



INNOVATIVE TECHNOLOGIES IN NURSING CARE IN GERONTOLOGY

Radjabova Ilmiya Xafizovna

Samarkand branch of the Republican Center for Advanced Training of Medical and Pharmaceutical Personnel

Abstract: Gerontology plays an important role in maintaining the health of older adults, improving their quality of life, and ensuring their social adaptation. Today, the aging of the world population poses new and complex challenges for the healthcare system. The increasing number of older adults requires measures to preserve their health, enhance their quality of life, and expand opportunities for independent living. From this perspective, the implementation of innovative technologies in nursing care within gerontology is of significant importance. Modern technologies help to facilitate nursing work, improve the quality and efficiency of care, and reduce human error. Digital and technological approaches are particularly relevant when working with gerontological patients.

Keywords: gerontology, nursing care, innovative technologies, telemedicine, digital health, older adults' health.

Introduction

The concept of innovative technologies in gerontology. Innovative technologies refer to new methods, technical tools, digital systems, and advanced approaches applied in the healthcare sector. In gerontology, these technologies allow for comprehensive monitoring of older adults' physical, mental, and social conditions. In nursing care, innovations are widely used to remotely monitor patient conditions, facilitate rapid information exchange, develop individualized care plans, and efficiently organize rehabilitation processes. Telemedicine is one of the most important innovative directions in gerontological nursing care, enabling older adults to communicate with doctors and nurses remotely while their health status is continuously monitored.

Nursing care in gerontology is carried out according to specific stages. These stages serve to improve the quality of assistance provided to older adults. The first stage is nursing assessment, during which the patient's physical condition, psychological state, social circumstances, and level of independent mobility are evaluated. The second stage is the nursing diagnosis, which involves analyzing identified problems and determining priority areas. The third stage is care planning, where an individualized care plan is developed. The fourth stage is the implementation of care, and the fifth stage involves evaluating the outcomes. This process is essential for regularly improving the condition of older adults and preventing potential complications.

Psychological and social care. One of the important aspects of nursing care in gerontology is psychological support. Older adults often experience feelings of loneliness, social isolation, and a loss of life purpose, which can lead to depression and mental distress.



Nurses should treat older adults with respect, listen to their opinions, and provide psychological support through conversation. In terms of social care, it is also important to strengthen the older adults' connections with family members and to guide them to social services and rehabilitation programs.

Using telemedicine platforms, nurses remotely monitor indicators such as blood pressure, heart rate, and blood glucose levels. This is particularly convenient for older adults living at home or those with limited mobility. Telemedicine also enables timely consultations and increases the possibility of early detection of disease complications. In recent years, smart devices (such as smartwatches and sensors) have been widely introduced in gerontology. These devices help monitor older adults' daily physical activity, sleep quality, and cardiac function. Based on this digital data, nurses assess patients' conditions and develop individualized care plans. In addition, fall-detection sensors play an important role in ensuring the safety of older adults. The introduction of electronic medical record systems in gerontological nursing care has significantly improved the care process.

Electronic medical records provide comprehensive information about a patient's medical history, medications, allergic conditions, and care plan. By using this information, nurses are able to ensure accurate medication management and deliver continuous and well-organized care, which contributes to a reduction in medical errors. In modern gerontology, robotic technologies are also gradually being introduced. Assistive robots support older adults in their daily activities, such as reminding them to take medications and helping with mobility. Through the use of these technologies, nurses can effectively monitor patients' daily needs and improve the quality of care. Robotic technologies are particularly important in conditions of workforce shortages.

The main advantages of innovative technologies include the following: they improve the quality and speed of care; reduce the workload of nursing staff; expand opportunities for independent living among older adults; and ensure continuous monitoring of health status. At the same time, certain challenges also exist. In particular, the use of these technologies requires specialized knowledge and skills, and some older adults may have a low level of digital literacy.

Conclusion

In conclusion, the implementation of innovative technologies in nursing care within gerontology is an important factor in maintaining the health of older adults and improving their quality of life. Telemedicine, digital monitoring, electronic documentation, and robotic technologies are advancing nursing care to a new level. In the future, the wider adoption of these technologies, the enhancement of nurses' professional skills, and the creation of a supportive technological environment for older adults will remain one of the priority tasks of the healthcare system.

REFERENCES:

1. Geriatriya va gerontologiya asoslari. — Toshkent: Ibn Sino nomidagi nashriyot, 2021.
2. Jamoat salomatligi va sog'liqni saqlashni tashkil etish. — Toshkent: Fan, 2020.
3. Tibbiyot psixologiyasi. — Toshkent: Yangi asr avlodi, 2018.
4. Tibbiyot etikasi va deontologiyasi. — Toshkent: Fan va texnologiya, 2020.



**AMERICAN
ACADEMIC
PUBLISHER**

INTERNATIONAL JOURNAL OF MEDICAL SCIENCES

ISSN NUMBER: 2692 - 5206

Volume 5. No 12. December ,2025

5. G'aniyev A.A. Gerontologiya va geriatrik hamshiralik asoslari. — Toshkent: Tibbiyot nashriyoti, 2019.