

The Role of Nursing and Healthcare Assistants in Providing Patient Care using digital techniques

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Abstract

In recent years, digital health technologies have dramatically transformed the healthcare landscape, particularly in the roles of nurses and healthcare assistants. These technologies have improved patient outcomes by enabling more accurate diagnoses, efficient disease management, and improved care coordination. The integration of electronic health records, mobile health apps, remote monitoring systems, and wearable health devices has enabled nurses and healthcare assistants to deliver more personalized, timely, and effective care. Additionally, these innovations have reduced the risk of medical errors, increased operational efficiency, and facilitated better communication within healthcare teams. This review explores the essential role of nurses and healthcare assistants in leveraging digital tools to improve patient care, streamline healthcare processes, and enhance the overall patient experience.

Keywords: Digital Health, Digital Techniques, Nursing, Healthcare Assistants, Patient Care.

Introduction:

Digital techniques contribute to developing the role of nurses and health assistants, improving health care quality, improving patient results, reducing the duration of hospital accommodation, and low health care costs [1]. According to the World Health Organization, the increasing use of digital health techniques has contributed to improving health care results through the accuracy of diagnosis, treatment and disease management more effectively [2]. In addition, to supporting efforts to improve health and disease prevention, for example, electronic health records provide an effective way to recover and participate Patient information easily [3]; This reduces the risk of errors associated with manual blogging of medical records, and thanks to these

technological developments, nurses can customize more time to care for their patients better and more detailed; It enhances the patient's experience and improves health results in general [4]. In addition, digital health technologies significantly contribute to enhancing multidisciplinary communication and cooperation between the various parties in the health care team; Where information and medical data can be exchanged in a fast and safe way, and discussions about patients' cases and common therapeutic decisions. Digital health techniques also help reduce the risk of developing direct contact between patients and presenters and enabling patients' condition remotely; This may help prevent exacerbation of symptoms and avoid the re-transfer of patients to the hospital [5].

Digital technological transformations in the field of nursing and health assistants are embodied in the use of health applications via smartphones; When these applications help patients and healthcare providers alike by providing self-management tools [6], reminding medications and health monitoring, these tools contribute not only to promoting patient participation in caring for their health, but also in promoting pre-healthy and preventive health care [7].

Despite many advantages, there are challenges in fully benefiting from digital techniques in the field of health care, including issues related to data security and technological barriers and the need for more training among health care workers [8]. However, the expansion capabilities of digital technologies still provide innovative solutions to improve patient care and operational efficiency [8,9].

In general, the role of nurses and healthcare assistants in benefiting from digital techniques is necessary in improving the patient's results, simplifying health care processes, and ensuring patients obtaining effective care in time [10]. These developments emphasize increasing the importance of digital tools in the environmental health care system and their ability to transform patients [11].

This review aims to review the role of nurses and health assistants in promoting health care and improving patient results through the use of modern digital techniques.

The Role of nurses in Patient Care

Nurses play a multifaceted role, as nurses are responsible for promoting healthy lifestyles, advocating for patients, providing health education, and providing direct care to patients. The role of nursing include:

Patient Care: The primary duties of nursing are to provide comprehensive health care to patients and prevent diseases, including monitoring the patient, recording relevant information, conducting medical examinations, providing treatment based on doctors' instructions, conducting periodic medical examinations, and monitoring vital signs [12].

Patient Advocacy: Nurses guide patients and their families throughout all stages of treatment, provide the necessary support to deal with the psychological challenges associated with the disease, and also help patients understand treatment options and defend patients' medical and legal rights [13].

Care Planning: Nurses are an important part of health care and assess patient signs and detect potential complications. Nurses are responsible for participating in treatment decisions alongside specialist doctors, and nurses also play an important role in developing treatment plans [14].

Patient Education and Support: Nurses are responsible for ensuring that the patient understands his/her health condition, treatments, and medications he/she is taking, especially when he/she leaves the hospital. In addition, providing advice and guidance on home care and ensuring that the patient and his/her family know how to continue treatment [15].

The Role of Healthcare Assistants in Patient Care

Health assistants play an important role in health care and improve patient results. This is in cooperation with the underdevelopment of other specialties and medical professions in order to improve health care for patients. The responsibilities of health assistants are:

Patient care: Health assistants are helping patients to perform daily life activities (ADLS), as well as the direct care of patients, which enhances the patient's comfort and improves health results [16].

Vital Sign monitoring: Health assistants periodically measure and monitor the vital signs of patients such as blood pressure and blood sugar, which contributes to early detection of any health problems and informing those specialized in care for immediate intervention [17].

Medication Assistance: Helps healthcare assistants in medicine management under the supervision of healthcare professionals. This includes preparing medications, managing them by mouth or through other methods, and documenting any noticeable side reactions or side effects [18].

Emotional support: Healthcare assistants provide valuable emotional support, through sympathy for patients and their families, which helps patients respond to treatment and improve health results [19].

Health education: Healthcare assistants play a major role in enhancing health education and enabling patients to play an active role in their care and educating patients about healthy habits, commitment to medicines, and identifying symptoms [20].

Collaborative group action: Health assistants are part of health care teams, which cooperate with nurses and doctors to provide comprehensive health care that enhances patient health [21].

The importance of digitization in the profession of nursing and health assistants

The importance of digitization in the field of nursing and health aids increases significantly; It effectively contributes to enhancing the efficiency of patient care, accuracy and quality of patients, and digitization techniques are an integral part of the practice of a modern nursing profession [22]. The increasing use of digital health technologies shows many benefits; It enables diagnosis and disease management more effectively, in addition to supporting efforts to improve health and prevent diseases.

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Digital technologies such as electronic health records provide an effective way to retrieve and share patient information easily; This reduces the risk of errors associated with manual blogging of medical records, nurses and health assistants can customize more time to direct their patient care in a better and more detailed way; Which enhances the patient's experience and improves health results in general [23].

The role of digital technologies in improving the results of health care

Digital technologies and modern technologies helps nurses and healthy assistants to improve patient results in several ways, including:

Electronic health records (EHRS):

Electronic medical records enable nurses and health assistants to access patient information quickly, efficiently and provide all patients' data, which reduces errors and improves care coordination between various health care providers, and the nurses and health assistants can make enlightened decisions on patient care [24].

MHEALTH applications:

Which enhances the ability of nurses and healthy assistants in their role in monitoring patients and progressing in treatment. Where these applications contribute to tracking the vital signs of patients, medicines and remote symptoms, which allows timely interventions and personal care plans. Patients can also use these applications to stay in contact with health care providers and manage their health more proactively [25].

Remote health services and remote medicine:

Nurses and health assistants use distance health care platforms and remote medicine to conduct hypothetical consultations with patients. It also contributes to promoting health care for patients in remote or deprived areas and who may have limited access to healthcare facilities. It also contributes to evaluating patients' cases, providing guidance and managing chronic diseases without the need for personal visits [26].

Wearable health devices:

Many patients now use healthy devices that can be worn, such as smart watches and fitness tracking devices, to constantly monitor their health standards. Nurses and health assistants can combine data from these devices into patient care plans, enabling them to discover trends, identify potential problems and encourage health behaviors [27].

Pharmaceutical Management Systems:

Nurses and health assistants use technology -based drug management systems to reduce pharmaceutical errors. These systems provide actual time alerts of potential pharmaceutical interactions, doses or allergies, which helps nurses and healthy assistants ensure that patients get the right medications in time [28].

Distance patient monitoring:

Technology allows nurses to monitor patients with chronic diseases or who recover at home after entering the hospital remotely. Through connected devices, nurses can

track patient progress, educate patients, and immediately intervene in any related direction, reducing re -input and improving results [29].

Health education and training:

Digital applications enable nurses and health assistants to provide health education to patients more effectively. Interactive e -learning platforms, virtual simulation and multimedia content enhance the learning experience and enable patients to play an active role in managing their health [30].

Data analysis:

Nurses and health assistants increasing digital techniques increasing data analysis to determine the patterns, trends and possible fields to improve patient care [31]. The analysis of large data groups can lead to changes in evidence based on evidence, ultimately improving patient results.

Conclusion:

Digital health technologies are enhancing the roles of nurses and healthcare assistants, providing them with innovative tools to improve patient care and outcomes. Through technologies such as electronic health records, mobile health apps, and remote monitoring devices, healthcare professionals can deliver more accurate, timely, and personalized care. Additionally, digital technologies are creating a more collaborative and interactive healthcare environment. However, challenges such as ensuring data security, overcoming technological barriers, and providing adequate training for healthcare workers must be addressed for these tools to reach their full potential. The integration of digital health technologies is a critical step forward in modernizing healthcare systems and improving the quality of care for patients around the world. As these tools continue to evolve, their potential to transform patient outcomes and healthcare processes will only grow, making the role of nurses and healthcare assistants even more important in the digital age.

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