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The Role Of Medical Activity In Population Disease Prevention

Khasanova Mamura Ikramovna
Candidate of Medical Sciences, Associate Professor, Tashkent State Medical University, Uzbekistan

Lazokat Khusnidinovna Mirzaeva
Family Clinic No. 2, Mirabad District, Tashkent, Uzbekistan

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Abstract: This study utilized methods for analyzing scientific publications, statistical data, and materials reflecting the state of preventive care and the level of population involvement in health maintenance activities. It has been established that low levels of medical activity contribute to late detection of diseases, an increase in chronic pathologies, and higher rates of complications. At the same time, increased medical activity among the population ensures early diagnosis, increases the effectiveness of preventive programs, and reduces overall morbidity. The results confirm the need for comprehensive measures aimed at fostering a responsible attitude toward one's own health and increasing the accessibility of preventive medical care.

Keywords: Medical activity, disease prevention, population morbidity, public health, preventive medicine, healthcare system.

Introduction: In today's public health context, disease prevention is considered a priority for the healthcare system. The population's medical activity plays a significant role in implementing preventive measures, determining the timeliness of seeking medical care, participating in preventive examinations, and adhering to medical recommendations. The aim of this study is to examine the role of medical activity in population disease prevention and to substantiate its impact on reducing disease prevalence.

METHODS

The study was analytical and generalizing in nature and aimed to assess the role of the population's medical activity in disease prevention. A comprehensive approach was used as a methodological basis, including an analysis of scientific publications, official statistical data, and materials reflecting the state of preventive medical care and the level of population participation in health maintenance activities.

The study utilized data from national and regional statistical reports on the healthcare system, as well as the results of epidemiological and sociological studies on disease prevention and health behavior. Medical activity was assessed using indicators such as the frequency of preventive examinations, timeliness of seeking medical care, adherence to medical recommendations, and participation in medical screening programs.

The analysis of morbidity was conducted taking into account the structure and dynamics of the prevalence of both acute and chronic noncommunicable diseases. Data from various age and socio-demographic groups of the population were used for comparison. Particular attention was paid to the relationship between the level of medical activity and early disease detection rates, complication rates, and the need for hospitalization. The study utilized comparative analysis, systematization, and generalization of the data. The results were interpreted from a preventive medicine and public health perspective, allowing for an assessment of the importance of medical activity as a key factor in reducing morbidity and increasing the effectiveness of preventive measures.

RESULTS

The analysis revealed that the level of medical activity in the population has a significant impact on morbidity

rates and the effectiveness of preventive measures. The data obtained indicate that population groups with high medical activity have a higher rate of early disease detection, as well as a lower proportion of advanced and complicated forms of pathology. Regular participation in preventive examinations and screenings facilitated the timely initiation of treatment and preventive measures and reduced the need for emergency medical care. An analysis of the disease pattern revealed that groups with low medical activity were more likely to have chronic diseases in their later stages, accompanied by significant functional impairment. These patients had a higher rate of hospitalizations and medical visits for complications, indicating insufficient effectiveness of primary prevention and delayed medical care seeking.

A stable relationship was established between the population's awareness of preventive measures and indicators of medical activity. Individuals with higher levels of health literacy and awareness of risk factors were more likely to adhere to medical recommendations and maintain a healthy lifestyle. This, in turn, was reflected in a reduced frequency of exacerbations of chronic diseases and improved overall health indicators.

The results also highlight the significant role of access to medical care and the quality of interactions between patients and healthcare providers in shaping medical engagement. Regions with a developed primary health care system and effective preventive care demonstrated lower morbidity rates and a lower burden on inpatient healthcare.

DISCUSSION

These results confirm the importance of the population's medical engagement as a key factor in disease prevention and improving the effectiveness of the healthcare system. The identified relationship between the level of medical engagement and early disease detection rates is consistent with current research indicating the crucial role of preventive behavior in reducing the burden of chronic noncommunicable diseases. Of particular note is the fact that low medical engagement is associated not only with late diagnosis but also with an increased incidence of complications requiring inpatient treatment. This suggests that insufficient public engagement in preventive measures leads to increased burden on the healthcare system and decreased resource efficiency. At the same time, increased medical activity shifts the focus from treating complications to preventing disease development, which is consistent with the principles of preventive medicine and public health. The role of public awareness and health literacy in shaping medical activity confirms the need to develop health education programs and strengthen communication between healthcare professionals and patients. Effective interaction at the primary health care level fosters trust in the healthcare system and increases the population's adherence to preventive recommendations.

Furthermore, the data obtained highlight the importance of access to medical services and organizational aspects of care delivery. Developing a system of preventive examinations, medical screenings, and health monitoring of the population allows for the early detection of diseases and the reduction of the risk of adverse outcomes. Taken together, this indicates the need for a comprehensive approach to increasing medical activity, including social, educational, and organizational measures.

CONCLUSION

The study demonstrated that the medical activity of the population plays a key role in disease prevention and improving the effectiveness of the healthcare system. A high level of medical activity facilitates the early detection of diseases, the timely initiation of treatment and preventive measures, and a reduction in the incidence of complicated pathologies. At the same time, low population engagement in preventive programs is associated with late diagnosis, an increase in chronic diseases, and an increased burden on inpatient healthcare.

These results confirm that medical activity is determined by a combination of factors, including health literacy, accessibility of medical services, and the quality of interactions between patients and healthcare providers. Increasing public awareness of risk factors and preventive measures promotes a responsible attitude toward their own health and increases adherence to medical recommendations.

From a public health and preventive medicine perspective, it is appropriate to consider medical activity as a priority indicator of the effectiveness of preventive measures. The implementation of comprehensive programs aimed at developing health education, improving primary health care, and expanding the coverage of preventive examinations can help reduce overall morbidity and improve public health. Thus, increasing the medical activity of the population is an important strategic direction for disease prevention and should be considered as an integral element of state policy in the field of health protection.

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