



Toshkent tibbiyot akademiyasi Urganch filiali “Jamoat salomatligi va umumiy gigiyena” kafedrasi mudiri, Ibadulla Qochkarovich Abdullayevning 70 yilligiga bag‘ishlangan “Sog‘liqni saqlash tizimida menejmentning zamonaviy muammolari va istiqbollari” mavzusidagi xalqaro ilmiy-amaliy anjuman 2025-yil 20-21 oktabr

**Various issues in the preservation and strengthening of public health
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Abstract. This thesis discusses the role of rational use of medicines and preventive measures in strengthening public health. Furthermore, attention is given to rational pharmacotherapy, the prevention of chronic diseases, the role of pharmacists in promoting a healthy lifestyle among the population, as well as the prospects of electronic prescription and pharmacovigilance systems. It is emphasized that enhancing public awareness and integrating pharmaceutical services into the healthcare system can significantly improve public health outcomes.

Keywords. Public health, prevention, pharmaceutical services, public awareness, antibiotic resistance, electronic prescription.

Strengthening public health is regarded as one of the most important priorities of every state policy. The aim of modern medicine is not only to treat diseases but also to prevent them through preventive measures. In this context, improving the quality of pharmaceutical services and ensuring the rational and effective use of medicines hold particular significance. The quality of medicines remains a global challenge. According to a study conducted by the World Health Organization (WHO), nearly 10 percent of medicines in low- and middle-income countries unfortunately do not meet international quality standards. This was publicly declared as a threat both to policy and to public health. Such circumstances not only reduce the effectiveness of treatment but also lead to the emergence of antibiotic-resistant strains, the aggravation of chronic diseases, and increased economic losses.

Rational use of medicines refers to the process of providing patients with medications appropriate to their clinical needs, in effective and safe dosages, for an adequate duration, and at an affordable cost. The excessive use of antibiotics, in particular, has become a global challenge. Each year, millions of patients worldwide suffer from infections that are difficult to treat due to antibiotic-resistant microorganisms. This situation raises the alarming prospect of a “post-antibiotic era.”

In the context of Uzbekistan, the tendency of patients to self-medicate and the lack of sufficient medical literacy further aggravate the problem. The rational use of medicines and adherence to a healthy lifestyle among the population are directly linked to the level of public awareness. Therefore, enhancing the professionalism and responsibility of pharmacists, as well as improving public knowledge about the proper use of medicines, are crucial. Strengthening preventive measures and promoting healthy lifestyles represent the most cost-effective and efficient approaches to reducing morbidity and improving overall public health. For instance, a significant proportion of cardiovascular diseases and type 2 diabetes cases can be prevented through the adoption of healthier lifestyles.

It is also vital to regularly conduct educational campaigns, promote healthy lifestyles through mass media, and provide the public with clear information on the proper use of medicines. Pharmacists, in particular, should not limit their role to dispensing drugs. By offering patients personalized counseling—explaining possible side effects, correct dosages, and safe usage guidelines—they can substantially improve community health. Pharmacists must be seen as key healthcare professionals who not only distribute medicines but also advocate for healthy living, advise on the rational use of drugs, and contribute to the prevention of harmful habits.

Moreover, the use of digital health platforms, mobile applications, and social networks to deliver interactive information about healthy lifestyles and rational pharmacotherapy can significantly enhance outreach. As public awareness increases, prevention rates improve, self-medication practices decline, and the overall efficiency of the healthcare system strengthens.



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Regular educational initiatives, the promotion of healthy lifestyles through mass media, and the provision of clear information on the correct use of medicines are essential for strengthening community health. Personalized counseling by pharmacists—detailing possible side effects, appropriate dosages, and safe usage instructions—further enhances the effectiveness of treatment. The responsibilities of pharmacists should not be limited to dispensing medicines, they are expected to serve as active health promoters, advisors on the rational use of drugs, and contributors to the prevention of harmful habits. In many developed countries, the practices of “clinical pharmacists” and “community pharmacists” are well established. These professionals monitor patients’ medication use, help prevent adverse effects, and collaborate closely with physicians. Adopting a similar model in Uzbekistan, step by step, could significantly improve public health indicators.

Equally important, digital health platforms, mobile applications, and social networks can be employed to deliver interactive information on healthy lifestyles and rational pharmacotherapy. As the level of public awareness rises, disease prevention outcomes improve, self-medication cases decline, and the overall efficiency of the healthcare system is reinforced.

Looking ahead, the digitalization of pharmaceutical services is expected to fundamentally transform the healthcare system. The introduction of electronic prescription systems will prevent the uncontrolled sale of medicines and allow real-time monitoring of drug distribution. This, in turn, will ensure more effective oversight of medication use within the population.

Ensuring the rational use of medicines, expanding preventive measures, and integrating pharmaceutical services into the healthcare system represent some of the most pressing priorities in strengthening public health. Addressing challenges such as the misuse of antibiotics, self-medication, and weak pharmaceutical oversight can lead to significant improvements in health indicators. For this reason, expanding the role of pharmacists, modernizing pharmaceutical services, and applying advanced technologies are of strategic importance, contributing substantially to the protection and promotion of population health.

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