Egamkulov Khusniddin Erkaboyevich
associate professor
Gulistan State University
Ibrokhimova Sabina Gofurjon kizi
master student
Gulistan State University

SCIENTIFIC-THEORETICAL BASIS OF THE STUDY OF INFECTIOUS-PARASITIC DISEASES

Abstract: Infectious and parasitic diseases are among the oldest and most widespread health problems in human history. They are caused by bacteria, viruses, fungi, and parasites and negatively affect public health and socio-economic development. This article analyzes the scientific and theoretical foundations of infectious-parasitic diseases, their historical development, transmission mechanisms, and key influencing factors.

Keywords: Infectious diseases, parasitic diseases, infection, epidemic, anthroponosis, zoonosis.

НАУЧНО-ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ИЗУЧЕНИЯ ИНФЕКЦИОННО-ПАРАЗИТАРНЫХ ЗАБОЛЕВАНИЙ

Аннотация: Инфекционные и паразитарные заболевания являются одной из древнейших и наиболее распространенных проблем здравоохранения в истории человечества. Они возникают под влиянием бактерий, вирусов, грибов и паразитов и оказывают негативное воздействие на здоровье населения и социально-экономическое развитие. В данной статье анализируются научные и теоретические основы инфекционных и паразитарных заболеваний, этапы их исторического изучения, механизмы их распространения и основные факторы.

Ключевые слова: Инфекционные заболевания, паразитарные заболевания, инфекция, эпидемия, антропоноз, зооноз.

YUQUMLI-PARAZITAR KASALLIKLARNI O‘RGANISHNING ILMIY-NAZARIY ASOSLARI

Annotatsiya: Yuqumli-parazitar kasalliklar insoniyat tarixida eng qadimiy va keng tarqalgan sog‘liq muammolaridan biri hisoblanadi. Ular bakteriyalar, viruslar, zamburug‘lar va parazitlar ta’sirida yuzaga kelib, aholi salomatligi hamda ijtimoiy-iqtisodiy rivojlanishga salbiy ta’sir ko‘rsatadi. Mazkur maqolada yuqumli-parazitar kasalliklarning ilmiy-nazariy asoslari, ularning tarixiy o‘rganilish bosqichlari, tarqalish mexanizmlari va asosiy omillari tahlil qilinadi.

Kalit so‘zlar: yuqumli kasalliklar, parazitar kasalliklar, infeksiya, epidemiya, antroponoz, zoonoz.

Introduction: Infectious diseases have been widespread throughout human history, and their epidemics have claimed the lives of millions of people. The plague epidemic observed in Europe in the 14th century and diseases such as smallpox and plague in later periods have emerged as global problems.

Today, infectious and parasitic diseases remain a pressing problem. Globalization, urbanization, and environmental changes are expanding their scope. The purpose of this study is to analyze the scientific and theoretical foundations of infectious and parasitic diseases and determine the characteristics of their spread.

Level of study of the problem: The first scientific views on infectious diseases date back to ancient times. Hippocrates explained epidemics by linking them with environmental factors. Eastern thinkers Abu Bakr al-Razi and Abu Ali ibn Sino scientifically explained the causes, clinical signs, and mechanisms of spread of infectious diseases. Ibn Sino emphasized the role of water, air, food, and carriers in the transmission of diseases.

In the 20th century, the theory of natural foci, developed by E.N. Pavlovsky, played an important role in explaining the geographical spread of infectious diseases. As a result of research conducted in Central Asia by L.M. Isayev and K.I. Skryabin, some parasitic diseases were eliminated. Uzbek scientist I.K. Musaboyev achieved important scientific results in the clinic and classification of infectious diseases. At the same time, the territorial spread of diseases and their relationship with environmental factors have not been sufficiently studied.

Methods: In this study, a comprehensive approach was used to study the scientific and theoretical foundations of infectious and parasitic diseases. In the process of the study, first of all, the stages of formation of scientific views on infectious diseases were studied based on historical and methodological analysis. Also, the scientific approaches of scientists who lived in different eras were compared using comparative analysis.

Based on a systematic approach, the classification of infectious and parasitic diseases, their causes and mechanisms of spread were studied. Through epidemiological analysis, the sources of diseases, transmission routes, and environmental and social factors affecting them were assessed. At the same time, the results of scientific literature, classical sources, and modern research were summarized and theoretical conclusions on the topic were developed.

Discussion: The results of this study confirm that the formation and spread of infectious and parasitic diseases is a multifactorial and complex process. When comparing the results obtained with historical scientific views, it is determined that the theories put forward by ancient and medieval scientists are to a certain extent consistent with modern epidemiological approaches. In particular, the ideas expressed by Ibn Sina about the role of water, air and environmental factors in the spread of diseases still retain their scientific significance today.

Also, the theory of natural foci developed by E.N. Pavlovsky serves as an important methodological basis for interpreting the results of the study. Based on this theory, it was confirmed that some infectious diseases are closely related to

certain geographical areas, that is, their formation in accordance with natural and ecological conditions. This is especially evident in the case of zoonotic diseases.

The results of the study also show that in modern times, factors such as globalization, urbanization and climate change have a significant impact on the dynamics of the spread of infectious diseases. The increase in population density, increased migration processes, and disruption of the ecological balance are leading to the expansion of foci of infection. This indicates the need to comprehensively analyze geographical, ecological, and social factors, not limited to a medical approach in the study of diseases.

In addition, the routes of infection transmission identified during the study (fecal-oral, airborne, and contact) are of practical importance, and their consideration is one of the main criteria for developing preventive measures. In particular, it was noted that non-compliance with sanitary and hygienic requirements and poor quality of drinking water contribute to the widespread spread of diseases.

In general, the results obtained justify the need for an integrated approach to the study of infectious and parasitic diseases. This indicates the importance of strengthening interdisciplinary contacts in future scientific research in this area.

Conclusio: In conclusion, the parasitic production of products is one of the global problems that seriously affect human production, and the production of products is manifested as a multifactorial and complex process. The results of the study show that the regional results of this study are the result of the interaction of biological factors, as well as ecological, social and geographical factors. , a deep study of the relationship between the sources of infection, routes of infection and the organizational environment is an important profession for effective control and purification. For this, obtaining a specific file of anthroponosis and zoonosis production serves as an important scientific basis for the development of preventive measures.

As the study found, modern global processes - urbanization, migration and climate change - complicate the detection of epidemics of safety. This indicates the need to use complexes, in addition to traditional elements for these disciplines.

The scientific results of this study substantiate the importance of the nosogeographic approach in the study of infectious and parasitic diseases. This approach makes it possible to determine the territorial characteristics of diseases, reveal the patterns of their spread, and identify risk zones. In practice, the results obtained can be used to improve the epidemiological monitoring system, strengthen sanitary and hygienic measures, expand preventive work among the population, and make effective management decisions in the healthcare system.

Future research in this area would include mathematical modeling of the regional spread of infectious and parasitic diseases, in-depth analysis of their relationship with environmental factors, and the development of monitoring systems based on digital technologies.

List of used literature

1.Komilova N.K.,Muxammedova N.J.,Karshiboyeva L.K.,Egamqulov H.E. “Nozoekologik vaziyat va aholi kasallanishining hududiy tahlili” Monografiya . Guliston 2023.

2. E.I.Musaboyev, A.Q. Bayjanov “Yuqumli kasalliklar epidemiologiya va parazitologiya” Tibbiyot kollejlari uchun o‘quv qo‘llanma. Davlat ilmiy nashriyoti Toshkent – 2007.

3. Komilova, N. K., & Egamqulov, H. E. (2023). IQLIM O ‘ZGARISHLARI SHAROITIDA AHOLI O ‘LIMINING HUDUDIY TAHLILI (SIRDARYO VILOYATI MISOLIDA). *Экономика и социум*, (5-1 (108)), 150-158.

4. Egamkulov, H. E. (2022). NOSOECOLOGICAL SITUATION AND GEOGRAPHICAL DIFFERENCES IN THE INCIDENCE OF THE POPULATION (ON THE EXAMPLE OF BAYAUT DISTRICT). *Экономика и социум*, (12-2 (103)), 26-34.

5. Komilova, N., Karshibaeva, L., Egamberdiyeva, U., & Egamkulov, K. (2024). Territorial Analysis of the Nosoecological Situation and the Health of the Population of the Syrdarya Region. *Universal Journal of Public Health*, *12*(2), 207-217.

6. Egamkulov, H. E. (2024). MEDICAL GEOGRAPHIC FORECAST OF THE DEATH OF THE POPULATION OF SIRDARYA REGION. *Экономика и социум*, (4-2 (119)), 128-131.

7. Egamkulov, K. E., & Karshibayeva, L. K. (2021). SIRDARYO VILOYATI AHOLISINING MILLIY TARKIBI UNING GEOKRIMINOGEN HOLATGA TA'SIRI. *Экономика и социум*, (1-1 (80)), 62-64.