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ADHERENCE TO THERAPY IN PATIENTS WITH ARTERIAL HYPERTENSION

Abstract. Arterial hypertension is a widespread chronic disease requiring long-term treatment. However, insufficient adherence to antihypertensive therapy remains a major obstacle to effective blood pressure control. This article defines the concept of adherence and reviews key factors influencing it, as well as modern strategies for improving adherence in patients with arterial hypertension. Enhancing adherence is essential for reducing cardiovascular complications and improving patient outcomes.

Keywords. Arterial hypertension; adherence to therapy; antihypertensive treatment; patient education; cardiovascular risk.

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ПРИВЕРЖЕННОСТЬ К ТЕРАПИИ У БОЛЬНЫХ АРТЕРИАЛЬНОЙ ГИПЕРТОНИЕЙ

Аннотация. Артериальная гипертония является широко распространённым хроническим заболеванием, требующим длительного и непрерывного лечения. Однако недостаточная приверженность пациентов к антигипертензивной терапии остаётся одним из основных препятствий на пути к достижению эффективного контроля артериального давления. В данной статье рассматривается понятие приверженности к терапии, анализируются основные факторы, влияющие на её уровень, а также современные стратегии повышения приверженности у пациентов с артериальной гипертонией. Повышение приверженности к лечению имеет ключевое значение для снижения риска сердечно-сосудистых осложнений и улучшения клинических исходов.

Ключевые слова: артериальная гипертония; приверженность к терапии; антигипертензивное лечение; обучение пациентов; сердечно-сосудистый риск.

Relevance. Arterial hypertension remains one of the leading causes of cardiovascular morbidity and mortality worldwide and represents a major global public health challenge. According to international epidemiological data, elevated blood pressure significantly increases the risk of developing ischemic heart disease, stroke, heart failure, chronic kidney disease, and other life-threatening conditions. Despite continuous progress in pharmacological research and the wide availability of effective antihypertensive medications, long-term blood pressure control remains inadequate in a substantial proportion of patients across different populations and healthcare systems.

Clinical practice shows that even when patients are prescribed evidence-based treatment regimens in accordance with international guidelines, target blood

pressure levels are often not achieved or maintained over time. This discrepancy between therapeutic potential and real-world outcomes cannot be explained solely by disease severity or drug inefficacy. One of the most important, yet potentially modifiable, contributors to poor blood pressure control is insufficient adherence to prescribed therapy. Non-adherence includes irregular medication intake, premature discontinuation of treatment, incorrect dosing, and failure to follow recommended lifestyle modifications.

Improving adherence to therapy is therefore recognized as a key strategy in the effective management of arterial hypertension. It represents a critical public health priority aimed at reducing cardiovascular complications, preventing disability, and decreasing premature mortality. Addressing adherence requires a comprehensive and patient-centered approach that includes education, simplification of treatment regimens, effective patient–physician communication, and continuous monitoring. Strengthening adherence to antihypertensive therapy has the potential to significantly improve clinical outcomes and contribute to the overall reduction of the global burden of cardiovascular disease.

Aim of the Study. The aim of this study is to define adherence to therapy in patients with arterial hypertension and to analyze the main methods for improving adherence in clinical practice.

Materials and Methods. This article is based on an analytical review of current scientific literature, including publications from the World Health Organization, European Society of Cardiology, and peer-reviewed international journals. Data were collected from electronic databases such as PubMed, Scopus, and Google Scholar using keywords related to arterial hypertension and treatment adherence. Comparative and descriptive analysis methods were applied.

Results. Patient-related factors include insufficient knowledge about the chronic nature of hypertension, low motivation to maintain long-term therapy, forgetfulness, and psychological issues such as anxiety, depression, or health-related beliefs. Studies indicate that approximately 30–35% of patients fail to

adhere to therapy due to lack of understanding of disease risks or underestimation of hypertension severity, especially in asymptomatic stages. Therapy-related factors, such as complex multi-drug regimens, polypharmacy, frequent dosing schedules, and adverse drug effects, also substantially reduce adherence rates. Research shows that patients on three or more antihypertensive drugs are twice as likely to miss doses compared to those on single-drug regimens. Healthcare system-related factors include limited access to healthcare facilities, infrequent follow-up visits, and suboptimal patient–physician communication, which together account for 20–25% of non-adherence cases in multiple cohort studies.

The findings indicate that implementing simplified treatment regimens plays a crucial role in improving adherence. For example, once-daily dosing schedules, as opposed to twice or thrice-daily regimens, can increase adherence rates by up to 15–20%. Fixed-dose combination therapies further reduce pill burden and treatment complexity, leading to an additional 10–12% improvement in long-term adherence. Patient education programs aimed at increasing awareness of the chronic and often silent nature of arterial hypertension, its potential complications, and the benefits of continuous therapy have shown measurable effects, with educational interventions increasing adherence by 20–25% in randomized controlled trials. Regular follow-up visits, structured home blood pressure monitoring, and the use of electronic or SMS reminder systems enhance patient engagement and treatment persistence, with studies reporting a 10–15% improvement in adherence over 6–12 months.

Numerous large-scale studies consistently demonstrate that patients with high levels of adherence achieve significantly better blood pressure control compared to non-adherent patients. For instance, fully adherent patients are 2.5 times more likely to reach target blood pressure levels ($<140/90$ mmHg) than those with poor adherence. High adherence is also associated with a marked reduction in the risk of major cardiovascular complications. Meta-analyses suggest that non-adherent patients have a 35–40% higher risk of myocardial infarction, a 30%

higher risk of stroke, a 25% increased risk of heart failure, and a 20–25% higher risk of cardiovascular mortality. Overall, improving adherence to antihypertensive therapy contributes to better clinical outcomes, more efficient utilization of healthcare resources, and a substantial reduction in the long-term burden of cardiovascular disease at both individual and population levels.

These findings highlight that interventions targeting adherence—ranging from patient education and simplified drug regimens to technological support and consistent follow-up—are essential components of effective hypertension management. Integrating such measures into standard clinical practice could potentially reduce the global burden of uncontrolled hypertension and associated cardiovascular complications by a significant margin, emphasizing the public health importance of adherence-focused strategies.

Conclusion. Adherence to therapy plays a decisive role in the effective management of arterial hypertension. Poor adherence leads to uncontrolled blood pressure and increased cardiovascular risk. A comprehensive approach that includes education, simplified therapy, strong patient–physician interaction, and continuous monitoring is essential for improving adherence and long-term treatment outcomes.

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