

Challenges and Strategies in Managing Chronic Diseases: Perspectives of Nursing Technicians

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ABSTRACT

Chronic diseases represent one of the most imperative challenges facing healthcare systems worldwide, given their wide prevalence among millions, which requires not only constant but also long-term management. The diseases concerned include diabetes, hypertension, heart disease, and respiratory illnesses. These are ailments usually needing a multifaceted approach in their care. Nursing technicians are one of these health teams that are always at the front line, managing these conditions by working closely with the patients through monitoring their health, educating them, and observing the adherence to the treatment plans. However, due to issues relating to resource limitations, high volumes of patients, inadequate training, and complexities associated with coordinated care across multiple healthcare providers, management of chronic diseases still remains a big challenge among nursing technicians. This, when trying to manage different chronic conditions at the same time, could mean burnout and stress to the nursing technicians, thereby making their delivery less than optimal. These are discussed in the review, which further looks into some strategies employed by nursing technicians in an attempt to attempt the challenge of overcoming these. The other strategies discussed here as essential tools in the effort to improve chronic disease management are team collaboration, effective communication, patient education, and use of technology. Besides that, the review prioritizes continuous professional growth and training to equip nursing technicians with certain skills to help handle complicated cases. Since there are so many obstacles to be overcome by nursing technicians, the strategy to be adopted by them in such situations will contribute to developing policies and programs with an aim to support these professionals in healthcare organizations, which would ensure improved outcomes for patients and further ensure quality care for those suffering from chronic diseases. This review provides an overview of the current situation regarding chronic diseases from a nursing technician perspective and presents recommendations on future development in the field.

Keywords: Chronic disease management, Nursing technicians, Patient-centered care, Healthcare challenges, Multidisciplinary teams.

INTRODUCTION

These conditions have also become one of the serious public health concerns worldwide, as it involves very high prevalence rates and requires long-term care for their effective management. Diabetes, cardiovascular diseases, respiratory disorders, and cancer contribute to the top causes of morbidity and mortality across different parts of the world. The global burden of chronic diseases has continuously been rising because of increased factors like aging, sedentary lifestyle, poor diet, and environmental influences. (1,2)

Effective management of chronic diseases requires a holistic, multidisciplinary approach involving continuous care, frequent monitoring, education of the patient, and changes in lifestyle. In fact, management of chronic diseases is required not only to control the disease but also to delay complications arising later, which further devastate the quality of life for patients. (3,4)

Among care providers of chronic diseases, nursing technicians play a very important role. They are the first point of contact for most patients with the health care system, and they play a major role in the daily management of chronic conditions. Their practice spans medication administration, monitoring of vital signs,

and patient education in modifications of lifestyle related to diet, exercise, and tobacco use. Additional services provided by nursing technicians include the coordination of care and ensuring that patients adhere to their treatment and follow up on routine check-ups. They are especially critical in chronic disease management, where they continually support patients to cope with both the emotional and physical problem of living with a long-term condition. (5)

Despite the fact that nursing technicians are very crucial in the health system, there are various problems faced by these assistants, which make it difficult for them to effectively manage chronic diseases. These are multifactorial challenges, rooted in both systemic issues of healthcare organizations and the intrinsic complexities of managing a chronic disease process. The first major barrier is related to the lack of proper trainings and professional development of nursing technicians. (6,7)

This is because, even though professional in nature, the training of nursing technicians concentrates on basic elements that cannot meet all demands of chronic disease management due to its nature of dynamism. Advanced training opportunities are often limited in many healthcare settings, creating a further difficulty for nursing technicians to remain up-to-date on best practices in the care of chronic diseases. (8,9)

Perhaps an even bigger challenge would be that of resource shortages: people, equipment, and time. In most healthcare settings, nursing technicians will have too many patients to attend to; that cannot allow time for caretaking of individual patients. With increasing chronic disease management needs along with resource limitations, including burnout of the nursing staff, stress, and generally poorer quality of delivered care, will ensue. Apart from this, multiple chronic conditions can very well make things immensely complicated for nursing technicians, as each condition may have its peculiar style of care as well as patient education. (10)

Good communication and coordination between healthcare professionals are other major challenges to managing chronic diseases. For instance, nursing technicians have to cooperate with doctors, specialists, and other members of the health team in their effort to have a comprehensive treatment of the patient. (11,12)

On the other hand, health systems can be fragmentary, and often there is a deficiency in communication between the providers, which may result in inconsistencies in the care of the patients, loss of opportunities for early intervention, and poor quality of outcomes for the patients. Management of chronic diseases is also made difficult by the problem of coordination in care across different healthcare settings such as hospitals, primary care clinics, and home care. (13)

Despite these barriers, nursing technicians have found some strategies that can be implemented to help improve their patient outcomes in chronic disease management. One key strategy is patient-centered care that empowers and encourages patients to participate in their care by making decisions for themselves regarding their health. The nursing technician can facilitate education in disease management, self-care practices, and the importance of treatment adherence in order for the patients to take better care of their disease processes. This also helps in the development of patient-provider relationships that are trusting and communicative, hence improving patients' compliance with treatment plans for long-term changes in their lifestyle. (14,15)

Use of technology to aid in managing chronic diseases: this is another strategy employed by nursing technicians. Advancements in telemedicine, tools for remote monitoring, and electronic health records have allowed nursing technicians to care for patients more efficiently and effectively. These technologies also provide for an improvement in communication between professions in healthcare, enhance patient monitoring, and are capable of early complication detection. Telemedicine allows the nursing technician to check in with patients on a routine basis, provide consultations remotely, and monitor vital signs without having to make repeated direct visits, thus assuring continuity of care. (16)

In sum, nursing technicians face many barriers in managing chronic diseases but use many strategies in overcoming them in order to improve outcomes for patients. It is, therefore, when there is the addressing of the barriers to providing support for nursing technicians in adequate training, resource shortages, and fragmented care that health systems are better supported in enhancing overall quality in chronic disease management. (17,18)

This review outlines those challenges and gives an insight into how nursing technicians can become further empowered to do even more in the improvement of patients with chronic conditions.

Challenges in Managing Chronic Diseases

Chronic disease management is a very complex process requiring huge expertise, resources, and collaboration among staff in healthcare. Nursing technicians are highly valued in the management of chronic diseases, though they themselves have to fight numerous challenges standing in the way of giving their best. These are resource and staffing limitations, general lack of training, non-compliance on the part of patients, communication barriers, and technological limitations. Such are the challenges that are to be discussed in the present section in detail and how they impact care delivered to patients with chronic conditions. (12,19)

1. Limited Resources and Staffing

One of the pressing challenges in managing chronic diseases has been a shortage of health professionals, particularly nursing technicians. This goes hand in hand with badly staffed hospitals and health facilities, where a nursing technician may be allocated more patients than they can possibly care for with success. Chronic diseases require continued care, require routine monitoring, and need visits quite frequently. All these are time-consuming processes where nursing technicians, when staffing is poor, have to spend less than adequate time with the patients during which substandard care may arise. (20,21)

This in turn will increase workload and time pressures for the nursing technicians leading to a state of burnout and a concomitant decrease in the quality of care for the patients. In addition, if personnel is inadequate to provide care for the chronically ill, activities that are necessary, such as periodic health checks, education related to lifestyle changes, and monitoring that certain treatments are implemented, may not be conducted at all or may be hurried through. This ultimately results in less-than-adequate management of the chronic illnesses and, in turn, a deteriorating health status in patients. (22,23)

2. Lack of Specialized Training

The more serious problem of nursing technicians who address chronic diseases is the general lack of specialized training. Limited to basic training in the fundamentals of health care, the richness of chronic diseases demands considerably greater knowledge and expertise than provided to newly minted nursing technicians. Such is the case with chronic conditions management such as diabetes and cardiovascular diseases that demand thorough vital signs assessment, drug therapies, knowledge of comorbidities, and importantly, the need to educate patients about sophisticated lifestyle adjustments, lacking focused education in any one of these areas, nursing technicians are likely poorly prepared for the complexities in managing chronic conditions. (24,25)

This gap in training leads to errors in patient care, inadequate management of medicines, and inability to identify complications at an early stage. Furthermore, the nursing technicians are inclined not to educate the patients about the management of diseases; this more often than not results in a patient's non-compliance. In relation to this problem, this challenge will be duly minimized if continuous education and specialized training on chronic diseases management are provided to nursing technicians by the health care organizations. (26)

3. Non-Compliance by the Patient

The most challenging thing in the treatment of chronic diseases is to make patients follow what is ordered as treatment. Usually, chronic diseases require management over a long period, which may be in the form of regular medication or a change of lifestyle in terms of diet and exercise, and at times even mental health support. Due to one reason or another, such as lack of understanding, financial constraints, and sometimes psychological resistance to change, many patients are not able to continue. (27)

For this reason, many nursing technicians are in leading positions to promote follow-through of patients with their treatment plans and help them make life changes that are necessitated. This becomes very challenging when the patient does not understand the nature of their treatment or resists change. In addition, there exist emotional and psychological complications for the patient, including depression, that further complicate their compliance with treatment. (28)

In the light of these, nursing technicians have to employ the use of patient-centered approaches through individualized care plans that take into consideration the patient's preference, cultural background, and social setting. By knowing and addressing the determinants of non-compliance, it would be probable for the nursing technicians to facilitate the patients in overcoming such challenges toward better health outcomes. (29)

4. Communication Barriers

Whereas effective communication is integral to managing a chronic disease, various barriers to communication often get in the way of a nursing technician giving service in the desired manner. Those afflicted with a chronic disease may at times vary in culture, language, and socio-economic status, which poses an obstacle to effective communication. There are numerous misconceptions concerning treatment processes inclusive of medication as well as lifestyle changes that may lead to confusion and non-conformity among the patients, enhancing the chances of deterioration of health status. (30)

These are those patients who may misunderstand the application of certain medicines or perhaps fail to follow certain dietary recommendations as they could not understand it or their cultural practice forbids it. Sometimes, these patients may not be at ease discussing symptoms; hence this might also lead to underreporting vital health information. Similarly, these barriers call for nursing technicians to develop appropriate skills in overcoming them. These include the use of interpreters and available material sensitive to this culture, confidence creation through invitation for open dialogue. (31,32)

Again, communication amongst health professionals is equally imperative. Nursing technicians should be in constant contact with doctors, nutritionists, psychologists, and other specialists so that all dimensions of a

patient's condition are properly taken care of. However, uncoordinated communication along with fragmented systems of healthcare often results in discontinuity in care and lost chances for interference. (11,33)

5. Technological Barriers

Medical technologies have huge potential to alter many aspects of the management of chronic diseases; however, these technologies often pose significant barriers to adoption and integration into nursing technicians' practice. Although all of these—electronic health records, telemedicine, and remote monitoring devices—can facilitate better patient monitoring, improve communication among health providers, and enhance patient education, most nursing technicians are not well enough trained in the use of such tools. (34,35)

Not all healthcare settings are well-equipped with such technologies to utilize at will, especially for areas in which location and resources are major concerns. Other times, nursing technicians themselves may be resistant or unwilling to utilize new technologies either because of unfamiliarity or lack of training. If there is a failure to integrate these tools into their everyday practice, it results in opportunities lost for early intervention, delayed care, and/or reduced patient satisfaction. (36,37)

Overcoming the Challenges

Despite these, several strategies have been discovered which the nursing technicians can use to surmount some of these challenges in the management of chronic diseases. These strategies center on the knowledge base and skill enhancement of the nursing technicians, leveraging on improved communication and available technology in the delivery of services. (38)

1. Improved Education and Training

Continuous education and training, especially the specialized ones, have become quite crucial in the equipping of nursing technicians with the knowledge and skills required for the management of chronic diseases. This would include continuous professional development through workshops, online training, and practical hands-on experiences in managing medication, monitoring patients, and further developing communication skills. Specialized training should cover the management of selected chronic conditions and psychosocial aspects of care. The focus of this specialized training would, therefore, be on enhancing the nursing technician's expertise and capacity for disease management and offering comprehensive care for complex conditions. (38,39)

2. Person-Centered Care

This refers to a model of chronic disease management that is patient-centered. The nursing technician has to work very closely with a patient in an attempt to understand the needs, preferences, and challenges of the particular patient. The nursing technician, by gaining the trust of the patient, then invites him or her to assume active responsibilities in his or her own care and to be more compliant in pursuing the treatment plans. This in turn improves compliance and enhances the patient's satisfaction and quality of life. (40,41)

3. Working in Multidisciplinary Teams

Interdisciplinary collaboration in health care or management of chronic conditions is the backbone of management. One can, as a nursing technician, be part of a multidisciplinary team and ensure that every area of the patient's condition is taken into consideration: their medical treatment, management of mental health, lifestyle management of their conditions. Multidisciplinary teams can provide more holistic care and improve patient outcomes. With this in mind, the team approach is able to facilitate nursing technicians working hand in hand with dietitians, mental health specialists, and physicians to have a highly detailed care plan for the needs of every area a patient may need. (42,43)

4. Using Technology

These could be serious enhancements in the adoption of digital health tools in the form of telemedicine, remote monitoring devices, and electronic health records that improve chronic disease management. This helps some of these technologies in easing the task for nursing technicians to keep a track of patients from afar—monitoring their vital signs, communicating better with them. This will definitely result in increased monitoring of patients, reduction of frequent visits, and better timing of interventions. (16,44)

5. Supporting Mental Health and Coping Strategies

The chronic diseases have a tendency to present symptoms of anxiety, depression, and stress in the patient. The nursing technicians must be specifically trained for identifying signs of emotional distress among their patients and offering support. The use of coping strategies, such as stress-reducing techniques, would more likely serve a patient's quality of life. Finally, nursing technicians will also have to be prepared to refer the patients to the respective psychologist in those cases where such psychological treatment will be necessary. (24)

On one hand, chronic disease management ranges from resource constraints and staffing shortages to the non-compliance of patients and communication barriers. However, informed education, patient-centered care, teamwork within multi-professional teams, and integration of technology support nursing technicians to surmount these challenges and thus contribute ultimately to improved patient outcomes. (38)

A nursing technician, if adequately supported and appropriately resourced, could well bear an important role in chronic disease management and improvement regarding the quality of care for the patients. Confrontation with

these issues means working not only for the benefits of nursing technicians but also for better outcomes in those living with chronic conditions. (45)

CONCLUSION

Nursing technicians play a vital role that is irreplaceable in the management of chronic diseases by providing the essential care necessary for improving the quality of life for patients and their health outcomes in the long term. However, there are challenges faced by such professionals, which can deter them from offering the required services of high quality. Resource limitations, too little training to provide sufficient care for the patient, and the ever-increasing load of patient non-compliance may also present barriers to nursing technicians in managing chronic diseases effectively. Since the need to manage chronic diseases will continuously increase with aging populations, along with the prevalence of conditions related to diabetes, cardiovascular diseases, and respiratory disorders, there is a pressing urgency for health systems to identify and address these challenges. Health systems can significantly improve chronic disease management if appropriate resources are allocated and nursing technicians receive constant professional training, with no lack of encouragement and support. Moreover, strategies such as patient-centered care and coordination of efforts within multidisciplinary health teams guarantee the best treatment of a patient. It tends to incorporate advanced technologies, such as electronic health records, telemedicine, and remote monitoring devices, which make care delivery, communication between providers, and the ability of nursing technicians to monitor their patients better. By providing nursing technicians with the tools and supplies necessary for the job and professional development, it further reduces the issues while improving patient outcomes, diminishing readmission to hospitals, and advancing quality in general. Thus, investment in the training, support, and well-being of nursing technicians is a precondition for the success of long-term chronic disease management and also for setting higher standards in patient care. In a nutshell, with proper investment and systemic changes, nursing technicians have bright opportunities in prosperous functioning and making further contributions to patient well-being and overall healthcare.

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