болада (13,5%), (ўғил болалар -7, қиз болалар -1), биринчи ой давомида – 6 та (10,2%) болада, (ўғил болалар -3, қиз болалар -3), 6 ойликкача – 23 та (39,0%) болада, (ўғил болалар -14, қиз болалар - 9), 1 ёшгача – 16 та (25,4%) болада, (ўғил болалар – 13, қиз болалар – 3), 2 ёшгача – 4 (6,8%) болалар, (ўғил болалар – 2, қиз болалар - 2), 3 ёшгача – 3 (5,1%) болалар, (ўғил болалар – 1, қиз болалар - 2) кузатилди.

Олинган маълумотлардан кўриниб турибдики, талваса ҳолатлари ёш болаларда биринчи марта 6 ойгача тез-тез содир бўлиб туради.**Натижалар муҳокамаси.** Талваса ҳолатларининг юзага келишида ирсий омилларнинг аҳамияти инкор этилмайди, балки кўпчилик муаллифлар томонидан фақат мойиллик сифатида қаралади. Бизнинг беморларимизда ирсий мойиллик 18,0% ҳолларда, шу жумладан 3,4% ҳолларда қариндошларда эпилепсия, ота - оналардан бирида-7,7% ҳолларда аниқланди. Қариндошлик биринчи даражали қариндошлари орасида бошқа руҳий касалликлар 6.9% ҳолларда қайд этилди.

Кўпчилик муаллифларнинг таъкидлашича, ирсият бола миясининг талвасага тайёргарлигини оширувчи омилдир. Тутқаноқ фақат эпилептик ҳолатлар бу талвасани қўллаб қувватловчи қўшимча омилга қўшилганда пайдо бўлади.

Талваса ҳолатларнинг юзага келишига олиб келадиган пренатал хавфлар орасида сурункали хомилалик гипоксия, гестоз, инфекциялар ва ҳомиладор онанинг интоксикацияси мавжуд. Туғма травма, узоқ вақт меҳнат қилиш, акушерлик патологиялари билан таъсирланиш, вакуум экстрактор, тез меҳнат қилиш, узоқ вақт асфиксия талваса ҳолатларининг тез-тез перинатал сабабларидан биридир. Тутқаноққа чалинган болаларда ҳомиладорлик даврида онада асфиксия ва гестоз кўпинча анамнезда аниқланади.

Клиник текширув натижаларига кўра, 43 (73%) ҳолатларида пренатал хавф мавжудлиги аниқланди, биз текширган барча болаларда перинатал хавф аниқланди (100%).

Постнатал даврда талваса ҳолатлар кўплаб ва турли омилларга олиб келиши мумкин: мия инфекциялари, травматик мия жароҳатлари, турли соматик касалликлар. Ўткир инфекциялар талваса ҳолатларининг ривожланишида катта аҳамиятга эга. Биз ўрганган беморлар орасида 24 (40.6%) ҳолатларида ўтган инфекцияларнинг кўрсаткичлари мавжуд. 14 (23.7%) беморда инфексия конвулсив ҳолатлар билан бевосита боғлиқлигини кузатдик. 2 (3.4%) беморда АКДС билан эмлашдан кейин биринчи марта конвулсион ҳолатлар пайдо бўлди.

Хулосалар: Юқоридаги маълумотлардан кўриниб турибдики, талваса ҳолатлари аниқланган беморларнинг текширилаётган гуруҳида ўғил ва қиз болалар нисбати 2: 1 ни ташкил этган. Ўғил болалар орасида талваса ҳолатлари частотаси қиз болалар ўртасида икки марта юқори, яъни ўғил болалар талваса ҳолатларининг юзага келишига кўпроқ мойил бўлади. Талваса ҳолатлари эндо ва экзоген омилларнинг биргаликдаги таъсири таъсири остида юзага келади. Эндоген омиллар орасида ирсий омил энг муҳим ҳисобланади. Экзогенлар омиллар орасида ҳомиладорлик гестози, туғма жароҳатлар ва юқумли касалликлар катта аҳамиятга эга.

Адабиётлар:

1.Бадалян Л.О., Медведев М.И., Гусева П.И. и др. Неонатальные судороги (клиника, диагностика, лечение). Метод. рекомендации. М., 1990; 32 с.

2.Вельтищев Ю.Е., В.П.Петров. Объективные показатели нормального развития и состояния здоровья ребёнка (нормативы детского возраста) // Рос. вест. перинатол. и педиатр. Приложение. М.: 2000, 96с.; с. 21-25;

3.Воронкова К.В. Нарушения памяти при эпилепсии // Росс. вестник перинатологии и педиатрии, 2002, № 4 – с. 43 – 46;

4.Исмаилов Т.И., Сулейманов С.Р., Компанцева А.К. Некоторые клинические аспекты изучения психического онтогенеза детей группы высокого риска по эндогенному психическому заболеванию //

5.Экспериментальный мутагенез и клиническая генетика: Сб. науч. тр. / ТашГосМИ – Т.. 1990 – с. 39-42;
6.Карлов В.А. Ключевые вопросы эпилепсии // Журн. неврол. и психиатр., 2003, № 3 – с. 4 – 8;
7.Козловская Г.В. Состояние психического здоровья детского населения раннего возраста и актуальные проблемы микропсихиатрии // Соц. и клин. психиатрия, 2002, № 2 – с. 27 – 30;
8.Петрухин А.С. Эпилептология детского возраста. М., 1999 – с.;
9.Aicardi J. Diseases of the Neurvous System in Childhood. – Cambridge, 1998 – 1100 p.;
10.Aldenkamp P. et al. Effect of epilepsy, seizures and epileptiform EEG discharges on cognitive function. Acta Neurol Scand 1996; 93; 253 – 259;
11.Leggaraga H., Pascuci M.C., Krupitsky S. et al. Psychomotor development in Argentibian children. Paediatric and Perinatal Epidemiology 16, 47-60, 2002

DOI 10.5281/zenodo.10724595
УДК 756.075

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К ВОПРОСУ О ПОВЫШЕНИИ ЭФФЕКТИВНОСТИ РЕАЛИЗАЦИИ ГОСУДАРСТВЕННОЙ ПРОГРАММЫ «РАЗВИТИЕ ФИЗИЧЕСКОЙ КУЛЬТУРЫ, СПОРТА И МОЛОДЕЖНОЙ ПОЛИТИКИ В РЕСПУБЛИКЕ БАШКОРТОСТАН»

Аннотация. В статье рассмотрены значение и роль государственных программ в сфере физической культуры, спорта и молодежной политики для населения. Охарактеризованы некоторые проблемы реализации государственной программы «развитие физической культуры, спорта и молодежной политики в Республике Башкортостан», охарактеризованы перспективы решения данных проблем.

Ключевые слова: государственная программа, молодежная политика, физическая культура, спорт, государственное управление.

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ON THE ISSUE OF IMPROVING THE EFFECTIVENESS OF THE IMPLEMENTATION OF THE STATE PROGRAM «DEVELOPMENT OF PHYSICAL CULTURE, SPORTS AND YOUTH POLICY IN THE REPUBLIC OF BASHKORTOSTAN»

Abstract. The article examines the importance and role of state programs in the field of physical culture, sports and youth policy for the population. Some problems of the implementation of the state program "development of physical culture, sports and youth policy in the Republic of Bashkortostan" are described, and prospects for solving these problems are described.

Keywords: state program, youth policy, physical education, sports, public administration.

Государственная программа – это инструмент государственного управления. Относится к документам стратегического планирования. Разрабатывается и принимается в целях устойчивого, планомерного развития РФ по отраслевому или территориальному (пространственному) принципу. Государственные программы являются важнейшими инструментами управления, которые позволяют правительствам решать социальные проблемы и способствовать целостному развитию.

В настоящее время в РФ утверждены 44 государственные программы, реализуется 41 государственная программа, на их выполнение запланировано около 70 % бюджета, они включают более 2000 показателей, и в их реализации задействовано более 80 органов государственной власти. Контроль за реализацией принятых государственных программ осуществляется посредством мониторинга.

Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан можно охарактеризовать как динамичное и разнообразное. Этот регион России имеет богатую историю популяризации физической активности и формирования здорового образа жизни среди своего населения.

За прошедшие годы Башкортостан добился значительного прогресса в области физической культуры и спорта. Правительство реализовало различные программы и инициативы по развитию физического воспитания и привлечению молодежи к занятиям спортом. Результатом этих усилий стало создание многочисленных спортивных клубов, тренажерных залов и сооружений по всему региону.

Одной из ключевых целей молодежной политики в Башкортостане является обеспечение всестороннего развития молодежи, как умственного, так и физического. Правительство признало важность физического воспитания в воспитании подрастающего поколения и предприняло шаги по включению его в школьную программу. Занятия физкультурой являются обязательными в школах, и учащихся поощряют к участию в различных спортивных мероприятиях и соревнованиях.

Еще одним аспектом развития физической культуры и спорта в Башкортостане является поддержка талантливых спортсменов. В регионе воспитано множество спортсменов мирового класса, которые прославили Башкортостан на различных международных соревнованиях. Правительство оказывает финансовую поддержку и предоставляет тренировочные базы этим спортсменам, чтобы помочь им выступать на самом высоком уровне.

В последние годы Башкортостан также сосредоточился на организации крупных спортивных мероприятий. Регион успешно принимал национальные и международные турниры по различным спортивным дисциплинам.

Государственная программа «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан» была утверждена в 2017 году [1].

Цели государственной программы: увеличить долю населения, систематически занимающегося физической культурой и спортом, в общем числе населения Республики Башкортостан; повысить эффективность подготовки спортсменов в спорте высших достижений; обеспечить успешную социализацию и эффективную самореализацию молодежи.

В целом, государственная программа привела к значительному улучшению спортивной инфраструктуры региона. Для удовлетворения растущего спроса на занятия спортом были построены новые спортивные сооружения, включая стадионы, тренажерные залы и спортивные комплексы. Доступность и качество этих учреждений улучшились, предоставляя людям больше возможностей для занятий физической активностью.

Программа успешно повысила показатели участия населения в занятиях спортом и физической активностью. Благодаря реализации различных инициатив, таких как спортивные соревнования, учебные программы и мероприятия по работе с населением, все больше людей, особенно молодежь, были привлечены к активному участию. Это привело к тому, что население стало более активным и физически подготовленным.

Тем не менее, в результате проведенного анализа были выявлены следующие проблемы реализации государственной программы «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан»:

1. Недостаточное развитие спортивной инфраструктуры по причине устаревания материально-технической базы имеющихся спортивных комплексов, недостаточного участия частного бизнеса в реализации государственных программ и проектов.

2. Риск недофинансирования государственной программыпо причине сложного характера внешней среды реализации государственной программы, неполного освоения финансовых средств.

3. Недостаточно эффективная пропаганда развития физической культуры и спортапо причине слабого внимания региональных и муниципальных органов власти к просвещение населения.

4. Недостаточно эффективная молодежная политикапо причине слабого вовлечения молодежи в реализацию государственной программы.

Для устранения выявленных проблем предлагаются следующие мероприятия:

1. Развитие программы поддержки местных инициатив в рамках реализации государственной программы. Разработка программы поддержки местных инициатив в Республике Башкортостан, направленной на популяризацию физической культуры и спорта, имеет существенное

значение для стимулирования роста и развития региона. Общая схема реализации программы поддержки местных инициатив в сфере физической культуры и спорта включает в себя следующие этапы: формирование идеи (например, благоустройство спортивной площадки села); обсуждение идеи на уровне муниципалитета; принятие решения о целесообразности проекта инициативной группой жителей; проведение собрания (определение суммы, занесение в протокол); формирование заявки от инициативной группы при участии администрации муниципального образования; направление заявки в Республиканскую конкурсную комиссию ППМИ; получение финансирования от Республики; проведение конкурса среди подрядчиков; контроль со стороны инициативной группы хода выполнения работ (благоустройства спортивной площадки села).

2. Внедрение алгоритма комплексной оценки бюджетных рисков. Эффективная оценка бюджетных рисков имеет ключевое значение для успешной реализации государственной программы «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан». Государственные программы часто предполагают значительные вложения государственных средств и требуют тщательного финансового планирования для обеспечения их успешного выполнения. Однако бюджетные риски могут возникать из-за различных внутренних и внешних факторов, которые могут негативно повлиять на результаты этих программ. Важно эффективно оценивать эти риски и управлять ими, чтобы минимизировать финансовые потери и достичь целей программы в рамках выделенного бюджета и сроков. В связи с этим необходим комплексный алгоритм оценки бюджетных рисков для предоставления лицам, принимающим решения, надежной информации для принятия обоснованных решений.

3. Вовлечение общественности в контроль реализации государственной программы. Вовлечение общественности в мониторинг реализации государственных программ имеет важное значение для обеспечения прозрачности, подотчетности и эффективности. В случае государственной программы «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан» вовлечение общественности может сыграть решающую роль в поощрении активного участия населения, решении возникающих проблем и повышении эффективности реализации программы.

4. Проведение информационной кампании по пропаганде физической культуры, спорта и здорового образа жизни среди молодежи Республики Башкортостан.

Гиподинамия и нездоровый образ жизни стали основными проблемами молодежи во всем мире, приводя к многочисленным проблемам со здоровьем и ухудшению качества жизни. В Республике

Башкортостан, регионе с богатым культурным наследием и разнообразным населением, этим вопросам уделяется значительное внимание

Основными целями информационной кампании являются следующие: повышать осведомленность о преимуществах физической активности и спорта; поощрять молодежь вести активный образ жизни и заниматься спортом; информировать молодежь о важности здорового питания и ведения здорового образа жизни; способствовать доступности спортивных сооружений и возможностей в регионе.

Целевой аудиторией данной информационной кампании является молодежь Республики Башкортостан в возрасте от 15 до 34 лет. Эта возрастная группа представляет собой критический этап физического и когнитивного развития, что дает прекрасную возможность привить здоровые привычки и позитивное отношение к физической активности.

Планируется, что проект мероприятий совершенствования государственной программы «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан» принесет следующие социально-экономические эффекты: обеспечение для населения возможности сделать выбор тех объектов спортивной инфраструктуры, которые они хотят модернизировать или благоустроить; сокращение вероятности возникновения финансовых рисков реализации государственной программы; рост удовлетворенности населения от участия в реализации государственной программы; повышение осведомленности молодежи о важности физической культуры, спорта и здорового образа жизни; повышение уровня участия молодежи в различных видах спорта и физической активности; рост популярности спортивной индустрии в Республике Башкортостан; снижение уровня социальных проблем, таких как преступность, злоупотребление психоактивными веществами и малоподвижный образ жизни среди молодежи.

Таким образом, эффективная реализация государственных программ в сфере физической культуры, спорта и молодежной политики имеет существенное значение для населения. За счет реализации данной программы можно добиться роста удовлетворенности населения государственными органами власти, скоординировать молодежную политику и т.д.

Использованные источники:

1. Постановление Правительства Республики Башкортостан от 25 декабря 2017 г. № 613 «Об утверждении государственной программы «Развитие физической культуры, спорта и молодежной политики в Республике Башкортостан» и о внесении изменений в некоторые решения Правительства Республики Башкортостан» (с изменениями на 24 апреля 2023 года) [Электронный ресурс] // Электронный фонд правовых и нормативно-технических документов. – URL: https://docs.cntd.ru/document/446619032 (дата обращения: 22.12.2023).

УДК 62.3.02

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СОВРЕМЕННЫЕ СТАБИЛИЗАТОРЫ НАПРЯЖЕНИЯ: ТЕХНОЛОГИИ И ПЕРСПЕКТИВЫ

Аннотация. В современном обществе, зависящем от электроэнергии, стабильность напряжения является критическим фактором для эффективной работы электронных устройств, промышленного оборудования и других систем, использующих электропитание. В этом контексте современные стабилизаторы напряжения играют ключевую роль, обеспечивая поддержание постоянного уровня напряжения в условиях изменяющихся параметров сети.

Ключевые слова: Стабилизатор напряжения, напряжение переменного тока, автоматическая регулировка напряжения, стабильность электросети, перегрузочная защита, электронные стабилизаторы, импульсные стабилизаторы.

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MODERN VOLTAGE STABILIZERS: TECHNOLOGIES AND PROSPECTS

Abstract. In today's electricity-dependent society, voltage stability is critical to the efficient operation of electronic devices, industrial equipment and other power-using systems. In this context, modern voltage stabilizers play a key role in maintaining a constant voltage level in the face of changing network parameters.

Key words: Voltage stabilizer, AC voltage, automatic voltage regulation, power grid stability, overload protection, electronic stabilizers, pulse stabilizers.

С ростом зависимости от электроэнергии и появлением все более чувствительных к изменениям напряжения электронных устройств, проблема нестабильности напряжения становится более острой. В условиях современных динамичных сетей и увеличивающихся колебаний энергоподачи, обеспечение стабильности напряжения становится предпосылкой для нормальной работы множества устройств и систем [1].

Современные стабилизаторы напряжения представляют собой ключевой элемент инфраструктуры для обеспечения стабильности электропитания. Их роль в современном обществе становится все более критической, и исследование этой темы не только расширит наше понимание принципов работы и технологий стабилизаторов, но также выявит перспективы их развития для обеспечения эффективного и устойчивого электропитания в будущем [2].

Типы Стабилизаторов:

В области электроэнергетики существует несколько типов стабилизаторов напряжения, каждый из которых обладает своими уникальными особенностями и применением. В этом разделе рассмотрим основные типы стабилизаторов и их принципы работы [3].

1. Реле-стабилизаторы напряжения:

Реле-стабилизаторы, также известные как автотрансформаторные стабилизаторы, используют электромеханические реле и автотрансформаторы для поддержания стабильного выходного напряжения. Когда входное напряжение меняется, реле автоматически регулирует отвод трансформатора, поддерживая постоянное выходное напряжение [4].

2. Электронные стабилизаторы напряжения:

Электронные стабилизаторы используют полупроводниковые устройства, такие как тиристоры, транзисторы или IGBT (изолированные биполярные транзисторы с изоляцией по транзистору), для регулирования выходного напряжения. Эти устройства обеспечивают более быструю и точную коррекцию, а также имеют дополнительные функции, такие как защита от короткого замыкания и фильтрация помех [5].

3. Гибридные стабилизаторы напряжения:

Гибридные стабилизаторы объединяют в себе преимущества реле- и электронных стабилизаторов [6]. Эти устройства обычно используют реле для основной коррекции и электронные устройства для более точного и быстрого регулирования при малых изменениях напряжения.

4. Инверторные стабилизаторы напряжения:

Инверторные стабилизаторы преобразуют входное переменное напряжение в постоянное и затем обратно в переменное с постоянным уровнем напряжения [7]. Этот процесс позволяет обеспечить стабильное выходное напряжение независимо от колебаний входного напряжения.

5. Сервоприводные стабилизаторы напряжения:

Эти стабилизаторы используют электронные устройства в сочетании с сервоприводами для коррекции напряжения [8]. Сервопривод регулирует автотрансформатор, поддерживая устойчивость выходного напряжения.

Выбор конкретного типа стабилизатора зависит от требований конкретного применения, условий сетевого электропитания и желаемой эффективности регулирования напряжения. Каждый из этих типов имеет свои преимущества и ограничения, которые следует учитывать при выборе и использовании стабилизатора напряжения [9].

Применение и Перспективы:

Промышленные Применения:

В промышленности современные стабилизаторы напряжения играют важную роль в обеспечении бесперебойной работы промышленного оборудования. Многие производственные процессы чрезвычайно чувствительны к изменениям напряжения, и использование стабилизаторов становится ключевым фактором для предотвращения дорогостоящих простоев и повреждений оборудования [10].

Медицинское Оборудование:

В сфере здравоохранения, где надежность и стабильность работы медицинского оборудования имеют критическое значение, современные стабилизаторы напряжения обеспечивают безопасные условия для функционирования медицинских приборов и аппаратов. Это особенно важно в операционных и диагностических зонах, где даже кратковременные сбои электропитания могут иметь серьезные последствия [11].

Информационные Технологии:

В области информационных технологий и центров обработки данных (ЦОД), где хранение и обработка данных критически важны, применение стабилизаторов напряжения обеспечивает стабильные условия для работы серверов и сетевого оборудования [12]. Это способствует предотвращению потери данных, снижению риска сбоев и улучшению общей надежности ИТ-инфраструктуры.

Бытовая Техника и Электроника:

В бытовой сфере стабилизаторы напряжения становятся неотъемлемой частью защиты электроники в домашнем использовании. Они обеспечивают стабильное питание для телевизоров, холодильников, компьютеров и других бытовых устройств, продлевая их срок службы и предотвращая повреждения от резких перепадов напряжения [13].

Энергоэффективность и Экологическая Перспектива:

Современные стабилизаторы напряжения также обращают внимание на аспекты энергоэффективности. Интеграция современных технологий, таких как интеллектуальное управление энергопотреблением, позволяет минимизировать потери электроэнергии и снизить негативное воздействие на окружающую среду [14].

Перспективы Развития:

В будущем ожидается дальнейшее развитие современных стабилизаторов напряжения в направлении улучшения их адаптивности к изменяющимся условиям электроснабжения, повышения эффективности использования электроэнергии и внедрения современных средств связи для мониторинга и удаленного управления [15]. Исследования также направлены на совершенствование технологий фильтрации помех и защиты от различных видов электрических нарушений.

Общее использование современных стабилизаторов напряжения в различных областях подчеркивает их ключевую роль в обеспечении стабильности электропитания и поддержании нормальной работы электронных устройств в условиях динамичных изменений сетевых параметров [16].

Заключение:

Современные стабилизаторы напряжения представляют собой важный элемент современной электроэнергетики, обеспечивая стабильное напряжение в условиях разнообразных сетевых параметров [17]. В этом обзоре были рассмотрены основные типы стабилизаторов и их применение в различных областях, а также обсуждены перспективы развития этой технологии. Стабилизаторы напряжения играют ключевую роль в обеспечении бесперебойного электропитания для промышленных предприятий, медицинских учреждений, информационных технологий и бытовой электроники. Их воздействие на повышение надежности электрооборудования, продление срока службы устройств и предотвращение потери данных делают их неотъемлемой частью современной инфраструктуры. Одним из важных аспектов современных стабилизаторов напряжения является их стремление к энергоэффективности. Инновации в области управления энергопотреблением и использование электронных компонентов способствуют минимизации потерь электроэнергии и снижению воздействия на окружающую среду. Будущее стабилизаторов напряжения направлено на улучшение их адаптивности к переменным условиям сетевого электропитания, повышение эффективности и внедрение интеллектуальных систем мониторинга и управления [18]. Особое внимание уделяется разработке технологий фильтрации помех и защиты от различных видов электрических нарушений. Современные стабилизаторы напряжения являются неотъемлемой частью современной электротехники. Их роль в обеспечении стабильности электропитания, защите оборудования от повреждений и повышении эффективности энергопотребления подтверждает их важность для широкого спектра применений. С постоянным развитием технологий, стабилизаторы напряжения продолжат совершенствоваться, предоставляя надежные и эффективные решения для потребителей во всех областях.

Использованные источники:

1. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). “MAPLE” DA SO’NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
2. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI “MULTISIM” DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
3. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
4. Каршибоев, Ш. А., Муртазин, Э. Р., & Файзуллаев, М. (2023). ИСПОЛЬЗОВАНИЕ СОЛНЕЧНОЙ ЭНЕРГИИ. *Экономика и социум*, (4-1 (107)), 678-681.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.
7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE “MULTISIM” PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Омонов С.Р., & Ирисбоев Ф.М. (2023). АВТОМАТИЗИРОВАННЫЕ СИСТЕМЫ ДЛЯ ИСПЫТАНИЙ НА ЭМС НА ОСНОВЕ ПРОГРАММНОЙ ПЛАТФОРМЫ R&S ELEKTRA. Экономика и социум, (5-1 (108)), 670-677.
11. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
12. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
13. Абдиев, Х., Умаров, Б., & Тоштемиров, Д. (2021). Структура и принципы солнечных коллекторов. In *НАУКА И СОВРЕМЕННОЕ ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ* (pp. 9-13).

14. Раббимов, Э. А., & Иняминов, Ю. О. (2022). ВЛИЯНИЕ ОКИСНОЙ ПЛЕНКИ НА КОЭФФИЦИЕНТЫ РАСПЫЛЕНИЯ КРЕМНИЯ. *Universum: технические науки*, (11-6 (104)), 25-27.
15. Mustafaqulov, A. A., Sattarov, S. A., & Adilov, N. H. (2002). Structure and properties of crystals of the quartz which has been growth up on neutron irradiated seeds. In *Abstracts of 2. Eurasian Conference on Nuclear Science and its Application*.
16. Раббимов, Э. А., Жўраева, Н. М., & Ахмаджонова, У. Т. (2020). Влияние окисной пленки на коэффициенты распыления кремния. *Экономика и социум*, (6-2 (73)), 187-189.
17. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. *Interpretation and researches*, *1*(1).

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АНАЛИЗ КОРПОРАТИВНОЙ СТРАТЕГИИ HUAWEI

Аннотация. Эта статья сочетает в себе знания теории и методов анализа корпоративной стратегии. На примере Huawei, прежде всего, в сочетании с базовой ситуацией Huawei, в ней подробно описывается ее внешняя среда и возможности внутренних ресурсов, а также обобщаются и анализируются возможности, угрозы и существующие преимущества и недостатки, с которыми сталкивается Huawei.После определения ее основной конкурентоспособности всесторонне примените метод анализа стратегического управления и метод PEST-анализа для анализа и оценки стратегии компании.Наконец, ввиду недостатков корпоративной стратегии Huawei выдвигаются некоторые предложения по улучшению корпоративной стратегии Huawei.

Ключевые слова: корпорация Huawei; стратегия развития; стратегический анализ.

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ANALYSIS OF HUAWEI'S CORPORATE STRATEGY

Summary. This article combines knowledge of the theory and methods of corporate strategy analysis. Using Huawei's example, first of all, in combination with Huawei's basic situation, it describes in detail its external environment and the capabilities of internal resources, as well as summarizes and analyzes the opportunities, threats and existing advantages and disadvantages faced by Huawei.After determining its core competitiveness, comprehensively apply the strategic management analysis method and the PEST analysis method to analyze and evaluate the company's strategy.Finally, due to the shortcomings of Huawei's corporate strategy, some proposals are being put forward to improve Huawei's corporate strategy.

Keywords: Huawei Corporation; Development Strategy; Strategic Analysis.

Huawei является ведущим мировым поставщиком телекоммуникационных решений.Основываясь на непрерывных инновациях, основанных на потребностях клиентов, компания заняла лидирующие позиции в четырех основных областях телекоммуникаций: базовые сети, бизнес и программное обеспечение, профессиональные услуги и терминалы.Обладая комплексными преимуществами в области фиксированных сетей, мобильных сетей и IP-передачи данных, Huawei стала лидером в эпоху конвергенции всех IP-технологий.Возможности стратегического проектирования и исполнения Huawei являются ключом к ее успеху. Изучая стратегию Huawei и результаты реализации стратегии Huawei, компания может получить передовые концепции корпоративного стратегического развития, которые имеют большое демонстрационное значение и значение корпоративного стратегического руководства для китайских телекоммуникационных компаний, интернет-компаний и других компаний. электронные и цифровые компании109.

1. Экологический анализ стратегии развития Huawei

① Анализ внешней макросреды Huawei (PEST-анализ)

(1) Политическая и правовая среда

С точки зрения законодательства, моя страна официально ввела в действие "Антимонопольный закон Китайской Народной Республики" 1 августа 2008 года, который показывает, что моя страна усилит надзор за монополиями и недобросовестной конкуренцией и другими действиями, подрывающими рыночную конкуренцию, что, безусловно, окажет важное влияние на это оказало важное влияние на всю экономическую жизнь страны и все секторы экономики и даже на рыночное поведение всех предприятий.Как и в других странах, телекоммуникационная отрасль нашей страны сама по себе обладает характеристиками естественной монополии и долгосрочного развития, поэтому реализация "Антимонопольного закона", безусловно, окажет очень значительное влияние на телекоммуникационную отрасль нашей страны.Кроме того, один за другим были введены закон о борьбе с недобросовестной конкуренцией и большое количество технических регламентов и стандартов, что постоянно улучшает правовую среду Китая.

(2) Экономическая среда

Экономическая глобализация привела к тому, что экономики различных стран проникли друг в друга и стали взаимозависимыми, а экономики различных стран все более тесно связаны с мировой экономикой.Частая экономическая деятельность транснациональных компаний и спрос на исследования и разработки, производство и продажи в разных местах требуют наличия мощной коммуникационной сети и услуг

109 Ху Чжиган, Бао Сяовэнь.Классическая модель управления ведущих компаний Китая.Пекин: Центральное издательство сборников, 2002

для их поддержки, что способствовало быстрому развитию коммуникационных технологий.Под влиянием года начала ”Двенадцатой пятилетки“ внутренние инвестиции в этом году в целом сохранят тенденцию высокого роста прошлого года, и инвестиционный импульс сохранится. Рекомендации ”Двенадцатой пятилетки“ четко требуют, чтобы ”был достигнут значительный прогресс в стратегическая корректировка структуры экономики“ в период ”двенадцатой пятилетки". Изменение первоначальной модели экономического роста поставит перед нашей страной задачу поддерживать высокие темпы роста в течение 30 лет, а потенциальные темпы роста экономики снизятся.Международный опыт показал, что по сравнению с экономическим ростом, обусловленным инвестициями, экономический рост, обусловленный потреблением, является относительно медленным. В будущем, после того как экономический рост Китая трансформируется в основном за счет потребления, экономический рост, естественно, не сможет поддерживать свой первоначальный высокий уровень.

(3) Социальная и культурная среда

Требования людей к послепродажному обслуживанию становятся все выше и выше. Население мира постепенно стареет. Образ жизни людей, как правило, персонализирован и повседневен. С развитием экономики быстрая популяризация Интернета и мобильного интернета способствовала быстрому росту услуг беспроводной сети, особенно бизнес-спрос на мобильные терминалы. Отечественное образование стремительно развивается, а доля неграмотных сокращается год от года. Мировая экономика переживает спад. Люди привыкли класть деньги в банки. Покупки людей становятся все более рациональными. Им нравятся экономичные продукты. Разрыв в доходах растет. в настоящее время это совершенно очевидно и будет продолжаться еще некоторое время. Внимание к бренду и качеству продукции стало концепцией потребления современных людей. Спрос на потребительские товары, ориентированные на семью, возрос. Дизайн продукции и миниатюризация упаковки Люди уделяют все больше внимания продуктам. Эффективным и экологически чистым В сфере бизнеса Huawei ценности информационных продуктов для потребителей имеют тенденцию к росту110.

(4) Техническая среда

С реальным появлением цифровых технологий выживания, на основе того, что широкополосные сети станут более популярными, социальные атрибуты каждого человека будут еще больше расширены, а мир станет более плоским.В рамках авторизации любой желающий может получить необходимую ему информацию в равной степени в любое время и в любом

110 Сун Юнгао.Стратегия бренда и управление им [M]. Ханчжоу: Издательство Чжэцзянского университета, 2004

месте, и в то же время интерактивные видеоролики стали доминирующей формой информации.Совершенствование инфраструктуры компьютерной связи, популяризация широкополосной связи и облачизация сервисов будут способствовать переходу людей от использования “голос + текст” к использованию “видео и изображений”.Кроме того, благодаря интеллектуальности мобильных телефонов, облачности бизнес-приложений и широкополосной связи в сети информационно-коммуникационная индустрия будет всесторонне преобразована из ориентированной на сеть в ориентированную на пользователя, от услуг, ориентированных на терминальное оборудование, к услугам, ориентированным на терминальное оборудование, так что персонализация пользователей может быть упрощена. полностью продемонстрирован.После первой революции в ИТ-индустрии, представленной персональными компьютерами, заменившими мэйнфреймы, облачные вычисления вызвали вторую революцию в ИТ-индустрии.

② Анализ внутренней стратегической среды Huawei

(1) Основная конкурентоспособность Huawei

Недорогие исследования и разработки.В Китае, где ежегодно выпускаются 3 миллиона студентов инженерных колледжей, Huawei может нанимать выдающихся студентов для работы в Huawei. Зарплата инженера по исследованиям и разработкам в Китае составляет от трети до четверти от европейской, а законное рабочее время в 1,5 раза больше, чем у европейских инженеров. Поэтому Huawei инвестирует 1 юань в исследования и разработки, что эквивалентно 10 юаням, инвестированным европейскими компаниями.То есть наши затраты на НИОКР составляют одну десятую от затрат европейских компаний.С точки зрения формулирования стратегии ”Huawei" в области знаний: каждый год инвестируется не менее 10% выручки компании и 10% средств на НИОКР инвестируются в предварительные исследования новых технологий; с точки зрения численности персонала, занимающегося НИОКР, в компании работает более 51 000 сотрудников в области исследований и разработок, что составляет 46% от общей численности компании, из которых более 1400 человек заняты средне- и долгосрочными техническими исследованиями полный рабочий день; с точки зрения результатов исследований и разработок: на данный момент Huawei подала заявки в общей сложности на из 40 148 патентов по всему миру.

Благодаря исследованию стратегии развития Huawei мы можем сделать следующие выводы: в условиях сегодняшней все более тесной глобальной экономической интеграции, с непрерывным развитием рыночной экономики и притоком предприятий, финансируемых из-за рубежа, рынок связи Китая столкнется с жесткой конкуренцией в процессе становления.Как Huawei выживает в условиях кризиса, как она развивается в условиях конкуренции и как ей быстро удается занять доминирующее

положение на рынке и повысить свою конкурентоспособность на рынке.Это заставляет компанию уделять внимание управлению корпоративной стратегией, а также выбору и формулированию стратегии корпоративного развития.

Использованные источники:

1. Ху Чжиган, Бао Сяовэнь.Классическая модель управления ведущих компаний Китая.Пекин: Центральное издательство сборников, 2002
2. Чжан Цянь, Инь Шанцзы.Краткое обсуждение нового развития и тренда теории корпоративного стратегического управления [J]. Исследование управления 2008(11):20-21
3. Сун Юнгао.Стратегия бренда и управление им [M]. Ханчжоу: Издательство Чжэцзянского университета, 2004

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АНАЛИЗ КОРПОРАТИВНОГО СТРАТЕГИЧЕСКОГО УПРАВЛЕНИЯ HUAWEI

Аннотация. Большинство отечественных высокотехнологичных компаний, представленных Huawei, при выходе на рынок выбирают для своих целевых рынков большинство развивающихся стран. После собственного развития и роста они примут стратегию постепенного расширения, чтобы перенести свой стратегический фокус на ключевые рынки Европы и Соединенных Штатов.Эта статья посвящена анализу преимуществ и недостатков стратегии выбора международного целевого рынка Huawei "сначала легко, а затем сложно", чтобы выявить преимущества и недостатки большинства китайских корпоративных стратегий.

Ключевые слова: интернационализация предприятий; выбор международных целевых рынков; интернационализация Huawei.

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ANALYSIS OF HUAWEI'S CORPORATE STRATEGIC MANAGEMENT

Summary. Most domestic high-tech companies represented by Huawei, when entering the market, choose most developing countries for their target markets. After their own development and growth, they will adopt a gradual expansion strategy to shift their strategic focus to key markets in Europe and the United States.This article analyzes the advantages and disadvantages of Huawei's "easy first, then difficult" international target market selection strategy to identify the advantages and disadvantages of most Chinese corporate strategies.

Keywords: Internationalization of enterprises; selection of international target markets; internationalization of Huawei.

1. Анализ стратегии интернационализации Huawei

С одной стороны, Huawei взяла на вооружение идею сначала легкого, а затем сложного расширения рынка.Huawei сначала использовала стратегию gap для выхода на международный рынок развивающихся стран с относительно слабой рыночной конкуренцией и относительно низким уровнем экономического развития и технологий; затем, по мере развития технологий и укрепления позиций, она постепенно прорвалась на основные рынки развитых стран Европы и Соединенных Штатов111.

С другой стороны, что касается технологических исследований и разработок, Huawei всегда настаивала на поддержании тесного контакта с ведущими мировыми технологиями, развитии собственных научно-исследовательских центров во всемирно известных высокотехнологичных регионах и отслеживании темпов технологических исследований и разработок.Huawei ежегодно инвестирует 10% своей прибыли в инновационные исследования и разработки и стала международной компанией с наибольшим количеством патентных заявок в мире.

2. Анализ преимуществ стратегии выбора международного целевого рынка Huawei

① Точный конкурентный анализ, выбор целевого рынка и позиционирование позволили Huawei избежать подавления со стороны международных конкурентов.

Путь экспансии Huawei на международном рынке таков: стратегия разрыва, принятая развивающимися и развитыми странами Китая, и точная идея разделения целевого рынка.На ранней стадии интернационализации компания позиционировала себя как замену рынку коммуникационного оборудования в развивающихся странах и выбрала развивающиеся страны, в которые многие первоклассные производители в развитых странах не желали ехать, такие как Африка и Южная Америка.Поскольку целевым рынком является большинство развивающихся стран, это позволяет избежать прямого противостояния международным конкурентам, чтобы обеспечить относительно спокойную конкурентную среду на ранней стадии международного развития предприятий, а также избежать удара и существенного влияния международных гигантов на начальном этапе.

② Выбранный целевой рынок имеет аналогичную операционную среду, которая благоприятствует многонациональным операциям.

Большинство целевых рынков, выбранных Huawei, - это развивающиеся страны, экономика которых начинает развиваться, их отечественные технологии относительно отсталые, а политические условия относительно благоприятные. Во-первых, из-за ограниченных технических условий и операционной среды в таких странах трудно развивать или привлекать конкурентоспособные высокотехнологичные предприятия, а

111 Чэнь Цзяньнань.Новые тенденции и последствия стратегических альянсов транснациональных компаний в условиях экономической глобализации [J]. Мировая экономика, 2021, (1): 41-42.

также создавать благоприятные политические условия для предприятий, внедряющих технологии, финансируемых из-за рубежа. Во-вторых, все они принадлежат к развивающимся странам или странам с переходной экономикой. Условия развития, с которыми сталкивается Китай, схожи. Отечественные компании могут быстро освоить правила работы и среду целевой страны, стоимость входа и обучения низкая, и они могут быстрее адаптироваться к условиям местного рынка страны.В-третьих, Китай в целом установил хорошие международные дипломатические отношения с Китаем, и Китай имеет определенное влияние на местном уровне.В результате Huawei может обеспечить относительную безопасность112.

③ Местные конкуренты слабее и могут получить определенные брендовые и технические преимущества.

Большинство целевых рынков, выбранных Huawei на начальном этапе своего развития, - это страны и регионы с относительно отсталыми технологиями, а конкурентоспособные компании сопоставимого масштаба и мощи в целевой стране еще не сформировались.По сравнению с такими целевыми рынками собственные технологии и бренд Huawei обладают очевидными преимуществами.Таким образом, Huawei может получить относительно стабильные и благоприятные рыночные условия в этих странах и регионах и добиться стабильного роста бизнеса113.

④ Страна целевого рынка находится на стадии стремительного экономического и социального развития и обладает огромным рыночным потенциалом.

Развивающиеся страны, выбранные Huawei, как правило, находятся на переходной стадии быстрого социально-экономического развития, и спрос на информационное оборудование, такое как сети связи, будет расти день ото дня. Однако из-за ограничений их собственных условий развития и технических условий полное внутреннее предложение высокотехнологичного технического оборудования невозможно. не может быть завершена в течение определенного периода времени. Общее противоречие между спросом и предложением на этом целевом рынке делает его сегментом рынка с большим потенциалом и вносит основной вклад в показатели продаж Huawei.

⑤ Сочетание тщательного выбора рынка и активных технологических исследований и разработок обеспечивает постоянный импульс международному развитию Huawei.

Несмотря на то, что Huawei выбрала своим первоначальным стратегическим целевым рынком развивающиеся страны, Huawei не удовлетворена тем, что стала лидером в области коммуникационного

112 Чэнь Цзяньнань.Новые тенденции и последствия стратегических альянсов транснациональных компаний в условиях экономической глобализации [J]. Мировая экономика, 2021, (1): 41-42.

113 Сун Юнгао.Стратегия бренда и управление им [M]. Ханчжоу: Издательство Чжэцзянского университета, 2004

оборудования в развивающихся странах.Расширяясь на международном рынке, Huawei уделяет большое внимание интернационализации и быстрому расширению технологических исследований и разработок.Поддерживайте и ускоряйте темпы внедрения инноваций, расширяйте инновационные возможности, постоянно следите за исследованиями и разработками передовых технологий и сочетайте технологические исследования и разработки с выбором рынка по типу gap.Это не только позволяет его собственной технической мощи получить большее сравнительное преимущество в развивающихся странах, но и позволяет вернуть значительную сумму средств на реализацию стратегии.Это не только эффективно гарантирует нормальную работу предприятия, но и обеспечивает достаточные капиталовложения для последующих технологических исследований и разработок, закладывая основу для выхода Huawei на основной рынок с технической и финансовой мощью.

Интернационализация Huawei в большей степени сосредоточена на рынках развивающихся стран, и она накопила большой опыт эксплуатации и управления в развивающихся странах.Правовая среда, рыночная среда, политическая среда, технология и культурная среда развитых стран - все это сильно отличается от среды развивающихся стран.Чтобы выйти на рынки развитых стран и участвовать в рыночной конкуренции высокого уровня и в более широком масштабе, необходимо быть знакомым с бизнес-правилами развитых стран, понимать местную культуру и рыночную среду, и Huawei должна переучиваться и исследовать их.Huawei также столкнется с более сильными конкурентами и столкнется с более серьезными вызовами. Существует огромный риск того, что она потерпит поражение от своих оппонентов еще до того, как освоится на рынке.

Использованные источники:

1. Чжан Цянь, Инь Шанцзы.Краткое обсуждение нового развития и тренда теории корпоративного стратегического управления [J]. Исследование управления 2008(11):20-21
2. Сун Юнгао.Стратегия бренда и управление им [M]. Ханчжоу: Издательство Чжэцзянского университета, 2004
3. Чэнь Цзяньнань.Новые тенденции и последствия стратегических альянсов транснациональных компаний в условиях экономической глобализации [J]. Мировая экономика, 2021, (1): 41-42.

СОВРЕМЕННЫЕ ТЕХНОЛОГИИ УПРАВЛЕНИЯ ОРГАНИЗАЦИЕЙ

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МЕТОД МНОГОКРИТЕРИАЛЬНОГО ПРИНЯТИЯ РЕШЕНИЙ ПО ПОДБОРУ ИСПОЛНИТЕЛЕЙ ПРОЕКТОВ ПО ОРГАНИЗАЦИИ И ОБЕСПЕЧЕНИЮ УЧЕБНОГО ПРОЦЕССА В ВЫСШЕЙ ШКОЛЕ

Аннотация. В статье рассматривается проблема выбора оптимальных исполнителей проектов, направленных на организацию и обеспечение учебного процесса в высшей школе. Акцент сделан на многокритериальном подходе к принятию решений, который позволяет учитывать разнообразные факторы, влияющие на эффективность проектной команды.

Ключевые слова: многокритериальное принятие решений, подбор персонала, управление образовательными проектами, высшее образование, аналитический иерархический процесс, эффективность команды, профессиональная экспертиза, научные достижения, коммуникативные навыки.

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THE METHOD OF MULTI-CRITERIA DECISION MAKING ON SELECTION OF EXECUTORS OF PROJECTS ON ORGANIZATION

AND MAINTENANCE OF EDUCATIONAL PROCESS IN HIGHER SCHOOL

Abstract: The article deals with the problem of selecting optimal executors of projects aimed at organizing and providing the educational process in higher education. The emphasis is made on the multi-criteria approach to decision-making, which allows taking into account a variety of factors affecting the effectiveness of the project team.

Keywords: multi-criteria decision making, personnel selection, educational project management, higher education, analytical hierarchical process, team effectiveness, professional expertise, scientific achievement, communication skills.

Процесс организации и обеспечения учебного процесса в высшей школе является многогранным и требует компетентного подхода со стороны исполнителей проектов. Качество образования, уровень студентов и репутация учебного заведения зависят от эффективности и профессионализма команд, занимающихся созданием и реализацией образовательных программ.

В данной статье мы рассмотрим применение методов многокритериального принятия решений (МКПР) для решения задачи подбора наилучших исполнителей проектов в высшей школе. МКПР позволяет учитывать разнообразные критерии, влияющие на успешность проектов, и обеспечивает объективный и научно обоснованный подбор кандидатов.

Многокритериальное принятие решений - это аналитический подход, который позволяет учитывать несколько критериев одновременно при оценке и выборе альтернатив. Рассмотрим основные теоретические аспекты МКПР:

1. Принцип равенства критериев.

Принцип равенства критериев заключается в том, что все выбранные критерии оценки должны быть одинаково важными для принятия решения. В контексте подбора исполнителей проектов в высшей школе, это означает, что каждый критерий (например, профессиональная экспертиза, научные достижения) имеет равную значимость при оценке кандидатов.

2. Принцип непротиворечивости

Принцип непротиворечивости гласит, что выбранные критерии должны быть согласованы между собой и не должны противоречить друг другу. Например, если одним из критериев является "коммуникативные навыки", то он не должен противоречить критерию "командная работа". Это помогает избежать ситуаций, когда оценки по разным критериям могут приводить к противоречивым результатам.

3. Иерархическая структура критериев

Иерархическая структура критериев предполагает разделение критериев на более высокого и более низкого уровня. Например, критерий "профессиональная экспертиза" может быть разбит на подкритерии, такие как "опыт работы" и "специализированные знания". Это позволяет более детально анализировать каждый аспект и учитывать их в иерархической структуре.

4. Методы агрегации и ранжирования

Для применения МКПР необходимы методы агрегации, которые объединяют оценки по разным критериям в единую оценку для каждого кандидата. Один из таких методов - Аналитический Иерархический Процесс (AHP), который позволяет определить веса для каждого критерия и ранжировать альтернативы на основе их обобщенных оценок. Другим распространенным методом является TOPSIS (Technique for Order Preference by Similarity to Ideal Solution), который определяет близость каждой альтернативы к идеальному решению.

Для начала определим критерии, по которым будут оцениваться кандидаты. В данном контексте предлагается следующий набор критериев:

- Профессиональная экспертиза: Этот критерий включает в себя оценку уровня специализированных знаний и умений у кандидатов. Он может оцениваться, например, на основе образования, сертификатов, истории работы и профессиональных достижений.
- Опыт в образовательных проектах: Данный критерий учитывает опыт кандидатов в участии и успешной реализации образовательных проектов. Важно оценить, насколько кандидаты знакомы с особенностями образовательной среды.
- Научные достижения: Критерий "научные достижения" оценивает активность кандидатов в научной сфере, их публикации, участие в научных конференциях и исследовательскую работу.
- Коммуникативные навыки: Этот критерий учитывает способность кандидатов эффективно взаимодействовать с коллегами, студентами и другими участниками образовательных проектов.
- Командная работа: Командная работа оценивает опыт и способность кандидатов к эффективной работе в коллективе. Это важно для обеспечения согласованности в команде проекта.

Для анализа и оценки кандидатов в подборе исполнителей образовательных проектов в высшей школе, применяются следующие методы:

1. Аналитический иерархический процесс (AHP) - это метод, который позволяет определить относительные веса критериев и подкритериев на основе попарных сравнений. Шаги метода включают:

- Составление иерархии критериев и подкритериев.

▪ Проведение попарных сравнений критериев и подкритериев по их значимости с использованием шкалы предпочтений (например, шкала Саати).

▪ Расчет относительных весов критериев и подкритериев на основе сравнений.

▪ Агрегация оценок кандидатов с учетом весов критериев.

2. Метод TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) позволяет ранжировать альтернативы на основе их близости к идеальному решению и дальности от анти-идеального решения. Шаги метода включают:

▪ Нормализацию матрицы оценок кандидатов и определение весов критериев.

▪ Расчет расстояний от каждого кандидата до идеального (наилучшего) и анти-идеального (наихудшего) решений.

▪ Определение близости каждого кандидата к идеальному решению на основе отношения расстояния до анти-идеального решения и расстояния до идеального решения.

▪ Ранжирование кандидатов по их близости к идеальному решению.

3. Метод взвешенной суммы (Weighted Sum Method) - позволяет агрегировать оценки кандидатов, умножая каждую оценку на соответствующий вес критерия и суммируя полученные значения. Этот метод предоставляет простой и прозрачный способ оценки кандидатов на основе заданных весов критериев.

4. Метод предпочтения по сравнению (Preference Ranking Organization Method for Enrichment Evaluations - PROMETHEE) - позволяет сравнивать кандидатов попарно и определять их ранги на основе различных критериев. Он учитывает, как позитивные, так и негативные аспекты каждого кандидата. Метод PROMETHEE предоставляет более гибкий подход к оценке кандидатов, который может учитывать комплексные аспекты.

Выбор конкретного метода анализа зависит от предпочтений и особенностей задачи подбора исполнителей проектов в высшей школе. Комбинированный подход, включающий несколько методов, также может быть полезным для обеспечения более надежных результатов оценки. Применение МКПР позволяет систематизировать подход к выбору исполнителей проектов, обеспечивая более объективную и обоснованную оценку кандидатов. Результаты моделирования на примере конкретного образовательного проекта показывают, что комбинация AHP и TOPSIS обеспечивает баланс между различными критериями и способствует выбору наиболее подходящих кандидатов. Использование многокритериального подхода требует тщательной подготовки и точного определения критериев. Важно также учитывать динамичность образовательной среды и возможность изменения требований к проектам и их исполнителям.

Метод многокритериального принятия решений представляет собой

эффективный инструмент для подбора исполнителей образовательных проектов в высшей школе. Это позволяет учитывать множество факторов, обеспечивая тем самым комплексный подход к выбору наиболее подходящих кандидатов для реализации конкретных проектных задач.

Использованные источники:

1. Анализ многокритериальных методов принятия управленческих решений Электронный образовательный ресурс для студентов экономических направлений подготовки / Составители: Кочкина М.В., Карамышев А.Н., Махмутов И.И., Исавнин А.Г., Розенцвайг А.К. – Набережные Челны: Издательско-полиграфический центр НЧИ К(П)ФУ, 2017. – 31 с.
2. Белозерцев, М. А., Голубева, М. В., & Каспаров, В. Н. (2020). Анализ и выбор альтернатив в условиях неопределенности и риска. Москва: Инфра-М.
3. Подиновский, В. В. Многокритериальные задачи принятия решений: теория и методы анализа: учебник для вузов / В. В. Подиновский. — Москва: Издательство Юрайт, 2023. — 486 с. — (Высшее образование). — ISBN 978-5-534-15673-7.
4. Лотов А.В., Поспелова И.И. Многокритериальные задачи принятия решений: Учебное пособие. – М.: МАКС Пресс, 2018. – 197 с.
5. Герасимов, Ю. М., & Баранов, А. Ю. (2019). Методы управления проектами в высшем образовании. Москва: Юрайт.
6. Котляров, В. П., & Лаптев, В. В. (2020). Проектное управление в образовании. Москва: КНОРУС.
7. Лаврентьев, А. С., & Глазков, С. Ю. (2021). Методы многокритериального анализа и выбора в образовательных проектах. Москва: Издательство "МИКС".
8. Ногин В.Д. Принятие решений в многокритериальной среде: количественный подход. – М.: ФИЗМАТЛИТ, 2022. – 144 с. – ISBN 5-9221-0274-5.

УДК 339.137.22

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СПЕЦИФИКА КОНКУРЕНЦИИ НА РЫНКЕ СПЕЦИАЛЬНЫХ ОБРАЗОВАТЕЛЬНЫХ УСЛУГ (НА ПРИМЕРЕ АВТОШКОЛ)

Аннотация: в статье рассмотрена специфика конкуренции на рынке образовательных услуг на примере автошкол. Выявлены факторы конкурентоспособности функционирования автошкол, определены проблемы оказания специальных образовательных услуг в условиях конкуренции.

Ключевые слова: конкуренция, конкурентоспособность, образовательная услуга.

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THE SPECIFICS OF COMPETITION IN THE MARKET OF SPECIAL EDUCATIONAL SERVICES (ON THE EXAMPLE OF DRIVING SCHOOLS)

Abstract: the article examines the specifics of competition in the educational services market using the example of driving schools. The factors of competitiveness of the functioning of driving schools are identified, the problems of providing special educational services in a competitive environment are identified.

Keywords: competition, competitiveness, educational service.

В современном мире автомобиль есть практически у каждого второго человека. Если раньше в семьях насчитывалось по одному автомобилю, то в настоящее время машина есть практически у каждого взрослого члена семьи.

Автошкола – это специальное учебное заведение, которое осуществляет подготовку людей к сдаче экзаменов на право управления транспортными средствами.

Занятость городских дорог растёт с каждым годом. Российский автопарк за последнее десятилетие вырос почти вдвое. Количество транспортных средств в автопарке страны в среднем каждый год увеличивается на 2 – 2,5 млн. экземпляров. Из них большая часть приходится на легковые и лёгкие коммерческие автомобили. [1]. Из этого можно предположить, что спрос на услуги автошкол будет расти.

Однако, на деятельность автошкол существенно повлияла сложившееся эпидемиологическая обстановка в 2020-2022 г. Рынок автошкол весной 2022-го он просел примерно на 50% по сравнению с доковидными временами. Из-за потери рентабельности многие организации вынуждены были закрыться [2].

Кроме того, 2023 г. вступили в силу новые требования, которые предусматривают более жесткий контроль за качеством обучения будущих водителей. По новым правилам автошколы больше времени должны уделять обучению курсантов навыкам вождения в условиях городского движения, появились дополнительные занятия по вождению на скоростных магистралях, дополнен теоретический курс обучения. Изменились правила сдачи экзамена в ГИБДД [3]. Автошколы обязаны получить лицензию на осуществление образовательной деятельности, что предполагает определенные требования к учебному оборудованию и квалификации преподавательского состава. А также регулярно проходить проверки со стороны контролирующих органов. [4]. В следствие финансовых трудностей далеко не все действовавшие ранее автошколы в состоянии предоставить правильно оборудованный автодром и классы теоретического обучения, в результате чего не могут пройти процедуру лицензирования.

В силу перечисленных выше неблагоприятных условий, количество автошкол по всей России резко сократилось. Из 11000 работающих автошкол осталось только 5500 тысяч.

Рассмотрим более подробно их распределение по регионам.

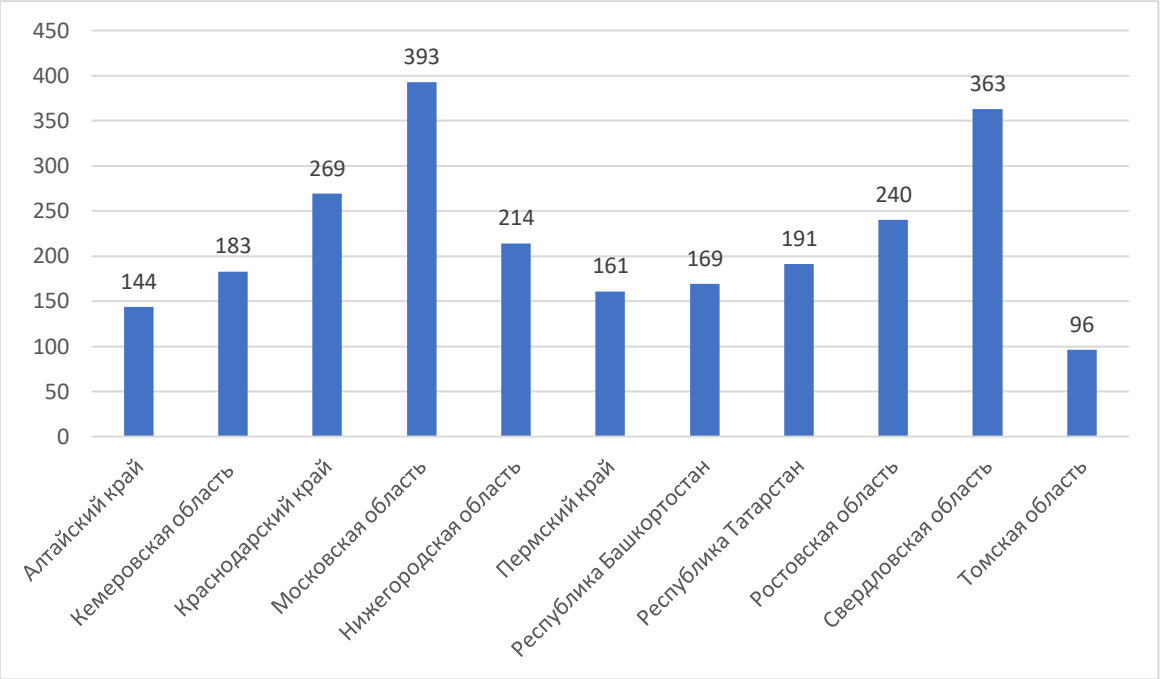

Рисунок 1 – Распределение автошкол по регионам РФ

На графике отражена первая десятка регионов по количеству автошкол, находящихся в них (по данным за 2023 г., согласно информации официального сайта ГИБДД). Из графика видно, что первое место занимает Московская область, в ней сосредоточены 393 автошколы, которые получили лицензию и успешно функционируют. На рынке остаются крупные, наиболее конкурентоспособные организации, оснащённые собственными основными фондами. Таким образом, вопрос повышения конкурентоспособности для автошкол становится вопросом их выживаемости.

Рассматривая подходы различных авторов к определению конкурентоспособности можно сделать вывод, что это комплекс характеристик объекта или субъекта производства дающий возможности превзойти аналоги.

Конкурентоспособность автошколы, как специальной образовательной организации, определяется её способностью привлекать большее количество обучающихся посредством удовлетворения их запроса на формирования высокого уровня специальных теоретических знаний и практических навыков.

Конкурентоспособность автошкол находится под влиянием факторов их внешней и внутренней среды. Классификация данных факторов и показатели их оценки представлены нами в таблице 1.

Таблица 1 – Факторы, влияющие на конкурентоспособность автошкол

Название фактора	Воздействие фактора	Показатели оценки
Внешние факторы косвенного воздействия (макроокружение)		
Технологический	Появление новых компьютерных и интернет технологий в обучении.	Доля занятий с использованием компьютерных технологий в учебных планах. Доля использованием онлайн-технологий для записи на занятия.
Правовой	Появление новых регулирующих нормативных актов в сфере деятельности автошкол.	Наличие и достаточность финансовых и организационных ресурсов для реорганизации деятельности.
Экономический	Изменение платёжеспособности населения.	Индекс изменения реальных доходов населения.
Социальный	Демографические изменения.	Изменение коэффициента старения населения. Изменение ёмкости рынка предоставляемых услуг.
Природно-климатический	Спад спроса на услуги автошкол в осенне-зимний период.	Коэффициент сезонности в работе автошкол.
Внешние факторы прямого воздействия (микроокружение)		
Поставщики ресурсов	Изменение цен на горюче-смазочные материалы, электроэнергию, услуги по техническому обслуживанию и ремонту автомобилей. Рост арендной платы.	Индекс цен на различные виды материальных ресурсов. Изменение доли материальных затрат в себестоимости услуг.
Клиенты	Формирования потребительских предпочтений, от которых зависит направленность и величина спроса на образовательные услуги. Чувствительность клиентов к изменению цен.	Индекс изменения спроса на услуги автошкол. Изменение структуры спроса на программы обучения. Эластичность спроса на услуги автошкол.
Конкуренты	Изменение фирмами конкурентами цен на предоставляемые услуги. Наличие у конкурентов более совершенных технических средств для обучения.	Результаты конкурентного анализа.

	Совершенствование у конкурентов организации процесса обучения.	
Фискальные органы	Штрафы и денежные взыскания, налагаемые ГИБДД, налоговой инспекцией, судебными органами.	Индекс изменения суммы годовых затрат организации связанных с выплатой налогов, штрафов, пеней и денежных компенсаций за причинённый материальный ущерб.
Внутренние факторы		
Финансово-экономическое состояние	Финансовая устойчивость организации. Доходность деятельности. Цены на предоставляемые услуги.	Интегральная оценка финансового состояния. Рентабельность продаж. Сопоставление уровня цен на предоставляемые организацией услуги с их среднерыночными значениями.
Материально-техническая база	Количество и качество парка учебных автомобилей. Соответствие учебных классов и автодромов лицензионным требованиям.	Коэффициент износа учебных автомобилей. Коэффициент загрузки учебных автомобилей по времени. Актуальный список лицензированных автошкол на портале ГИБДД.
Преподавательский состав	Уровень квалификации преподавателей и инструкторов. Укомплектованность штата.	Коэффициент использования работников по квалификации. Коэффициент повышения квалификации кадров. Доля вакансий в штатном расписании организации.
Организация учебной работы	Наличие удобного для курсантов расписания занятий. Удобное для курсантов расположения объектов автошколы.	. Результаты анализа опроса клиентов автошколы.
Качество предоставляемых услуг	Успешность сдачи курсантами экзамена в ГИБДД.	Сравнение результатов сдачи экзаменов в ГИБДД с аналогичными в автошколе. Сравнение полученного результата с другими автошкллами.

Маркетинговая деятельность	Эффективность рекламы и мероприятий по продвижению услуг.	Коэффициент рентабельности финансовых вложений в маркетинговые мероприятия.

Из вышесказанного можно сделать вывод о том, что в настоящее время рынок автошкол в России находится не в лучшем положении. В следствии финансово-экономических проблем количество автошкол сокращается. На рынке услуг остаются только наиболее крупные и популярные организации. Для поддержания эффективности деятельности и дальнейшего успешного существования действующим автошколам необходимо проводить постоянный мониторинг факторов конкурентоспособности на основе анализа текущего состояния показателей их оценки.

Использованные источники:

1. Е. Астапенко. В России за 10 лет почти в два раза увеличилось количество автомобилей [Электронный ресурс]/ URL: https://www.kolesa.ru/news/v-rossii-za-10-let-pochti-v-dva-raza-uvelichilos-kolichestvo-avtomobilej (дата обращения 20.12. 2023).
2. Бабаков И. «Известия»: в России появятся проблемы с получением водительских прав. [Электронный ресурс]. URL: https://ura.news/news/1052586101?ysclid=lqdluehd3l523546925 (дата обращения 20.12. 2023).
3. Моржаретто И. Лишь каждый восьмой: почему в России стали хуже сдавать экзамен на автоправа. [Электронный ресурс]. URL: https://tass.ru/opinions/14634899 (дата обращения 20.12. 2023)
4. Кротова Е. Как проходит обучение в автошколе в 2023 году в РФ. [Электронный ресурс]. URL: https://avtoshkola-tehnika.ru/news/kak-prohodit-obuchenie-v-avtoshkole-v-2023-godu-v-rf/ (дата обращения 20.12. 2023).

УДК 338.984

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ОСОБЕННОСТИ ОПЕРАТИВНОГО ПЛАНИРОВАНИЯ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ

Аннотация. Для эффективной работы промышленные предприятия должны планировать и контролировать все процессы. Осуществление производственного процесса невозможно без краткосрочного оперативного планирования. В статье рассмотрена важность данного планирования для предприятий, определены основные цели и задачи успешной реализации оперативного плана.

Ключевые слова: оперативное планирование, конкурентоспособность, эффективность, план-график, планово-учетные документы.

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FEATURES OF OPERATIONAL PLANNING OF INDUSTRIAL ENTERPRISES

Abstract. To operate effectively, industrial enterprises must plan and control all processes. The production process is impossible without short-term operational planning. The article discusses the importance of this planning for enterprises, and identifies the main goals and objectives of the successful implementation of the operational plan.

Key words: operational planning, competitiveness, efficiency, schedule, planning and accounting documents.

Деятельность любого предприятия направлена на повышение конкурентоспособности изготавливаемой продукции на конкретном рынке. В процессе работы предприятия возникают несоответствия между фактическим его состоянием и запланированным. К таким несоответствиям можно отнести низкое качество выпускаемой продукции, не соответствующее требованиям время изготовления. Для того чтобы это не происходило необходимо особое внимание уделять оперативному планированию и диспетчерскому регулированию производства.

Оперативное планирование — это функция, связанная с определенными целями и задачами промышленного предприятия. В оперативное планирование входит определение необходимых ресурсов для достижения поставленных краткосрочных целей. Оперативное планирование способно обеспечить основу для принятия любых управленческих решений [1].

Организация должна использовать преимущества оперативного планирования. В противном случае, она будет лишена способа оценки цели и направления корпоративной направленности.

Оперативное планирование учитывает обоснование целей и задач управления, разработку плана краткосрочных действий, а также включает:

– разработку плана-графика – это определение времени последовательности выполнения работ по достижению целей и реализации программ;

– составление бюджета – это составление документа о затратах и распределении ресурсов по цехам, участкам работ;

– построение бизнес-процессов, более действенных методов и приемов, чтобы гарантировать правильное выполнение для всех операций.

Если в целом говорить о планировании, то оно является одной из важнейших частей предпринимательской тактики. Серьёзный подход к данному процессу создает прочную основу для эффективной и устойчивой работы всего предприятия. Также, грамотное планирование позволит повысить эффективность деятельности отдельных структурных подразделений предприятия. Планирование представляет собой процесс определения целей предприятия на перспективу и анализ имеющихся способов реализации этих целей.

Главной целью планирования является повышение эффективности производства на предприятии. При этом важно и получение в результате максимально возможной прибыли.

Задачи планирования каждым предприятием определяются самостоятельно. Они зависят от того, каким видом деятельности занимается предприятие.

План представляет собой целевое описание последовательных событий и действий. В нем до конца планируемого периода должно быть расписано обязательное количественное и качественное состояние планируемого объекта. На всех этапах исполнения плана его цели и задачи должны быть чётко увязаны с ресурсами. Эти ресурсы необходимы для получения желаемого результата. Контроль за исполнением плана, в свою очередь, ведётся с помощью различных средств обратной связи. Например, учёта и отчетности, различных информационных потоков и так далее.

Оперативное планирование – это система краткосрочного планирования и выдача заданий производственным подразделениям.

Под системой оперативного планирования понимают совокупность методик работы, показателей и учетно-плановой документации.

В настоящее время среди ученых и практиков возникает множество споров касаемо объекта оперативного планирования. Одни считают, что объектом являются производство и производственные системы. Другие полагают, что объектами следует считать производство, цех, участки, производственные процессы.

Оперативное планирование направлено на достижение стратегии предприятия и сочетает в себе все факторы производства. Эффективность планирования заключается в грамотном использовании имеющихся ресурсов, соблюдении ответственности.

Оперативное планирование направлено на составление производственных заданий по изготовлению продукции. При этом план составляется на относительно короткие промежутки времени. Кроме того, осуществляется непрерывный контроль и регулирование выполнения принятой производственной программы.

Цель оперативного планирования – выполнение производственной программы по критериям количества, качества, сроков и затрат.

Основные задачи оперативного планирования производства организации:

1. Обеспечение выполнения производственной программы;
2. Минимизация времени ожидания покупателем;
3. Минимизация длительности производственного цикла
4. Обеспечение минимальных уровней запасов;
5. Эффективное использование площадей, оборудования и персонала [2].

Оперативное планирование зависит от особенностей принятой производственной структуры на предприятия. При этом ее выбор зависит от принятой формы внутризаводской специализации производственных подразделений.

Содержание оперативного планирования деятельности предприятия определяется такими факторами, как:

– степень развития производительных сил;
– степень оснащения производственными мощностями;
– количество производимой продукции;
– отрасль, в которой функционирует предприятие;
– изменчивость экономической системы.

На уровне отдельно взятого предприятия, оперативное планирование является основой:

– для улучшения координации действий различных подразделений;
– более рационального использования и распределения ресурсов;

– создания предпосылок для своевременного выявления и решения возникающих проблем.

Таким образом, для успешной работы предприятия необходимо внедрять интегрированное оперативное планирование. Оно позволяет учитывать все аспекты организации процесса выпуска продукции: от закупки у поставщика до продажи готового изделия.

Использованные источники:

1. Ильдеменов С. В. Операционный менеджмент: учебник / С.В. Ильдеменов, А.С. Ильдеменов, С.В. Лобов. — Москва: ИНФРА-М, 2021. — 337 с.
2. Оперативное управление производством: учебник / Н. М. Мурахтанова, Н. В. Александрова, Е. А. Боргардт [и др.]; под общей редакцией Н. М. Мурахтановой. — Тольятти: ТГУ, 2014. — 332 с.

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ОСНОВНЫЕ ПРИНЦИПЫ И СРОКИ ВВЕДЕНИЯ ТЕХНИЧЕСКИХ УСЛОВИЙ, СТАНДАРТОВ, "СТРОИТЕЛЬНЫХ НОРМ И ПРАВИЛ"

Аннотация: стандартизация всегда направлена на решение важных практических задач и служит научно-техническому прогрессу. Разработка и пересмотр действующих государственных стандартов нового типа осуществляется на основании "республиканского плана стандартизации по разработке и пересмотру действующих государственных стандартов нового типа", который формируется ежегодно. Он проводится по определенным принципам

Ключевые слова: стандарт, технические условия, норма, правило, принцип, срок действия, гарантия.

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BASIC PRINCIPLES AND DEADLINES FOR THE INTRODUCTION OF TECHNICAL SPECIFICATIONS, STANDARDS, "BUILDING CODES AND REGULATIONS"

Abstract: standardization is always aimed at solving important practical problems and serves scientific and technological progress. The development and revision of existing state standards of a new type is carried out on the basis of the "republican standardization plan for the development and revision of existing state standards of a new type", which is formed annually. It is conducted according to certain principles

Keywords: standard, technical conditions, norm, rule, principle, validity period, warranty.

Вступление

Разработка стандартов и технических условий Республики Узбекистан обычно осуществляется силами технических комитетов (ТК), состоящих из специалистов, автономно представляющих каждое заинтересованное предприятие и организацию, или базовыми организациями по стандартизации [1].

Материалы и методы

Сюда входят эмпирические методы, такие как моделирование, установление фактов, эксперимент, описание и наблюдение, а также теоретические методы, такие как логические и исторические методы, абстракция, дедукция, индукция, синтез и анализ, а также методы эвристических стратегий. Материалами исследования являются: научные факты, результаты предыдущих наблюдений, опросов, экспериментов и тестов; средства идеализации и рационализации научного подхода.

Стандартизация всегда направлена на решение важных практических задач и служит научно-техническому прогрессу. Как мы уже говорили, разработка и пересмотр действующих государственных стандартов нового типа осуществляется в соответствии с “Республиканским планом стандартизации по разработке и пересмотру действующих государственных стандартов нового типа”, который формируется ежегодно. Он проводится по определенным принципам [2].

Результаты и обсуждение:

Принцип системности. Техническое развитие и повышение качества продукции требуют системного подхода к производственному процессу, включая проведение стандартизации. В настоящее время стандартизация должна охватывать все этапы использования сырья, материалов, комплектующих и готовой продукции в производстве, а также устанавливать взаимосвязанные требования к качеству всех видов продукции. Реализация комплексной и опережающей стандартизации основана на принципе системности внедрения комплексных систем контроля качества продукции [3].

Принцип удобства. Стандарты устанавливаются на изделия, используемые во многих отраслях промышленности и производства. Они распространяются в большом диапазоне параметров и поэтому применяют принцип удобства при разработке стандартов. Это предусматривает ограничение различных категорий и номенклатур товаров одного наименования, расширение сфер применения отдельных категорий товаров одного наименования или повышение степени взаимозаменяемости, ведет к специализации и кооперации предприятий, развитию серийного производства, удешевлению продукции [4].

Принцип прогрессивности и оптимальности стандартов является сущностью стандартизации и находит свое отражение в принятых определениях стандартов. Новые стандарты должны отвечать современным требованиям науки и техники. Внедрение новых стандартов должно обеспечить максимальный возможный экономический эффект при минимальных затратах [1].

Принцип функциональной взаимозаменяемости обеспечивает взаимозаменяемость стандартных элементов по рабочим показателям и,

следовательно, является основным принципом комплексной и предстоящей стандартизации [2].

Принцип взаимосвязи стандартов. Без реализации этого принципа невозможно разработать новые общетехнические и межотраслевые стандарты, разработать комплекс, а также стандартизацию [1].

Принцип исследования. Разработка всех видов стандартов должна сопровождаться проведением необходимых научно-исследовательских работ [4].

Принцип минимума относительного расхода материалов. В промышленности и строительстве большую часть стоимости готовой продукции составляют цены на сырье, материалы и полуфабрикаты. Учитывая объем производства, сокращение затрат на материалы на 1% также дает очень большой экономический эффект. Поэтому при разработке стандартов необходимо выбирать рациональные структуры деталей, использовать новые методы расчета, использовать передовые технологические процессы [5].

Принцип патентной чистоты стандартов. При проектировании, изготовлении новых машин, механизмов, приборов и в других ситуациях недопустимо использование оригинальных конструкций, технологических процессов, методов испытаний и измерений и других объектов, запатентованных другими странами. Нарушение этого правила, с точки зрения патентного законодательства, влечет за собой применение международных штрафных санкций [6].

Вывод:

Срок действия стандартов, технических условий и руководящих документов также определяет их гарантийный срок [1].

Использованные источники:

1. Tojiyev R.J., Yusupov A.R., Rajabova N.R. Qurilishda metrologiya, standartlash va sertifikatlashtirish [Matn]: darslik / R.J. Tojiyev, A.R. Yusupov, N.R. Rajabova. – Toshkent: «Yosh avlod matbaa», 2022. – 464 b.
2. Tojiyev R.J., Yusupov A.R.. Metrologiya, standartlashtirish va sifat nazorati. O`quv qo`llanma. Farg`ona.: FarPI, «Texnika» noshirlik bo`limi. 2003-328 bet
3. Метрология, стандартизация, сертификация: учебник для вузов / С.В. Пономарев, Г.В. Шишкина, Г.В. Мозгова. - Тамбов: Изд-во ГОУ ВПО ТГТУ, 2010. - 96 с.
4. Сергеев А. Г., Крохин В. В. Метрология. Учебное пособие. М.: Логос, 2001. -408 с.: ил.1S0 90012. Ulchash vositalarining sifatini ta’minlaydigan talablar.
5. O‘z RH 51-095:2000*. Методические указания по составлению карты технического уровня и качества продукции.

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THE ROLE OF THE PENITENTIARY SYSTEM IN REFORMING THE STATE'S CRIMINAL LEGAL POLICY

Abstract. The article is devoted to the modern issues of criminal and penitentiary policy. Author analyzed the prospects of development and ways of improving legislation in the Republic of Uzbekistan. As a result of the study, it was formed specific suggestions for improving the current legislation of on the basis of in-depth analysis from the historical and legal point of view.

Keywords: crime, crime prevention, liberalization, punishment, (criminal-executive) policy.

The establishment of civilized penitentiary systems in many states, especially in the US and most of Western European countries, was influenced by the ideas of the sociological school of criminal law on the imposition of punishment and its execution, the emergence of penology and penitentiary science.

In the current criminal-executive legislation of the Republic of Uzbekistan, the term "penitentiary system", "penitentiary institution", "penitentiary policy" is not used. At the stages of development of criminal law in our Republic alternative terms are used in these concepts: labor correction system, criminal penalties system, penitentiary systemand others.

The history of penitentiary has a very long period [1], this word (from Latin "poenitentia" - "remorse") means the maintenance of the system of execution of punishment [2] The use in the modern legal literature of the term "penitentiary system" occurs most often in two cases: in works of a historical and legal nature, in which the concepts of "penitentiary system" and "penitentiary institutions" are of a general nature and used to characterize various stages of historical development (these concepts are often combined with terms officially used in specific historical conditions)[3]; in acts containing the norms of international law (such as the "Standard Minimum Rules for the Treatment of Prisoners" adopted at the First United Nations Congress on the Prevention of Crime and the Treatment of Offenders on August 30, 1955, "European Prison Rules" of February 12, 1987[4] and others), as well as in studies on foreign law and foreign legislation[5]. Most scientists believe that the penitentiary system includes all organs and institutions of the state that carry out all types of criminal punishment,

organizational and legal, social and public institutions that provide the goal of correcting convicts [6].

Currently, the term "penitentiary system" and other phrases with the adjective "penitentiary": "penitentiary policy", "penitentiary institutions" find their application only in the scientific environment. Thus, I.Kamalieva believes that the penitentiary system includes all organs and institutions of the state that carry out all types of criminal punishment, organizational and legal, social and public institutions that provide the goal of correcting convicts[7].

According to M.P.Melentiev, "the penitentiary system is not a system of placing prisoners in prisons, but the whole correctional system connected with the execution of the punishment in the form of imprisonment, together with the means and methods of legal influence on the convicted persons, with the aim of restoring social justice, correcting the convict and warning committing new crimes"[8].

Scientists V.B. Spitsnadel and S.I. Velezhev [9] under the penitentiary institutions and the penitentiary system understood institutions and bodies that carry out sentences in the form of imprisonment. At the same time, we think, that such interpretation is too narrow.

Most often in modern legal literature it is a question of the penitentiary *system.* For example, concepts that characterize social systems operating in the political and legal field are "law enforcement system" and "judicial system". In all these cases, we are talking about certain institutions, means and methods, the totality of which in their interrelationship constitutes a certain system.

In general, the criminal-executive system is a social multi-component, multifunctional and multi-level system [10] However, the use of the concept of "criminal executive system" does not deny the understanding of the penitentiary system as a set of all means and methods aimed at correcting convicts. Therefore, we can talk about the penitentiary system in a narrow and broad sense. Also, T.Sinelnikova claimed that, the penitentiary system is a set of interconnected and interrelated state and legal means, methods and guarantees aimed at achieving the goals of criminal punishment (restoring social justice, correcting a convicted person, preventing the commission of new crimes) in institutions connected with isolation from society[11]. A.Ovchinnikova has an analogical opinion [12].

The penitentiary system in the narrow sense is a system of institutions and bodies that carry out criminal penalties related to isolation from society, which are currently the correctional facilities. Thus, in modern legal science there is not yet a single approach to the definition of the concept of "penitentiary system". In our opinion, the most reflective of the content of the socio-legal phenomenon "penitentiary system" is the approach within which the penal system is examined in a broad and narrow sense.

In all these cases, *penitentiary system - a system that includes the educational, moral, pedagogical, psychological, political, legal, socio-economic and other areas of activity of state bodies and institutions for the implementation*

of criminal penalties and other measures of criminal law aimed at correcting and resocialization of convicts.

While revealing the importance of the penitentiary system in the organization of the criminal and legal policy of the state, it should be noted that the reform of the penal system began with the moment when Uzbekistan gained national independence. Since, it was necessary not only to rework the regulatory framework, but also to determine the strategy for the development of the system for a long period. Unfortunately, up to the present time, a harmonious and unified Concept for reforming the criminal execution system has not been developed in our country.

Today the creation of the penitentiary provides a clear example of the basic dynamic of penal reform. The penitentiary was originally hailed as a symbol of progressive political and religious ideas. Instead of tormenting wrongdoers, the penitentiary would effect their moral reformation. The penitentiary also filled a more basic need. The new nation, such Uzbekistan, founded upon ideals of a virtuous citizenry, found that the old penal methods were inadequate to keep many of its citizens virtuous. The penitentiary represented a new and more effective means of suppressing crime. Perhaps, the most important influence upon the nature of the new punishment had nothing to do with the goals of punishment, though-it was institutional. This system, adopted in most institutions across the nation, ensured that the penitentiary was a place, not of benevolent rehabilitation, but of often brutal repression [13].

Signs of the penitentiary system of Uzbekistan:

-as one of the elements of the constitutional foundations of the Republic of Uzbekistan for the purpose of strengthening and protecting the rule of law, it is implemented by a specially created state body with separate powers;

-operates in all spheres of penitentiary relations, regulated by legislative acts;

-carried out in connection with violation of laws.

On the base of national legislation, the followings are the tasks of the criminal-executive legislation of the Republic of Uzbekistan:

-execution of criminal penalties in the form of fines, compulsory public works, deprivation of certain rights, correctional labor, restrictions on service, restriction of freedom, deprivation of military or special ranks, referral to disciplinary units, imprisonment and life imprisonment;

-execution of supervision of the behavior of conditionally convicted persons, other measures of criminal legal effect in the form of compulsory medical measures, imposition of an apology on the minor, compensation or elimination of the damage caused, placement in a special educational institution;

-ensuring law enforcement and lawfulness in the bodies and institutions for the enforcement of criminal penalties, the safety of the convicted prisoners, workers and employees, officials and citizens on their territory;

-attraction of convicts to work, provision of their general and vocational education, vocational training;

-ensuring the health of convicts;

-rendering assistance to the bodies carrying out operatively-search activity, etc.

By the analyses of **several institutional models of the penitentiary systems in the world, based on the jurisdiction of these bodies and institutions to one or another government agency, we can identify five models of the organization of the penitentiary system:**

1) The model of the penitentiary system, which is located in the Ministry of Internal Affairs in full;

2) The model of the penitentiary system, administered in full by the Ministry of Justice;

3) The model of the penitentiary system, under the joint management of the Ministries of Justice and Internal Affairs;

4) The model of the penitentiary system, which is part of separate state department that is not controlled by the Ministry of Justice or the Ministry of Internal Affairs;

5) a mixed model where the execution of types of punishments or measures of procedural coercion are transferred to the competence of various departments (penitentiary institutions are under the jurisdiction of the Ministry of Justice, places of pre-trial detention are administered by the Ministry of Internal Affairs).

Based on this classification and complex analysis of penitentiary systems in a number of countries, it may be concluded that in the mechanism of the rule of law, penitentiary institutions perform certain functions of law enforcement and executive authorities.

In our opinion, today, in Uzbekistan, the existing legislative framework in this area has ceased to meet modern realities, especially in the aspect of the need to strengthen its preventive principles, which necessitates the development by the scientists and specialists of **the Concept of reforming the criminal execution system of the Republic of Uzbekistan for the period up to 2021**. This Concept, in our opinion, should contain a number of provisions that will help realize the real opportunities associated with the functioning of the executive system, without going beyond the scope of financial and economic costs.

Moreover, the measures envisaged in the Concept to reduce the number of convicts and detainees, reduce the intensity of their movement across the country and other measures should significantly reduce the costs of maintaining the penitentiary system. At the same time, in full accordance with modern ideas about the role and significance of institutions and bodies of the penitentiary system, the preventive function of the penitentiary system should be at the heart of the matter.

References:

1. The Philosophy and History of Prisons. Philosophers of Punishment and Penology. // 29043_CH01_1_21.qxd 9/28/05 8:51 AM Page 6.

2. Legal Encyclopedia of Uzbekistan. / Responsible editor: N.Toychiev. - Tashkent: Adolat, 2011. – P. 365.
3. Samuel H. Pillsbury. Understanding Penal Reform: The Dynamic of Change.Journal of Criminal Law and Criminology. Volume 80 Issue 3FallArticle 3 – P.729; Шамансуров A.A. Shamansurov A.A. Theoretical and applied problems of the modernization of the penitentiary system. - Tashkent: Science and technology, 2015. – p. 216; Borzenko Yu.A. Penitentiary justice in Russian society: current status and development problems. Diss... cand. legal sciences. - Vladimir, 2008. – p. 176; Hovhannisyan S.M. State Penitentiary System: Historical, Theoretical and Legal Analysis. Dis.... doctor. legal sciences. - SPb., 2005. – p. 315.
4. European Penitentiary Rules of the UN Committee of Ministers. - M., 2000. – p. 13.
5. Prisoner's rights: international and national standards. / F.Bakaeva and others. - Tashkent: Tafakkur, 2011. – P. 98.
6. Kamalieva I.R. The penal system as a regulator of social norms. // Bulletin of Chelyabinsk State University, 2015, № 26 (381). – P. 54.
7. *Wilson, David & Reuss, Anne, eds. (2000). "Introduction".* Prison(Er) Education: Stories of Change and Transformation. *Waterside Press. pp. 12–15; Carlson, Peter M., ed. (2013). "Correctional Academic, Career, and Reentry Education".*Prison and Jail Administration: Practice and Theory.*Jones & Bartlett. p. 108;* Kamalieva I.R. The penal system as a regulator of social norms. // Bulletin of Chelyabinsk State University, 2015, № 26 (381). – P. 54.
8. Gorban, D. V. "Integrated" correctional institutions of the penitentiary system of Russia at the present stage of its reform. // Actual problems of struggle against crimes, 2015, № 1. – P. 38.
9. Spitsnadel V.B., Velezhev S.I. The penitentiary system: concept and general characteristic, correlation with penal law // Bulletin of the St. Petersburg University of the Ministry of Internal Affairs of Russia. –2003, № 1. – P. 143–151.
10. *Vogel, Brenda (2009).* The Prison Library Primer: A Program for the Twenty-First Century. *Scarecrow Press. p. 176.; Drucker, Ernest (2011).* A Plague of Prisons: The Epidemiology of Mass Incarceration in America. *The New Press. pp. 115–116.;* Baluev E.N. “The penitentiary system”: pluralism of approaches to designating a socio-legal phenomenon and a means of protecting and protecting the rule of law. // Society. Wednesday. Development (Terra Humana). - 2010, № 3. – P. 113.
11. Sinel’nikova T.V. Penitentiary System: Theoretical Problems of Definition. // Вестник Владимирского юридического института. – 2014, № 3 (32). – p. 170.
12. Ovchinnikova A. Prison system as a form of legal communication. // Bulletin of the Samara Law Institute. - 2015, № 2. – P. 53.

13. Samuel H. Pillsbury. Understanding Penal Reform: The Dynamic of Change.Journal of Criminal Law and Criminology. Volume 80 Issue 3FallArticle 3 – P.729

УДК: 378.147

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MEDIATA'LIMNING BO'LAJAK MUHANDISLARNI KASBGA TAYYORLASHDAGI MAQSADI

Annotatsiya. Zamonaviy ta'limni mediata'limdan foydalanmasdan tasavvur qilib bo'lmaydi ommaviy axborot vositalari va axborot texnologiyalari. Axborot asrining kelishi o'qituvchilar va talabalarni ommaviy axborot vositalari va kommunikatsiyalar faoliyati jarayonlariga yo'naltirish vazifasini qo'yadi. Mediata'lim metodini qo'llashdan maqsad, bir tomondan, moslashuvchanlik, harakatchanlik, izchillik kabi fikrlash fazilatlarini rivojlantirish; boshqa tomondan– qidiruv faoliyati, yangilikka intilish; nutq va ijodiy tasavvurlarini rivojlantirishdir.

Kalit so'zlar: axborot, mediata'lim, didaktika, texnologiya pedagogik ommaviy kommunikatsiya, kompyuterlashtirish.

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THE PURPOSE OF MEDIA EDUCATION IN PREPARING FUTURE ENGINEERS FOR PROFESSION

Abstract. Modern education cannot be imagined without the use of media and information technologies. The arrival of the information age puts the task of directing teachers and students to the processes of mass media and communication activities. The purpose of using the media education method is, on the one hand, to develop thinking qualities such as flexibility, mobility, consistency; on the other hand – search activity, striving for novelty; is to develop speech and creative imagination.

Key words: information, media education, didactics, technology, pedagogical mass communication, computerization.

Bugungi axboriy muhitni tushunishda media savodxonlik muhim ahamiyat kasb etadi. Axborot qayerdan, kim tomonidan va nima maqsadlarda uzatilayapti, kimning manfaatlarini o'zida aks ettirayapti, degan savollarga javob topa olish uchun zarurdir. Mediata'limning maqsadi bo'lajak muhandislarni media va axborot savodxonligi infoetikani shakllantirishga xizmat qilish bugungi axborot

asridagi, shiddatli va murakkab jarayonlar axborot makoni globallashuvi so‘z erkinligi ta’minlanilishi ommaviy kommunikatsiyaning kuchayishi shuning barobarida OAV ning manipulyativ ta’siri oshib borayotgan sharoitda talabalarning axborotdan bahramandlik, undan to‘g‘ri foydalanish, ishonchli axborot manbaalarini aniqlash bo‘yicha bilimlarni berishdan iborat.

Media-ta'lim texnologiyalarining rivojlanishi ta'limni kompyuterlashtirish va axborotlashtirish bilan bog'liq. Kompyuterlashtirish shundan iboratki, kompyuterlar nafaqat hisoblash operatsiyalarini bajarish uchun, balki axborot tizimlariga kirish, test pedagogik nazorat qilish uchun bir usul sifatida ishlatiladi va axborotlashtirish o'qitishda turli xil audio, video va kompyuter texnikasidan foydalanishni o'z ichiga oladi..

Zamonaviy didaktika turli xil texnologiyalarni taqdim etadi, bunda har bir muallif va ijrochi maqsad va vazifalarga muvofiq pedagogik jarayonga yangi narsalarni olib keladi. “Muhandislik ta’limida zamonaviy texnologiyalar” maqolasi mualliflari jamoasining fikriga murojaat qilaylik, ular kompleks ta’lim texnologiyalari ro‘yxatini taqdim etadi:

- pedagogik;
- axborot;
- telekommunikatsiya (tarmoq);
- intellektual;
- innovatsion.

Oliy ta'limning dolzarb faoliyati, bu texnologiyalar bir-biri bilan chambarchas bog'liq va bir-birini to'ldiruvchi va o'zaro bog'lovchi sifatida ishlatiladi. 90-yillardan boshlab, dunyo jamiyatida ko'plab o'zgarishlar ro'y bergan o'tish davri sharoitida, muhandisning shaxs sifatida, jamiyatning professional muhim a'zosi sifatidagi maqomini qayta ko'rib chiqish zarurati paydo bo'ldi.

Axborot asrida o'qituvchining vazifasi o'quvchilarning tanqidiy fikrlashini, tahlil qilish va tanlash qobiliyatini rivojlantirishdir. "O'quv jarayonida media-ta'lim texnologiyalari jihatlarini tartibga soluvchi asosiy tavsiflovchi parametrlar bakalavrlarning kasbiy faoliyatiga qo'yiladigan talablar, kompetentsiyalarga qo'yiladigan talablar, oliy ta'limning ta'lim dasturlarini amalga oshirish shartlariga qo'yiladigan talablar". Bundan tashqari, muallif "bakalavrlarning kasbiy faoliyatiga qo'yiladigan talablar o'qitish metodologiyasida media-ta'lim komponenti mavjud bo'lgandagina hal qilinishi mumkin bo'lgan kasbiy vazifalar ro'yxatida ifodalangan"

Zamonaviy dunyoda mediata'lim ommaviy axborot vositalari bilan muloqot qilish madaniyatini, ijodiy, kommunikativ qobiliyatlarni, tanqidiy fikrlashni, to'liq fikrlash ko'nikmalarini shakllantirish maqsadida ommaviy kommunikatsiya (OAV) yordamida va materiali yordamida shaxsiy rivojlanish jarayoni sifatida qaraladi. media-matnlarni idrok etish, sharhlash, tahlil qilish va baholash, media-texnologiyadan foydalangan holda turli shakllarda o'zini o'zi ifoda etishni o'rgatish. Mediasavodxonlik insonga televideniye, radio, video, kino,

matbuot, internet axborot sohasi imkoniyatlaridan faol foydalanishga yordam beradi, ekran san'ati tilini yaxshiroq tushunishga yordam beradi.

Ilmiy-pedagogik adabiyotlar va himoyalangan dissertatsiyalar tahlili shuni ko'rsatadiki, mediata'lim elementlaridan foydalanish va o'quv faoliyatiga mediata'lim texnologiyalarini joriy etishga qiziqish sezilarli darajada ortib bormoqda. O'qituvchilar va akademik tadqiqotchilar mediata'lim vazifalarini asosiy fanlar vazifalari bilan birlashtirishga harakat qilmoqdalar va bu tasodif emas:Ayrim olimlarning so'zlariga ko'ra, media-ta'lim texnologiyalari "ta'lim muhitini shakllantirish tamoyillarini o'zgartirish, o'qituvchi va talaba o'rtasidagi yangi muloqot asoslarini yoritish, jamiyat taraqqiyotining yangi bosqichida ta'limning gumanistik modelini ishlab chiqish, uning samaradorligini sinab ko'rish yo'llarini belgilash imkonini beradi". Aynan shuning uchun ham ta'lim jarayoniga media-ta'lim texnologiyalarini joriy etish zamonaviy sharoitda universitet o'qituvchisining eng muhim vazifalaridan biriga aylanib bormoqda.O'z navbatida, ta'lim faoliyatida media-ta'lim, umuman, media-ta'lim texnologiyalaridan foydalanish zarur, deb hisoblaymiz.O'qituvchining intellektual qobiliyatlarini yuqori darajaga ko'tarish. Ammo bu yerda bir narsani hisobga olish kerak: o'quv jarayonida mediata'lim texnologiyalaridan foydalangan muhandislarni kasbga tayyorlovchi pedagoglar mediata'limning maqsad va vazifalarini albatta bilishlari olingan kerak.

Foydalanilgan adabiyotlar ro`yhati:

1. Islomov, M., & Irisboyev, F. (2023). IOT (INTERNET OF THINGS) TECHNOLOGIES OF INTERNET DEVICES. *Modern Science and Research*, *2*(9), 220-223.
2. Mustofoqulov, J. A., & Bobonov, D. T. L. (2021). "MAPLE" DA SO'NUVCHI ELEKTROMAGNIT TEBRANISHLARNING MATEMATIK TAHLILI. *Academic research in educational sciences*, *2*(10), 374-379.
3. Mustofoqulov, J. A., Hamzaev, A. I., & Suyarova, M. X. (2021). RLC ZANJIRINING MATEMATIK MODELI VA UNI "MULTISIM" DA HISOBLASH. *Academic research in educational sciences*, *2*(11), 1615-1621.
4. Иняминов, Ю. А., Хамзаев, А. И. У., & Абдиев, Х. Э. У. (2021). Передающее устройство асинхронно-циклической системы. *Scientific progress*, *2*(6), 204-207.
5. Мулданов, Ф. Р., Умаров, Б. К. У., & Бобонов, Д. Т. (2022). РАЗРАБОТКА КРИТЕРИЙ, АЛГОРИТМА И ЕГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ СИСТЕМЫ ИДЕНТИФИКАЦИИ ЛИЦА ЧЕЛОВЕКА. *Universum: технические науки*, (11-3 (104)), 13-16.
6. Мулданов, Ф. Р., & Иняминов, Й. О. (2023). МАТЕМАТИЧЕСКОЕ, АЛГОРИТМИЧЕСКОЕ И ПРОГРАММНОЕ ОБЕСПЕЧЕНИЕ СОЗДАНИЯ СИСТЕМЫ РОБОТА-АНАЛИЗАТОРА В ВИДЕОТЕХНОЛОГИЯХ. *Экономика и социум*, (3-2 (106)), 793-798.

7. Ирисбоев, Ф. Б., Эшонкулов, А. А. У., & Исломов, М. Х. У. (2022). ПОКАЗАТЕЛИ МНОГОКАСКАДНЫХ УСИЛИТЕЛЕЙ. *Universum: технические науки*, (11-3 (104)), 5-8.
8. Zhabbor, M., Matluba, S., & Farrukh, Y. (2022). STAGES OF DESIGNING A TWO-CASCADE AMPLIFIER CIRCUIT IN THE "MULTISIM" PROGRAMM. *Universum: технические науки*, (11-8 (104)), 43-47.
9. Каршибоев, Ш., & Муртазин, Э. Р. (2022). ТИПЫ РАДИО АНТЕНН. *Universum: технические науки*, (11-3 (104)), 9-12.
10. Саттаров Сергей Абудиевич, & Омонов Сардор Рахмонкул Угли (2022). ИЗМЕРЕНИЯ ШУМОПОДОБНЫХ СИГНАЛОВ С ПОМОЩЬЮ АНАЛИЗАТОРА СПЕКТРА FPC1500. Universum: технические науки, (11-3 (104)), 17-20.
11. Якименко, И. В., Каршибоев, Ш. А., & Муртазин, Э. Р. (2023). Джизакский политехнический институт СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ. Экономика и социум, 1196.
12. Yuldashev, F. (2023). HARORATI MOBIL ELEKTRON QURILMALAR ASOSIDA NAZORAT QILINADIGAN QUYOSh QOZONI. Interpretation and researches, 1(1).
13. Mustofokulov, J., Suyarova, M., Choriev, S., & Ashurova, K. (2023). METHODS FOR DESIGNING ELECTRONIC DEVICE CIRCUITS IN THE» PROTEUS" PROGRAM. Экономика и социум, (4-1 (107)), 189-193.

UDC 551.5

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DISTRIBUTION OF AIR TEMPERATURE AND PRECIPITATION IN THE JIZZAKH REGION IN 1991-2020

Abstract. The article discusses the analysis of climatic conditions in the Jizzakh Region based on information from meteorological stations located in the area for four 30-year periods: 1961-1990, 1971-2000, 1981-2010, and 1991-2020. The study compares temperature and precipitation data for these periods. The European Centre for Medium-Range Weather Forecasts (ECMWF) ERA5 reanalysis data for the years 1991-2020 is used to determine the distribution of temperature and precipitation during the climatic period. The obtained results illustrate the increasing trend of temperature and precipitation in the region over the specified time frames.

Keywords: climate change, air temperature, precipitation, ERA5, Jizzakh Region.

Global climate change is characterized by an increase in temperature, intense winds, heavy precipitation, melting glaciers, flash floods, and drought among other hazardous meteorological events. According to analytical data from the National Aeronautics and Space Administration's (NASA) Goddard Institute for Space Studies (GISS), it has been observed that the average global temperature has risen by 1.5 ºC since 1850 (Fig. 1) [1]. Climate change impacts various sectors of human activity, including agriculture, water resources, energy, transportation, construction, healthcare, tourism, and many others. The consequences are significantly affecting these fields on a global scale.

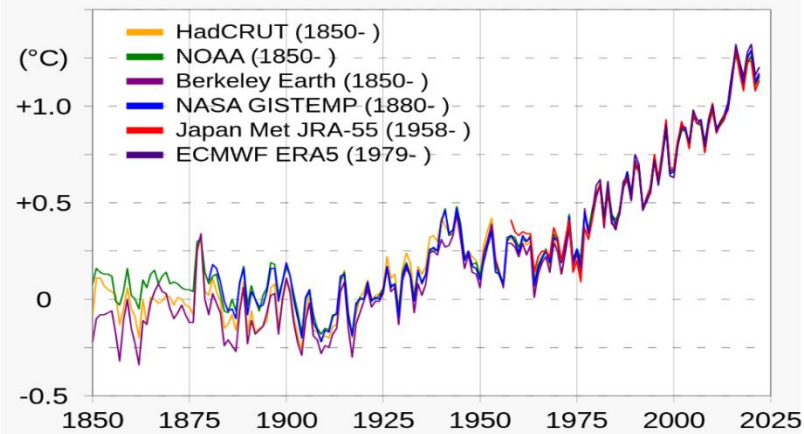


Fig. 1. Global average temperature change [1]

In describing local climate, temperature and precipitation data are fundamental climatic indicators. A wide range of scientific and practical issues benefit from utilizing information on temperature and precipitation regimes.

This article investigates the distribution of temperature and precipitation in the Jizzakh Region, located in the central part of Uzbekistan, during the latest 30-year climatic period (1991-2020). The region exhibits various relief forms, from northern plain and lowland areas to southern plains and foothills. Currently, the Jizzakh Region is equipped with seven meteorological stations of Uzhydromet, and data from six of them was used for analysis during the research (Table 1, Fig. 2).

Table 1. Information about meteorological stations located in the Jizzakh Region

№	Station	Absolute height, m	Descriptive area
1	Jizzakh	344	Plain
2	Gallaaral	573	Foothills
3	Bakhmal	1313	Mountainous
4	Yangikishlak	514	Foothills
5	Lalmikor	748	Mountainous
6	Dustlik	273	Plain
7	Western Arnasay	248	Plain

To assess changes in temperature and precipitation regimes in the region, meteorological data for four 30-year climatic periods (1961-1990, 1971-2000, 1981-2010, and 1991-2020) from meteorological stations were comparatively analyzed [2-5] (Fig. 3). The processing of observational data was conducted following the World Meteorological Organization (WMO) guidelines [6].

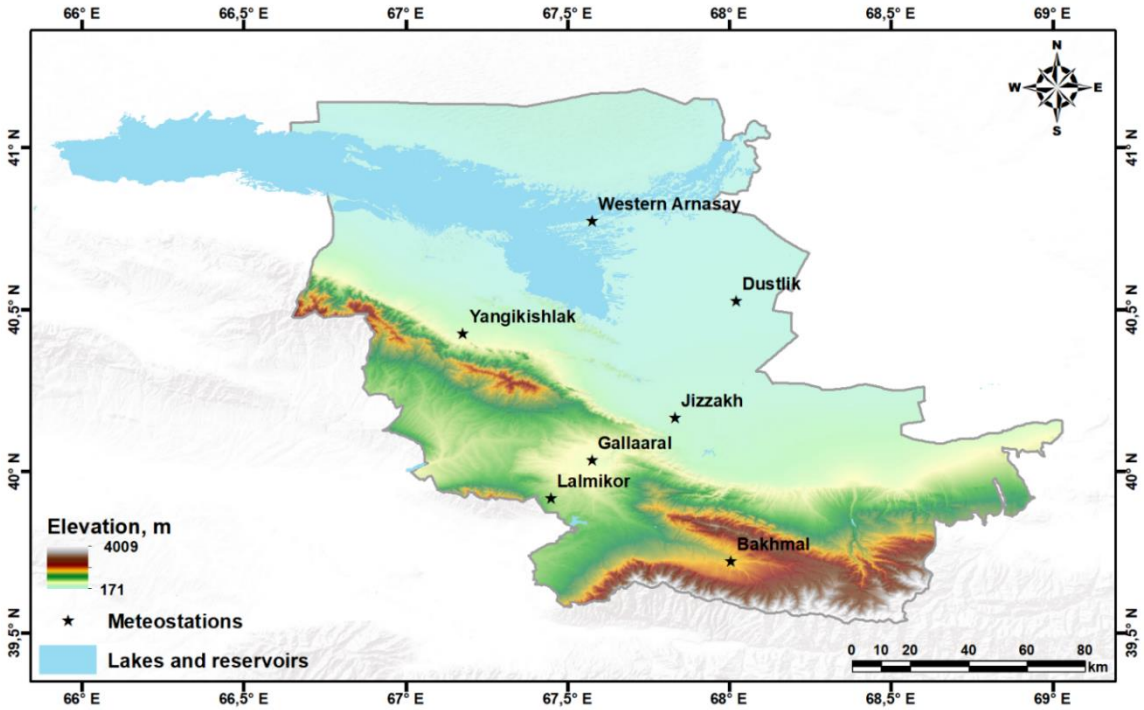
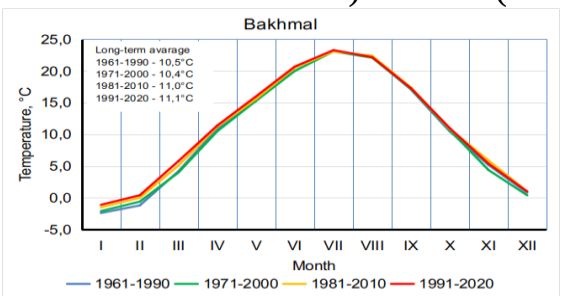
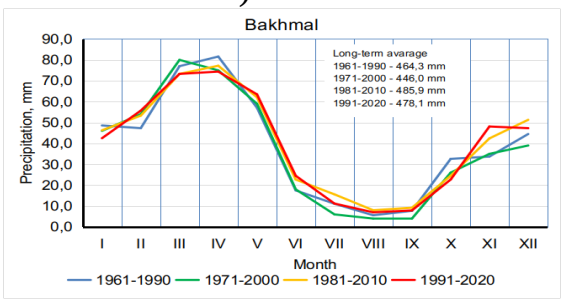


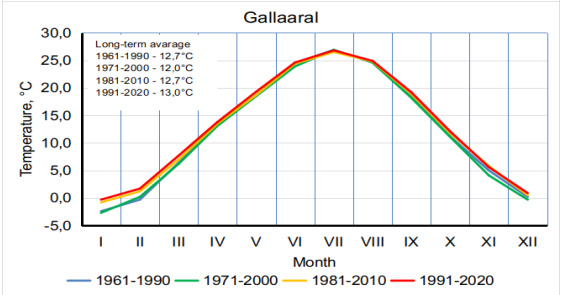
Fig. 2. Location of meteorological stations in Jizzakh Region

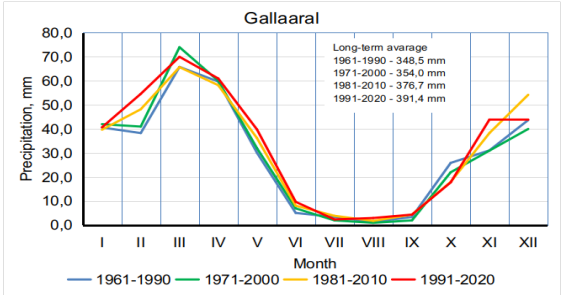
The changes in the average annual temperature over several decades indicate an overall increase in temperature at all stations. Comparing the first baseline climatic period (1961-1990) to the later climatic period (1991-2020), Lalmikor and Yangikishlak experienced an increase of 0.5°C (from 13.2°C to 13.7°C and from 15.1°C to 15.6°C, respectively). Similarly, in Bakhmal and Jizzakh, the average annual temperature increased by 0.6°C (from 10.5°C to 11.1°C and from 14.4°C to 15.0°C, respectively), and in Gallaaral and Dustlik, it increased by 0.8°C (from 12.2°C to 13.0°C and from 14.4°C to 15.2°C, respectively). The temperature rise is particularly notable during the cold half of the year (January, February, and March).

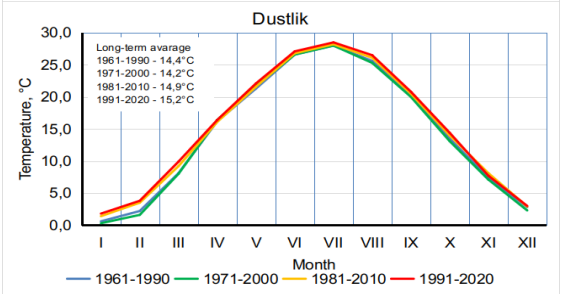
Changes in the precipitation regime in the region showed uneven character. For example, multi-year average precipitation in Bakhmal is lower in the second (1971-2000 – 446.0 mm) and last (1991-2020 – 478.1 mm) climatic

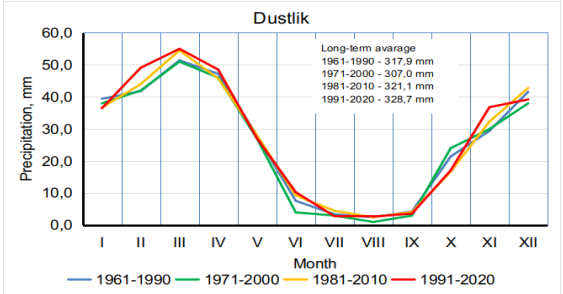


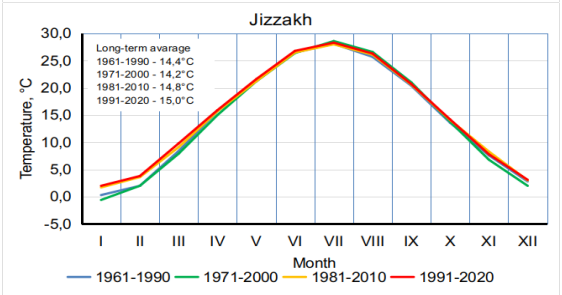


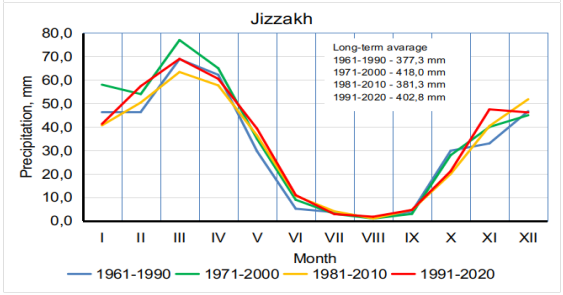












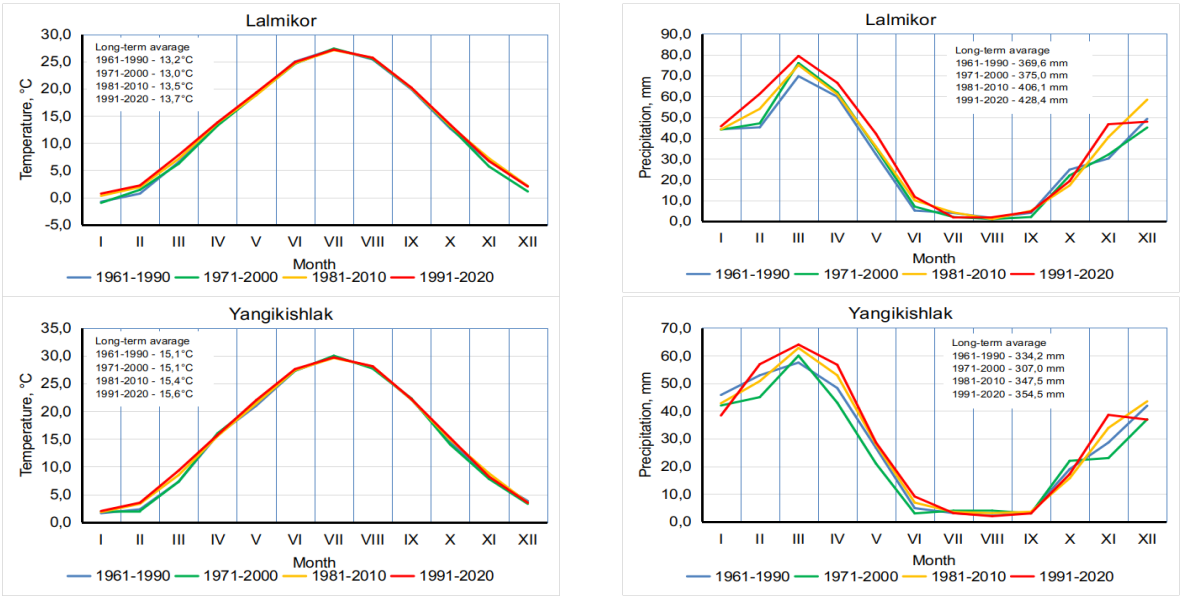


Fig. 3. Intra-annual distribution of air temperature and precipitation at Jizzakh Region's weather stations in periods 1961-1990, 1971-2000, 1981-2010 and 1991-2020

periods than in the first (1961-1990 – 484.3 mm) and third (1981-2010 – 485.9 mm) climatic periods. The opposite trend was observed in Jizzakh. Gallaaral witnessed an overall increase in precipitation over the climatic periods. The differences in the average annual precipitation between the first and fourth climatic periods were +13.8 mm in Bakhmal, +42.9 mm in Gallaaral, +10.8 mm in Dustlik, +25.5 mm in Jizzakh, +58.8 mm in Lalmikor, and +20.3 mm in Yangikishlak.

According to M.L. Arushanov, Uzbekistan has established a network of 82 meteorological stations with a coverage density of 1 meteorological station per 6000 km^2, which is less than 2 times than the requirements of the WMO [7]. However, this distribution does not allow for an accurate spatiotemporal distribution of meteorological parameters.

The challenge of insufficient coverage in meteorological data can be addressed through one of the methods of overcoming observational gaps: utilizing reanalysis data from meteorological field analyses. Reanalysis involves regularly updating meteorological observation data in the reanalysis process, and it interpolates atmospheric parameters globally in a regular grid, even in regions with no direct observations. Importantly, this method has been effectively applied in scientific research in Uzbekistan [8-10].

In the Jizzakh Region, the distribution of temperature and precipitation for the period 1991-2020 was mapped using data from the ECMWF ERA5 reanalysis (Fig. 4-5). The southern part of the region, considering locations like Molguzar, Gubdin, and Zaamin, experiences the lowest average temperatures (3-4°C) and the highest annual precipitation (>1000 mm). Conversely, areas in

the northern and southern parts, like Mirzachul, exhibit higher temperatures and lower precipitation levels.

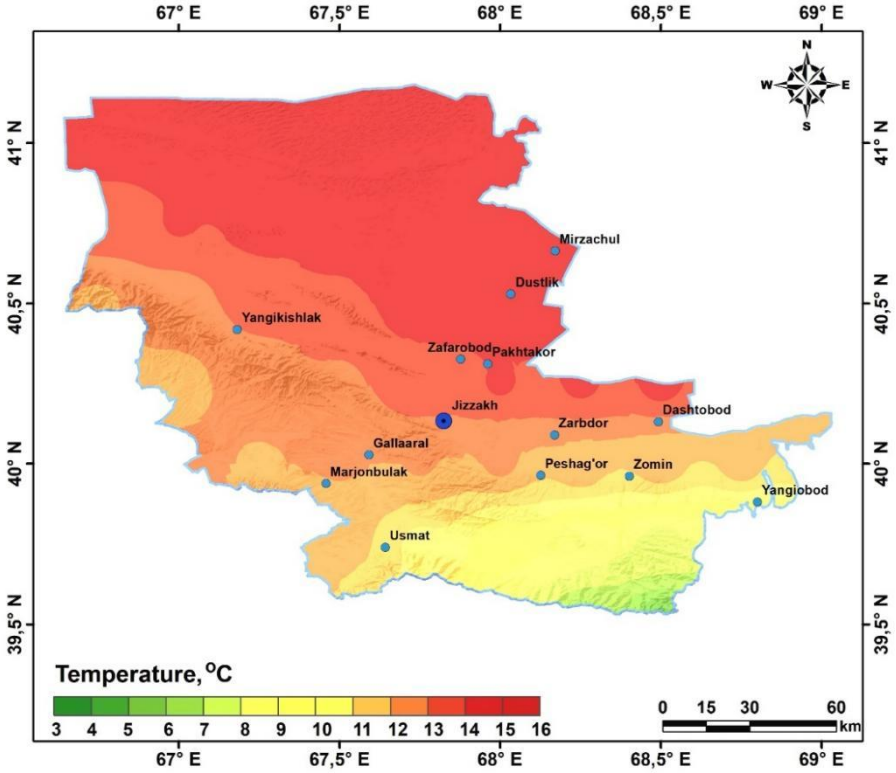


Fig. 4. The distribution of the annual average temperature in the Jizzakh Region (based on ERA5 reanalysis data)

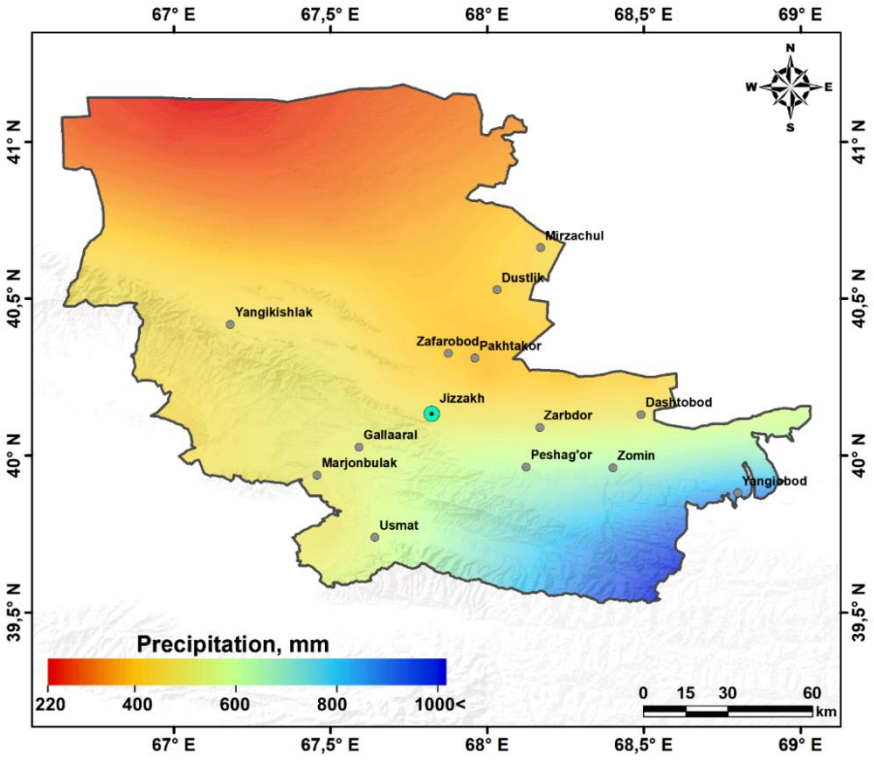


Fig. 5. The distribution of the annual average precipitation in the Jizzakh Region (based on ERA5 reanalysis data)

References:

1. Disputes about global warming – Global warming controversy [Electronic resource]. URL: https://ru.abcdef.wiki/wiki/Global_warming_controversy
2. Average multi-year meteorological elements values for the stations of the Republic of Uzbekistan (for the period 1961-1990). Tashkent, Uzgidromet, 2003, 17 p. (in Uzbek)
3. Average multi-year meteorological elements values for the stations of the Republic of Uzbekistan (for the period 1971-2000). Tashkent, Uzgidromet, 2009. 110 b. (in Uzbek)
4. Average multi-year meteorological elements values for stations of the Republic of Uzbekistan (for the period 1981-2010). Tashkent, Uzgidromet, 2017, 30 p. (in Uzbek)
5. Average multi-year meteorological elements values for the stations of the Republic of Uzbekistan (for the period 1991-2020). Tashkent, Uzgidromet, 2022, 70 p. (in Uzbek)
6. Guidelines on the Calculation of Climate Normals (WMO/TD-No. 1203). Geneva, WMO, 2017.
7. Arushanov M.L. Methodology of rationalization of the meteorological network of stations on the example of the territory of Uzbekistan // Hydrometeorology and environmental monitoring, No 4, 2021. PP. 20-30. (in Russian)
8. Arushanov M.L., Vdovenko A.I. Expansions of anomal fields of the monthly mean temperature in natural orthogonal functions using reanalysis data on the territory of Uzbekistan and neighboring countries // Hydrometeorology and environmental monitoring, No 2, 2022. – S. 8-21. (in Russian)
9. Rakhimov E.Yu., Omonov B.Yu., Kholmatjanov B.M., Abdikulov F.I. Possibilities of using air temperature data from NASA POWER and ERA5 bases in Uzbekistan // Hydrometeology and environmental monitoring, №3, 2023. PP. 8-20. (in Uzbek)
10. Rakhmatova N., Arushanov M., Shardakova L., Nishonov B., Taryannikova R., Rakhmatova V., Belikov D.A. Evaluation of the Perspective of ERA-Interim and ERA5 Reanalyses for Calculation of Drought Indicators for Uzbekistan // Atmosphere, 12(5):527. 2021.

UDC: 016

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RESISTANCE TO PROVOCATIONS IS A RELIABLE PROTECTION OF PRODUCTIVE CREATIVE ACTIVITY

Abstract: provocation is a psychological manipulation, a "challenge" aimed at forcing the victim to behave in a certain way. Usually we are talking about undesirable behavior, which implies harmful consequences for the victim, which are beneficial to the provocateur. Even after recognizing the provocateur, it is not always possible to effectively resist him. If you realize that you have succumbed to provocation, carefully analyze this situation.

Keywords: provocateur, aggressor, psychopath, gossip, introspection, defense.

Introduction

The change of the acting person himself is, therefore, an integral part of all human activity to the extent that a person finds himself faced with the need to live and act, including adapting to a world that is largely created by the same activity. Today we see many examples of the fact that the adaptation of man and humanity to the changes generated by previous activities often becomes far from an easy problem, if we talk, say, about the changes to which our environment is exposed [1].

At the same time, most people easily succumb to yf, because they are not able not only to resist them, but even to recognize them. Using this, skillful provocateurs "play" with their victims, putting them in a bad position and achieving their goals [2].

Provocation is a psychological manipulation, a "challenge" aimed at forcing the victim to behave in a certain way. Usually we are talking about undesirable behavior, implying harmful consequences for the victim, which at the same time are beneficial to the provocateur. In everyday life, provocations are most often aimed at throwing an opponent off balance, forcing him to behave inappropriately and convincing all his colleagues that he is wrong.

To get the opponent out of himself, the provocateur can use special questions and statements, which he utters in a calm tone:

• "Is this information from an authoritative source? And from which one?";

• "I have the right to express my opinion. Or has freedom of speech been abolished?";

• "Can you prove it? Or are these empty words, as usual?";

• "You're making up something that didn't happen!";

• "So what?!".

There are many different examples. But there are several typical types of provocation that are most often found in everyday life and are played out in works of art [2].

Materials and methods

This includes empirical methods such as modeling, fact-finding, experiment, description and observation, as well as theoretical methods such as logical and historical methods, abstraction, deduction, induction, synthesis and analysis, as well as methods of heuristic strategies. The research materials are: scientific facts, the results of previous observations, surveys, experiments and tests; means of idealization and rationalization of the scientific approach.

In real life, provocation is often used in close relationships in order to cause conflict and at the same time look like a victim, not an aggressor. For example, spouses use this approach when clarifying a relationship in order to ensure a deliberately advantageous position for themselves and convince the "soulmate" that she is to blame for the quarrel. Such a "game" usually takes place on a personal level between two people, but sometimes it is aimed at the general public.

There are different types of provocations:

Exploitation of ambition and vanity. Provocation is not always aimed at a negative reaction. Skillful manipulators can use it to force the interlocutor to behave in a certain way. A famous example is described in the fable "The Crow and the Fox": with the help of praise, the Fox lulls the vigilance of the Crow and makes it drop the cheese. Provocations are often found in works of art. For example, a spy provocateur can "admire" how important and influential the interlocutor is in order to get him to talk, forcing him to brag and give out secrets.

Checking the boundaries of independence. It is very often unconsciously resorted to by children who violate the restrictions of their parents and guardians in order to understand how far they can freely go and what the consequences will be. This is not because they are such skillful provocateurs, it's just that children like to experiment, in this way they actually calculate the reaction of adults. This approach is chosen and coordinated at work, when changing the commanding staff [4].

The demand for evidence and arguments for justification is used in public disputes to convince others of their own rightness. Its essence lies in the fact that the provocateur accuses the opponent of something and waits for a reaction. The opponent finds himself in a losing situation. He can deny the accusations or begin to justify himself – to others he will still look guilty.

Another type of provocation is a test for "weakly", here the provocateur demands that the opponent prove his determination or courage by performing some dangerous, reckless and, as a rule, completely meaningless action. Checking for "weak" is often used to achieve beneficial actions for oneself. For example, a seller in the market may significantly doubt the solvency of the buyer and offer him a cheaper thing. The same one, outraged, demands to give him the most

expensive one, and then pays much more for it than he originally intended to spend, just so as not to lose face in the dirt [6].

Results and discussion:

All types of provocations can be divided into two large groups:

• Demonstrative. This is what provocations are called, which are obvious to the victim himself and to others, and also have clear goals. These can be direct insults, lies, slander, bullying and other types of defiant behavior. Most people react to such attacks against themselves emotionally and intemperately. This is what a provocateur usually needs. Positive provocation at the expense of flattery, praise and admiration can also be obvious, but the victim herself often does not notice it, because pleasant words lull her to sleep.

• Hidden. This is what provocations are called, which are difficult to recognize. In addition, even if the provocation becomes obvious, its goals still remain unclear. In fact, this is covert manipulation of the victim. The provocateur achieves his goals, the victim does not know about anything, which means he cannot resist.

With provocateurs, everything is somewhat more complicated than with provocations. To choose the optimal tactics of confrontation, it is necessary to correctly identify the "type" of the provocateur. There are 5 main types:

• The provocateur is a politician. Provocateurs belonging to this species are willing to spend time and effort to develop well-thought-out plans. Their goals may be different. But in any case, they are very dangerous, especially when you consider that they mask their "subversive" activities well. Having found such a provocateur among friends, you need to immediately understand that he is very dangerous. You can't get too close to him, but you don't need to quarrel once again, because it will be very difficult to confront him on his own territory [5].

• A vampire. Many provocateurs are ordinary energy vampires who destabilize the situation around them in order to get "nourishment" from others. Representatives of this species are less dangerous than political provocateurs. And yet, it is also better to stay away from them, because you will not be able to build good friendships with them anyway.

• The gossip. Some people just like to collect, multiply and spread gossip. Once they are alone with you, they begin to "wash the bones" of friends, colleagues and other acquaintances who are not around. You need to be very careful with such people, because in another company they behave the same way, they can spread gossip and accusations about you as well. The best tactic of communicating with a gossip is to distance yourself as much as possible and become "uninteresting" for him, even "unnecessary".

• Flagship of justice. There are people who pretend to be zealous righteous men fighting with all their might for the truth. At the same time, they themselves are far from saints, but they do not care. But they diligently expose the sins of others. As a rule, they are very aggressive and at the same time always confident in their rightness, in connection with which they can pose a serious danger {7].

• An ordinary psychopath. This may be a sociopath or just a person with an unstable psyche who reacts aggressively to most external stimuli. As a rule, such a person does not have a clear motivation, but it is difficult for him to control himself, and any event can make him lose his temper. Such people brawl in queues, are rude to sellers and cashiers, and behave provocatively in public places. They show an aggressive reaction even in the company of people they have known well for a long time [8].

Conclusion:

As we have already found out, provocation can be demonstrative or hidden. An explicit provocation is usually obvious, but an implicit one is difficult to recognize. Its presence is usually signaled by a feeling of discomfort that occurs when communicating with a provocateur, even if he does not give himself away in any way. One of the reasons for this feeling is that such people implicitly break through the psychological protection of the victim, trying not to give themselves away in any way. If communication with some person causes a feeling of discomfort, most likely, an implicit provocation occurs.

Even after recognizing the provocateur, it is not always possible to effectively resist him. There are three important rules, compliance with which provides reliable protection against aggression and provocations:

• Stand your ground. A person who doubts himself is a faithful victim of provocations. Therefore, you must always be confident in your words and your own opinion. No matter how the provocateur behaves, you can not show him that he made you doubt, put you in an awkward position.

• Never explain anything unnecessarily to anyone. If you realize that the other person is trying to get you out of yourself or take control of your emotions, you lose your composure, feel free to stop the conversation and immediately leave that place. This way you will save your nerves, and the provocateur will not achieve his goal, that is, he will not be able to defeat you [5].

• Study yourself [3]. Provocateurs immediately react to the weaknesses of their victims. It is important for every successful person to constantly engage in introspection, find their weaknesses, honestly admit their presence and think in advance about ways to confront provocateurs who exploit your weaknesses and shortcomings [9].

If you realize that you have succumbed to provocation, carefully analyze this situation. Guess exactly what weaknesses the aggressor takes aim at, how and why he found them, how he managed to take advantage of them. It is very important to think about a provocative situation and not to ignore it, not to transfer its outcome to the mercy of daily circumstances, even fate [10].

References:

1. Тутушкина М. К. и др. Практическая психология. Издательство «Дидактика Плюс», 2001. – 368 с.

2. Щербатых Ю. В. Общая психология. Завтра экзамен. — СПб.: Питер, 2008. — 272 с.: ил. — (Серия «Завтра экзамен»). 18BM 978-5-388-00230-

3. Юсупов А.Р. Эвристические стратегии интеллектуального образования. "Экономика и социум" №11(102) 2022. www.iupr.ru.
4. Юсупов А.Р. Альтернативные стратегии самостоятельного образования студентов. "Экономика и социум" №12(103) 2022. www.iupr.ru.
5. Юсупов А.Р. Оптимизация процесса математического и иного моделирования строительных конструкций, зданий и сооружений "Экономика и социум" №11(102) 2022. www.iupr.ru.
6. Юсупов А.Р. Влияние нерациональной самооценки на процесс интуитивного и эвристического познания. "Экономика и социум" №1(104) 2023. www.iupr.ru.
7. Юсупов А.Р. Воображение – мысленное, интуитивное и абстрактное моделирование субстанций, объектов и процессов. "Экономика и социум" №1(104) 2023. www.iupr.ru.
8. Юсупов А.Р. Проблемы творческой команды, связанные с комплексами неполноценностей. "Экономика и социум" №1(104) 2023. www.iupr.ru.
9. Юсупов А.Р. Искусство или психологические аспекты преодоления коммуникативных барьеров творческим коллективом. "Экономика и социум" №1 (104) 2023. www.iupr.ru.
10. Юсупов А.Р. Как действует эго исследователя на процесс природного и историко-социального познания? "Экономика и социум" №1 (104) 2023. www.iupr.ru.

УДК: 709.10-101.709

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ВЛИЯНИЕ АНТИМИКРОБНОЙ ФОТОДИНАМИЧЕСКОЙ ТЕРАПИИ НА ЗАБОЛЕВАНИЯ ПАРОДОНТИТА С САХАРНЫМ ДИАБЕТОМ 2 ТИПА

Аннотация. Воспалительные заболевания пародонта являются одной из наиболее сложных проблем стоматологии, так как, несмотря на эффективность стоматологической помощи, число больных остаётся весьма значительным. Часто такие заболевания протекают на фоне патологии систем пищеварения, кровообращения, нарушения обмена веществ и эндокринных расстройств.

Распространённость сахарного диабета составляет 5-6% и имеет тенденцию к дальнейшему увеличению, в первую очередь в возрастных группа старше 40 лет, при этом на долю больных сахарным диабетом II типа приходится около 7% общей популяции. По материалам ВОЗ, число больных сахарным диабетом увеличивается в год в 2 раза.

Ключевые слова: сахарный диабет 2 типа, заболевания пародонта, антимикробная фотодинамическая терапия.

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THE EFFECT OF ANTIMICROBIAL PHOTODYNAMIC THERAPY ON PERIODONTITIS WITH TYPE 2 DIABETES MELLITUS

Summary. Inflammatory periodontal diseases are one of the most difficult problems in dentistry, since, despite the effectiveness of dental care, the number of patients remains very significant. Often such diseases occur against the background of pathology of the digestive, circulatory systems, metabolic disorders and endocrine disorders.

The prevalence of diabetes mellitus is 5-6% and tends to further increase, primarily in the age group over 40 years, while patients with type II diabetes mellitus account for about 7% of the general population. According to WHO, the number of patients with diabetes mellitus increases by 2 times per year.

Keywords: diabetes mellitus type 2, periodontal diseases, antimicrobial photodynamic therapy.

Актуальность темы. Заболевания пародонта характеризуются хроническим воспалением тканей пародонта, вызванным накоплением зубной биопленки. После удаления зубного налета гингивит становится обратимым заболеванием. Однако длительное накопление биопленки приводит к необратимой потере ткани пародонта. Из-за своей хронической воспалительной природы и многофакторной сложности заболевания пародонта также связаны с рядом системных заболеваний и состояний, таких как сердечно-сосудистые заболевания, сахарный диабет и ожирение.

Диабет — хроническое метаболическое заболевание, характеризующееся повышенным уровнем глюкозы в крови, приводящее к тяжелому поражению сердца, кровеносных сосудов, глаз, почек и нервов. Около 90% больных страдают сахарным диабетом 2 типа. Большинство пациентов имеют избыточную массу тела и повышенный процент жира в организме, особенно в области живота. Всемирная организация здравоохранения (ВОЗ) оценила число диабетиков в 1985 году в 30 миллионов человек во всем мире, а в 2005 году это число выросло до 217 миллионов.

Многочисленные исследования подтверждают, что сахарный диабет увеличивает риск возникновения гингивита, пародонтита и осложнений при имплантации. Однако заболевания пародонта также ухудшают гликемический контроль у людей с сахарным диабетом через медиаторы воспаления. Заболевания пародонта представляют собой шестое осложнение сахарного диабета.

Цель исследования. Целью данного исследования было определение влияния сопутствующей антимикробной фотодинамической терапии (АПТД) на заболевания пародонта и гликемический контроль у пациентов с сахарным диабетом 2 типа (СД2).

Материалы и методы исследования. Данное исследование представляло собой рандомизированное одинарное слепое контролируемое клиническое исследование. Исследование проводилось в соответствии с этическими стандартами. Размер выборки из 12 пациентов в группе был установлен так, чтобы мощность превышала 80% (10 пациентов в группе) для выявления разницы в 1 мм в клинической потере прикрепления (CAL) и 1% гликированного гемоглобина (HbA1c) между группами с прогнозируемым значения CAL 3,5 мм и вариабельностью 1,3 мм и группы с прогнозируемыми значениями HbA1c 8,0% и вариабельностью 1,5%.

Пациенты с сахарным диабетом 2 типа были направлены из городского эндокринного диспансера в стоматологическое отделение городского медицинского центра. Были получены подробные стоматологические и медицинские записи. Критерии включения были следующими: возраст от 40 до 75 лет, сахарный диабет 2 типа со значением HbA1c > 7,0%, не менее десяти зубов верхней и нижней челюсти и не менее четырех зубов с глубиной зондирующего кармана ≥ 5 мм и кровотечение

при зондировании. Критерии исключения были следующими: лечение антибиотиками в течение последних 4 месяцев, пародонтологическое лечение в течение последних 6 месяцев и любые изменения в антигипергликемическом лечении за 3 месяца до участия. Беременные и кормящие женщины, курильщики и бывшие курильщики, бросившие курить менее чем за 5 лет до участия, также были исключены. К участию в исследовании были приглашены субъекты, соответствующие критериям включения. Каждый субъект был подробно проинформирован о преимуществах и рисках лечения и подписал форму информированного согласия перед участием.

Результаты исследования. В этом трехмесячном исследовании приняли участие двадцать четыре пациента. Процесс заживления прошел гладко, и ни один из участников не сообщил о каких-либо побочных эффектах, таких как изменение цвета зубов, десен или слизистых оболочек.

Двадцать четыре пациента были рандомизированы в экспериментальную и контрольную группы. Анализ показал, что демографические характеристики, пародонтальные индексы, а также исходные клинические и гликемические параметры были однородными между двумя группами без статистически значимых различий ($p > 0,05$).

Исходно не было статистически значимых различий между двумя группами по клиническим параметрам пародонта (PPD-, CAL, GR, FMBS, FMPS и FMSBS). В обеих группах наблюдалось улучшение клинических параметров пародонтита. Кроме того, в обеих группах наблюдалось увеличение клинической привязанности (0,5 ± 0,9 мм в контрольной группе и 0,4 ± 0,9 мм в контрольной группе, не показано), но разница между группами не была статистически значимой ($p > 0,05$).

Микробиологический анализ. Исходно анализ не выявил статистически значимых различий между группами ($p > 0,05$). В опытной группе достоверно снизилась доля положительных участков для *P. gingivalis, P. intermedia, T. denticola* и *T. forsythia* ($p < 0,05$). Доля *A. actinomycetemcomitans* составляла 0% исходно и через 180 дней. В контрольной группе снизилась доля положительных участков для *A. actinomycetemcomitans, P. gingivalis, T. denticola* и *T. forsythia*. Однако разница не была статистически значимой ($p > 0,05$). Доля положительных сайтов для *P. intermedia* не изменилась.

Сравнение между группами через три месяца показало статистически значимую разницу в доле положительных участков на *T. forsythia* в пользу опытной группы ($p < 0,05$).

Гликемический контроль. Исходно не было значительной разницы между уровнями гликированного гемоглобина (HbA1c) в группах. Уровень HbA1c снизился с 7,9 ± 0,3% до 7,4 ± 0,2% в основной группе и с 8,2 ± 0,3% до 7,5 ± 0,2% в контрольной группе. Однако сравнение между группами не выявило статистически значимой разницы через 3 месяца. Результаты

показывает значение HbA1c в исследуемой и контрольной группах исходно и через 3 месяца.

Выводы. Целью данного исследования было определение влияния сопутствующей аФДТ с использованием ИКГ в качестве фотосенсибилизатора и диодного лазера с длиной волны 810 нм на заболевания пародонта, гликемический контроль и микробиологические показатели у пациентов с СД2. Мы обнаружили статистически значимое снижение FMBS в пользу тестовой группы; однако разница в других параметрах пародонта (PPD, CAL, GR, FMSBS и FMPS) не была статистически значимой. В обеих группах наблюдалось снижение HbA1c, но разница между группами не была статистически значимой. В краткосрочной перспективе дополнительный аФДТ не способствует лучшему гликемическому контролю. Результаты нашего исследования показывают, что эффект дополнительной аФДТ на снижение доли положительных участков для пародонтальных патогенов более значителен, чем протокол полной дезинфекции полости рта в одиночку.

Можно заключить, что дополнительный аФДТ не способствует лучшему гликемическому контролю. Однако это вызывает более значительное снижение FMBS и доли положительных участков для пародонтальных патогенов. Для подтверждения наших результатов потребуется долгосрочное исследование с большим количеством участников.

Использованные источники:

1. Всемирная организация здравоохранения. Определение и диагностика сахарного диабета и промежуточной гипергликемии, Отчет консультации ВОЗ/IDF. Женева, Швейцария: Всемирная организация здравоохранения; 2006.
2. Тейлор Г.В., Боргнакке В.С. Заболевания пародонта: связь с диабетом, гликемический контроль и осложнения. Оральный дис. 2008 г.; 14: 191–203. doi: 10.1111/j.1601-0825.2008.01442.x.
3. Филстром Б.Л., Михалович Б.С., Джонсон Н.В. Заболевания пародонта. Ланцет. 2005 г.; 366: 1809–1820. doi: 10.1016/S0140-6736(05)67728-8.
4. Дарби И. Факторы риска пародонтита и периимплантита. Периодонтол 2000. 2022; 90:9–12. дои: 10.1111/прд.12447.
5. Памук Ф., Кантарчи А. Воспаление как связь между заболеваниями пародонта и ожирением. Энн Периодонтол 2000. 2022; 90: 186–196. дои: 10.1111/прд.12457.
6. Меурман Дж. Х., Басконес-Мартинес А. Инфекции полости рта и системное здоровье – больше, чем просто связь с сердечно-сосудистыми заболеваниями. ORAL Health Prev Dent. 2021 год; 19: 441–448. doi: 10.3290/j.ohpd.b1993965.

7. Папапанов П.Н. 1996 Всемирный семинар по клинической пародонтологии. Заболевания пародонта: эпидемиология. Энн Периодонтол. 1996 год; 1:1–36. дои: 10.1902/анналы.1996.1.1.1.
8. Ло Х. Заболевания пародонта. Шестое осложнение сахарного диабета Сахарный диабет. Забота. 1993 год; 16:329–334.
9. Нибали Л., Гкраниас Н., Майнас Г., Ди Пино А. Пародонтит и осложнения с имплантатами при диабете. Периодонтол 2000. 2022; 90:88–105. дои: 10.1111/прд.12451.
10. Параскевас С, Хейзинга Дж.Д., Лоос Б.Г. Систематический обзор и метаанализ С-реактивного белка в отношении пародонтита. Дж. Клин Периодонтол. 2008 г.; 35: 277–290. doi: 10.1111/j.1600-051X.2007.01173.x.

УДК 372.881.111.1

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РЕАЛИЗАЦИЯ КЕЙС - ТЕХНОЛОГИИ НА УРОКЕ ИНОСТРАННОГО ЯЗЫКА

Аннотация. Статья включает в себя актуальность реализации кейс-технологии, а также различные приемы кейс-технологий. В работе рассмотрены принципы внедрения данного метода в учебный процесс, а также различные виды кейсов и их базисные элементы. Помимо этого, в работе представлены примеры грамотно составленных кейсов с точки зрения методологической и теоретической значимости.

Ключевые слова: преподавание, иностранный язык, инновационные стратегии, кейс-технология.

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IMPLEMENTATION OF CASE TECHNOLOGY IN A FOREIGN LANGUAGE LESSON

Annotation. The article includes the relevance of the implementation of case technology, as well as various techniques of case technology. The paper considers the principles of implementing this method in the educational process, as well as various types of cases and their basic elements. In addition, the paper presents examples of well-designed cases from the point of view of methodological and theoretical significance.

Keywords: teaching, foreign language, innovative strategies, case technology.

Система образования XXI века находится в постоянном изменении и в непрерывном преобразовании, как принципов обучения, так и методической системы учебного процесса. В современных школах, университетах по всему миру уже долгие годы существует тенденция к глубокому, содержательному изучению иностранного (английского) языка.

Это очевидно, ведь в настоящее время образовательная система стремится к интеграции, интернационализации учебно-воспитательного процесса и многие языки, в том числе и английский язык, становятся международными. В условиях глобализации и модернизации всех ступеней образования происходят изменения и в контексте преподавания иностранных языков.

Основными образовательными ценностями XXI века являются креативность, развитые социальные навыки, знания и умения. В настоящее время система образования постепенно отходит от ориентации на развитие предметных знаний и умений, делая упор на формирование у школьников современных компетенций. К таким компетенциям относятся навыки сотрудничества, коммуникации и кооперации. Как и любой урок, учебный процесс в рамках изучения иностранного языка также направлен на формирование и развитие данных навыков. Как показывает практика и опыт, как зарубежных педагогов – практиков, так и отечественных исследователей, все более актуальным и эффективным становится кейс-метод.

В современной педагогической науке кейс - технологии определяются как система методов активного проблемно-ситуационного анализа, в основе которого лежит организация учебного процесса путем выполнения определенных заданий/решения проблем/ситуаций, которые могут возникнуть в профессиональной сфере. В основе кейс - технологий лежат два термина — «кейс» и «исследование», которые образуют единое поле — «кейс-обучение». Итак, целью такого метода является анализ конкретной ситуации, возникающей при определенных условиях, и выбор практического решения предложенной проблемы с последующим ее анализом [2, с.25-26].

Кейс - технологии предполагают обучение в сотрудничестве, через совместную работу. То есть, основной формой организации учебной деятельности в рамках методики выступает групповая / командная работа. Это, в свою очередь, развивает у учащихся навыки работы в коллективе, навыки группового общения и взаимодействия со сверстниками. В основе кейс - технологий лежат несколько принципов, которые важны для становления личности школьника, поддержания его познавательного интереса: ключевое понятие «партнер», наличии игровой составляющей, технология проблемного кооперативного обучения. Данные принципы были отражены и в российском докладе «Новый взгляд на образование», представленный на Всемирном экономическом форуме, который демонстрирует новую образовательную модель, в которой представлена важность формирования у школьников компетенций 4К: креативность, критическое мышление, кооперация и коммуникация [5, с.456]. Все это детерминирует исследование кейс - технологий в качестве метода организации учебно-воспитательного процесса в контексте уроков иностранного языка.

Кейс – технологии обладают в познавательном аспекте дидактической значимостью, так как предполагают обучение учащихся через практику и конкретные ситуации. Главная задача учащихся при решении кейсов состоит в рассмотрении представленной ситуации, ее анализе и моделировании возможных решений. При решении кейсов школьники или студенты учатся находить причинно-следственные связи, определять негативные последствия ситуации и пути их предотвращения.

Главная особенность кейс – технологий состоит в том, что они стимулируют познавательную активность учащихся посредством практической деятельности и активного диалога в системах «ученик – учитель», «ученик – ученик». При этом, на первых этапах внедрения кейс-метода в практическую деятельность на уроках иностранного языка могут быть выбраны такие, в которых ситуация максимального приближена к опыту и возрасту школьников, что позволит им почувствовать себя активными субъектами кейса или проблемы.

На уроках иностранного языка педагог может использовать различные приемы кейс – технологий [3, с.84]:

1. Описание социальных, культурных или нравственных проблем, которые не имеют точного, единого решения, но предлагают учащимся поразмышлять и активизировать возможности критического мышления.

2. Включение словесных сюжетов, иллюстраций или игровой деятельности с проблемными ситуациями для реализации принципа наглядности в рамках изучения иностранного языка.

3. Использование фото и видеороликов, содержащих проблемные вопросы и ситуации для реализации принципа интерактивности на уроке иностранного языка.

4. Работа с объектами и явлениями окружающей действительности, которые могут быть включены в кейс - технологии. Данный прием особенно актуален на первых этапах знакомства с кейс - технологии для реализации принципа ориентации на опыт учащихся.

Для того чтобы кейс – технологии развивали познавательный интерес учащихся, трансформировали урок иностранного языка в увлекательное занятие, педагогу необходимо знать о некоторых принципах внедрения данного метода в учебный процесс. А именно [1, с.308-309]:

1.Педагог выполняет функцию организатора и координатора, он также корректирует деятельность школьников, дает обратную связь, на первых этапах обучает детей оценивать себя и других в устной, а затем и в письменной форме. Данное условие необходимо, так как современная система образования, в том числе кейс - технологии, декламируют необходимость развития у учащихся самостоятельности, саморегуляции, умения контролировать свои действия, а также навыков взаимодействия. Становится ясно, что формирование и развитие представленных умений и

навыков зиждется на создании атмосферы для продуктивного усвоения информации и групповой, активной, самостоятельной работы.

2.В рамках применения кейс - технологий на уроках иностранного языка не стоит забывать о социальном аспекте учебного процесса. Одна из целей обучения иностранному языку – формировать коммуникативные навыки и развивать речевую деятельность на неродном языке. По причине этого, у учащихся с первых лет обучения должен быть сформирован мотив совместной деятельности, а также должны быть созданы условия для благоприятного продолжения социализации посредством изучения другой культуру. Именно поэтому кейс - технологии как эффективный способ обучения необходимо как можно раньше включать в систему уроков иностранного языка.

3.Педагогу на уроке иностранного языка следует использовать все приемы кейс – технологий, которые доступны для учащихся с целью одновременного развития индивидуального исследовательского интереса у детей, а также умения работать в группе и коллективе.

4. Кейсы не являются целостным, готовым материалом, который может быть использован в качестве целого урока или серии уроков. Педагогу важно понимать: кейсы – метод, отдельное задание, которое следует включать на разных этапах урока в соответствии с логикой учебно-воспитательного процесса.

Для того, чтобы урок иностранного языка был интересным, увлекательным с одновременно богатым познавательным содержанием, педагогу необходимо разрабатывать и включать в учебную деятельность разнообразные виды кейсов. К таким видам можно отнести [4, с.312]:

1. Коллективные кейсы. Такие кейсы предполагают коллективную дискуссию с целью нахождения наиболее правильного ответа на проблемный вопрос.

2. Описательные кейсы. Данный вид предполагает написание учащимися описательной теории, наблюдение за объектами и сравнение результатов наблюдения с ранее выдвинутой теорией. Кейс предполагает мини – эксперимент.

3. Объяснительные кейсы. В данном случае ученики должны в процессе решения кейса отыскать и аргументировать причинно-следственные связи. То есть, учащиеся изучают факторы, которые могли вызвать определенные события.

4. Внутренние кейсы. Данный тип кейсов может использоваться преподавателем в качестве индивидуального домашнего задания на основании исследовательских и научных интересов учащихся. Педагог и ученики совместно выбирают кейс, который будет им интересен. Учащиеся решают, исследует кейс во внеурочное время. Результаты исследования могут быть представлены как на практических занятиях или в рамках круглого стола, дебатов в урочное время.

Бесспорно, как и любое задание, кейс обладает определенной структурой, которую педагогу необходимо соблюдать для того, чтобы применение кейс - технологии было эффективным и профессиональным. При разработке кейса важно учитывать включение следующих базисных элементов кейса [1, с.310]:

1. Краткое, лаконичное и запоминающееся название кейса – задания.
2. Введение, которое включает в себя основную мысль, проблему или предысторию, которые важны в контексте решения ситуации или задачи.
3. Основная часть, которая содержит в себе базисную информацию, которая необходима для решения проблемы. Обычно в основной части указывается противоречие, которое учащимся необходимо решить.
4. Заключение. Данный элемент, как правило, содержит в себе вопрос, который задается учащимся. В заключении кейса могут быть недосказанности, отсутствие ответа на вопрос, абсурд или иные инструменты порождения познавательного интереса учащихся.

Для наглядной демонстрации грамотно составленных кейсов с точки зрения методологической и теоретической значимости, представим несколько материалов, которые могут быть использованы педагогами общеобразовательных учреждений в соответствии с целями, задачами конкретного урока и возрастными особенностями учащихся.

Пример кейса № 1

«Living in the city or in the country»

Jack and Michael are arguing about where is the best place for a person to live. Jack says that the city is the best place to live because it has lots of entertainment and beautiful buildings. Michael is sure that the village is a great place to live, as it is closer to nature.

So where is it better to live - in the city or in the country? Provide arguments for your opinion.

Пример кейса № 2

«Global warming»

Almost every day through the media, we are confronted with warnings of immediate environmental disasters. It is still difficult for us to imagine such global phenomena as the greenhouse effect or the destruction of the planet's ozone layer. We are sometimes skeptical of reports from biologists that it is getting hotter day by day. There are those who support the idea of global warming, and there are skeptics who do not believe in this theory.

Give arguments for and against global warming.

Пример кейса № 3

«Why is a foreign language necessary?»

Everyone knows that in the 21st century learning foreign languages is a tendency and a new trend. In social networks, on different information platforms we can see thousands of articles that demonstrate the importance of learning a

foreign language. But what about those who have no inner desire to learn a foreign language? Is it really necessary?

Think in a group about whether it is necessary to learn a foreign language. If so, why? If not, why not?

Данные кейсы могут быть решены в групповом формате с помощью дебатов, где одни учащиеся рассматривают аргументы, поддерживаю одну точку зрения, а другие учащиеся исследуют и аргументируют противоположное мнение. Педагогу важно в заключение озвучить мысль о том, что каждая точка зрения имеет место быть, так как данные кейсы – дискуссионные феномены, которые стоит рассматривать с разных точек зрения. Так, у учащихся будут формироваться не только коммуникативные навыки в рамках иностранного языка, но и критическое мышление, креативность, умение отстаивать и аргументировать позицию, что необходимо в условиях современной системы образования.

Таким образом, кейс – технологии выступают тем способом организации процесса обучения, который способствует развитию у учащихся разных возрастов познавательного интереса, повышению мотивации и приобретению предметных и метапредметных навыков. Этот факт обуславливается наличием у кейс-метода элементов проблемного обучения, которое создает на занятиях ситуацию для раскрытия у учащихся исследовательского и интеллектуального потенциала. Более того, при решении коллективных или групповых кейсов, учащиеся учатся аргументировать свое мнение, слушать других, вступать в коммуникативный акт на иностранном языке. В рамках решения индивидуальных кейсов у учеников формируется собственное Я, внутренний голос на иностранном языке и развиваются навыки самостоятельности, целеполагания.

Так, если педагог грамотно, профессионально составит и внедрит кейсы в учебно-воспитательный процесс, то они становятся эффективным инструментом по обучению учащихся иностранному языку. Представленные в настоящем эссе принципы составления кейса, описанные элементы и примеры кейсов могут стать методическим и теоретическим фундаментом для педагога при организации учебной деятельности в рамках преподавания иностранного языка. В дальнейшем представляется интересным более детальное изучение возможностей кейс - технологий применительно к обучению учащихся старшей школы.

Использованные источники:

1. Осипова И. В. Применение кейс-технологии при обучении иностранному языку / И. В. Осипова // Актуальные проблемы языкознания. – 2016. – Т. 1. – С. 306-311

2. Пересунько Е. А. Метод кейс-стади в сфере профессиональной иноязычной коммуникации / Е. А. Пересунько // Мир педагогики и психологии. – 2018. – № 7(24). – С. 24-36.

3. Токюл М. В. Кейс -технологии на уроках английского языка / М. В. Токюл, Н. В. Рындина, Т. П. Мельникова // Символ науки: международный научный журнал. – 2021. – № 1. – С. 83-85.
4. Хижняк И. М. Использование кейс-технологии в целях формирования иноязычной коммуникативной компетенции при обучении иностранным языкам / И. М. Хижняк // Иностранные языки в контексте межкультурной коммуникации: Материалы докладов IX Международной конференции, Саратов, 21–22 февраля 2017 года. – Саратов: Издательство "Саратовский источник", 2017. – С. 310-314.
5. Шермазанова С. В. Использование кейс-технологии при обучении иностранным языкам / С. В. Шермазанова // Научный альманах. – 2015. – № 11-2(13). – С. 455-462.

***УДК*: 37.013.31**

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ИНТЕГРИРОВАННИЕ В ОБРАЗОВАНИЕ СТРАТЕГИИ ФОРМИРОВАНИЯ STEM-КОМПЕТЕНЦИЙ: КОМПЛЕКСНЫЙ АНАЛИЗ ОТ НАЧАЛЬНОЙ ДО ВЫСШЕЙ ШКОЛЫ

Аннотация: данная статья рассматривает интегрированный подход к образованию в области науки, технологии, инженерии и математики (STEM). Освещены ключевые этапы STEM-образования, начиная с начальной школы, и проходя через среднюю школу и вузы, заканчивая профессиональным ростом. Авторы обсуждают роль STEM в формировании базовых навыков, развитии интереса к научным и техническим дисциплинам, а также влиянии на выбор будущих профессиональных путей. Особое внимание уделяется специализированным техническим программам в вузах, а также значению непрерывного обучения и карьерного роста в условиях быстрого технологического развития. Статья предоставляет анализ и прогнозы развития STEM-образования и его влияния на будущее технологического прогресса и научных открытий.

Ключевые слова: интегрированное STEM-образование, наука, технологии, инженерия, математика, STEM-навыки, образовательные тенденции, непрерывное обучение.

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INTEGRATION IN EDUCATION STRATEGIES FOR STEM COMPETENCY FORMATION: COMPREHENSIVE ANALYSIS FROM ELEMENTARY TO HIGHER SCHOOL

Abstract. This article explores an integrated approach to education in the fields of science, technology, engineering, and mathematics (STEM). Key stages of STEM education are highlighted, starting from elementary school, through middle school and universities, culminating in professional growth. The authors discuss the role of STEM in shaping basic skills, fostering interest in scientific and technical disciplines, and influencing the choice of future career paths. Special attention is given to specialized technical programs in universities, as well as the significance of continuous learning and career development in the context of rapid technological advancement. The article provides an analysis and forecasts for the development of STEM education and its impact on the future of technological progress and scientific discoveries.

Keywords: integrated STEM education, science, technology, engineering, mathematics, STEM skills, educational trends, continuous learning.

Введение

В современном информационном обществе STEM-образование, базирующееся на принципах науки, технологии, инженерии и математики [1], выступает в роли катализатора интеллектуального прогресса и технологического развития. STEM не просто представляет собой сокращение от четырех обширных областей знаний [2], но является многогранным подходом к образованию, ориентированным на развитие критического мышления, творческой проблемной постановки и решения, а также научной методологии [3].

Важность STEM-образования неоспорима в свете текущих образовательных трендов и растущей потребности в высококвалифицированных специалистах в области науки, технологии, инженерии и математики. На протяжении последних десятилетий мы наблюдаем не только ускоренный темп технологического прогресса, но и появление новых вызовов, требующих инновационных подходов к их решению.

Тенденции в образовании непрерывно изменяются в ответ на динамичные потребности общества. Сегодняшние учащиеся сталкиваются с уникальными вызовами, такими как глобальные проблемы окружающей среды, кибербезопасность, искусственный интеллект и биотехнологии. Эти вызовы создают растущий спрос на квалифицированных специалистов, обладающих не только глубокими знаниями в своих областях, но и способных применять их к практическим задачам [4].

Таким образом, введение STEM технологий в образовательные программы становится стратегическим шагом, направленным на

подготовку нового поколения лидеров и новаторов. В данной статье мы рассмотрим эволюцию STEM-образования от начальной школы до высшего образования, выявим его влияние на формирование профессиональных навыков и рассмотрим перспективы его развития в будущем.

Таблица 1

Этапы STEM-образования и их особенности

Этап образования	Особенности	Примечания	Профессиональные пути
Начальная школа	Игровые методы, базовые навыки	Основы научного мышления и технических предметов	-
Средняя школа	Углубленные курсы, проекты, технологическое внедрение	Развитие интереса к конкретным STEM-дисциплинам	-
Высшее образование	Специализированные технические программы, лаборатории, индустриальные связи	Глубокое изучение профессиональных навыков	Инженеры, Научные исследователи
Проф. рост	Непрерывное обучение, онлайн-курсы, семинары, конференции	Адаптация к требованиям рынка и технологическим изменениям	IT-специалисты, Медицинские специалисты

STEM-образование в начальной школе

В начальной школе STEM-образование играет важнейшую роль, предоставляя ученикам уникальные возможности для формирования фундаментальных навыков и вдохновляя интерес к науке и технике. На этом этапе акцент делается на использовании игровых методов обучения, создавая при этом захватывающее и практическое окружение для детей.

Учебные программы начальной школы в области STEM должны быть направлены на развитие базовых навыков, таких как логическое мышление, аналитические способности и командная работа. Игровые методы обучения, такие как конструирование, решение головоломок и коллективные проекты, становятся важным инструментом, способствующим не только усвоению знаний, но и формированию практического опыта [5].

Важно отметить, что игровые методы обучения в STEM-образовании не только привлекают внимание учащихся, но и позволяют им осваивать сложные концепции в форме игры, что способствует более глубокому пониманию материала. Например, использование робототехники в учебном процессе позволяет детям не только составлять простейшие алгоритмы, но

и решать задачи, развивая тем самым навыки критического мышления и творческого подхода.

Таким образом, анализ исследований позволяет нам выделить следующие преимущества раннего вовлечения в STEM-деятельность для формирования интереса к науке и технике:

- Раннее вовлечение в STEM-деятельность имеет долгосрочные выгоды, включая формирование стойкого интереса к научному и техническому творчеству. Этот интерес не только стимулирует учеников начальных классов к дальнейшему изучению STEM-дисциплин, но и создает фундаментальную основу для развития будущих профессиональных интересов.
- Исследования показывают, что дети, занимающиеся STEM-активностями на ранних этапах обучения, чаще выбирают STEM-специализации в дальнейшем образовании и карьере. Таким образом, начальные этапы STEM-образования становятся ключевым фактором в формировании кадрового резерва в области науки и технологии.

Перейдем теперь к следующему этапу нашего исследования, рассмотрев роль STEM-образования в средней школе и его воздействие на дальнейшую образовательную активность учащегося.

STEM-образование в средней школе

На этапе обучения в средней школе STEM-образование приобретает более глубокий и комплексный характер, ориентированный на развитие конкретных навыков и углубленное понимание ключевых дисциплин [6]. Средняя школа становится полигоном для формирования STEM-навыков через углубленные курсы и проекты для стимулирования интереса учащихся.

Средняя школа предоставляет учащимся возможность выбора кружков, дополнительных курсов STEM направленности, в отдельных случаях программы подготовки с соответствующим уклоном, что позволяет фокусироваться на конкретных областях интереса. Подобные программы, курсы могут включать в себя более сложные темы в математике, физике, химии, биологии и информатике. Проектно-ориентированный подход становится центральным элементом обучения, позволяя учащимся применять теоретические знания к реальным задачам.

Проекты в средней школе могут варьироваться от создания научных исследований и инженерных проектов до программирования и решения технических задач. Такой подход к обучению стимулирует творческое мышление, развивает навыки работы в команде и помогает учащимся видеть важность STEM в решении реальных проблем.

Неотъемлемой частью учебного процесса в средней школе становятся технологии. Использование интерактивных досок, программного обеспечения для моделирования и виртуальных лабораторий обогащает

учебный опыт и делает учебный процесс более доступным и увлекательным.

Важной частью технологического внедрения является использование STEM-ориентированных программ и платформ, которые позволяют учащимся создавать и тестировать свои собственные проекты [7]. Проекты могут подразумевать программирование, создание роботов, виртуальное моделирование, работу с технологиями дополненной и виртуальной реальности [8].

Такие инновационные методы не только улучшают понимание учебного материала, но и стимулируют интерес учащихся к STEM-дисциплинам. Использование технологий в учебном процессе не только готовит учащихся к цифровому миру, но и создает возможности для более глубокого погружения в изучение науки, техники и математики.

Таким образом, средняя школа становится периодом интенсивного формирования STEM-компетенций, а внедрение технологий в образовательный процесс является ключевым фактором для вдохновения учащихся на долгосрочное обучение и карьерный успех в области STEM.

STEM-образование и среднее специальное профессиональное образование

Общее среднее образование, сфокусированное на STEM-дисциплинах, не только формирует технические навыки и глубокое понимание науки, но и оказывает заметное влияние на выбор будущей профессиональной траектории учащихся. Учащиеся, получившие углубленное STEM-образование в средней школе, приобретают не только технические навыки, но и развивают критическое мышление, проблемное решение, коммуникацию и коллективные навыки. В результате они готовы к успешному вхождению в разнообразные области, требующие STEM-компетенций, будь то технический сектор, научные исследования, медицинская область, информационные технологии, инжиниринг.

Как показано в Таблице 2, открывающиеся профессиональные пути для выпускников школ со специализацией в STEM-дисциплинах становятся более разнообразными и перспективными [9]. В будущем, после получения соответствующего среднего специального профессионального и/или высшего образования они могут выбрать карьеру инженера, научного исследователя, программиста, врача, архитектора, аналитика данных и многих других.

Таблица 2

Разнообразие STEM-профессий

STEM-профессия	Область	Навыки и квалификации	Требования к образованию	Примеры компаний
Инженер по разработке ПО	IT	Программирование, аналитические навыки, коммуникация	Высшее образование в IT-сфере	Google (США), Tencent (Китай)
Биоинформатик	Биология	Анализ данных, биоинформатика, молекулярная биология	Высшее образование в биоинформатике	Illumina (США), BGI (Китай)
Инженер по автоматизации производства	Инженерия	Автоматизация процессов, знание PLC	Высшее образование в области инженерии	Siemens (Германия), Fanuc (Япония)
Ученый в области искусственного интеллекта	Исследования	Машинное обучение, нейронные сети, статистика	Докторская степень в области исследований	OpenAI (США), Alibaba DAMO Academy (Китай)
Медицинский исследователь	Медицина	Клинические исследования, знание биологии	Медицинская степень, PhD	Novartis (Швейцария), Roche (Швейцария)
Астрофизик	Физика	Теоретическая физика, астрономия, математика	Докторская степень в астрономии или физике	NASA (США), European Space Agency (Европа)
Инженер по энергетике	Инженерия	Проектирование энергетических систем, знание обновляемых источников энергии	Высшее образование в области энергетики	Vestas (Дания), GE Renewable Energy (США)
Геоинформационный аналитик	География	Географическая информационная система (ГИС), статистика	Высшее образование в геоинформационных науках	Esri (США), China National Offshore Oil Corporation (Китай)
Специалист по кибербезопасности	ИТ	Кибербезопасность, анализ уязвимостей, пентестинг	Сертификация в области кибербезопасности, высшее образование в IT	Kaspersky Lab (Россия), Check Point Software Technologies (Израиль)
Инженер-химик	Химия	Синтез и анализ химических веществ, химическая инженерия	Высшее образование в области химии или химической инженерии	BASF (Германия), Dow Chemical (США)

Примеры STEM профессий и компаний, в которых подобные специалисты могут быть востребованы, демонстрируют разнообразие применения навыков STEM, взращенных в системе непрерывного образования и глобальное влияние различных сферах деятельности в разных странах и областях экономики. Анализ исследований [10, 11, 12], представленный в таблице 2 показывает, что в некоторых случаях, если специалисты не останавливаются на среднем специальном профессиональном образовании, а продолжают свое обучение в ВУЗах, то возможности карьерного роста существенно расширяются. Благодаря широкому спектру STEM-навыков, учащиеся будут более подготовлены к адаптации к быстро меняющемуся миру труда. Это можно объяснить особенностями, характерными для высшего профессионального образования, которые мы раскроем далее.

STEM-образование в Высшей школе

STEM-образование в Высшей школе характеризуется активным сотрудничеством с предприятиями и индустрией, что предоставляет студентам практический опыт и представление о реальных требованиях современных рынков труда. Проекты, стажировки, мастер-классы от профессионалов в области STEM создают мост между учебной средой и реальной индустрией.

Эта связь с индустрией помогает студентам лучше понять, как применять свои знания на практике, что в свою очередь укрепляет их убежденность в выборе STEM-пути. Опыт работы с индустрией также расширяет горизонты профессиональных возможностей, предоставляя информацию о новейших технологиях и трендах.

STEM-образование в Высшей школе является катализатором формирования будущих лидеров и новаторов. Выпускники STEM-программ обладают креативностью и предпринимательским духом, способными представлять новые идеи и решения для глобальных проблем. Этот подход к образованию стимулирует не только профессиональный рост, но и создает культуру постоянного стремления к улучшению и инновациям.

Таким образом, STEM-образование в Высшей школе не только подготавливает выпускников к конкретным профессиональным областям, но и формирует их как креативных мыслителей, способных вносить вклад в научные открытия, технологический прогресс и общественные изменения.

Специализированные технические программы в вузах предоставляют студентам уникальные возможности для глубокого погружения в свои области интереса и подготовки к будущей карьере в технологических и инженерных областях. Особенности таких программ включают:

• **Глубокое изучение дисциплин**. Студенты технических программ изучают предметы более подробно и систематично, чем студенты других направлений. Программы разрабатываются таким образом, чтобы

обеспечить студентам необходимые теоретические знания и практические навыки.

• **Лабораторные работы и практики**. Технические программы активно используют лабораторные работы и практику для применения теоретических знаний на практике. Студенты могут участвовать в реальных проектах, что способствует развитию профессионального опыта.

• **Специализированные курсы**. Программы включают в себя специализированные курсы, позволяющие студентам выбирать конкретные направления в своей области. Например, программы могут предлагать курсы по разработке программного обеспечения, робототехнике, электротехнике и др.

• **Индустриальные связи.** Вузы с техническим уклоном активно сотрудничают с промышленными предприятиями. Студенты могут участвовать в стажировках и проектах совместно с компаниями, что улучшает их подготовку к реальным требованиям рынка.

• **Междисциплинарные проекты.** Студенты технических программ участвуют в междисциплинарных проектах, совмещая знания из различных областей STEM. Это способствует развитию коммуникационных навыков и пониманию взаимосвязи между разными техническими дисциплинами.

Послевузовское непрерывное обучение в области STEM

Непрерывное обучение играет ключевую роль в успешной карьере в области STEM, учитывая быстрое технологическое развитие и постоянные изменения в требованиях рынка труда. Необходима не только преемственность STEM образования на всех уровнях становления будущего специалиста, личности [13], но и в дальнейшем, в процессе профессиональной деятельности, что требует более тесной интеграции STEM-образования с современным образованием (Таблица 3)

Таблица 3

Интеграция STEM-образования в современное общество

Аспекты интеграции	Значение	Примечания	Примеры проектов
Программы в начальной школе	Развитие базовых навыков, формирование интереса к STEM	Игровые методы обучения, интерактивные занятия	"STEM for Kids" (США), "Кодируй с детьми" (Россия)
Специализированные технические программы в вузах	Подготовка высококвалифицированных специалистов	Глубокое изучение технических дисциплин, сотрудничество с промышленностью	MIT School of Engineering (США), Stanford School of Engineering (США)
Интеграция технологий в образовательный процесс	Стимулирование интереса и вовлеченности учащихся	Виртуальные лаборатории, образовательные приложения,	Google Classroom (США), Microsoft Education (США)

Аспекты интеграции	Значение	Примечания	Примеры проектов
		мобильные и компьютерные технологии	
Непрерывное обучение и онлайн-курсы	Обеспечение доступности образования на протяжении карьеры	Гибкость обучения, доступность для профессионального развития	Coursera (США), edX (США)
Участие в научных исследованиях и проектах	Развитие практических навыков и внедрение в активное научное сообщество	Междисциплинарные проекты, участие в конференциях	Citizen Science projects (Великобритания), NASA's Open Innovation Initiative (США)
Развитие STEM-профессий в регионах	Поддержка местных инициатив и развитие экосистемы	Сотрудничество с местными предприятиями и учебными заведениями	STEM-кластеры (Германия), региональные конкурсы и форумы (Южная Корея)
Экосистема инноваций в STEM	Содействие стартапам и инновационным проектам	Инкубаторы, акселераторы, сотрудничество с венчурными фондами	Silicon Valley Innovation Center (США), Skolkovo Foundation (Россия)

Следует отметить, что в настоящее время огромное значение имеет постоянное обновление как преподавателями, так и студентами [14] знаний в условиях быстрого технологического развития. Такой подход дает:

• **Технологическое развитие**: в области STEM технологии постоянно эволюционируют. Регулярное обновление знаний позволяет специалистам следить за последними трендами и технологическими инновациями.

• **Конкурентоспособность на рынке труда**: специалисты, постоянно улучшающие свои навыки, более конкурентоспособны на рынке труда. Работодатели ценят специалистов, готовых к самообучению и адаптации.

• **Углубленное понимание области**: постоянное обучение помогает углубить знания в своей области, что способствует более глубокому пониманию принципов и технологий.

Выводы

Таким образом, от начальной школы до профессионального роста в области STEM происходит последовательное формирование и развитие компетенций, необходимых для успешной карьеры в современном мире. Начиная с акцента на игровых методах обучения и развитии базовых навыков в начальной школе, STEM-образование в средней школе углубляет знания и формирует профессиональные интересы через участие в проектах

и практических занятиях. Специализированные технические программы в вузах предоставляют студентам глубокие знания и опыт, подготавливая их к вызовам современной индустрии. Важными элементами обучения становятся междисциплинарные проекты, лабораторные работы и сотрудничество с промышленностью. Непрерывное обучение и карьерный рост в области STEM подчеркивают важность постоянного обновления знаний в условиях быстрого технологического развития. Онлайн-курсы, семинары и конференции играют ключевую роль в профессиональном развитии, обеспечивая специалистов необходимыми инструментами для постоянного совершенствования.

Перспективы развития STEM-образования обещают углубление и расширение его воздействия. Современные тенденции свидетельствуют о росте внимания к STEM в начальных и средних школах, что создает прочный фундамент для будущих профессиональных успехов.

Влияние STEM-образования на будущее технологического прогресса и научных открытий остается важным фактором. Выпускники STEM-программ не только формируют ядро квалифицированных специалистов, но и становятся новаторами, вносящими вклад в научные и технологические достижения. Продолжение интеграции STEM в учебные программы и повышение доступности образования в этих областях предвещают устойчивый рост технологического прогресса и научных открытий в будущем.

Однако, в сфере интеграции STEM-образования в современное общество остаются актуальными несколько ключевых проблем и вызовов, которые требуют внимания и решения:

1. Эффективное внедрение STEM-образования требует хорошо обученных преподавателей, способных обеспечивать интерактивное и практическое обучение [15]. Программы обучения для учителей должны уделять внимание актуальным методикам, новым технологиям и инновационным подходам в области STEM [16].

2. Для успешной реализации STEM-образования необходимо обеспечить соответствующую инфраструктуру и ресурсы. Это включает в себя обновленные лаборатории, высокотехнологичное оборудование, программное обеспечение и доступ к современным технологиям.

3. Важно установить прочные связи между STEM-образованием и требованиями рынка труда. Это включает в себя разработку программ стажировок, сотрудничество с предприятиями и создание возможностей для студентов и профессионалов в области STEM.

4. Развитие и реализация междисциплинарных STEM-программ, позволяющих студентам объединять знания из различных областей, помогут создать более целостный и глубокий опыт обучения.

Решение указанного спектра проблем требует комплексного и согласованного подхода от образовательных учреждений, правительственных органов, индустрии и общества в целом.

В заключении следует отметить, что интегрированное STEM-образование является неотъемлемой частью современной образовательной системы. Он способствует формированию у учащихся не только конкретных навыков в области науки и технологии, но и развивает критическое мышление, командную работу и проблемное решение. Отмечается, что успешное внедрение STEM-образования требует сотрудничества между образовательными учреждениями, промышленностью и обществом в целом. В конечном итоге, подготовка карьерных специалистов в области STEM играет ключевую роль в стимулировании инноваций и обеспечении устойчивого развития общества.

Использованные источники:

1. Чемеков В. Н., Крылов Д. А. STEM-новый подход к инженерному образованию //Вестник Марийского государственного университета. – 2015. – №. 5 (20). – С. 59-64.
2. Ощепков А. А., Репин А. О. STEM-технология как средство развития творческой деятельности обучающихся //Проблемы современного педагогического образования. – 2019. – №. 65-4. – С. 246-249.
3. Шарифбаева Х. Я., Абдурашидов И. Ж. У. Опыт подготовки преподавателей технических дисциплин в ведущих вузах мира //Вестник науки и образования. – 2021. – №. 7-2 (110). – С. 27-29.
4. Кохно П. А., Кохно А. П. Опережающему промышленному производству необходимы востребованные специалисты //Вестник Московского университета МВД России. – 2022. – №. 1. – С. 367-375.
5. Тотикова Г. А. и др. Внедрение STEAM-образования в начальную школу //Современные научные разработки. Инновационный аспект. – 2023. – С. 7-10.
6. Ратиева Ю. О. Stem-образование и педагогические практики в школах Сингапура //Сборник трудов магистров-2019. – 2019. – С. 186-193.
7. Тоноян Н. Ж. STEM-технологии в образовании //Методический сборник:" STEM-технологии в образовательной организации". – 2020. – С. 34-37.
8. Абдураззакова Д. А., Абдурашидов И. Ж., Алимарданов Р. А. Цифровые приложения в преподавании технических дисциплин //Интернаука: электрон. научн. журн. – 2022. – №. 2. – С. 225.
9. Van den Berghe W., de Martelaere D. Choosing stem //Young people's educational choice for technical and scientific studies. Report compiled on behalf of the Vlaamse Raad voor Wetenschap en Innovatie, Brussels: Flemish Council for Science and Innovation. – 2012.
10. Xue Y. et al. STEM crisis or STEM surplus?: дис. – Massachusetts Institute of Technology, 2014.

11. Wong B. et al. End of the road? The career intentions of under-represented STEM students in higher education //International Journal of STEM Education. – 2022. – Т. 9. – №. 1. – С. 51.
12. Hanson G. H., Slaughter M. J. High-skilled immigration and the rise of STEM occupations in US employment //Education, skills, and technical change: Implications for future US GDP Growth. – University of Chicago Press, 2017. – С. 465-494.
13. Шарифбаева Х. Я. Реализация преемственности модели STEM на всех уровнях образования //Проблемы педагогики. – 2023. – №. 1 (62). – С. 7-10.
14. Yadkarovna S. H., Anvarovna A. D. Technology of blended learning as a condition of formation self-education skills for students //International scientific review. – 2020. – №. LXIX. – С. 73-75.
15. Шарифбаева Х. Я., Абдурашидов И. Ж. У. Общеметодическая подготовка преподавателей специальных дисциплин в технических вузах //Вестник науки и образования. – 2020. – №. 23-3 (101). – С. 49-51.
16. Sharifbaeva K. et al. Formation of methodical competence of special subjects teachers in technical universities //AIP Conference Proceedings. – AIP Publishing, 2022. – Т. 2432. – №. 1.

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КОМБИНАТОРНЫЕ ЗАДАЧИ О ДВИЖЕНИЯХ ШАХМАТНЫХ ФИГУР

Аннотация. В данной статье рассматривается комбинаторные задачи о шахматах и о комбинаторных ходах шахматных фигур. В решении таких задач используется используется аддитивная теория чисел, формулы комбинаторики размещение, перестановка, сочетание.

Ключевые слова: шахматные фигуры, аддитивная теория чисел, движение шахматных фигур (король, ладья..).

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COMBINATORY PROBLEMS ABOUT CHESS MOVEMENTS FIGURES

Annotation. This article examines combinatorial problems about chess and combinatorial moves of chess pieces. To solve such problems, additive number theory and combinatorics formulas are used: placement, permutation, combination.

Key words: chess pieces, additive number theory, movement of chess pieces (king, rook..).

Введение

Здесь мы займёмся решением следующего вопроса: сколькими способами может какая-либо шахматная фигура с клетки *(a, b)* перейти на клетку (a_1, b_1) двигаясь все время в поступательном направлении. Мы увидим ниже, что эта задача в некоторых случаях (движение ладьи) имеет тесную связь с аддитивной теорией чисел, т.е. с той частью науки о целом числе (называемой теорией чисел), которая посвящена решению вопроса о разбиении числа на сумму слагаемых. Прототипом задач подобного рода

является задача о гирях: как взять n чисел a_1, a_2…, a_n так, чтобы всякое число могло быть представлено в виде алгебраической или арифметической суммы чисел a_1, a_2…, a_n. Она была рассмотрена ещё Леонардом Фибоначчи, крупнейшим из европейских математиков средних веков.

Шахматные фигуры можно разделить на две категории: фигуры дальнодействующие и фигуры не дальнодействующие. К первой категории относится слон, ладья и ферзь, а ко второй- конь и король. Мы начнём нашу главу с простейшего случая, а именно с исследования движения короля.

Основная часть

Пусть, например, король стоит на клетке *e*4.

В один ход он может переместиться на одну из восьми клеток *e3, e5, d4, f4, d3, f5, f3, d5*.

Спрашивается - какие из этих перемещений следует считать поступательными? Условимся в дальнейшем подпоступательными движениями короля подразумевать движения типа:

e4- e5, e4- f4 и e4- f5,

т.е. вверх, вправо и вправо-вверх, причём мы эти движения обозначим соответственно стрелками ↑ , → и .

Предположим, что король начинает свое движение от угловой клетки (1, 1), двигаясь все время поступательно в двух направлениях ↑ и →. Поставим задачу:

Сколькими способами король может дойти с клетки (1, 1) до клетки (*x*, *y*)?

Обозначим искомое число способов через $F_{x,y}$. Очевидно, что наша фигура может пройти на клетку (*x*, *y*), либо проходя через (x, y-1), либо через (x-1, y). Но клетку (x, y-1) король может достичь $F_{x,y-1}$ способами, а клетку (x-1, y) $F_{x-1,y}$ способами, откуда сразу получается простое соотношение:

$$F_{x,y} = F_{x,y-1} + F_{x-1,y}, (1)$$

Позволяющее вычислить $F_{x,y}$, если только известны $F_{x,y-1}$ и $F_{x-1,y}$. Нетрудно сообразить, что $F_{x,1} = 1$ при всяком *x*, так как клетку (*x*, *1*) король может достичь, двигаясь все время только в направлении →. Точно так же $F_{1,y} = 1$ при всяком *y*. Поэтому получим, например, что

$$F_{2,2} = F_{2,1} + F_{1,2} = 1+1 = 2;$$
$$F_{2,3} = F_{2,2} + F_{1,3} = 2+1 = 3;$$
$$F_{2,4} = F_{2,3} + F_{1,4} = 3+1 = 4$$

и т.д. Очевидно, что мы, действуя подобным образом, вычислим $F_{x,y}$ для любой клетки шашечницы.

Выпишем в каждую клетку (*x*, *y*) вычисленное для нее число $F_{x,y}$. После такого выписывания шахматная доска примет следующий вид (рис. 1), т. е. мы получим так называемую арифметическую шашечницу.

1	8	36	120	330	792	1716	3432
1	7	28	84	210	462	924	1716
1	6	21	56	126	252	462	792
1	5	15	35	70	126	210	330
1	4	10	20	35	56	84	120
1	3	6	10	15	21	28	36
1	2	3	4	5	6	7	8
1	1	1	1	1	1	1	1

Рисунок 1.

Попробуем теперь выразить $F_{x,y}$ через x и y. Для этого обозначим цифрой 1 перемещение $\rightarrow$, а цифрой 2 перемещение $\uparrow$. Король может перейти от клетки (1, 1) к (x, y), совершив x-1 горизонтальных ходов $\rightarrow$ и y-1 вертикальных ходов $\uparrow$, например, он может перейти на (x, y) следующим образом:

$$\underbrace{111...1}_{m_1 раз}\ \underbrace{222...2}_{n_1 раз}\ \underbrace{11...1}_{m_2 раз}...\underbrace{11...1}_{m_k раз}\ \underbrace{222...2}_{n_k раз} \quad (A)$$

причем

$$m_1 + m_2 + ... + m_k = x - 1;$$

$$n_1 + n_2 + ... + n_k = y - 1.$$

Сколько же можно составить подобных комбинаций из x-1 цифр 1 и y-1 цифр 2? Сочетания цифр типа (А) принято называть перестановками с повторениями. Следовательно, нашей ближайшей задачей является определение числа всевозможных перестановок с повторением из x-1 цифр 1 и y-1 цифр 2. Это число, очевидно, и будет как раз равно $F_{x,y}$. Прежде всего заметим, что в схеме (А) всего имеется (x-1)+(y-1)= x+ y -2 цифр.

Составив всевозможные перемещения этих цифр, получим (x+ y -2)! схем, но они не все различны, так как в (А) цифра 1 повторяется x-1 раз, а цифра 2 повторяется (y-1) раз.

Между цифрами 1 можно совершить (x-1)! перестановок, и эти перестановки не изменят (А). Поэтому число (x+ y -2)! схем (А) можно сократить на (x-1)!.

Точно так же (y -1)! Перестановок между цифрами 2 не изменят (А), и поэтому число схем можно сократить ещё на (y -1)!.

В итоге получим, что число различных схем (А) равно

$$\frac{(x+y-2)!^1}{(x-1)!(y-1)!}$$

Таким образом мы имеем, что

$$F_{x,y} = \frac{(x+y-2)!}{(x-1)!(y-1)!}. \quad (2)$$

Формула (2) позволяет решить без труда более общую задачу: сколькими способами король может перейти из клетки (a, b) на (a_1, b_1), двигаясь все время в направлениях ↑ и →. В самом деле, мы всегда можем (a, b) принять за (1, 1).

Тогда клетка (a_1, b_1) относительно (a, b) будет иметь координатами числа $a_1 - a + 1$ и $b_1 - b + 1$. Отсюда следует, что искомое число способов равно F_{a_1-a+1, b_1-b+1} или, по формуле (2)

$$F_{a_1-a+1, b_1-b+1} = \frac{\left[(a_1+b_1)-(a+b)\right]!}{(a_1-a)!(b_1-b)!}$$

Например, если король стоит на клетке (2, 3), то на клетку (7, 8) он может переместиться

$$\frac{\left[(7+8)-(2+3)\right]!}{(7-2)!(8-3)!} = \frac{10!}{5!5!} = 252$$

способами, двигаясь в направлениях ↑ и →.

До сих пор мы рассматривали тот случай, когда король перемещается поступательно в направлениях ↑ и →. Естественно теперь перейти к более общему случаю, а именно пусть король перемещается поступательно в трех направлениях: ↑, → и □ .

Мы опять начнём свое исследование изучением движения короля из угловой клетки (1,1) на клетку (x, y). Обозначим через $D_{x,y}$ искомое число перемещений. Для того чтобы попасть на (x, y), король неминуемо должен пройти либо через (x-1, y-1), либо через (x-1,y), либо через (x,y-1). Отсюда будем иметь такое соотношение:

$$D_{x,y} = D_{x-1,y-1} + D_{x-1,y} + D_{x,y-1},$$

причём $D_{x,1} = 1$, $D_{1,y} = 1$. С помощью этой формулы можно определить $D_{x,y}$ для любой клетки. Проделав все вычисления, мы получим следующую арифметическую шашечницу (рис.2).

1	7	25	63	4
1	5	13	25	
1	3	5	7	3
1	1	1	1	2

1

1 2 3 4

Рисунок 2.

Впрочем, оказывается, что и $D_{x,y}$ можно непосредственно выразить через x и y с помощью тех же методов, которые применялись к $F_{x,y}$. Обозначим соответственно через 1, 2 и 3 перемещения ↑, → и □. В своём движении от клетки (1, 1) до (x, y) король должен пройти x-1 строк и y-1 колонн. При ходе 1 он переходит на новую строку, но колонна остаётся одна и та же. Наоборот, при ходе 2 король переходит на новую колонну, оставаясь на одной и той же строке. Наконец, при ходе 3 наша фигура перемещается на новую колонну и новую строку. Поэтому ход 3 эквивалентен перемещению 12 или 21.

Использованные источники:

1. Yusupova A.K. Refining One Theorem For The Romanovsky Distribution The American journal of interdisciplinary innova-tions and Research. 2021 Impact Factor 5,676, vol. 03 Crossref doi 10.37547
2. Yusupova A.K Developing Matematical Institation in Students. International Journal of Cblture and Modernity
3. Yusupova A.K Developing students' logical thinking in the process of teaching probability theory and mathematical statistics.
4. Юсупова А.К., Абдулатипова З.А. Рещение химических задач математическими методами. Международная конференция «Интеграция современных химических наук в охране общественного здоровья» 2023 год 18 декабрь. Стр. 317-319
5. Юсупова А.К., Абдулатипова З.А. Нахождение неизвестных химических металлов с помощью математики. Международная конференция «Интеграция современных химических наук в охране общественного здоровья» 2023 год 18 декабрь. Стр. 323-327
6. Yusupova A.K., Bogdan A. Tibbiyot masalalarini hal qilishda kombinatorika formulalarini qo'llash. Международная конференция «Интеграция современных химических наук в охране общественного здоровья» 2023 год 18 декабрь. Стр. 431-433.

ИНФОРМАЦИОННЫЕ И КОММУНИКАТИВНЫЕ ТЕХНОЛОГИИ

УДК 004

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ОЦЕНКА ЭМОЦИОНАЛЬНОГО СОСТОЯНИЯ СТУДЕНТОВ ВНУТРИ ГРУППЫ С ПОМОЩЬЮ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ

Аннотация. Данная статья посвящена использованию информационных технологий для оценки эмоционального состояния студентов в учебной группе. Рассматриваются различные методы и инструменты, позволяющие производить оценку эмоционального состояния студентов, а также возможности использования этих данных для оптимизации учебного процесса.

Ключевые слова: эмоциональное состояние, студенты, информационные технологии, учебный процесс, машинное обучение, анализ данных.

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ASSESSMENT OF THE EMOTIONAL STATE OF STUDENTS WITHIN THE GROUP USING INFORMATION TECHNOLOGY

Abstract. This article is devoted to the use of information technology to assess the emotional state of students in the study group. Various methods and tools are considered to assess the emotional state of students, as well as the possibility of using these data to optimize the educational process.

Keywords: emotional state, students, information technology, educational process, machine learning, data analysis.

Эмоциональное состояние студентов играет важную роль в их обучении и успешном завершении учебной программы. Понимание и оценка эмоционального состояния студентов в образовательной среде имеет

большое значение для создания поддерживающей и эмоционально благоприятной обучающей среды.

Оценка эмоционального состояния студентов включает в себя мониторинг и измерение их эмоциональных реакций, уровня стресса, уровня эмоциональной поддержки, а также выявление возможных проблем, связанных с эмоциональным благополучием. Для этого могут использоваться различные методики, включая анкетирование, наблюдение и интервью.

Оценка эмоционального состояния студентов позволяет выявить потенциальные проблемы в их эмоциональном благополучии и предпринять соответствующие меры для поддержки их эмоционального здоровья. Кроме того, такая оценка может помочь образовательным учреждениям разработать программы и мероприятия для повышения эмоциональной поддержки студентов и снижения уровня стресса.

Таким образом, оценка эмоционального состояния студентов в образовательной среде является важным инструментом для создания благоприятной обучающей среды и поддержки эмоционального благополучия студентов.

Современные информационные технологии играют все более важную роль в мониторинге и оценке эмоционального состояния студентов. С их помощью можно проводить анализ данных, полученных из социальных сетей, мобильных приложений и онлайн платформ, чтобы проверить эмоциональное состояние студентов [1].

Технологии машинного обучения и анализа данных позволяют эффективно обрабатывать большие объемы информации о поведении студентов в онлайн среде. Например, анализ комментариев и постов в социальных сетях может дать представление о настроении и эмоциональном состоянии студентов.

Также информационные технологии используются для создания специализированных мобильных приложений, которые помогают студентам отслеживать свои эмоции и настроение. Эти приложения могут предложить различные методики для улучшения эмоционального состояния, например, предлагая медитации, поддерживающие видео или психологические тренинги.

В целом, информационные технологии играют ключевую роль в создании возможностей для более точной и достоверной оценки эмоционального состояния студентов, что способствует более эффективному и индивидуализированному подходу к помощи им в случае необходимости.

1. Разработка программного обеспечения для оценки эмоционального состояния студентов включает в себя такие этапы, как:

2. Анализ данных: сбор данных об эмоциональном состоянии студентов, включая их поведение, реакции и выражения, используя датчики, аудио- и видеозаписи, опросники и т. д.

3. Создание алгоритмов: разработка алгоритмов и методов для анализа собранных данных и определения эмоционального состояния студентов на основе их поведения, мимики, голоса и других характеристик.

4. Использование машинного обучения: применение методов машинного обучения для обработки и анализа данных, чтобы определить паттерны и связи между эмоциональным состоянием студентов и их активностью, успехом в учебе и другими факторами.

5. Создание приложения или программы: разработка программного обеспечения, которое позволит отслеживать и оценивать эмоциональное состояние студентов, предоставлять им обратную связь и рекомендации для улучшения их благополучия.

6. Тестирование и адаптация: проведение тестирования разработанного программного обеспечения с участием студентов, анализ обратной связи и внесение корректировок для улучшения его эффективности.

7. Внедрение и поддержка: развертывание программного обеспечения для использования в учебных заведениях, обучение персонала по его использованию и поддержка его работоспособности и обновлений.

При этом использование информационных технологий для оценки эмоционального состояния имеет как потенциальные преимущества, так и ограничения, которые должны быть учтены при их применении.

Среди преимуществ можно выделить следующие:

1. Объективность: Использование информационных технологий для оценки эмоционального состояния может предоставить более объективные данные, чем традиционные методы, основанные на мнении человека. Технологии могут анализировать физиологические показатели, голосовые данные и другие индикаторы, что помогает исключить субъективные оценки.

2. Масштабируемость: Информационные технологии могут обрабатывать большие объемы данных и анализировать их с высокой скоростью. Это позволяет оценить эмоциональное состояние большого числа людей одновременно и в реальном времени.

3. Доступность: С развитием мобильных приложений и устройств, оценка эмоционального состояния становится доступной даже для обычных пользователей. Люди могут отслеживать свои эмоции, получать рекомендации и поддержку через приложения на своих смартфонах [2].

В качестве недостатков рассматриваются такие, как:

1. Недостаточная точность: Несмотря на все технические возможности, точность оценки эмоционального состояния через информационные технологии может быть недостаточной. Различные люди

могут выражать свои эмоции по-разному, что делает сложным разработку универсального алгоритма для их определения.

2. Приватность и безопасность данных: Сбор и анализ данных об эмоциальном состоянии человека может стать предметом обсуждения с точки зрения приватности и безопасности. Люди могут быть не готовы разглашать такую интимную информацию, беспокоясь за её неправильное использование.

3. Этические проблемы: Использование информационных технологий для оценки эмоционального состояния может вызвать этические вопросы, связанные с возможностью манипуляции людьми на основе их эмоций или дискриминацией на этом основании [2].

Использованные источники:

1. Кочетова Ю. А., Климакова М. В. Эмоциональный интеллект в условиях информационного общества и кибербуллинга //Мир науки. Педагогика и психология. – 2019. – Т. 7. – №. 2. – С. 51.

2. Исмагилова А. Ф., Дудина Д. С., Алейников С. А. Разработка средств оценки уровня удовлетворенности студентов процессом дистанционного обучения посредством видеоконференцсвязи //Научный результат. Информационные технологии. – 2020. – Т. 5. – №. 4. – С. 44-52.

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ПОСТАНОВКА, АЛГОРИТМИЗАЦИЯ И НОРМИРОВАНИЕ РЕШЕНИЯ КОМПЛЕКСНОЙ ПРОБЛЕМЫ СИНТЕЗА КОМПОЗИЦИОННЫХ СТРОТЕЛЬНЫХ МАТЕРИАЛОВ С ПРИМЕНЕНИЕМ ЭВРИСТИЧЕСКИХ МЕТОДОВ

Аннотация: комплексную проблему, связанную с подбором состава и химического синтеза новых композиционных строительных материалов можно решить с применением эвристических стратегий, в статье освящается алгоритмы эффективного подхода решения задачи.

Ключевые слова: эвристика, химический синтез, метод, строительство, композитный материал, критерий, этап, прототип, альтернатива, аналог, решение.

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FORMULATION, ALGORITHMIZATION AND NORMALIZATION OF SOLUTIONS TO THE COMPLEX PROBLEM OF SYNTHESIS OF COMPOSITE BUILDING MATERIALS USING HEURISTIC METHODS

Abstract: the complex problem associated with the selection of the composition and chemical synthesis of new composite building materials can be solved using heuristic strategies, the article highlights the algorithms of an effective approach to solving the problem.

Keywords: heuristics, chemical synthesis, method, construction, composite material, criterion, stage, prototype, alternative, analogue, solution.

Вступление

Решение проблем подбора состава и химического синтеза новых композиционных строительных материалов спомощью эвристических методов – принятие решений состоит из последовательных этапов [2]. Процесс решения таких проблем с использованием эвристических методов фактически состоит из 5 последовательных шагов [4]:

1. Постановка вопроса химического синтеза, определение целей и задач [1].

2. Осуществление выбора вещества прототипа и метода, которые могут быть использованы на основе анализа недостатков и дефектов прототипа и существующих противоречий в его разработке [3].

3. Изменить прототип выбранными методами и сформировать несколько новых технических решений как альтернативные варианты.

4. Анализ новых технологических решений с точки зрения целесообразности и эффективности использования.

5. Выбор наиболее оптимального из альтернативных вариантов в качестве решения задачи химического синтеза, при несоответствии какого-либо варианта требованиям, используя другие прототипы, повторять лабораторные процессы синтеза, предусмотренную в шагах 2-4, до создания оптимального решения.

Материалы и методы

Сюда входят эмпирические методы, такие как моделирование, установление фактов, эксперимент, описание и наблюдение, а также теоретические методы, такие как логические и исторические методы, абстракция, дедукция, индукция, синтез и анализ, а также методы эвристических стратегий. Материалами исследования являются: научные факты, результаты предыдущих наблюдений, опросов, экспериментов и тестов; средства идеализации и рационализации научного подхода.

Результаты и обсуждение:

Решение проблемы, то есть химико-технологический процесс, можно представить состоящим из пяти описанных выше шагов, но на самом деле количество шагов определяется сложностью задачи [5]. Ниже мы объясним 8 этапов принятия решения по творческой проблеме на примере.

На первом этапе ставится вопрос по творческой задаче. На этом этапе осуществляется сбор, обработка и анализ дан ных. Основная задача этого этапа (решаемая аналитиками) – своевременно заметить признаки затруднений, возникающих в процессе исследований, и зафиксировать причины, довести до сведения лиц, принимающих решение.

Второй шаг – диагностика проблемы. Первым шагом к решению проблемы является ее идентификация. Есть два взгляда на проблемную ситуацию. Согласно первому, ситуация недостижимости поставленных целей является проблемой. Согласно последнему, неиспользованный потенциал также может рассматриваться как проблема.

Третий этап – формирование ограничений и критериев принятия решений. Решения многих задач, являющиеся продуктом творческого мышления, не реализуются из-за отсутствия на тот момент сырья, технологий и машин или других ресурсов с особыми свойствами, необходимых для реализации принятых решений. В таких ситуациях необходимы координирующие действия ограничения, которые сужают варианты принятия проектных решений. В дополнение к выявлению ограничений руководитель проекта также должен установить стандарты для

оценки а вариантов. Такие стандарты называются критериями, и они же служат рекомендациями по оценке архитектурных решений.

При проектировании нового вещества или композиционного материала критериями служат следующие требования и ограничения: архитектурно-строительная привлекательность вещества, неповторяемость; требования, определяемые функциональным процессом, протекающим в помещении: освещение, температурно-влажностный режим и т.п.; требования по энергосбережению; требования к прочности и сейсмостойкости конструктивной схемы; наличие технологических возможностей, машин и механизмов; требования по охране труда и предотвращению негативного воздействия на окружающую среду; технико-экономические требования и ограничения [7].

Если проект посвящен вопросам реставрации и реконструкции, следует учитывать дополнительные требования и ограничения к вышеперечисленным: сохранение исторического колорита здания; отрицательные влияния реконструкции на прочностные, пространственные и сейсмостойкие аспекты здания [6].

Четвертая стадия – формирование множества альтернативных вариантов решения проблемы. Обычно главный архитектор тщательно прорисовывает приемлемых альтернатив и ограничивает вариантов.

Пятый этап – оценка альтернатив. При оценке решений руководитель сравнивает преимущества и недостатки вариантов, а также определяет возможные последствия в целом [8].

Шестой шаг – выбор альтернативы. Если проблема определена правильно, альтернативы решения продуманы и оценены, сделать выбор, то есть принять решение, сравнительно легко. Модератору остается выбрать альтернативный вариант с наиболее положительными последствиями.

Седьмой этап – реализация. Решение задачи не заканчивается выбором альтернативы, но ограничение выбора образа действий не имеет большого значения для организации-заказчика. Чтобы решить проблему или воспользоваться решением, сначала получить искомого вещества [8].

Восьмой этап — обратная связь. До и после принятия решения по проекту проведение экспертизы и получение подробной информации о том, что произошло в процессе синтеза композитного материала позволяет руководителю проекта своевременно вносить коррективы и предотвращать отрицательные явления и последствия.

Вывод:

Команда ученых аналитиков и технологов может выбрать одну из эвристических стратегий: мозгового штурма, коллективного метода поиска оригинальных идей, многомерного матричного метода, коллективного блокнота, метода Дельфи и других методов [9].

Использованные источники:

1. Falsafa asoslari [Matn]: o‘quv qollanma / Q.Nazarov [va boshq.]. - Toshkent: 0 ‘zbekiston faylasuflari milliy jamiyati, 2018. - 380 b.
2. Глущенко В.В., Глущенко И.И. Разработка управленческого решения. Прогнозирование - планирование. Теория проектирования экспертов: Учебник для ВУЗов. - М.:ЮНИТИ-ДАНА, 2011.- 456с.
3. Юсупов А.Р. Эвристические стратегии интеллектуального образования. "Экономика и социум" №11(102) 2022. www.iupr.ru.
4. Юсупов А., Сирожиддинов Х. Рекомендации по оптимизации математического и иного моделирования строительных конструкций, зданий и сооружений. Международная научная и научно-техническая конференция: «Инновации в строительстве, сейсмическая безопасность зданий и сооружений». Республика Узбекистан, г. Наманган, 15-17 декабря 2022 года. E-mail: pgsnauka@gmail.com; https://t.me/nammqi_xalqaro _konf_2022
5. Юсупов А.Р. Альтернативные стратегии самостоятельного образования студентов. "Экономика и социум" №12(103) 2022. www.iupr.ru.
6. Юсупов А.Р. Примеры исторических инноваций, народной прозорливости и мудрости в инженерных решениях здания мемориала «Мадрасаи Мир» в городе Каканд. "Экономика и социум" №12(103) 2022. www.iupr.ru.
7. Юсупов А.Р. Усиление железобетонного перекрытия. "Экономика и социум" №12(103) 2022. www.iupr.ru.
8. Юсупов А.Р. Высокоэффективная, ресурсосберегающая технология восстановления конструкций совмещенных кровельных покрытий большепролетных зданий. "Экономика и социум" №12(103) 2022. www.iupr.ru. "Экономика и социум" №12(103) 2022. www.iupr.ru.
9. Юсупов А.Р. Методы эвристических стратегий познания. "Экономика и социум" №12(103) 2022. www.iupr.ru.

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ВВЕДЕНИЕ В ПРАКТИКУ МАЛОИНВАЗИВНЫХ МЕТОДОВ ЛЕЧЕНИЯ ГНОЙНО-ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЙ ПРИДАТКОВ МАТКИ

Аннотация. Воспалительные заболевания внутренних женских половых органов занимают первое место в структуре гинекологической патологии. Острое воспаление придатков наиболее частое заболевание, возникающее в репродуктивном возрасте и выявляющееся у 60-65% женщин. 20-30% из них требуется стационарное лечение. За последнее десятилетие во всех странах мира увеличилось число случаев острых воспалительных заболеваний органов малого таза.

Ключевые слова: гнойные воспалительные заболевания,придаток матки, антибактериальная терапия.

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INTRODUCTION TO PRACTICE OF MINIMALLY INVASIVE METHODS OF TREATMENT OF PUROPENTAL-INFLAMMATORY DISEASES OF THE UTERINE APPENDIXES

Annotation. Inflammatory diseases of the internal female genital organs occupy first place in the structure of gynecological pathology. Acute inflammation of the appendages is the most common disease that occurs during reproductive

age and is detected in 60-65% of women. 20-30% of them require hospital treatment. Over the past decade, the number of cases of acute inflammatory diseases of the pelvic organs has increased in all countries of the world.

Key words: purulent inflammatory diseases, uterine appendage, antibacterial therapy.

Введения. Лечение при ГВЗПМ проводится одновременно в двух основных направлениях. Во-первых, воздействие на инфекцию, включая хирургическую санацию первичного очага, системную антибактериальную терапию, коррекцию измененного биоценоза основных биотопов. Во-вторых, воздействие на организм больной, направленное на восстановление расстройств гомеостаза, включая органные нарушения: респираторную поддержку, инфузионную терапию и коррекцию гемостаза [1, 4]. Установлено, что успешный результат лечения больной с абдоминальной инфекцией лишь на 15—20% зависит от эффективной антибактериальной терапии, на 80% — от адекватной хирургической санации [2].

Цель исследования: оптимизация тактики ведения больных с гнойно-воспалительными заболеваниями придатков матки.

Задачи:Изучить характер изменений NO-эргической системы лейкоцитов крови среди женщин с ГВЗПМ. Выявить зависимость изменений от клинической формы (глубины и распространенности) заболевания.

Оптимизировать алгоритм ведения больных с ГВЗПМ в зависимости от клинико-биохимического статуса. Существует несколько способов хирургического лечения ГВЗПМ: чревосечение, лапароскопия, кольпотомия и дренирование гнойников под визуальным контролем. Сторонники малоинвазивной навигационной хирургии под контролем ультразука и компьютерной томографии проводят дренирование гнойников в малом тазу с использованием троакарной методики или специальных игл через переднюю брюшную стенку либо через задний свод влагалища. При этом проводят аспирацию гнойного экссудата и вводят антибиотики [5, 6]. Использование малоинвазивных эндовидеохирургических методов является наиболее перспективным направлением в хирургии абдоминальных инфекций, а интенсивность их развития позволяет надеяться на быстрые и существенные преобразования в неотложной абдоминальной хирургии [1, 6]. Развитие эндоскопической техники привело к внедрению лапароскопии при ГВЗПМ сначала с диагностической целью, а затем и с лечебной [2, 8]. В дальнейшем благодаря исследованиям отечественных и зарубежных ученых эндоскопический подход получил признание среди других методов хирургического лечения ГВЗПМ как метод выбора при равных условиях и наличии одинаковых показаний к хирургическому лечению [5].

Результаты. Различия в подходах гинекологов к эндоскопическому лечению в основном касаются сроков выполнения и кратности процедур. При условии полного удаления воспалительного экссудата достаточно однократной лечебно-диагностической лапароскопии. При гнойном сальпингите, пиосальпинксе, тубоовариальном абсцессе у женщин репродуктивного периода оптимальным вариантом является динамическая лапароскопия и активное дренирование малого таза [2,3]. Такой подход расценивается как вариант органосохраняющих операций [4]. Перенесенные хирургические вмешательства при острых ГВЗПМ представляют серьезную проблему для репродуктивного здоровья женщин и являются причиной бесплодия в 12,5—74,0% [3]. Вторым по значимости отдаленным осложнением у 50% женщин является эктопическая беременность. Один эпизод гнойного сальпингита увеличивает риск эктопической беременности в 7—10 раз. Рецидивы воспалительных заболеваний органов малого таза возникают у 11,2% и увеличивают вероятность бесплодия в случае единичного эпизода на 10%, при трех эпизодах — на 40—60%. В 24—30% случаев у больных с воспалительными процессами придатков матки формируются тазовые ганглионевриты и болевой синдром. Хронизация воспалительного процесса в придатках матки возникает у 17—85% больных при запоздалом лечении. У пациенток с данной патологией после операции изменяется гормональный баланс, который проявляется гиперполименореей (38,5—50%), альгодисменореей (16,7—18%), гипоменореей (6,7—7,7%), ановуляцией (40%). При гнойном воспалении придатков матки выражена иммунная дисфункция. Так, наблюдается повышение уровней фактора некроза опухоли и интерлейкина 2, 6 в сыворотке крови и в удаленных органах в десятки раз и сохраняется длительное время после операции. У 82% больных с ГВЗПМ наблюдается снижение продукции эмбриотропных антител в послеоперационном периоде.

В результате гнойной интоксикации у трети пациенток изменяются показатели липидного профиля: повышаются концентрация общего холестерина, уровни липопротеидов низкой плотности, коэффициент атерогенности, возникает гипоэстрогения, что усложняет реабилитацию. В ряде случаев морфологические изменения в тканях яичника настолько выражены, что не удается дифференцировать орган, при этом концентрация рецепторов эстрадиола и прогестерона в яичнике приближается к нулевой отметке. Однако при одностороннем гнойном поражении придатков матки рецепторы сохраняются в непораженном яичнике [4]. В последние годы наблюдается очевидная и закономерная эволюция этиологической структуры тяжелых инфекций в гинекологии, связанная с изменением преморбидного фона больных, наличием у них сложных гормональных нарушений (в том числе сахарного диабета и ожирения), хронических экстрагенитальных заболеваний, увеличение числа

иммунокомпрометированных пациентов и, что не менее важно, расширение объема и характера инвазивных медицинских вмешательств, широко применяемой антибиотикоте-рапии и антибиотикопрофилактики, что составляет значимую проблему в лечении ГВЗПМ [6].

Выводы.Таким образом, понимание особенностей течения гнойного процесса придатков матки и его исхода способствует оказанию адекватной хирургической помощи на ранних этапах воспаления, диктует активную тактику ведения пациенток и реализацию новых и эффективных программ для предотвращения осложнений и их последствий. При принятии решения о хирургическом подходе у больных с ГВЗПМ в ургентной ситуации главенствующим моментом является сохранение репродуктивных органов, особенно у юных и нерожавших женщин.

Использованные источники:

1. Абдоминальная хирургическая инфекция: клиника, диагностика, антимикробная терапия: практическое руководство / под ред. В.С. Савельева, Б.Р. Гельфанда. М.: Лит-терра, 2020. 168 с.
2. Адамян Л.В., Киселёв С.И., Яроцкая Е.Л. и др. Хирургическое лечение гнойных воспалительных заболеваний придатков матки. Эндоскопия в диагностике, лечении и мониторинге женских болезней: материалы междунар. конгр. / под ред. В.И. Кулакова, Л.В. Адамян. М.: Панто-ри, 2020. С. 170—194.
3. Айламазян Э.К. О специфической диагностике и консервативной терапии острых воспалительных заболеваний придатков матки // Акушерство и гинекология. 2021. № 4. С. 62—66.
4. Анри-Сюше Ж. Лапароскопическая диагностика и лечение воспалительных заболеваний органов таза. Репродуктивное здоровье: пер. с англ. / под ред. Л. Кейта и др. М.: Медицина, 2020. I: 14. С. 215—229.
5. Антонова Л.В. Острые воспалительные заболевания придатков матки: этиология, клиника, диагностика, терапия: автореф. дис.... д-ра мед. наук. М., 2021. 36 с.
6. Брауде И.Л. О хирургическом лечении воспалительных заболеваний женской половой сферы // Совет. медицина. 2021. № 8. С. 10—12.
7. Буянова С.Н., Щукина Н.А. Актуальные вопросы диагностики и тактики ведения больных с гнойными воспалительными заболеваниями придатков матки // Тез. I съезда Рос. ассоциации акушеров-гинекологов. М., 2019. С. 143—144.
8. Буянова С.Н., Щукина Н.А., Савельев С.В. и др. Клиническое значение рецепторов половых стероидов в оценке исхода хронического гнойного воспаления внутренних половых органов // Рос. вестн. акуш.-гин. 2019. № 3. С. 16—20.
9. Кауфман О.Я., Подзолкова Н.М., Ермакова Н.Г. и др. Пато- и морфогенез гнойных воспалительных заболеваний придатков матки // Арх. патологии. 2019. Т. 55, № 1. С. 43—48.

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ИММУНОТЕРАПИЯ В КОМПЛЕКСНОМ ЛЕЧЕНИИ ОСТРЫХ ПНЕВМОНИЙ У ДЕТЕЙ РАННЕГО ВОЗРАСТА

Резюме. Острые пневмонии среди заболеваемости детей раннего возраста занимают одно из первых мест, хотя анализ данных официальной статистики показывает некоторое снижение заболеваемости впоследние десятилетия. Однако вызывает опасения фактнарастания число больных детей с вяло текущими, затяжными и рецидивирующими вариантами пневмоний. Такие дети, впоследствиипополняют группу часто болеющих детей. Именно поэтому, впоследние годы, большая значения в комплексном лечении не благоприятно протекающих форм острых пневмоний, придается восстановлению нарушенного иммунного гомеостаза, то есть иммунокоррекции.

Ключевые слова: острая пневмония; часто болеющие дети; имммуномодулятор; генферон.

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IMMUNOTHERAPY IN THE COMPREHENSIVE TREATMENT OF ACUTE PNEUMONIA IN YOUNG CHILDREN

Resume. Acute pneumonia remains one of the leading causes of illness among young children, although an analysis of official statistics indicates a certain decrease in incidence over the past decades. However, there is a concerning trend of increasing numbers of children with sluggish, prolonged, and recurrent forms of pneumonia. These children often become part of the group of frequently ill individuals. Therefore, in recent years, significant emphasis in the

comprehensive treatment of severe cases of acute pneumonia has been placed on restoring the disrupted immune homeostasis, specifically through immunocorrection.

Keywords: acute pneumonia, frequently ill children, immunomodulator, interferon.

Актуальность.

Пневмония, вызванная микроорганизмами, которые редко являются причиной заболевания у здоровых людей, может иметь место у людей с ослабленной иммунной системой.

Симптомы отличаются, но могут включать одышку, кашель и повышение температуры тела.

При постановке диагноза рентгенография органов грудной клетки часто сочетают с исследованием образцов мокроты и крови.

Для лечения этой пневмонии используют антибиотики, либо противогрибковые или противовирусные препараты, а также проводят лечение любых проблем со стороны иммунной системы.

У людей с ослабленной иммунной системой пневмонию могут вызывать те же микроорганизмы, которые являются причиной внебольничной пневмонии, но также ее могут вызвать нетипичные или редкие микроорганизмы.

Симптомы пневмонии у людей с ослабленной иммунной системой могут быть такими же, как и при внебольничной пневмонии, и включают следующие:

общая слабость (недомогание);

кашель с выделением мокроты (вязкой слизи или слизи с измененным цветом);

одышка;

лихорадка;

озноб;

боль в груди;

Эти симптомы могут развиваться быстро или медленно.

У большинства людей с пневмонией, вызванной *P. jirovecii*, возникает повышение температуры тела, одышка и сухой кашель, часто медленно. Легкие теряют способность доставлять достаточное количество кислорода в кровь, что приводит к одышке, приобретающей порою тяжелую форму.

Инфекционная заболеваемость респираторного тракта в детскомвозрасте является наиболее серьезной проблемой отечественногоздравоохранения. Это связано с широкой распространённостьюинфекций среди детского населения вне зависимости от возраста, полаи региона проживания. Большое число возбудителей бронхолегочнойпатологии обусловливает отсутствие тенденции к

снижениюзаболеваемости. Несмотря на большой арсенал имеющихсялекарственных средств, профилактического, этиотропного ипатогенетического воздействия, не снижается потребность в создании ивнедрении в практику новых препаратов в комплексной терапии даннойпатологии.

Острые пневмонии в структуре общей заболеваемости детейраннего возраста занимают одно из первых мест в Центрально-Азиатском регионе, хотя анализ данных официальной статистикипоказывает некоторое снижение заболеваемости в последниедесятилетия. Однако вызывает опасения факт нарастания числобольных детей с вяло текущими, затяжными и рецидивирующимивариантами пневмоний, с частичной эрадикацией возбудителей иотсутствием полного клинико-рентгенологического завершениявоспалительного процесса в легких. Такие дети, впоследствиипополняют группу часто болеющих детей, которая по даннымразличных авторов, составляет от 20 до 45% детской популяции, причемнаибольшая часть представлена детьми первых трех лет жизни, имеющих возрастные особенности или транзиторные отклонения виммунной системе.

Многочисленными научными исследованиями, посвященнымипроблеме пневмоний у детей раннего возраста, убедительно показано, что в основе этой патологии лежат вторичные, приобретённые в ходетечения инфекционного процесса в легких, нарушения иммунного гомеостаза, причем, как правило, транзиторного характера. Именнопоэтому, в последние годы, большая значения в комплексном лечениинеблагоприятно протекающих форм острых пневмоний, придаетсявосстановлению нарушенного иммунного гомеостаза, то есть иммунокоррекции.

Наиболее часто в современной терапии неблагоприятнопротекающих острых пневмоний у детей, с целью иммунокоррекции, назначают иммуномодуляторы - лекарственные средства, обладающие иммунотропной активностью, которые в терапевтических дозахвосстанавливают функции иммунной системы, т.е. повышают иммуннуюзащиту детского организма.

Цель исследования.

Нами в качестве иммунокоррегирующего средства системного действия был выбран препарат генферон и введен в состав комплекснойтерапии острых пневмоний у детей раннего возраста.

Материалы и методы исследования.

Под наблюдение мы отобрали грудных детей (20 контрольнаягруппа и 20 группа сравнения) в возрасте 6-12 месяца, получившихлечение в отделении раннего возраста ОДММЦ

Ректальные свечи генферон (в 1 свече - 150000 МЕ) был назначен 2раза в сутки с интервалом 12 часов. Курс лечения составил 5 суток.

Эффективность действия препарата проводилась на основе оценкеимеющих проявлений острой пневмонии.

Результаты исследования.

Как показала анализ, у 90% детей, получавших генферон на вторые сутки, а у 10% на 3 сутки отмечалось нормализация температурнойреакции; у всех детей на 4-5 сутки отмечалось уменьшения кашля, который стал более продуктивным, значительно улучшились физикальные данные и рентгенологическая картина в легких. Длясокращения сроков выздоровления, всем детям через 5 дней былназначен второй курс иммунокоррегирующей терапии.

Продолжительность пребывания на стационарном лечении детей, получивших два курса генферона, была на 5-7 дней короче, чем у детей, не получивших иммунокоррегирующего лечения.

Выводы.

Таким образом, опыт клинического применения свечи генферона в комплексном лечении острых пневмоний у детей раннего возрастапозволяет считать целесообразным включения данного препарата влечебный процесс с целью безопасной иммунокоррекции позволяющей облегчить течение, сократить продолжительность болезни, уменьшитьмедикаментозную нагрузку, восстановить иммунный гомеостаз детскогоорганизма, предупредить возможные рецидивы, осложнения ихронизацию болезни.

Использованные источники:

1. Внебольничная пневмония у детей: распространённость, диагностика, лечение, профилактика. /НПК. Российское респираторное общество. 2011-64с.
2. Заплатников А.А. Иммунокорректоры бактериального происхождения в профилактике и лечение респираторных инфекций. //Российский педиатрический журнал - 2002- №1- 45-48с.
3. Магруков Б.А. Пневмонии у детей раннего возраста и нарушения иммунного статуса. //Педиатрия-1991-№6-97-102с.
4. Самсыгина Г.А. Часто болеющие дети: проблемы патогенеза,диагностики и терапии. //Педиатрия - 2005-№1 - 66-73с.
5. Сенцова Т.Б. Иммуномодуляторы в практике педиатра//Пульмонологияиаллергология-2007-№3-44-45с.
6. Faure J., Bene M.C. Use of bacterial ribosomal immunostimulators inrespiratory tract infections. //Clinical lmmunother-1995-№4-p138.
7 Jain N. Upper respiratory infections diseases. //Hindu Pediatr-2013-voI68-№12. p.1135-1138.

УДК: 616.34-002.153-616.34-008.314.4

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ОБ ИЗМЕНЧИВОСТИ ПАТОГЕННОСТИ ЭНТЕРОКОККОВ ПРИ ДИАРЕЯХ У ДЕТЕЙ

Аннотация. В данной статье приведено данные сравнительного исследования, клинический значимых биологических свойств, патогенности (гемолитические свойства) энтерококков, полученных за два года от больных диареей, от детей в здоровом состоянии, до заболевания, и от переболевших. Отмечено значительное усиление гемолитических свойств, у штаммов, выделенных во время диареи и резкое снижение их после заболевания у переболевших. На основании приобретения и усиления признака патогенности энтерококками (гемолитические свойства) во время заболевания, можно утверждать, что эти микроорганизмы, вместе с некоторыми другими представителями нормальной кишечной микрофлоры, также приобретающими при этом патогенные свойства (кишечная палочка), поддерживают кишечные расстройства, а может быть, и создают условия, приводящие к развитию у детей диарей и состояний, определяемых как «неустойчивый стул»

Ключевые слова: кишечная палочка, энтерококки, патогенность, гемолиз - гемолитические свойства, диарея, «неустойчивый стул».

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ABOUT THE VARIABILITY OF PATHOGENICITY OF ENTEROCOCCIS FOR DIARRHEA IN CHILDREN

Abstract. This article presents data from a comparative study, clinically significant biological properties, pathogenicity (hemolytic properties) of enterococci obtained over two years from patients with diarrhea, from children in a healthy state, before the disease, and from those who had recovered from the disease. There was a significant increase in hemolytic properties in strains isolated during diarrhea and a sharp decrease in them after the disease in those who had recovered from the disease. Based on the acquisition and enhancement of pathogenicity by enterococci (hemolytic properties) during the disease, it can be argued that these microorganisms, together with some other representatives of normal intestinal microflora, which also acquire pathogenic properties (E. coli), support intestinal disorders, and maybe, and create conditions that lead to the development in children of diarrhea and conditions defined as "unstable stool."

Key words: Escherichia coli, enterococci, pathogenicity, hemolysis - hemolytic properties, diarrhea, "unstable stool".

Актуальность. Проблема диареи вызванные ОКИ (острые кишечные инфекции) продолжаются оставаться актуальной в клинической педиатрической практике и в микробиологии, в связи высокой заболеваемостью детей диареями [1,2]. Так как в составе нормальной микрофлоры, кроме кишечных палочек, встречаются в значительном количестве и энтерококки и в литературе есть указания на то, что этот микроб также может играть роль при диареях у детей [3,4]. Мы выделяли их из испражнений у детей от больных диареей, от детей в здоровом состоянии,

до заболевания, и от переболевших, и сравнительно изучали и анализировали.

Цель исследования: в связи с вышеизложенными, мы исследовали общепринятые стандартные и некоторые клинический значимые биологические свойства (гемолитические свойства) энтерококков, полученных за два года от больных диареей, от детей в здоровом состоянии, до заболевания, и от переболевших, и сравнительно эти свойства анализировали.

Материалы и методы. Для изучения изменения свойств энтерококков при диареях, нами было выделено и изучено за два года 409 штаммов от тех же детей, от которых мы выделали и кишечные палочки. Из этого числа штаммов 212 были получены от детей в здоровом состоянии и до заболевания, 131 штамм во время диареи и 66 от переболевших. И здесь мы стремились собрать материал для характеристики штаммов энтерококков, по возможности, от одних и тех же детей до, во время и после заболевания. Большая текучесть детского контингента в тех учреждениях, где нами проводилась работа не дала нам полной возможности в этом отношении. Мы имеем сравнительно небольшую группу таких детей.

Общую характеристику всех бактерий исследовали общепринятыми стандартными методами: морфологию, окраски по Граму, размеров, расположения по отношению к друг-другу, характер колоний, изучения биохимических свойств по росту на средах с глюкозой, лактозой, мальтозой, маннитом, сахарозой, дульцитом, рамнозой, галактозой, левулезой, арабинозой и по росту на желатине и молоке.

Устойчивость к желчи изучали посевом в 5 мл цельной бычьей желчи, простерилизованной дробно. Через 48 часов делался высев на сахарный бульон, в котором через сутки наблюдалось рост микробов, морфологию изучали по Граму.

Клинический значимый биологическое свойство (гемолитические свойства) энтерококков изучали по гемолизу на кровяном агаре.

Результаты этих исследований отражены в таблицах №1 и 2.

Результаты и обсуждения. Морфологически, при микроскопии мазков, чаще встречаются овальные клетки обычно средних размеров, иногда более мелкие, расположенные по два, в виде небольших цепочек или группами; только три культуры на косом агаре дали длинные цепи; встречаются круглые клетки, располагающиеся по два и группами. Клетки всех штаммов энтерокооков по Граму окрашивались положительно. На сахарном агаре можно было различить 4 типа колоний:

1. Мелкие выпуклые, полупрозрачные серого цвета, круглой формы с ровными краями.

2. Крупные плоские непрозрачные серые, иногда с неровным краем.

3. Мелкие и более крупные, круглой формы полупрозрачные кремового цвета, выпуклые с ровными краями.

4. Мелкие серобелые, полупрозрачные с ровным краем, выпуклые.

На кровяном агаре характер колоний были такие же, как в сахарном агаре.

Сахаролитические свойства энтерококков отличаются большим разнообразием. Как правило, разлагается с образованием кислоты только глюкоза, а другие углеводы и многоатомные спирты: мальтоза, маннит, галактоза, левулеза, лактоза большинством штаммов. Значительно реже энтерококки дают изменения арабинозы, рамнозы, дульцита, сорбита и инозита. Эритрит не разлагался ни одним из полученных штаммов. Разжижения желатины при посеве энтерококков не наблюдалось. Все штаммы оказались устойчивыми к действию желчи. Через 48 часов делался высев на сахарный бульон, в котором через сутки наблюдалось помутнение и при окраске мазков по Граму отмечали грамположительные энтерококки - морфологических изменений не отмечалось.

Многие признаки, на основе которых мы дали характеристику, у различных штаммов чрезвычайно разнообразны. Мы можем говорить об энтерококках, как о группе микроорганизмов, включающих в себя различные по свойствам группы. В литературе нет определенной классификации этих микроорганизмов. Различные авторы или говорят вообще о непостоянстве того или иного признака, или произвольно распределяетэнтерококков в группы по сходству свойств.

Мы подразделяем все свои штаммы по общности признаков на 12 групп. Наибольшее количество штаммов (177 из 409) отнесены к VIII и IX группам.

Таблица №1

№ групп	Количество штаммов	Окраска по Граму	Клетки			Колонии на сахарном (кровяном) агаре				Гемолиз	
			Форма	Размер	Расположение	Форма	Размер	Прозрачность	Цвет	24 ч	48 ч
I	22	+	круглые	средние	по два и цепоч.	круглые	мелкие	полупрозрачные	серые	++	++
II	49	+	круглые	средние	по два и групп.	круглые	мелкие	полупрозрачные	кремовые	-	-
III	21	+	овальные	средние	по два	круглые	мелкие	прозрачные	кремовые	++	++
IV	3	+	овальные	крупные	длинные цепоч	круглые	крупные	полупрозрачные	серые	-	++
V	17	+	круглые	средние	группами и	круглые	крупные	полупрозрачные	кремовые	-	+++

					кор. цепоч.						
VI	11	+	овальные	мелкие	по два и групп.	круглые	крупные	мутные	серые	-	++
VII	32	+	овальные	средние	по два и групп.	круглые	мелкие	полупрозрачные	серобелые	-	++
VIII	104	+	овальные	средние	по два и кор.цепоч	круглые	мелкие	полупрозрачные	кремовые	-	-
IX	73	+	овальные	средние	группами и кор. цепоч.	круглые	средние	прозрачные	серые	-	-
X	5	+	овальные	средние	группами	круглые	мелкие	полупрозрачные	кремовые	-	++
XI	25	+	круглые	средние	цепочк. и группами	круглые	мелкие	полупрозрачные	кремовые-серые	-	-
XII	47	+	овальные	средние	по два	круглые	мелкие	полупрозрачные	серые	-	-

Анализируя данные таблицы, мы также можем сказать, что биологические свойства различных штаммов энтерококков резко варьируют. Мы не можем выделить ни одного из них, кроме устойчивости к желчи, как постоянное.

Подразделяя наши штаммы по группам выделения в зависимости от состояния детей, (здоровые, с диареями и переболевшие) мы получили данные, приведенные в таблице №2.

При анализе материалов по изучению штаммов в соответствии со свойствами, положенными в основу нашей группировки, мы приняли за критерий изменения энтерококков патогенность - способность давать гемолиз на кровяном агаре, так как остальные свойства не дали нам статистический достоверные данные, на основании которых, возможно делать какие-то выводы об этом.

Таблица №2

ГЕМОЛИТИЧЕСКИЕ СВОЙСТВА ЭНТЕРОКОККОВ

№	Штаммы, выделенные от	Количество штаммов	К какой группе по свойствам принадлежали энтерококки и их количество (знаменатель)	Дававших гемолиз на кровяном агаре			
				Общее количество	%	Из них дали гемолиз в первые сутки	
						Общ. колич	%
1	Здоровых детей	212	I/7-II/34-III/9-IV/I-V/12-VI/5 VII/17-VIII/44-IX/46-X/3-X/3-XI/14-XII/20	54	25,5	16	7,5
2	Больных детей	131	I/13-II/9-III/12-IV/2-V/5-VI/5 VII/12-VIII/33-IX/9-X/2-XI/9-XII/20	51	39	25	19,5
3	Переболевших детей	66	I/2-II/6-III/0-IV/0-V/0-VI/1 VII/3-VIII/27-IX/18-X/0-XI/2-XII/7	6	9,2	2	1,5

Полученные результаты указывают, что гемолитические свойства энтерококков увеличивается значительно время заболевания детей диареями. В приведенной нами таблице №2 группы I, III, IV, V, VI, VII и X включают энтерококков, дающих гемолиз на кровяном агаре; при чем энтерококки I и III групп обладают резко выраженными гемолитическими свойствами (гемолиз в течение первых суток). Учитывая общее количество гемолизирующих штаммов, выделенных от здоровых детей, мы получили их 54 из 212, что составляет 25,5%; из них дававших гемолиз в течение первых суток было только 7,5 % (16 штаммов). Из 131 штамма, выделенных во время заболеваний, дали гемолиз 51 штамм, что составляет 39%, а среди них резко гемолизирующих было 19,5 % (25 штаммов). Из 66 штаммов, выделенных от детей переболевщих, гемолизирующих было только 9,2%, а гемолизирующих в первые 24 часа роста на кровяном агаре было только 1,5 % (2 штамма).

Эти данные указывают на резкое снижение процента гемолизирующих штаммов (больше, чем в 4 раза) после выздоровления, а процент дающих гемолиз в течение первых суток роста снизился в 13 раз по сравнению с тем, что мы имели в характеристике энтерококков, выделенных во время диареи. Несколько выше эти цифры у энтерококков, выделенных до заболевания.

Выводы: Таким образом, мы отмечали изменение патогенных свойств энтерококков - значительное усиление гемолитических свойств у штаммов, выделенных во время диареи и резкое снижение их после выздоровления.

На основании приобретения и усиления признака патогенности энтерококков (гемолитические свойства) во время заболевания, можно утверждать, что эти микроорганизмы, вместе с некоторыми другими представителями нормальной кишечной микрофлоры, также приобретающими при этом патогенные свойства (кишечная палочка), поддерживают кишечные расстройства, а может быть и создают условия, приводящие к развитию у детей диарей и состояний, определяемых как «неустойчивый стул». Основанием к такому предположению является то обстоятельство что здоровые дети имеют сравнительно высокий процент (25,5%) гемолизирующих штаммов; это могло быть предпосылкой к тому, что часть этих детей впоследствии заболевали диареями: с наступлением выздоровления положение резко изменялось в том отношении, что общий процент гемолизирующих штаммов энтерококков, выделенных при этом состоянии, значительно снизился, а процент штаммов, дающих резкий гемолиз, уменьшился в 13 раз.

Использованные источники:

1. Юсупов МИ, Одилова ГМ, Жамалова ФА. Появление гемолитеческих свойств у кишечных палочек в зависимости от состава питательной среды. Экономика и социум. 2021;3-2(82):602-6.
2. Юсупов МИ, Шайкулов ХШ, Одилова ГМ. Антигенные сходства штаммов E. coli, выделенных от детей и их матерей. Проблемы биологии и медицины. 2020;6:202-5.
3. Мухамедов ИМ, Юсупов МИ, Шайкулов ХШ. Дифференциальный диагноз энтероколитов у детей. Innova. 2022;2(27):35-9.
4. Шайкулов ХШ, Исокулова ММ. Характеристика энтеропатогенных кишечных палочек, выделенных у детей раннего возраста. Экономика и социум. 2023;1-1(104).

Оглавление

ОСНОВНОЙ РАЗДЕЛ

Abdimurodova Sh.A., INTERAKTIV TA’LIM MODELI VA UNI IQTISOD GURUHLARIDA QO’LLASHNING O’ZIGA XOS XUSUSIYATLARI 6

Abdukarimov J., Karimov E., PROBLEMS OF PROVIDING SAFE DRINKING WATER TO DEVELOPING COUNTRIES AND SUGGESTIONS FOR THEIR SOLUTION 10

Abdullabekova N.G`., TURIZM XIZMATLARI ISTE`MOLCHILARI BO`LGAN JISMONIY SHAXSLARNI SOLIQQA TORTISH MEXANIZMLARINI RIVOJLANTIRISH..... 16

Abdumajitova R.R., SOME EFFECTIVE METHODS OF TEACHING FOREIGN LANGUAGES 20

Abduvalieva Ch.M., IMPROVING THE DIAGNOSIS AND SURGICAL TREATMENT OF ACUTE TESTICULAR DISEASES IN CHILDREN 28

Agzamov J.B., Hamraqulov Yo.M., JIZZAX SHAHRI ALISHER NAVOIY KO’CHASIDA AVTOMOBIL SHOVQINIGA TA’SIR ETUVCHI OMILLAR 32

Ahmadjonova Sh.Ya., Mamatkarimova H.Sh., GENDER TENGLIGI 37

Ahmedova G., MAKTABGACHA TA’LIM TASHKILOTI BOLALARIDA BADIIY-IJODIY QOBILYATLARNI RIVOJLANTIRISHNING PEDAGOGIK-PSIXOLOGIK ASOSLARI..... 42

Akhmadjonova U.T., AGROCLUSTERS ARE THE FUTURE OF AGRICULTURE IN OUR COUNTRY 46

Akhmadjonova Yo.T., RAMSAR CONVENTION: ECOLOGY OF THE AYDAR-ARNASOY LAKE SYSTEM 50

Aminov Z.Yu., IQTISODIY XAVFSIZLIKKA OID ATAMALAR TA’RIFLARI MAZMUNI 54

Asatillaev F.R., Mamadalieva M.T., Odiljonova M.F., Qo'ldashev Sh.S., EFFECT OF FERTILIZER AND PLANTING RATE AND METHODS ON CORN GERMINATION AND PLANT THICKNESS 57

Askarova Kh.E., GRAIN AND CEREAL PRODUCTS, THEIR PRODUCTION TECHNOLOGY 62

Asrankulova D.B., Akromjonova X.U., MINIMALLY INVASIVE METHODS FOR TREATING PUROPENTAL-INFLAMMATORY DISEASES OF THE UTERINE APPENDIXES..... 66

Asrankulova D.B., Abdusattorova S.A., THE ROLE OF FOLATE METABOLISM IN THE DEVELOPMENT OF CERVICAL DISEASES 69

Asrankulova D.B., Ismoilova Sh.D., INTRODUCTION INTO PRACTICE OF MEDICAL OZONE IN IN THE PREVENTION COMPLEX OF FETOPLACENTAL INSUFFICIENCY IN WOMEN INFECTED WITH COVID-19 72

Astanova D., BOSHLANG'ICH SINFLARDA MUSIQA MADANIYATI DARSLARIDA INNOVATSION TEXNOLOGIYALARDAN FOYDALANISH 75

Axmedov A.Z., KARBYURATORLI DVIGATELNING TA'MINLASH TIZIMINING VAZIFASI VA UMUMIY TUZILISHI 79

Badalov U.N., THE ROLE OF METROLOGY AND STANDARDIZATION IN THE HUMAN WORLD 84

Baltabayeva M.O., THE IMPORTANCE OF ACCOUNTING IN THE ACTIVITIES OF ENTERPRISES 88

Barnoyev O., Ko'chimov A., RAQOBAT MUHITINI TAHLIL QILISH 92

Baxtiyorova Yo., YOSHLARGA ZAMONAVIY KASB-HUNARLARNI O'RGATISH ULAR O'RTASIDA TADBIRKORLIKNI RIVOJLANTIRISH-DAVLAT VA JAMIYAT TARAQQIYOTINING MUHIM OMILI 96

Beknazarova G.J., MODELING OF LIVESTOCK HERD COMPOSITION . 102

Bo'tayev D.E., THEORETICAL VIEWS OF THE ECONOMY OF THE SERVICE SECTOR 108

Bustonova S.S., SOME INFORMATION ABOUT GORYANKA "MOUNTAIN GRASS" DISTRIBUTED IN THE MOUNTAINS OF HUMID REGIONS 112

Dexkanova S., CURRENT ISSUES OF HISTORY TEACHING METHODOLOGY 114

Duvlaeva N.Kh., EDUCATIONAL MARKETING STRATEGIES TARGETING THE DEVELOPMENT OF EDUCATIONAL INSTITUTIONS 118

Efimenko O.V., Khaydarova L.R., Inakova S.U., CLINICAL AND LABORATORY CHARACTERISTICS OF ACUTE CARDITIS AND THE ROLE OF RISK FACTORS IN THEIR DEVELOPMENT 121

Ergashev S.I., BINO VA INSHOOTLAR KONSTRUKSIYALARINI LOYIHALASHNING ZAMONAVIY USLUBLARI 127

Erjanova S.B., Yusupov X.K., MAKTABGACHA YOSHDAGI BOLA SHAXSINI RIVOJLANTIRISHDA O‘YINLI TEXNOLOGIYALARDAN FOYDALANISHNING AHAMIYATI 131

Erjanova S.B., Yusupov X.K., MAKTABGACHA TA’LIM TASHKILOTIDA BOLALAR BILAN TURLI SAYOHATLAR O‘TKAZISHNING AHAMIYATI 135

Faxriyev D.E., O’ZBEKISTONNING 2030-YILGACHA BO’LGAN DAVRDAGI RIVOJLANISH STRATEGIYASI VA UNI AMALGA OSHIRISH BOSQICHLARI 139

Fayzullaeva U., THE COMPETENCE APPROACH IN EDUCATION OF A FOREIGN LANGUAGE 143

Fazilov Kh.Kh., REGIONAL LABOR MIGRATION AND SOCIO-ECONOMIC FACTORS AFFECTING IT 147

Hamdamov O.A., O’ZBEKISTON RESPUBLIKASIDA DAVLAT BUDJETINING G’AZNA IJROSIGA O’TISHNING ZARURLIGI VA AHAMIYATI 154

Hamzayev A.I., READ DATA FROM KEYBOARD AND OUTPUT TO LCD DISPLAY. CODE LOCK 157

Igamberdiyeva D., PYTHON DASTURLASH TILI HAMDA UNING IMKONIYATLARI 163

Inyaminov Y.A., Irisboyev F.B., IN THE TECHNOLOGY OF MANUFACTURING OF SOLAR ELEMENTS APPLICATION OF THE PHOTOLITHOGRAPHY METHOD 167

Inyaminov Y.A., Irisboyev F.B., CHARACTERISTICS OF MATERIALS USED IN THE MANUFACTURE OF SOLAR CELLS 171

Irisboyev F.B., UCH O’LCHAMLI KRISTALLARNING ATOM TUZILISHI 175

Irisboyev F.B., ATOMIC STRUCTURE OF THREE-DIMENSIONAL CRYSTALS 179

Irisboyev F.B., KRISTALLARDAGI ATOMLARNING BOG’LANISH TURLARI 184

Irisboyev F.B., ION IMPLANTATION AND QUANTUM STRUCTURES 188

Islomov M.H., RADIOCHASTOTA SPEKTRINI BOSHQARISHNI TASHKIL QILISH 192

Ismailova Z.U., FEATURES OF THE COURSE OF CHRONIC VIRAL HEPATITIS B DURING PREGNANCY AND PERINATAL RESULTS 194

Barlickbay J.A., THE INFLUENCE OF THE SOCIAL ENVIRONMENT ON THE TRAINING OF ATHLETES 199
Juraeva N.M., THE SCIENCE OF AGROMETEROLOGY AND THE CONTRIBUTION OF UZBEKISTAN SCIENTISTS TO ITS DEVELOPMENT 204
Jurakulov Sh.B., Sharifov Ya.X., EMULATION OF NETWORK ACTIVITY FOR MALWARE ANALYSIS IN AN ISOLATED ENVIRONMENT 208
Kadrimbetov R.N., QORAQALPOG'ISTON RESPUBLIKASIDA QILICHBOZLIK SPORTINI RIVOJLANTIRISH ORQALI SOG'LOM AVLODNI TAKOMILLASHTIRISHNING ILMIY PEDAGOGIK ASOSLARI 212
Kadrimbetov R.N., QORAQALPOQISTON RESPUBLIKASIDA QILICHBOZLIK SPORTINI RIVOJLANTIRISH ORQALI SOG'LOM MUHITNI SHAKLLANTIRISH ASOSLARI 217
Kambarova L.R., MANAGEMENT IN EDUCATIONAL ORGANIZATIONS 221
Karimova M.I., ANALYSIS OF THE DYNAMICS OF THE USE OF PRODUCTION CAPACITIES OF CONSTRUCTION MATERIALS INDUSTRY ENTERPRISES 225
Karimova U., ROLE OF A TEACHER IN A CONSTRUCTIVIST CLASSROOM 228
Kasimova Sh.O., WAYS TO ELIMINATE VARIOUS PATHOLOGIES OF PREGNANT WOMEN WITH PURULENT-INFLAMMATORY DISEASES OF THE UPPER RESPIRATORY TRACT 231
Khujaev M., AHMED ZAKI: ON THE IDEAS OF THE PHILOSOPHY OF HISTORY 235
Xurmamatov A.M., Mirsaidov M.X., Dedaboyeva M.N., SANOAT SUVLARINI TOZALASH USULLARINI TAKOMILLASHTIRISH 240
Khusanova H.A., THE IMPORTANCE OF STUDYING PERINATAL PATHOLOGIES IN THE FORMATION OF BIOELECTRIC BRAIN ACTIVITY IN CHILDREN 247
Kutlimuratov A.A., XORAZM TOPONIMIKASIDA TARKIBIDA GEOGRAFIK TERMINLARNING SHAKLLANISHI 252
Kuzibayeva M., OLIY TA'LIMDA O'QITUVCHINING INNOVATSION FAOLIYATNI SHAKLLANTIRISH 258
Lamba Shaitan Singh, INNOVATIVE TECHNOLOGIES IN NURSING EDUCATION AND PRACTICE 262

Mallayev R.Q., INFORMATIKA O‘QITUCHILARINI KASBIY FAOLIYATGA TAYYORLASHDA KOMPYUTER TA’MINOTI FANINI O‘QITISHNING METODIK TA’MINOTI 266

Mamadaliev Sh.M., Turgunov A.A., SAFETY PRECAUTIONS WHEN USING MACHINES AND MECHANISMS ON LIVESTOCK FARMS 276

Mamadaliyev A.T., TEACHING WITH THE SUPPORT OF INTERACTIVE METHODS AS AN EXAMPLE OF INTRUSIVE AND EFFUSIVE ROCKS 280

Mamarasulova N.I., JARROHLIK BO’LIMIDAGI TIBBIY XODIMLARIDAN AJRATILGAN STAFILOKOKKLARNING TARQALISHI VA BIOLOGIK XUSUSIYATLARI 285

Mardonov M.I., MANTIQ FALSAFASI 289

Masharipova D.I., TRIGONOMETRIYANING ASOSIY AYNIYATLARI 293

Matchanov F.K., EXPERIENCE OF SOME FOREIGN COUNTRIES IN THE APPLICATION OF CORRECTIONAL MEANS FOR CONVICTS 296

Matkarimova S.A., BOSHLANG‘ICH SINF O‘QUVCHILARINING IJODIY TASAVVURLARNI BOYITISHDA BOLALAR ADABIYOTI NAMUNALARIDAN FOYDALANISH. BOLALAR ADABIYOTI FANINI O‘RGANISH MASALALARI 306

Mavlanova B.Sh., IMPORTANCE OF TOURISM SERVICES IN THE REGION 310

Mavlonova O.D., CURRENT ISSUES OF ORGANIZING A HEALTHY LIFESTYLE 317

Maxkamova D.X., WAYS TO EASILY TEACH ROBOTICS TO SCHOOLCHILDREN IN EXTRACURRICULAR ACTIVITIES 320

Metinqulov J.T., ARDUINO UNO PLATASI BILAN TANISHISH VA UNGA DASTUR YOZISHNI O’RGANISH 324

Metinkulov J.T., MICROPROCESSOR KP580VM80A PRINCIPLE OF OPERATION 328

Metinqulov J.T., MA’LUMOTLARNI QAYTA ISHLASHDA KP580VM80A MIKROPROTSESSORINING O’RNI 332

Meyliyeva X.B., O‘ZBEKISTON RESPUBLIKASIDA YER UMUMMILLIY BOYLIK SIFATIDA QISHLOQ XO‘JALIGIGA MO‘LJALLANGAN YERLAR VA EKIN MAYDONLARIDA MONITORING ISHLARINI AMALGA OSHIRISH 335

Mizrabov U.B., Abdukarimov Sh.O., CAUSES OF TRAFFIC CONGESTION ON CITY STREETS 341

Murodova D.S., Nabiyeva O., VILOYAT MARKAZLARI IQTISODIY-IJTIMOIY RIVOJLANISHINING ASOSIY MASALALARI (QARSHI SHAHRI MISOLIDA) 345

Murodova D.S., Mahmatmurodov D., QASHQADARYO VILOYATI AHOLI ZICHLIGI VA DEMOGRAFIK SIG'IMINING IQTISODIY GEOGRAFIK JIHATLARI 349

Mustafoyev A., ELECTRONIC PROPERTIES OF NANOSCALE STRUCTURES FORMED ON THE GAAS SURFACE BY IMPLANTATION OF LOW-ENERGY IONS 357

Mustfoyev A.A., READ DATA FROM KEYBOARD AND OUTPUT TO LCD DISPLAY. CODE LOCK 361

Mustofoqulov J., Karshibayev U., Choriyev S., MULTISIM DASTURIDA BIR KASKADLI KUCHAYTIRGICH SXEMASINI TADQIQ QILISH 365

Nafasov D.Sh., Yangiboyev S., MUHAMMAD SODIQ QOSHGARIY VA UNING “ODOB AS-SOLIHIN” (YAXSHI KISHILAR ODOBI) ASARI, ASARDA ILGARI SURILGAN XULQ-ODOB ME’YORLARI..... 369

Nafasov D.Sh., Yangiboyev S., MUHAMMAD SODIQ QOSHG ‘ARIYNING MA ‘RIFIY-AXLOQIY QARASHLARI. EDUCATIONAL AND MORAL VIEWS OF MUHAMMAD SADIQ KASHGHARI 373

Nazirov S.O., DOLAZRB MUAMMOLARDAN BO’LGAN YER OSTI SUV QUVURLARINING KORROZIYASI 376

Nodirov J.M., Abdulakimov A., PROFESSIONAL TA’LIM TIZIMIDA GERMANIYA TAJRIBASI ASOSIDAGI DUAL TA’LIMNING TA’LIM-TARBIYA JARAYONLARINI TASHKIL ETISH VA BOSHQARISHDAGI AHAMIYATI 382

Normuradov N.S., DIGITAL TRANSFORMATION OF ECONOMIC ACTIVITY IN AGRICULTURE: PROBLEMS AND DEVELOPMENT PROSPECTS 388

Nutfieva D., IMPROVEMENT OF DIRECTIONS FOR INCREASING THE QUALITY AND EFFECTIVENESS OF INCLUSIVE EDUCATION IN HIGHER EDUCATION INSTITUTIONS 398

Oblqosimov M., SINERGETIKA TUSHUNCHALARI VA USULLARINI QO‘LLASHNING METODOLOGIK MUAMMOLARI 402

Olimov Kh.Y., LASSIFICATION OF THE SEMANTIC SERIES OF WORDS ADOPTED FROM FRENCH INTO ENGLISH AND ITS RESEARCH..... 406

Omonov S.R., IKKITA DETERMINANT SIGNALNI FARQLASH 409

Oramov J., XALQARO MOLIYADA YECHIMINI KUTAYOTGAN MASALALAR 416
Qaliev Q.S., YOSH VOLEYBOLCHILARNING TAYYORGARLIK BOSQICHIDA MASHG'ULOT VA MUSOBAQA SAMARADORLIGINI ANIQLASH USLUBLARI 420
Quryazov I.B., TURKISTONDA JADIDCHILIK HARAKATI VA ULARNING FAOLIYATI 424
Quvvatova M.H., A STUDY OF PAREMIOLOGICAL UNITS IN WORLD LINGUISTICS 428
Rahimberdieva Sh.R., AREA OF AMARANTH APPLICATION BY CHEMICAL COMPOSITION 432
Rakhimjonova G.D., THE ANALYSIS OF THE CROSS-CULTURAL VARIATIONS OF SPEECH ACTS IN MODERN LINGUISTICS 435
Rashidova B.Ya., QADIMGI SHARQDA QADRIYATLARNING SHAKLLANISHI VA RIVOJLANISHI 439
Rashidova Z.Sh., PATOPSIXOLOGIYADA PSIXIKANING SHAKLLANIB BORISH QONUNYATLARI 443
Rasulov N.M., BIZNES MUHITINI YAXSHILASH VA TADBIRKORLIKNI RIVOJLANTIRISHNING YAPON TAJRIBASI 448
Rasulova G.R., Yuldasheva A.S., ASSESSMENT OF THE ANGIOGENIC SYSTEM IN THE CASE OF SEVERE PREECLAMPSIA 454
Rasulova Yu.B., MUSIQIY-NAZARIY FANLARNI TASHKIL ETISHDA INNOVATSION YONDASHUV 458
Raximova S.D., INGLIZ TILIDA QO'LLANILADIGAN METODLAR 462
Rizaeva D.Sh., POSTMODERN BIOFICTION IN LITERATURE 466
Sadikova Sh.M., HUQUQIY MUNOSABATLAR ASOSI SIFATIDA - YURIDIK FAKTLAR 473
Sanetullaev E.E., Eshmuratov A.B., Mirsaatova Sh.Kh., Matyakubov A.B., Melikulov U.A., THE EFFECT OF FLUSHING ON THE MECHANICAL DRILLING SPEED 476
Shamuratov B.D., YARIM O'TKAZGICHLI MATERIALLAR 481
Shodiyev S.R., Jumaeva M.B., Jumaqulova S.S., ABOUT THE FORMATION OF THE TOPONYMS ZARAFSHAN BASIN AND ZARAFSHAN RIVER 485
Shodiyev S.R., Norquvvatova U.I., Parmonova N.A., THE ORIGIN OF GEOECOLOGICAL CIRCULATION UNDER THE INFLUENCE OF ANTOPOGENIC FACTORS IN THE NAVOI REGION 489

Shodmanova Z.U., ROLE OF SERVICES IN THE DEVELOPMENT OF THE MODERN ECONOMY 493

Shodmonkulova Sh.O., G‘AZNACHILIK IJROSINI TASHKIL ETISHNING XORIJIY TAJRIBALARI 498

Sobirov T.R., Majidova G.A., MUSIQA VA SAN’AT MAKTABLARIDA FORTEPIANO O‘QITISH METODIKASINING O‘ZIGA XOS XUSUSIYATLARI 503

Sobirov T.R., Abulov T.M., ABU NASR FAROBIYNING MUSIQIY TA’LIMI BORASIDAGI TADQIQOTLARI HAQIDA 507

Solayeva M.N., Mamatqulov F., IKKI KARRALI INTEGRALLARNI CHEGARALARINI TANLASHDA GEOGEBRA DASTURIDAN FOYDALANISH 512

Solieva H.M., Inombekova A.I., O’ZBEKISTONDA FUQAROLIK MASALALARI – QON VA TUPROQ HUQUQI 517

Solieva H.M., Umirzakova M.R., O’ZBEKISTONDA MA’MURIY SUDLARNING TAKOMILLASHIB BORISHINING HUQUQIY ASOSLARI 524

Sotvoldiyev E., FARM PRODUCTION EFFICIENCY AND THE POSSIBILITIES OF ITS INCREASE 530

Soyibjonova K.Ya., Noibjonova X.M., SUVNING QATTIQLIGINI INSON ORGANIZMIGA TA’SIRI 533

Sultanova N.R., UMUMTA’LIM MAKTABLARIDA TARBIYA FANINING JORIY ETILISHI. TARBIYA FANIGA QO‘YILGAN DAVLAT TA’LIM STANDARTLARI 536

Suyarova M.Kh., DEVELOPMENT OF USE OF ALTERNATIVE ENERGY SOURCES 540

Tabinbaev B.A., VOLEYBOL SPORT TURINING KELIB CHIQISHI, TARIXI VA HOZIRGI DUNYODAGI AHAMIYATI 545

Tajibayev M.A., O‘ZINI-O‘ZI TASHKILLASHTIRUVCHI JARAYONLARNI TADQIQ ETISHNING YAXLIT METODOLOGIYASI 549

Togayeva M.A., IRON DEPENDENCE OF THE POPULATION INDICATOR OF COVID-19 DISEASE 553

Tolibjonov O.O., Ergashbotirov S.M., Qosimov B.B., MITE BIOLOGY AND PLANT DAMAGE 561

Toshboyev B.B., O‘ZBEKISTONDA YASHIL O`SISH IQTISODIY RIVOJLANISHNNING MUHIM OMILI SIFATIDA 564

Turatov Sh.B., FUQAROLIK MAS’ULIYATI JAMIYATDAGI DEMOKRATIK O‘ZGARISHLARNING UZVIY QISMI 574

Tursunboyev D.Z., THE INFLUENCE OF THE MONETARY-CREDIT POLICY OF THE CENTRAL BANK ON THE DEVELOPMENT OF THE COUNTRY'S ECONOMY 578

Tursunova D.Z., O`QUVCHILARNING MUSTAQIL FIKRLASHINI PSIXOLOGIK XUSUSIYATLARI 582

Uktamov M.G., ASSESSMENT OF THE DYNAMIC STATE OF GLACIERS LOCATED IN THE AMUDARYA BASIN IN TERMS OF AGRICULTURAL USE..... 586

Umarova Z.O., Nurboyeva Z., XIZMAT KO‘RSATISH KORXONALARINI BOSHQARISHDA MENEJMENT VA MARKETING SOHASINING TUTGAN O‘RNI 590

Urokov F.O., DEVELOPMENT TREND OF MEDICAL SERVICES IN SAMARKAND REGION 594

Urokov F.O., CURRENT ISSUES OF DEVELOPMENT OF MEDICAL SERVICES..... 599

Xidiraliyev K.E., Jo‘rayev J.B., GEOGRAFIK QOBIQ – GEOGRAFIYA FANINING O‘RGANISH OBYEKTI..... 603

Yangiboyev S., MAHMUD KOSHG ‘ARIYNING HAYOT VA IJOD YO‘LI..... 611

Yangiboyev S.D., MUHAMMAD SODIQ QOSHG‘ARIYNING PEDAGOGIK QARASHLARI..... 615

Yuldashev F.M., QUYOSH QOZONLARINI DASTURLASHTIRISH XOSSALARI 619

Yuldasheva G.S., MAKTABGACHA TA`LIM TASHKILOTLARIDA TARBIYACHILIK KASBI VA UNING JAMIYATDA TUTGAN O‘RNI 625

Yusupov N.A., FUQAROLARNING SHAXS HAQIDAGI MA`LUMOTLARINI HIMOYA QILISH..... 628

Yusupov O.B., MEDIA VA AXBOROT SAVODXONLIGI 632

Yusupova F.O., SOG’LIQNI SAQLASH SOHASIDA TELETIBBIYOT XIZMATLARINI KO‘RSATISHNING XALQARO-HUQUQIY JIHATLARI 637

Zaripov A.D., Avezov A., Ahmadjonova Sh., Saydullayeva V., INVESTMENTS AND INVESTMENT ACTIVITY STATISTICS..... 641

Zaynabiddinov K.A., Ergashev S.A., ANDIJON VILOYATIDA PAXTA-TO’QIMACHILIK KLASTERLARINI HUDUDIY BAHOLASH VA SWOT-TAHLILI..... 645

Zhao Yongfeng, STUDY ON RESPONSE OF ECOLOGICAL ENVIRONMENT IN URBANIZATION PROCESS OF ORDOS, CHINA 652
Zhao Yongfeng, RESEARCH ON THE COUPLING RELATIONSHIP BETWEEN TOURISM AND NEW-TYPE URBANIZATION IN INNER MONGOLIA, CHINA 657
Zheng Hui, STUDY ON HARMONIOUS DEVELOPMENT OF POPULATION, ECONOMY, RESOURCES AND ENVIRONMENT IN INNER MONGOLIA, CHINA 662
Zheng Hui, STUDY ON COUPLING RELATIONSHIP BETWEEN POPULATION STRUCTURE AND REGIONAL ECONOMY IN ORDOS, CHINA 669
Zukhurova D.M., Gafurov D., MATCHING SECURITY: STRATEGIES FOR A SECURE FUTURE 674
Zuxurova D.M., YO'LLARDAGI TIRBANDLIKLAR QACHON BARHAM TOPADI? 677
Абдиолимов М.Х., Наджмитдинов О.Б., МЕТОДЫ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ ЗАБОЛЕВАНИЙ МОЗГА 681
Абдувахопова Н.Р., ИЗУЧЕНИЕ ЗНАЧЕНИЯ ТРОМБОПОЭТИНА В РАЗВИТИИ ПЛОДА У ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА 685
Абдужалилова Н.А., АФОРИЗМЫ В ПРЕПОДАВАНИИ ЛАТЫНИ 689
Абдуллаева М.Э., ЗНАЧЕНИЯ АНТРОПОМЕТРИЧЕСКИХ ПОКАЗАТЕЛЕЙ ДЛИННОТНЫХ И ОБХВАТНЫХ РАЗМЕРОВ ДЕТЕЙ РАННЕГО ВОЗРАСТА 693
Абдурахманов М.Г., Примкулова Г.Н., ВОПРОСЫ ТЕЧЕНИЯ, ДИАГНОСТИКИ И ЛЕЧЕНИЯ ЗАБОЛЕВАНИЯ У ПАЦИЕНТОВ С ХРОНИЧЕСКОЙ СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТЬЮ 702
Агоева М.М., О РОЛИ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ ПРИ ОБУЧЕНИИ ИНОСТРАННОМУ ЯЗЫКУ 705
Агоева М.М., О ВОЗМОЖНОСТИ ИСПОЛЬЗОВАНИЯ ИГРОВЫХ ТЕХНОЛОГИЙ ПРИ ИЗУЧЕНИИ ИНОСТРАННОГО ЯЗЫКА 709
Агоева М.М., ТЕСТИРОВАНИЕ ПО ИНОСТРАННОМУ ЯЗЫКУ КАК ФОРМА КОНТРОЛЯ ЗНАНИЙ СТУДЕНТОВ 712
Адилова Г.Р., СОВРЕМЕННЫЕ СПОСОБЫ КОНТРОЛЯ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ ДЕВОЧЕК-ПОДРОСТКОВ 715

Акбарова М.Ф., МЕЖДУНАРОДНАЯ КОНКУРЕНТОСПОСОБНОСТЬ И МЕТОДЫ ЕЕ ОЦЕНКИ 719

Аллаев М.Я., ЛЕЧЕНИЕ КРОВОТЕЧЕНИЙ ИЗ ВАРИКОЗНО РАСШИРЕННЫХ ВЕН ПИЩЕВОДА И ЖЕЛУДКА У ДЕТЕЙ С ПОРТАЛЬНОЙ ГИПЕРТЕНЗИЕЙ 722

Алланов К.А., Чариев А.К., ВОПРОСЫ ЭФФЕКТИВНОГО ИСПОЛЬЗОВАНИЯ ВОДНЫХ РЕСУРСОВ В ЗАСУШЛИВЫХ РЕГИОНАХ И РАЗВИТИЯ САДОВОДСТВА (НА ПРИМЕРЕ СУРХАНДАРЬИНСКОЙ ОБЛАСТИ) 729

Алтынбаев Р.М., ЖИЛИЩНАЯ ПОЛИТИКА В ХАНТЫ-МАНСИЙСКОМ АВТОНОМНОМ ОКРУГЕ: ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ 734

Артикова С.Г., Хайдарова Н.Б., УСТРАНЕНИЕ ПРОБЛЕМ С ДВЕНАДЦАТИПЕРСТНОЙ КИШКОЙ У ПАЦИЕНТОВ С ХРОНИЧЕСКИМ ПАНКРЕАТИТОМ 738

Аслонов У.Ш., Шамсиддинова М.У., О ПРЕПОДАВАНИИ ДИФФЕРЕНЦИРУЕМОСТИ ФУНКЦИИ МНОГИХ ПЕРЕМЕННЫХ 743

Асранов С.А., ПАТОМОРФОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА ЭКЗОКРИННОЙ ЧАСТИ ПОДЖЕЛУДОЧНОЙ ЖЕЛЕЗЫ 752

Атангулов С.Х., ХАРАКТЕРИСТИКА АППАРАТА ИСПОЛНИТЕЛЬНЫХ ОРГАНОВ ГОСУДАРСТВЕННОЙ ВЛАСТИ РЕСПУБЛИКИ БАШКОРТОСТАН 756

Ахмадалиева У.К., Мухторов З.М., УЛЬТРАЗВУКОВАЯ ЭЛАСТОГРАФИЯ ПРИ СТЕТОЗЕ И ФИБРОЗЕ 761

Ахмаджонова М.Н., Юлдашева А.С., АКУШЕРСКИЕ И ПЕРИНАТАЛЬНЫЕ ИСХОДЫ У ЖЕНЩИН С РУБЦОМ НА МАТКЕ В ЗАВИСИМОСТИ ОТ СПОСОБА РОДОРАЗРЕШЕНИЯ 765

Ахмедов И.У., СОВЕРШЕНСТВОВАНИЕ ГОСУДАРСТВЕННОЙ МИГРАЦИОННОЙ ПОЛИТИКИ ЧЕЛЯБИНСКОЙ ОБЛАСТИ 769

Бекпанов А., Абипов Р., ФАУНА И ФЛОРА РЕСПУБЛИКИ КАРАКАЛПАКСТАНА 774

Бобонов Д.Т., ДЕФЕКТЫ В РЕАЛЬНЫХ КРИСТАЛЛАХ 778

Богачик Т.О., ДЕБИТОРСКАЯ И КРЕДИТОРСКАЯ ЗАДОЛЖЕННОСТЬ В ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЯ 782

Боймирзаев А.А., Тухтасинов М.Д., СПОРТ – ЭТО СОЦИАЛЬНАЯ ДЕЯТЕЛЬНОСТЬ 787

Вишникина А.Д., СОДЕРЖАНИЕ ЭКОНОМИЧЕСКОГО АНАЛИЗА, ЕГО МЕСТО В УПРАВЛЕНИИ ОРГАНИЗАЦИЕЙ 791

Волкова К.А., ОЦЕНКА ЭФФЕКТИВНОСТИ РОЗНИЧНОЙ КЛИЕНТСКОЙ ПОЛИТИКИ ПАО «СБЕРБАНК» 800

Гермиханова З.Б, ПОВЫШЕНИЕ МОТИВАЦИИ СТУДЕНТОВ К УЧЕБНОЙ ДЕЯТЕЛЬНОСТИ В ЧЕЧЕНСКОМ ГОСУДАРСТВЕННОМ СТРОИТЕЛЬНОМ КОЛЛЕДЖЕ 806

Гозиева Ш.С., ФАРМАКОЭПИДЕМИОЛОГИЯ И ПРОФИЛАКТИКА ГИПЕРТОНИЧЕСКИХ ЗАБОЛЕВАНИЙ У БЕРЕМЕННЫХ ЖЕНЩИН 809

Гончарова И.И., Кожевин С.А., Игнатенко П.В., Подпругин А.И., ПОСТРОЕНИЕ ФУНКЦИОНАЛЬНОЙ МОДЕЛИ ИДЕНТИФИКАЦИИ ЖИВОТНЫХ 813

Ғоппорова Н.У., ИСЛОМ БАНК ХИЗМАТЛАРИНИ ТАКОМИЛЛАШТИРИШ: ТИЖОРАТ БАНКЛАРИ УЧУН МУАММОЛАР ВА ИМКОНИЯТЛАР 818

Гун Чжицюн, ТЕХНОЛОГИЯ СТРОИТЕЛЬСТВА БЕТОННЫХ КОРАБЛЕЙ С ИСПОЛЬЗОВАНИЕМ 3D ТЕХНОЛОГИИ (ТЕХНОЛОГИЯ АДДИТИВНОГО ПРОИЗВОДСТВА БЕТОННЫХ КОРАБЛЕЙ 822

Даулетбаев Б.К., Юнусова З.В., КЛИНИЧЕСКИЕ ХАРАКТЕРИСТИКИ АНДРОГЕННОГО ДЕФИЦИТА У БОЛЬНЫХ САХАРНЫМ ДИАБЕТОМ 2-ГО ТИПА 828

Джуманиязова Т.А., РОЛЬ ХУДОЖЕСТВЕННОЙ ГИМНАСТИКИ В СПОРТИВНОЙ СИСТЕМЕ 832

Джураев Н.Н., ДИФФЕРЕНЦИРОВАННАЯ ПРОФИЛАКТИКА СУИЦИДАЛЬНОГО ПОВЕДЕНИЯ 835

Дрозденский С., Каршибоев Ш., Муртазин Э., СИЛОВЫЕ КОНТУРА ИМПУЛЬСНЫХ ИСТОЧНИКОВ ПИТАНИЯ С НЕПОСРЕДСТВЕННОЙ СВЯЗЬЮ 839

Дудахова Л.Т., Халимова З.А., ФИНАНСОВАЯ ГРАМОТНОСТЬ СТУДЕНТОВ ЧЕЧЕНСКОГО ГОСУДАРСТВЕННОГО КОЛЛЕДЖА 845

Дудинова А.К., КАЧЕСТВО АУДИТА: КЛЮЧЕВЫЕ АСПЕКТЫ И ЗНАЧЕНИЕ В СОВРЕМЕННОМ БИЗНЕСЕ 849

Дусанова Ш.Б., Атаханова Д.Х., ОЦЕНКА ВЛИЯНИЯ ИЗМЕНЕНИЯ КЛИМАТА НА СЕЛЬСКОЕ ХОЗЯЙСТВО ХОРЕЗМСКОГО ОАЗИСА 853

Дяо Шилун, ТРЕБОВАНИЯ К РАЗЛИЧНЫМ ВИДАМ БЕТОНА ДЛЯ СТРОИТЕЛЬСТВА ТРАНСПОРТНЫХ ИСКУССТВЕННЫХ СООРУЖЕНИЙ В УСЛОВИЯХ КНР 857

Дяо Шилун, СРАВНЕНИЕ ТРЕБОВАНИЙ К БЕТОНУ ДЛЯ СТРОИТЕЛЬСТВА ТРАНСПОРТНЫХ ИСКУССТВЕННЫХ СООРУЖЕНИЙ В РОССИЙСКИХ И КИТАЙСКИХ УСЛОВИЯХ 862

Ефименко О.В., Хайдарова Л.Р., Инаков К.Т., СОСТОЯНИЕ ГЕМОДИНАМИКИ У ДЕТЕЙ ПОСЛЕ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ДЕФЕКТА МЕЖЖЕЛУДОЧКОВОЙ ПЕРЕГОРОДКИ 868

Жамолдинов С.Х., МАРКЕТИНГОВАЯ МОДЕЛЬ УПРАВЛЕНИЯ ИНФОРМАЦИОННЫМИ ПРОДУКТАМИ 874

Жўраев С.Т., Турсунова А.Ш., Жўраев Д.Т., ҒЎЗАНИНГ ТУРЛИ ХИЛ ҲУДУДЛАРДА ЕТИШТИРИЛГАН ТИЗМАЛАРИНИНГ АСОСИЙ ҚИММАТЛИ-ХЎЖАЛИК БЕЛГИЛАРИ ЎРТАСИДАГИ КОРРЕЛЯЦИОН БОҒЛИҚЛИКЛАР 882

Жўраев С.Т., Турсунова А.Ш., Жўраев С.Т., ЖАНУБИЙ МИНТАҚАДА ЎРГАНИЛГАН ҚАДИМГИ ЮМШОҚ БУҒДОЙ НАВЛАРИНИНГ ОБЁТИК ВА БИОТИК ОМИЛЛАРГА ЧИДАМЛИЛИГИ 891

Залялова А.А., АНАЛИЗ ЭФФЕКТИВНОСТИ ВЗАИМОДЕЙСТВИЯ ПАО «ВТБ БАНК» И ГОСУДАРСТВА В ВОПРОСАХ ПОДДЕРЖКИ МСП В СЕЛЬСКОХОЗЯЙСТВЕННОЙ ОТРАСЛИ 896

Игамбердиев С.Х., ОСНОВЫ ОРГАНИЗАЦИИ ОБСЛУЖИВАНИЯ КЛИЕНТОВ 905

Икрамова Ш.С., Юлдашева А.С., ОСОБЕННОСТИ ТЕЧЕНИЯ БЕРЕМЕННОСТИ И РОДОВ У ЖЕНЩИН С ПЕРЕНОШЕННОЙ БЕРЕМЕННОСТЬЮ, ПРОЖИВАЮЩИХ В НАШЕМ РЕГИОНЕ 909

Иногамов И.И., Рахимова М.Х., Шамсиева Н.М., Акбархонов С.К., МОНИТОРИНГ ТЕХНОГЕННЫХ ВОЗДЕЙСТВИЙ ХВОСТОВЫХ ХОЗЯЙСТВ ГОРНОГО ПРОИЗВОДСТВА НА ЭКОЛОГИЧЕСКУЮ СРЕДУ 913

Ирисметов Б., СТАНОВЛЕНИЕ И РАЗВИТИЕ АДМИНИСТРАТИВНО-ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ В СТРАНАХ ЦЕНТРАЛЬНОЙ АЗИИ 923

Исламова С.Т., Аскаров И.Р., Тохтаев Н.М., АНАЛИЗ ОСТРОЙ ТОКСИЧНОСТИ ПИЩЕВОЙ ДОБАВКИ «AIS-101» СБОРНЫЙ ТРАВЯНОЙ ЧАЙ 930

Исломов М.Х., СЛОЙНЫЕ ТЕХНОЛОГИИ ПРОИЗВОДСТВА И ИХ ПРИМЕНЕНИЕ 935

Исломов М.Х., ПРИМЕРЫ ВЫДЕЛЕННЫХ РАДИОДИАПАЗОНОВ 939

Кадирова Л.А., СОВЕРШЕНСТВОВАНИЕ МЕХАНИЗМА УПРАВЛЕНИЯ ВЫСШИМ УЧЕБНЫМ ЗАВЕДЕНИЕМ ПОСРЕДСТВОМ ВНЕДРЕНИЯ ГИС В ПРОЦЕСС ТРУДОУСТРОЙСТВА ВЫПУСКНИКОВ 942

Казаков О.С., Узоков Л.Ф., ВОПРОСЫ УПРАВЛЕНИЯ ТРУДОВЫМИ РЕСУРСАМИ В УСЛОВИЯХ ГЛОБАЛИЗАЦИИ 947

Казаков О.С., Турабаев И., СОВЕРШЕНСТВОВАНИЕ УПРАВЛЕНИЯ В НАПРАВЛЕНИИ ИСПОЛЬЗОВАНИЯ ПОТЕНЦИАЛА ПРЕДПРИЯТИЙ 951

Казаков О.С., СТРАТЕГИИ УПРАВЛЕНИЯ ВНЕШНЕЭКОНОМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЙ ПРЕДПРИНИМАТЕЛЬСТВА 955

Каландаров М., СОВРЕМЕННЫЕ ВЗГЛЯДЫ НА ЛЕЧЕНИЕ И ПРОФИЛАКТИКУ КИШЕЧНОГО ТОКСИКОЗА У ДЕТЕЙ РАННЕГО ВОЗРАСТА 959

Камбарова Д., ЕРЁҒОҚНИНГ ХАЛҚ ХЎЖАЛИГИДАГИ АХАМИЯТИ ВА БИОЛОГИК ХУСУСИЯТЛАРИ 963

Каражанова Г.Т., ПЕРСПЕКТИВЫ УСТОЙЧИВОГО РАЗВИТИЯ СЕЛЬСКОГО ТУРИЗМА В УЗБЕКИСТАНЕ 966

Каракотов О.Х., АНАЛИЗ МЕХАНИЗМА РЕАЛИЗАЦИИ ИНФОРМАЦИОННОЙ ОТКРЫТОСТИ В ОРГАНАХ ПУБЛИЧНОЙ ВЛАСТИ КАРАЧАЕВО-ЧЕРКЕССКОЙ РЕСПУБЛИКИ 970

Каримов Э.Т., ПОВЫШЕНИЕ ТЕПЛОИЗОЛЯЦИОННЫХ СВОЙСТВ ОГРАЖДАЮЩИХ КОНСТРУКЦИЙ ЗДАНИЙ 975

Каримова М.С., ЭКОТУРИЗМ КАК ПУТЬ К СОХРАНЕНИЮ ПРИРОДЫ И УСТОЙЧИВОМУ РАЗВИТИЮ 980

Касимова Н.Дж., Исакова Д.З., МОНИТОРИНГ МИКРОАЛЬБУМИНУРИИ ПРИ СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТИ И МЕРЫ ПО ЕЕ ЛЕЧЕНИЮ 986

Касимова Н.Д., ОСОБЕННОСТИ КУПИРОВАНИЯ МАКРОАНГИОПАТИИ ПРИ САХАРНОМ ДИАБЕТЕ И МЕРЫ ПО ИХ УСТРАНЕНИЮ 991

Каюмов Д.А., Мухаммаджонов М.Р., ОСНОВНЫЕ ДЕФЕКТЫ И ДЕФОРМАЦИИ ЗЕМЛЯНОГО ПОЛОТНА И НЕОТЛОЖНЫЕ МЕРЫ ПО ИХ УСТРАНЕНИЮ 996

Кинзябулатов Р.С., ПРОБЛЕМЫ ОРГАНИЗАЦИИ И ПРОХОЖДЕНИЯ СЛУЖБЫ В ПРАВООХРАНИТЕЛЬНЫХ ОРГАНАХ 1002

Киргизов Х. Т., Рахимова Г., Собиржонов М., УГОЛ УСТАНОВКИ ПОЧВОСДВИГАЮЩЕЙ ПЛАСТИНКИ К НАПРАВЛЕНИЮ ДВИЖЕНИЯ 1006

Кифа Л.Л., ОБ ОЦЕНКЕ ЦИФРОВОЙ КОМПЕТЕНТНОСТИ СОТРУДНИКОВ 1011
Кокожева М.А., АКТУАЛЬНЫЕ ВОПРОСЫ ОБЕСПЕЧЕНИЯ ПОДОЗРЕВАЕМОМУ И ОБВИНЯЕМОМУ ПРАВА НА ЗАЩИТУ 1015
Косимов С.С., Ибрагимов Д.Н., ЛЕЧЕНИЕ И ВЕДЕНИЕ ИШЕМИЧЕСКОЙ БОЛЕЗНИ СЕРДЦА И ФАКТОРОВ РИСКА, НАБЛЮДАЕМЫХ ПРИ СОПУТСТВУЮЩЕЙ ПАТОЛОГИИ 1020
Кулматов П.М., ШАХС МАЪНАВИЙ КАМОЛОТИ РИВОЖИНИНГ ЎЗИГА ХОС ЖИҲАТЛАРИ 1024
Курбанова Д.И., ФАКТОРЫ ОЦЕНКИ ЭФФЕКТИВНОСТИ НЕСТЕРОИДНЫХ ПРОТИВОВОСПАЛИТЕЛЬНЫХ ПРЕПАРАТОВ У ПАЦИЕНТОВ С ПОЯСНИЧНОЙ БОЛЬЮ 1028
Курбанова Д.И., ПАТОГЕНЕЗ И МЕТОДЫ ЛЕЧЕНИЯ НЕСТАБИЛЬНОЙ СТЕНОКАРДИИ В ФАРМАКОТЕРАПИИ 1032
Логинова Л.А., СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА МЕТОДИЧЕСКИХ ПОДХОДОВ К ОЦЕНКЕ ЭФФЕКТИВНОСТИ ДЕЯТЕЛЬНОСТИ БАНКОВ 1036
Лю Бинлэй, ТЕХНОЛОГИИ ИЗГОТОВЛЕНИЯ ШПАЛ-МЕТАЛЛИЧЕСКИЕ КОНСТРУКЦИИ ПОДРЕЛЬСОВЫХ ОСНОВАНИЙ 1040
Лю Бинлэй, ТЕХНОЛОГИИ ИЗГОТОВЛЕНИЯ ШПАЛ-ДЕРЕВО, КОМПОЗИТЫ, ЖЕЛЕЗОБЕТОН, МЕТАЛЛ 1045
Ляшенко А.А., РАЗРАБОТКА АЛГОРИТМА ПОДДЕРЖКИ ПРИНЯТИЯ РЕШЕНИЙ ПРИ ПЛАНИРОВАНИИ МАРШРУТА ДЛЯ ПЕРЕВОЗКИ ГОТОВОЙ ПРОДУКЦИИ 1051
Мадихонова Б.М., ТАЪЛИМНИ СИФАТИНИ ОШИРИШ УЧУН ПЕДАГОГИК МЕТОДЛАРДАН ФОЙДАЛАНИШ 1056
Максимова О.К., САМООБРАЗОВАНИЕ КАК ДЕЯТЕЛЬНОСТЬ ОБУЧАЮЩИХСЯ 1059
Максимчук О.В., Мансурова Ш.П., РЕКУПЕРАЦИЯ ВОЗДУХА В СИСТЕМЕ ВЕНТИЛЯЦИИ 1064
Мамадалиев А.Р., СОВРЕМЕННЫЙ ПОДХОД К ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ ГРИБКОВЫХ ЗАБОЛЕВАНИЙ УХА 1070
Мамаджанова М.Р., ИННОВАЦИОННЫЕ ТЕХНОЛОГИИ В ВУЗОВСКОМ ОБРАЗОВАНИИ 1074
Мамаджанова С.В., ФОРМИРОВАНИЕ ИНДИВИДУАЛЬНО-ПСИХОЛОГИЧЕСКИХ ХАРАКТЕРИСТИК БУДУЩЕГО УЧИТЕЛЯ

ИНФОРМАТИКИ В ВИРТУАЛЬНОЙ ОБРАЗОВАТЕЛЬНОЙ СРЕДЕ 1080
Маткаримова С.Д., КРАТКАЯ ИСТОРИЯ РАЗВИТИЯ ИНСТИТУТА СТРАХОВАНИЯ 1084
Матрасулов Б.Э., ҚИШЛОҚ ХЎЖАЛИГИНИ ДАВЛАТ ТОМОНИДАН ТАРТИБГА СОЛИШ ТИЗИМИНИ ШАКЛЛАНТИРИШНИНГ АСОСИЙ ТЕНДЕНЦИЯЛАРИ 1088
Махмудова Б.Ш., ОСНОВНЫЕ ПРОЯВЛЕНИЯ СОСТОЯНИЯ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ ПРИ БРОНХИАЛЬНОЙ ОБСТРУКЦИИ У ДЕТЕЙ 1096
Меденцева Н.П., СОЦИАЛЬНЫЕ АСПЕКТЫ СОВЕРШЕНСТВОВАНИЯ УСТНОЙ И ПИСЬМЕННОЙ РЕЧИ СТУДЕНТОВ 1099
Мулданов Ф.Р., ГЛАЗ РОБОТА ЭТАПЫ СОЗДАНИЯ МЕТОДИКИ ОПРЕДЕЛЕНИЯ ПОДЛИННОСТИ ЛИЦА ЧЕЛОВЕКА В АНАЛИЗАТОРЕ 1102
Мусаева Н.Н., Литвин В.Б., Мусаева Н.А., СУЩНОСТЬ ПРОБЛЕМНОГО ОБУЧЕНИЯ 1109
Мусаева Ш.А., АНАЛИЗ И УЛУЧШЕНИЕ МАРКЕТИНГОВОЙ СРЕДЫ НА ПРЕДПРИЯТИЯХ «ОПТОВАЯ ТОРГОВЛЯ» 1112
Мусаева К.М., ВЛИЯНИЕ ПЕДАГОГА НА ФОРМИРОВАНИЕ ЛИЧНОСТИ СТУДЕНТА 1120
Нагашыбаева А.К., БИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ РОДА POLISTES 1124
Наджмитдинов О.Б., Камбарова Д.Н., ПРИМЕНЕНИЕ МУЛЬТИСПИРАЛЬНОЙ КОМПЬЮТЕРНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ УРОЛОГИЧЕСКИХ БОЛЕЗНЕЙ 1128
Наджмитдинов О.Б., Шухратбекова М.Х., РОЛЬ МЕТОДОВ КОЛИЧЕСТВЕННОГО АНАЛИЗА ДАННЫХ МАГНИТНО-РЕЗОНАНСНОЙ ТОМОГРАФИИ В ДИАГНОСТИКЕ БОЛЕЗНИ АЛЬЦГЕЙМЕРА НА РАННЕЙ СТАДИИ ЗАБОЛЕВАНИЯ 1132
Назаров Х.Т., Давронов К.К., Худойбердиев О.И., Худаяров К.А., ЗНАЧЕНИЕ ИСКУССТВЕННОГО АГРОФИТОЗА В УЛУЧШЕНИИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ ПАСТБИЩА 1136
Назаров Х.Т., Мамажонов Р.И., Сафарва Н., Ахмадов Б.Н., ВОПРОСЫ УСТОЙЧИВОСТИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ НИЖНЕГО ЗАРАФШАНСКОГО БАССЕЙНА 1145
Назаров Х.Т., Давронов К.К., Жомолов Э.А., Шермаматова Д.Б., ЗНАЧЕНИЕ АГРОФИТОЦЕНОЗОВ В ОПТИМИЗАЦИИ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ ПАСТБИЩА 1150

Ниязов З.М., Валиева З.С., ЛЕЧЕНИЕ И ПРОФИЛАКТИКА КОРОНАРНОЙ НЕДОСТАТОЧНОСТИ У ПОЖИЛЫХ ПАЦИЕНТОВ С ИНФАРКТОМ МИОКАРДА 1158

Новик К., КОММУНИКАТИВНО-ПРАГМАТИЧЕСКИЕ ОСОБЕННОСТИ АНГЛОЯЗЫЧНОГО И РУССКОЯЗЫЧНОГО РЕКЛАМНОГО ТЕКСТА (НА ОСНОВЕ СОЦИАЛЬНОГО ДИСКУРСА) 1163

Новосёлова Ю.В., ПРОБЛЕМЫ ФОРМИРОВАНИЯ ПРАВОВОЙ ГРАММОТНОСТИ У ПОДРОСТКОВ, ПРОЖИВАЮЩИХ В НЕПОЛНЫХ СЕМЬЯХ 1170

Норкузиев А., УСЛОВИЯ ФОРМИРОВАНИЕ ПОЧВЫ В ЕСТЕСТВЕННЫХ УСЛОВИЯХ 1175

Одилова Г.М., Шодиева Д.Г., Амонова Ш.Л., О МУТАЦИЯХ ДРОЖЖЕПОДОБНЫХ ГРИБОВ РОДА КАНДИДА 1179

Парпиев О.Т., Ахатов Д.Н., СРЕДСТВА ОБУЧЕНИЕ КАК ФАКТОР РАЗВИТИЯ ПОЗНАВАТЕЛЬНОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ 1183

Пирназаров И.И., Бобоев С.М., Каримов Т.Х., Иброҳимова З.И., ИССИҚХОНАЛАРДАГИ ТЕШИЛГАН ИССИҚ ҲАВО ТАРҚАТУВЧИ ҚУВУР(ПОЛИЭТИЛЕНХЛОРИД) ИЧИДАГИ ИССИҚ ҲАВОНИНГ БОСИМ ЎЗГАРИШ ВА ГИДРАВЛИК ҚАРШИЛИКНИ ҲИСОБЛАШ 1187

Полева Ю.В., ОЦЕНКА ФИНАНСОВОГО СОСТОЯНИЯ ПРЕДПРИЯТИЯ (ИЛИ ОРГАНИЗАЦИИ) И НАПРАВЛЕНИЯ ПО ЕГО УЛУЧШЕНИЮ 1192

Раббимов Э.А., ЭЛЕКТРОННАЯ СТРУКТУРА И ОПТИЧЕСКИЕ СВОЙСТВА ПЛЕНОК CaF2, ИМПЛАНТИРОВАННЫХ НИЗКОЭНЕРГЕТИЧЕСКИМИ ИОНАМИ Ba+ 1198

Раззаков С.Ж., Мухторжонов А., ОЦЕНКА СЕЙСМИЧЕСКОЙ БЕЗОПАСНОСТИ ТЕРРИТОРИИ ФЕРГАНСКОЙ ДОЛИНЫ 1205

Разыкова Л.Т., МОДЕЛЬ ФОРМИРОВАНИЯ И РАЗВИТИЯ ТВОРЧЕСТВА БУДУЩИХ УЧИТЕЛЕЙ МЕДИЦИНСКОГО ОБРАЗОВАНИЯ 1210

Расулова М.Д., Нигматшаева А.Р., ФАКТОРЫ РИСКА РАЗВИТИЯ СИНДРОМА ОГРАНИЧЕНИЯ РОСТА ПЛОДА 1219

Расулова Ш.Ғ., АХОЛИ БАНДЛИГИНИ ТАЪМИНЛАШ АХОЛИ ТУРМУШ ДАРАЖАСИНИ ОШИРИШНИНГ МУХИМ ОМИЛИ СИФАТИДА 1223

Рахманов Ш.В., БИОЛОГИК РЕСУРСЛАРДАН ФОЙДАЛАНИШ ИҚТИСОДИЙ БАРҚАРОРЛИК ГАРОВИДИР 1227

Рашидова Ш.У., ЭФФЕКТИВНОСТЬ УЛЬТРАЗВУКОВОГО ИССЛЕДОВАНИЯ ПРИ ДИАГНОСТИКЕ УРЕТЕРОЛИТИАЗА 1233

Реймов П.Р., Матжанова Ш.К., Давлетов А.М., НЕКОТОРЫЕ АСПЕКТЫ КАРТОГРАФИРОВАНИЯ УСТОЙЧИВОСТИ ЭКОСИСТЕМ ДЕЛЬТЫ АМУДАРЬИ НА ПРИМЕРЕ АНАЛИЗА ТЕМПЕРАТУРЫ ПОВЕРХНОСТИ ЗЕМЛИ ПО ДАННЫМ ДИСТАНЦИОННОГО ЗОНДИРОВАНИЯ 1237

Ризакулов Ш.Ш., Жуманов А.И., ФИНАНСОВЫЕ ОТНОШЕНИЯ ЭКОНОМИЧЕСКИХ СУБЪЕКТОВ В СИСТЕМЕ ФИНАНСОВОГО МЕНЕДЖМЕНТА 1248

Рузиев А.Ж., ЯНГИ ЎЗБЕКИСТОНДА МИЛЛИЙ ЎЗЛИКНИ АНГЛАШ ВА ТАРИХИМИЗНИ ЎРГАНИШДА МУТАФАККИРЛАРИМИЗНИНГ МАЪНАВИЙ МЕРОСИНИНГ АҲАМИЯТИ 1253

Рыбин Д.Е., Гончарова И.И., Щендрыгин Р.В., Свиридова И.В., СОВЕРШЕНСТВОВАНИЕ ДЕЯТЕЛЬНОСТИ ТРАНСПОРТНОЙ КОМПАНИИ ЗА СЧЕТ АВТОМАТИЗАЦИИ ПРОЦЕССОВ 1257

Садикова М.А., АНАЛИЗ СОВРЕМЕННЫХ МОДЕЛЕЙ КОРПОРАТИВНОЙ КУЛЬТУРЫ 1262

Садыков Р.Ф., Байлов К.А., АКТУАЛЬНОСТЬ И ПРОБЛЕМЫ ОБЕСПЕЧЕНИЯ ИНФОРМАЦИОННОЙ БЕЗОПАСНОСТИ БАНКОВСКИХ СИСТЕМ 1271

Салиева М.Х., ОСОБЕННОСТИ ПРОИЗВОДСТВА БЛЮД ДИЕТИЧЕСКОГО ПИТАНИЯ В СТАЦИОНАРНЫХ УЧРЕЖДЕНИЯХ 1276

Салохитдинов Ш.Ф., Кузмина С.Н., ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИДА ТАЪЛИМ ХИЗМАТЛАРИ СИФАТИНИ БАҲОЛАШ 1283

Саттаров С.А., Каримов Д.Д., ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ СОЛНЕЧНОЙ ПАНЕЛИ ПУТЕМ ПОНИЖЕНИЯ ПОТЕРЬ МОЩНОСТИ НА ДИОДАХ ШОТТКИ 1287

Сатторкулов О.Т., ЯНГИЧА ИҚТИСОДИЙ МУНОСАБАТЛАР ШАРОИТИДА РАҚАМЛИ ИҚТИСОДИЁТНИНГ ТУТГАН ЎРНИ ВА РОЛИ 1295

Сафаров И.Б., Расулов Ф., СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ГОРОДОВ КАШКАДАРЬИНСКОЙ ОБЛАСТИ 1304

Се Минди, О ЭВОЛЮЦИИ ВИОЛОНЧЕЛЬНОГО ИСКУССТВА В КИТАЕ 1312

Се Минди, О ВИОЛОНЧЕЛЬНОМ ИСКУССТВЕ И ЕГО ОСОБЕННОСТЯХ 1317
Се Минди, СИНТЕЗ МУЗЫКАЛЬНОГО КАЛЕЙДОСКОПА И ВИОЛОНЧЕЛЬНОГО ИСКУССТВА 1322
Сейтмуратов Т.Ш., ВЛИЯНИЕ ПРИРОДНО-КЛИМАТИЧЕСКИХ ФАКТОРОВ НА ФИЗИЧЕСКОЕ РАЗВИТИЕ, ДВИГАТЕЛЬНУЮ АКТИВНОСТЬ И ФИЗИЧЕСКОЕ СОСТОЯНИЕ ЧЕЛОВЕКА 1327
Серопол Д.И., О НЕКОТОРЫХ ПРОБЛЕМАХ ОБЩИХ ПРАВИЛ ПРОВЕДЕНИЯ СЛЕДСТВЕННЫХ ДЕЙСТВИЙ 1332
Скляренко А.В., ЖИЗНЕННЫЙ МИР РОЛЕВИКА-РЕКОНСТРУКТОРА 1336
Сотволдиев Б.М., АТЕРОСКЛЕРОЗ У БОЛЬНЫХ РЕВМАТИЧЕСКИМИ ЗАБОЛЕВАНИЯМИ 1342
Сотволдиев С.М., ЖАДИД МАТБУОТИНИНГ 1917-18 ЙИЛЛАРДАГИ ҲОЛАТИ: “ТУРК СЎЗИ” ГАЗЕТАСИ ПУБЛИЦИСТИКАСИ МИСОЛИДА 1346
Сулейманова Н.А., ПРИМЕНЕНИЕ СОВРЕМЕННЫХ МЕДИКАМЕНТОЗНЫХ ПРЕПАРАТОВ ДЛЯ ЛЕЧЕНИЯ ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА ПРИ ДОБЕРЕМЕННОМ СОСТОЯНИИ ШЕЙКИ МАТКИ И НАСТУПЛЕНИИ РОДОВ 1351
Султонов П.С., Мамадалиев А.Т., Мамаджанов З.Н., ЭКОЛОГИЯ ФАНИНИ ЎҚИТИШДА ИНТЕРФАОЛ УСУЛЛАРДАН ФОЙДАЛАНИШ ИМКОНИЯТЛАРИ 1356
Сун Вэньпин, АУТСОРСИНГ ПРОИЗВОДСТВА И ГЛОБАЛЬНАЯ ЦЕПОЧКА ПОСТАВОК ТРАНСНАЦИОНАЛЬНЫХ КОРПОРАЦИЙ 1361
Таженова Г., Нажимова А., ИННОВАЦИОННЫЕ НАПРАВЛЕНИЯ РАЗВИТИЯ СЕЛЬСКОГО ХОЗЯЙСТВА 1364
Ташбаев А.Б., КЛИНИКО-ЛАБОРАТОРНЫЕ ПРОЯВЛЕНИЯ КОКСИЕЛЕЗА В АНДИЖАНСКОЙ ОБЛАСТИ 1367
Ташева У.Т., Алленова И.В., ЯЗЫКОВО-РЕЧЕВЫЕ АСПЕКТЫ УСТНОЙ И ПИСЬМЕННОЙ РЕЧИ ПРИ ОБУЧЕНИИ РУССКОМУ ЯЗЫКУ КАК ИНОСТРАННОМУ 1372
Ташева У.Т., Алленова И.В., ИСТОРИЯ РАЗВИТИЯ РУССКОГО ЯЗЫКА И ЕГО ЗНАЧЕНИЕ В МИРОВОМ МАСШТАБЕ 1376
Темирхажиев М.И., ВЛИЯНИЕ ЦИФРОВИЗАЦИИ НА СИСТЕМУ ОБРАЗОВАНИЯ 1380

Тилляходжаева З.Д., Тиллахужаев Т.И., Агзамов Ф.С., Мирвалиева Н.Р., ПРИРОДНЫЕ ПРОЦЕССЫ, ВЛИЯЮЩИЕ НА ЗДОРОВЬЕ ЖЕНЩИН СЕЛЬСКОГО НАСЕЛЕНИЯ В РЕСПУБЛИКЕ УЗБЕКИСТАН 1384

Торешов М.К., ПОВЫШЕНИЕ ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ ФУНКЦИОНИРОВАНИЯ МАЛОГО ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ 1401

Турдиев Н.Б., ИНТЕГРАТИВ ДАРСЛАРНИ ТАШКИЛ ЭТИШНИНГ ПЕДАГОГИК ШАРТ-ШАРОИТЛАРИ 1407

Тўхтабоев А., ТАКРОРИЙ ЭКИН СИФАТИДА МОЙЛИ МАХСАРДАН ФОЙДАЛАНИШ 1413

Тянь Жу, ИСКУССТВО ВОПЛОЩЕНИЯ РУССКОЙ КЛАССИКИ НА КИТАЙСКОЙ ТЕАТРАЛЬНОЙ СЦЕНЕ 1416

Тянь Жу, СТАНИСЛАВСКИЙ И ЭВОЛЮЦИЯ КИТАЙСКОГО ТЕАТРА 1422

Тянь Жу, ВЛИЯНИЕ МЕТОДОВ СТАНИСЛАВСКОГО НА КИТАЙСКИЙ ТЕАТР И ЕГО НАСЛЕДИЕ 1427

Узоков Л.Ф., ЭКОНОМИЧЕСКИЕ РЕСУРСЫ НА ПРЕДПРИЯТИЯХ ПРЕДПРИНИМАТЕЛЬСТВА И ПОКАЗАТЕЛИ ЕГО ЭФФЕКТИВНОСТИ 1432

Узоков Б., ИЛМ-ФАН РИВОЖИ ВА ҚАДРИЯТЛАР ТИЗИМИ 1436

Умаров У.У., Пошаходжаева Г.Ж., Хаитметов А.А., ВЛИЯНИЕ НЕКОТОРЫХ ФАКТОРОВ НА ЭКОНОМИЧЕСКИЙ РОСТ В ПРИМЕРЕ СТРАНЫ СЕРБИЯ 1441

Умурзакова Р.З., МОНИТОРИНГ СОСТАВА КРОВИ ПРИ ОЦЕНКЕ СОСТОЯНИЯ НИЖНИХ КОНЕЧНОСТЕЙ У ПАЦИЕНТОВ С ХРОНИЧЕСКИМ ЗАТЕМНЕНИЕМ ВЕН 1454

Ўринбоева. М.С., ЎРТА ОСИЁ ТАРИХИДА МИЛЛИЙ ВА ДИНИЙ ҚАДРИЯТЛАР УЙҒУНЛИГИ 1460

Усмонова Д.И., Усманов Ш.Ш., СУЩНОСТЬ МЕТОДА «ДЕРЕВО ЦЕЛЕЙ» В СТРАТЕГИЧЕСКОМ ПЛАНИРОВАНИИ 1463

Усманова Д.Н., Шокирова М.Ш., Тулкинжанова Г.Р., ЗНАЧЕНИЕ СЫВОРОТОЧНОГО МАРКЕРА КАРДИАЛЬНОГО ФИБРОЗА И ВОСПАЛЕНИЯ В ПРОГНОЗЕ ПЕРМАНЕНТНОЙ ФОРМЫ ФИБРИЛЛЯЦИИ ПРЕДСЕРДИЙ 1472

Фазилов Д.С., Кенжаев Т.Н., Мадалиев С.Д., Абдукаримова Ф.А., ИСПОЛЬЗОВАНИЕ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В ПРОЦЕССЕ ОБУЧЕНИЯ СВАРКЕ 1476

Филобок М.А., ЗАБРОШЕННЫЕ ГОРОДА РОССИИ: ИСТОРИЯ РАЗВИТИЯ И УПАДКА 1484
Филобок М.А., ДИНАМИКА РАЗВИТИЯ ПАЕВЫХ ИНВЕСТИЦИОННЫХ ФОНДОВ В РОССИИ 1487
Филобок М.А., ДИНАМИКА РАЗВИТИЯ НЕГОСУДАРСТВЕННЫХ ПЕНСИОННЫХ ФОНДОВ В РОССИИ 1492
Филобок М.А., ПЕРСПЕКТИВЫ ДЕМОГРАФИЧЕСКОГО РАЗВИТИЯ РОССИИ К 2046 ГОДУ ПО ДАННЫМ РОССТАТА 1496
Хабибуллаева Г.Х., ПРИНЦИПЫ И МЕТОДЫ ОБУЧЕНИЕ ОБЩЕНИЮ НА РУССКОМ ЯЗЫКЕ КАК ИНОСТРАННОМ 1499
Хазиева Д.Ф., К ВОПРОСУ О МОТИВАЦИИ СОТРУДНИКОВ В СИСТЕМЕ ОРГАНОВ ВНУТРЕННИХ ДЕЛ 1504
Хаитметов А.А., Умаров У.У., Пошаходжаева Г.Ж., ВЛИЯНИЕ ФАКТОРОВ НА ЦЕНООБРАЗОВАНИЕ АВТОМОБИЛЕЙ 1507
Халмуратова Ж.М., ПРИМЕНЕНИЕ ИНТЕРАКТИВНЫХ МЕТОДОВ ОБУЧЕНИЯ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ 1529
Хидиров Х.И., ЖАМИЯТДА КАМБАҒАЛЛИККА ҚАРШИ КУРАШИШ – КОРРУПЦИЯНИНГ ОЛДИНИ ОЛИШНИНГ ОБЪЕКТИВ ОМИЛИДИР 1532
Ходжиматов Г.М., Фозилжонов О.Ш., ДИАГНОСТИКА И ЛЕЧЕНИЕ ЭРОЗИВНО-ЯЗВЕННЫХ ИЗМЕНЕНИЙ ГАСТРОДУОДЕНАЛЬНОЙ ЗОНЫ У ПАЦИЕНТОВ С ПАТОЛОГИЯМИ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ 1536
Хожамуратова Р.Т., Жангабаев Д.М., Иманмурзаев А.К., МНОГОЛЕТНИЕ ИЗМЕНЕНИЯ МИНЕРАЛИЗАЦИИ ГРУНТОВЫХ ВОД НА ОРОШАЕМОЙ ТЕРРИТОРИИ РЕСПУБЛИКИ КАРАКАЛПАКСТАН 1541
Хомидова Г.Д., ЭПИДЕМИОЛОГИЯ, ТЕЧЕНИЕ И ПРОФИЛАКТИКА НЕАЛКОГОЛЬНОГО СТЕАТОГЕПАТИТА 1551
Шадманов М.А., Садикова Д.И., Косимхожиев М.И., Зайнобитдинова Ф., ФАКТОРЫ РИСКА РАЗВИТИЯ НЕДЕРЖАНИЯ МОЧИ У ЖЕНЩИН (ОБЗОР ЛИТЕРАТУРЫ) 1555
Шоев А.Х., ЎЗБЕКИСТОН ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИДА ИНКЛЮЗИВ ТАЪЛИМ САМАРАДОРЛИГИНИ ОШИРИШ ЙЎЛЛАРИ 1559
Щендрыгин Р.В., Исраелян А.И., Музыка С.С., ПРОЕКТИРОВАНИЕ ДЕЯТЕЛЬНОСТИ ФИТНЕС-ЦЕНТРА ПРИ ПОМОЩИ ДИАГРАММ БИЗНЕС-ПРОЦЕССОВ 1576

Эркинова Н.Г., Юлдашева А.С., ОЦЕНКА РАЗЛИЧНЫХ МЕТОДОВ ИНДУКЦИИ В АКУШЕРСКОЙ ПРАКТИКЕ 1582

Эшонкулов А.А., ПРИБОРЫ НА ОСНОВЕ ГЕТЕРОСТРУКТУР И ПЕРСПЕКТИВНЫЕ ТРАНЗИСТОРНЫЕ СТРУКТУРЫ 1586

Юнусов Д.М., СОВРЕМЕННЫЙ ПОДХОД К ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ ЖЕЛЕЗОДЕФИЦИТНОЙ АНЕМИИ У ДЕТЕЙ И ПОДРОСТКОВ..... 1593

Юнусов Д.М., ОСНОВНЫЕ ОСОБЕННОСТИ ПАРОКСИЗМАЛЬНЫХ РАССТРОЙСТВ У ДЕТЕЙ..... 1597

Юсупов А.Р., К ВОПРОСУ О ПОВЫШЕНИИ ЭФФЕКТИВНОСТИ РЕАЛИЗАЦИИ ГОСУДАРСТВЕННОЙ ПРОГРАММЫ «РАЗВИТИЕ ФИЗИЧЕСКОЙ КУЛЬТУРЫ, СПОРТА И МОЛОДЕЖНОЙ ПОЛИТИКИ В РЕСПУБЛИКЕ БАШКОРТОСТАН» 1601

Якименко И., Каршибоев Ш., Муртазин Э., СОВРЕМЕННЫЕ СТАБИЛИЗАТОРЫ НАПРЯЖЕНИЯ: ТЕХНОЛОГИИ И ПЕРСПЕКТИВЫ 1606

Ян миньфан, АНАЛИЗ КОРПОРАТИВНОЙ СТРАТЕГИИ HUAWEI 1612

Ян миньфан, АНАЛИЗ КОРПОРАТИВНОГО СТРАТЕГИЧЕСКОГО УПРАВЛЕНИЯ HUAWEI..... 1617

СОВРЕМЕННЫЕ ТЕХНОЛОГИИ УПРАВЛЕНИЯ ОРГАНИЗАЦИЕЙ

Гурьянова О.И., Медведев В.С., МЕТОД МНОГОКРИТЕРИАЛЬНОГО ПРИНЯТИЯ РЕШЕНИЙ ПО ПОДБОРУ ИСПОЛНИТЕЛЕЙ ПРОЕКТОВ ПО ОРГАНИЗАЦИИ И ОБЕСПЕЧЕНИЮ УЧЕБНОГО ПРОЦЕССА В ВЫСШЕЙ ШКОЛЕ..... 1621

Сидоркин Д.В., СПЕЦИФИКА КОНКУРЕНЦИИ НА РЫНКЕ СПЕЦИАЛЬНЫХ ОБРАЗОВАТЕЛЬНЫХ УСЛУГ (НА ПРИМЕРЕ АВТОШКОЛ)..... 1627

Сярдова О.М., ОСОБЕННОСТИ ОПЕРАТИВНОГО ПЛАНИРОВАНИЯ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ 1633

Юсупов А.Р., ОСНОВНЫЕ ПРИНЦИПЫ И СРОКИ ВВЕДЕНИЯ ТЕХНИЧЕСКИХ УСЛОВИЙ, СТАНДАРТОВ, "СТРОИТЕЛЬНЫХ НОРМ И ПРАВИЛ"..... 1637

АКТУАЛЬНЫЕ ВОПРОСЫ ПОЛИТИКИ И ПРАВА

Salaev N.S., THE ROLE OF THE PENITENTIARY SYSTEM IN REFORMING THE STATE'S CRIMINAL LEGAL POLICY..... 1640

СОВРЕМЕННЫЕ НАУКИ И ОБРАЗОВАНИЕ

Eshonqulov A.A., MEDIATA'LIMNING BO'LAJAK MUHANDISLARNI KASBGA TAYYORLASHDAGI MAQSADI 1646

Kholmatjanov B.M., Akhmuratova B.Kh., Begmatov S.U., Yarashev D.U., DISTRIBUTION OF AIR TEMPERATURE AND PRECIPITATION IN THE JIZZAKH REGION IN 1991-2020 1650

Yusupov A.R., RESISTANCE TO PROVOCATIONS IS A RELIABLE PROTECTION OF PRODUCTIVE CREATIVE ACTIVITY 1656

Жамолдинов Э.К., ВЛИЯНИЕ АНТИМИКРОБНОЙ ФОТОДИНАМИЧЕСКОЙ ТЕРАПИИ НА ЗАБОЛЕВАНИЯ ПАРОДОНТИТА С САХАРНЫМ ДИАБЕТОМ 2 ТИПА 1661

Удоратин В.В., РЕАЛИЗАЦИЯ КЕЙС - ТЕХНОЛОГИИ НА УРОКЕ ИНОСТРАННОГО ЯЗЫКА 1666

Шарифбаева Х.Я., Абдурашидова М.Ж., ИНТЕГРИРОВАННИЕ В ОБРАЗОВАНИЕ СТРАТЕГИИ ФОРМИРОВАНИЯ STEM-КОМПЕТЕНЦИЙ: КОМПЛЕКСНЫЙ АНАЛИЗ ОТ НАЧАЛЬНОЙ ДО ВЫСШЕЙ ШКОЛЫ 1673

Юсупова А.К., Абдулатипова З.А., КОМБИНАТОРНЫЕ ЗАДАЧИ О ДВИЖЕНИЯХ ШАХМАТНЫХ ФИГУР 1685

ИНФОРМАЦИОННЫЕ И КОММУНИКАТИВНЫЕ ТЕХНОЛОГИИ

Назина С.Л., ОЦЕНКА ЭМОЦИОНАЛЬНОГО СОСТОЯНИЯ СТУДЕНТОВ ВНУТРИ ГРУППЫ С ПОМОЩЬЮ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ 1690

Юсупов А.Р., ПОСТАНОВКА, АЛГОРИТМИЗАЦИЯ И НОРМИРОВАНИЕ РЕШЕНИЯ КОМПЛЕКСНОЙ ПРОБЛЕМЫ СИНТЕЗА КОМПОЗИЦИОННЫХ СТРОТЕЛЬНЫХ МАТЕРИАЛОВ С ПРИМЕНЕНИЕМ ЭВРИСТИЧЕСКИХ МЕТОДОВ 1694

ЗДРАВООХРАНЕНИЕ В ОБЩЕСТВЕ

Асранкулова Д.Б., Акромжонова Х.У., ВВЕДЕНИЕ В ПРАКТИКУ МАЛОИНВАЗИВНЫХ МЕТОДОВ ЛЕЧЕНИЯ ГНОЙНО-ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЙ ПРИДАТКОВ МАТКИ 1698

Рахимова Д.О., Рахимов Б.С., Хасанова Б.Ж., Абдуллаева М.У., ИММУНОТЕРАПИЯ В КОМПЛЕКСНОМ ЛЕЧЕНИИ ОСТРЫХ ПНЕВМОНИЙ У ДЕТЕЙ РАННЕГО ВОЗРАСТА 1702

Юсупов М.И., Нарзиев Ж.У., Толибов Б.Г., ОБ ИЗМЕНЧИВОСТИ ПАТОГЕННОСТИ ЭНТЕРОКОККОВ ПРИ ДИАРЕЯХ У ДЕТЕЙ 1706

ЭЛЕКТРОННОЕ НАУЧНО-ПРАКТИЧЕСКОЕ
ПЕРИОДИЧЕСКОЕ МЕЖДУНАРОДНОЕ ИЗДАНИЕ

«Экономика и социум»

Выпуск № 1(116) 2024
Сайт: http://www.iupr.ru
Издательство: ООО "Институт управления и социально-экономического развития", Россия, г. Саратов
Дата издания: Январь 2024