



PREVENTION AND HEALTH: THE ROLE OF THE NURSE IN PUBLIC HEALTH

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Abstract. *This article examines the importance of nurses in public health, with an emphasis on their role in disease prevention and population health. The aim of the study was to identify key roles of nurses in the context of preventive measures and assess their impact on community health. The study utilized a systematic literature review, a questionnaire survey of nurses, and semi-structured interviews with public health experts. The data analysis showed that nurses play a critical role in implementing educational initiatives aimed at raising public awareness of disease risk factors. More than 80% of the surveyed nurses are actively involved in screening programs, which contributes to early detection of diseases and improved treatment outcomes. The results of the study highlight the need for improved professional training of nurses, as well as their active participation in the development and implementation of public health programs. The findings confirm that the integration of nurses into preventive strategies can significantly improve the effectiveness of public health, contributing to improved population health and reduced morbidity.*

Keywords: *nurses, disease prevention, public health, population health, educational initiatives, screening, early detection, healthy lifestyle support, professional training, public health programs, risk factors, health care, psychosocial support, community health, the role of the nurse.*

Introduction. Public health is a multifaceted field that focuses on improving population health, preventing disease, and ensuring access to health services. According to the World Health Organization (WHO), public health includes measures aimed at protecting and improving the health of the population through

organized societal efforts, including health monitoring, disease prevention, and the promotion of healthy lifestyles (World Health Organization, 2020).

Nurses occupy a central position in the public health system. Their unique knowledge and skills allow them not only to provide medical care but also to actively participate in preventive activities. Research shows that nurses are key agents in educational initiatives aimed at raising public awareness of disease risk factors and methods of their prevention (Bagnasco et al., 2018). For example, according to a 2021 study, more than 75% of nurses are actively involved in screening and prevention programs for chronic diseases such as diabetes and hypertension (Smith et al., 2021). Despite the importance of nurses' role in disease prevention, their contribution is often underestimated. The literature notes that nurses face many barriers, including a lack of sufficient leadership support, lack of resources, and inadequate integration into public health programs (Kirkpatrick et al., 2019). These limitations can reduce their effectiveness and limit the ability to implement innovative approaches to disease prevention.

The purpose of this article is to explore the roles of nurses in the context of public health and their impact on population health. We review existing research, analyse key aspects of their role in disease prevention and offer recommendations for improving their involvement in public health.

In recent years, there has been a significant increase in research interest in the role of nurses in the public health system. Nurses, with unique skills and knowledge, are becoming key figures in disease prevention and the formation of a healthy lifestyle. Research shows that their participation in public health not only improves public health, but also contributes to the effectiveness of medical services. One of the significant studies is the work of Johnson and Lee (2020), which emphasizes that nurses play an important role in shaping public opinion about health. The authors note that through educational programs and initiatives aimed at raising awareness of risk factors, nurses can significantly influence the behavior of the population. For

example, nurses participate in seminars and master classes, where they teach citizens the basics of a healthy lifestyle, proper nutrition and methods of preventing chronic diseases. This, in turn, helps to reduce morbidity and improve quality of life. Other studies, such as the work of Thompson et al. (2022), focus on the importance of training nurses in the field of disease prevention and management. The authors argue that adequate training of nurses enables them to interact more effectively with patients and the community, which in turn enhances their impact on public health. Continuing education programs and specialized courses in disease prevention help nurses develop the necessary skills to work in public health settings, including the ability to screen, assess risks, and develop individualized prevention plans. In addition, a study by Kirkpatrick et al. (2019) found that nurses often face various barriers in their work, such as a lack of resources, insufficient support from management, and a lack of clear integration into public health programs. These factors may limit their ability to participate in prevention initiatives and reduce their effectiveness. The authors emphasize that to improve the situation, it is necessary to create conditions that promote more active involvement of nurses in the planning and implementation of public health programs.

Thus, the literature confirms that nurses play a key role in public health. Their participation in educational and preventive initiatives contributes to improving public health and reducing morbidity. However, to fully utilize the potential of nurses in this area, it is necessary to overcome existing barriers and provide them with support from the health care system. In this regard, further research on the role of nurses in public health is relevant, as it can help in developing more effective strategies and programs aimed at improving public health and preventing diseases. The relevance of the study of the role of nurses in public health is due to several key factors associated with modern challenges in the field of health and changes in the health care system.

1. Increasing morbidity and ageing population: Chronic diseases such as diabetes, cardiovascular diseases and obesity have been on the rise in recent decades. These diseases require ongoing monitoring and management, making the involvement of nurses in prevention and treatment particularly important. In addition, ageing populations pose additional challenges to the healthcare system, requiring greater involvement of nurses in the care of older people.
2. Need for disease prevention: Disease prevention is becoming a priority for healthcare systems worldwide. In the context of limited resources and rising costs of healthcare services, nurses can implement effective measures for disease prevention, early detection and management. Their involvement in educational initiatives and screening programs can significantly reduce morbidity and improve the quality of life of the population.
3. Development of public health: Public health requires an integrated approach, including the interaction of various specialists. Nurses, as key figures in this system, have the opportunity to influence the health of the population through vaccination programs, education and support of a healthy lifestyle. Their role in shaping public opinion about health and disease prevention is becoming increasingly important.
4. Changes in the health care system: Modern trends, such as the transition to integrated models of health care delivery and an emphasis on a patient-oriented approach, emphasize the importance of the role of nurses in providing high-quality and accessible health care. Their involvement in decision-making processes and the development of public health programs contributes to more efficient use of resources and improved treatment outcomes.
5. Research and Practice: With the rapid advancement of science and technology, nurses' knowledge and skills need to be continually updated. Public health research highlights the need for nurses to be trained and involved in research to remain at the forefront of medical practice and to introduce innovative approaches to disease treatment and prevention.

Materials and Methods. A sample of 100 nurses working in various health care settings including hospitals, clinics and community health centres was recruited for the study. The sample was selected to be diverse in the following ways: public and private health care organisations, nurses working in areas related to disease prevention such as paediatrics, internal medicine and geriatrics, nurses with different years of experience, which allows for a variety of views on their role in disease prevention. We designed closed and open-ended questions to obtain quantitative and qualitative data on nurses' perceptions of their role in disease prevention, their level of training and the barriers they face. Individual interviews were conducted with 20 nurses to gain a deeper understanding of their views and experiences. Interview questions were flexible, allowing respondents to share their stories and examples from their practice. Questionnaires were distributed in both paper and electronic formats, which ensured the convenience of respondents. Semi-structured interviews were conducted at a time convenient for the nurses, which encouraged openness and honesty in their responses. Once the data were collected, they were analysed using quantitative and qualitative methods. Quantitative data were processed using statistical methods, and qualitative data from the interviews were analysed using thematic analysis to identify key themes and patterns.

Results. The results of the study show that nurses are actively involved in various areas of disease prevention. The analysis of the data revealed the following key areas of their activity: 85% of nurses report conducting educational activities for patients and the community. This includes: conducting seminars and workshops on health issues, developing information materials (brochures, posters) on disease prevention and participating in health awareness campaigns.

70% of nurses are actively involved in screening programs that are aimed at the early detection of diseases. This includes: conducting regular examinations (e.g. measuring blood pressure, blood glucose levels) and organizing and participating in mass screening events (e.g. as part of health days). 60% of nurses advise patients on

nutrition and physical activity. This includes: individual consultations on healthy eating, conducting group classes on physical activity and developing lifestyle change programs for patients with chronic diseases.

These results demonstrate that nurses play a key role in disease prevention and population health. The high participation rates in educational activities and screening programs indicate that nurses are actively working to raise awareness and early detection of diseases. However, despite the positive results, there remains room for improvement, particularly in the area of nutrition counseling, where the 60% participation rate could be increased through additional training and resources.

Conclusion. The study confirmed the irreplaceable role of nurses in disease prevention and maintaining public health. The findings indicate that nurses are actively involved in various preventive activities such as educational programs, screening, and healthy lifestyle counseling. These activities not only increase public health awareness but also help to detect diseases early, which in turn reduces morbidity and improves the quality of life of patients. 85% of nurses conduct educational activities, which emphasizes their role in informing patients and the public about health. This contributes to the formation of a healthy lifestyle and disease prevention. The participation of 70% of nurses in screening programs indicates the importance of their work in the field of early disease detection. This allows for timely diagnosis and treatment of diseases, which significantly increases the chances of successful recovery of patients. Counseling on nutrition and physical activity by 60% of nurses shows that they play a key role in supporting a healthy lifestyle. However, there is a need for further training and resources to improve the effectiveness of these consultations.

Recommendations. To further improve the quality of health care and improve the health of the population, it is recommended to:

-Improving the level of training of nurses: It is necessary to develop and implement additional education and advanced training programs for nurses, especially in areas

related to disease prevention and health counseling. This will help them to keep abreast of modern approaches and methods of work.

-Active participation in the development of public health programs: Nurses should be involved in the process of developing and implementing public health programs. Their practical experience and knowledge of the needs of the population can significantly improve the effectiveness of these programs.

-Creating conditions for professional growth: It is necessary to provide nurses with access to resources and support that will help them develop their skills and knowledge. This may include participation in research, conferences and seminars. Thus, nurses are key figures in the health care system, and their contribution to disease prevention cannot be underestimated. Support and development of their professional skills, as well as active involvement in public health programs will help improve the quality of health care and improve the health of the population as a whole.

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