

## Review Article

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# Community nursing interventions for chronic disease management

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## ABSTRACT

Chronic illnesses present a hurdle in the field of healthcare in community settings. This review of existing literature delves into the role of community nursing interventions when it comes to managing diseases. It sheds light on their effectiveness challenges and potential areas for improvement. Chronic diseases like diabetes, cardiovascular conditions, and respiratory ailments contribute substantially to both mortality rates and morbidity levels. They also place a burden on healthcare systems. Community nursing interventions play a role in addressing these diseases in underserved and rural communities. These strategies include programs, self-management initiatives, home visits, telehealth services, and coordinated care. Research indicates that these approaches have been successful in improving outcomes and reducing the burden, on healthcare systems. To fully maximize the benefits of these interventions we need to overcome obstacles that come our way. Issues such as staffing shortages, the need for training among nurses involved in community care, and the seamless integration of technology must be addressed to optimize their effectiveness. To further advance the field of community nursing interventions for disease management, future research should focus on developing strategies to overcome these challenges effectively. In addition to evaluate the long-term impact of community nursing interventions to understand how effective they are.

**Keywords:** Chronic disease management, Community nursing interventions, Patient education, Telehealth, Coordinated care

## INTRODUCTION

Managing chronic diseases is challenging in the healthcare sector in community settings. The role of community nursing interventions has become increasingly important, in tackling this problem.<sup>1,2</sup> These interventions provide

strategies to enhance the well-being and quality of life for individuals who are dealing with conditions. This review explores aspects of community nursing interventions in managing diseases, focusing on their effectiveness, challenges, and areas that can be improved upon. Chronic diseases like diabetes, cardiovascular diseases, and respiratory conditions are causes of illness and death.

These diseases do not impact health. It also poses a significant economic burden on healthcare systems.<sup>3,4</sup>

In the field of American countries, continuous care is a collaborative effort, between hospitals and communities. It involves ensuring the transition of information, relationships, and management for patients as they move from hospital to community care or when they reunite with their families.<sup>5</sup> This seamless and ongoing process of care plays a role in managing chronic diseases. Some experts believe that it is important to define the scope and expansion of care services clearly. When compared to nursing, in hospitals or specialized facilities community nursing has its distinct functions and unique characteristics.<sup>6</sup> Most of the research has been focused on strategies to prevent cancer and cardiovascular diseases. In these studies, Community Based Health Workers (CBHWs) have been actively involved in tasks.<sup>7,8</sup> These tasks include providing health education and counseling assisting patients in navigating the healthcare system, managing care as offering social services and support. However, there is information, on how CBHWs are trained or supervised for their specific responsibilities. When compared to no intervention or other alternatives collaborating with CBHWs has shown outcomes such as increased screening for breast colorectal cancers; reduced blood pressure, blood glucose levels and weight; as well as encouraging exercise among participants in research studies.<sup>9</sup>

The roadmap for nursing development outlined in China's 13th Five Year Plan emphasizes the role of community nursing in delivering care. While the concept of care has been introduced for years now its implementation in China faces challenges due to a lack of standardized service content, defined service standards, and comprehensive plans.<sup>10</sup> As a result, the precise contribution of community nurses toward providing care for patients, with diseases remains unclear.<sup>11</sup> Many community nurses still adhere to work philosophies that solely focus on completing orders without embracing a more holistic approach. Community nursing interventions play a role in addressing these diseases in rural regions, where people often face challenges, in accessing healthcare services.<sup>12</sup> One key strategy employed by community nurses is education and self-management. Studies emphasize the importance of educating patients about their conditions and managing medications effectively.<sup>13,14</sup>

Making lifestyle modifications. This approach empowers patients to actively participate in managing their health. Studies have indicated that implementing these interventions leads to the management of diseases and enhances well-being. Additionally, community nurses frequently utilize home visits as a means to provide care and support for patients or those, with mobility challenges. Research has indicated that when nurses make home visits it can lead to a decrease, in the number of hospital readmissions as well as an enhancement, in patient satisfaction. These visits also give nurses the opportunity

to evaluate the home environment, which is crucial, for customizing care plans based on needs. Due to COVID-19, telehealth has become a part of community nursing. It has been successful in managing illnesses by providing monitoring, consultations, and educational support. This approach has been especially helpful in areas where patients have limited access to healthcare facilities. Another important aspect of community nursing involves coordinating care.

Nurses serve as intermediaries between patients, families, and various healthcare providers. This coordination is vital for ensuring care and addressing the needs of patients with chronic illnesses. These integrated care models have enhanced health outcomes and reduced healthcare expenses. Despite their effectiveness, community nursing faces challenges. A significant issue that arises is the lack of nursing personnel and resources in underserved areas. Additionally, effectively managing conditions requires specialized training and support for community nurses. Moreover, there is a need for the integration of technology into community nursing practices.

While telehealth has gained recognition, its full potential still awaits realization- particularly concerning data management and interoperability, among healthcare systems. Well, when it comes to managing diseases, community nursing interventions really play a role. These various approaches, such as educating patients, conducting home visits, utilizing telehealth services, and coordinating care efforts, have shown outcomes for patients. Helped alleviate the strain on healthcare systems. Nevertheless, certain challenges must be tackled to enhance the effectiveness of these interventions. These challenges include shortages in staffing and the need for training. Ensuring seamless integration of technology. Moving forward, it is crucial for research to focus on developing strategies that can overcome these hurdles and also evaluate the long-term effects of community nursing interventions on managing chronic diseases. The objective of this study is to review Community Nursing Interventions dedicated to Chronic Disease Management.

## METHODS

On 21 November 2023 we conducted an examination of articles sourced from JSTOR, Pubmed and ProQuest. Our review focused on topics such, as 'community nursing', 'chronic disease management', 'patient care', 'health outcomes'. We specifically emphasized studies published in English from 2008. The purpose of this review is to provide an overview of community nursing interventions and highlight approaches, for managing chronic diseases in different community settings.

## DISCUSSION

The review highlights the role that community nursing interventions play in addressing the challenges of diseases. It emphasizes how these interventions positively affect

outcomes and healthcare systems. Education and self-management strategies are seen as crucial empowering individuals to take a role, in managing their health. Community nurses visiting patients at home those who're vulnerable have proven effective in reducing hospital readmissions and creating personalized care plans.

The use of telehealth in areas with resources demonstrates its potential for remote monitoring and consultation. Coordinating care among community nurses acts as a link between patients, families and different healthcare providers. Despite these achievements there are still challenges such as staffing shortages and the need for training that require attention. The call for integration of technology in data management and interoperability indicates the need for ongoing innovation, in community nursing practices.

### ***Clinical manifestation***

Chronic diseases are well known for their lasting nature and complexity which have an impact, on individuals and communities. These diseases can affect systems making it essential to have comprehensive management strategies in place. In cases community nursing interventions play a role by providing personalized care, regular monitoring and supportive assistance to patients.<sup>15</sup> This discussion explores the signs of chronic diseases and emphasizes the significant contribution of community nursing in managing these conditions. For example, diabetes, an illness presents with various symptoms, like frequent urination increased thirst and hunger, fatigue blurred vision and sometimes weight loss.

If diabetes is not properly managed it can result in complications such, as neuropathy, nephropathy, retinopathy and an increased risk of disease. Community nurses play a role in managing these symptoms by monitoring blood glucose levels promoting medication adherence and educating patients about dietary and lifestyle adjustments.<sup>16,17</sup> Managing chronic diseases also involves addressing conditions like hypertension and heart failure. While hypertension may not always show symptoms severe cases can lead to headaches shortness of breath and nosebleeds. Heart failure is characterized by difficulty breathing, swelling and fatigue.

Community nurses tackle these conditions by monitoring blood pressure and heart rates emphasizing the importance of taking medications and advocating for lifestyle modifications including diet and exercise. Chronic respiratory diseases such as pulmonary disease (COPD) and asthma have their own distinct clinical signs. COPD causes symptoms like difficulty breathing, coughing and production of sputum; whereas asthma is identified by wheezing, breathlessness chest tightness episodes of coughing. Community nursing interventions for these conditions involve monitoring health closely assisting individuals in quitting smoking providing education on proper inhaler usage promoting vaccinations to prevent

respiratory infections. Chronic kidney disease (CKD) displays symptoms such, as fatigue reduced appetite swelling in the legs altered urination patterns. The advancement of kidney disease (CKD) can lead to the development of blood pressure low red blood cell count and issues related to bone health. Community nurses play a role, in managing the symptoms associated with diseases.<sup>18</sup> They monitor kidney function regulate blood pressure provide guidance on restrictions and coordinate care with nephrologists to ensure treatment. Among the population arthritis is common which can cause joint pain, stiffness, swelling and limited mobility. To address arthritis related issues community nurses focus on relieving pain encouraging activity to maintain function and educating patients about using assistive devices when needed.<sup>19,20</sup>

Chronic diseases not affect the body. Also have psychological implications. Patients often experience anxiety, depression and stress due to the lasting nature of their illnesses and the impact on their quality of life. Community nurses are there to offer support to patients and help them access health services. They also encourage participation in support groups where individuals can connect with others facing challenges. Given the manifestations of chronic diseases a multifaceted approach is necessary, for effective management. Community nursing interventions are tailored to meet each patients needs through care, education and support. By addressing both the psychological aspects of diseases, community nurses significantly improve patient outcomes and their overall quality of life.

### ***Management***

The increasing occurrence of long term illnesses presents a challenge, to health requiring a comprehensive and nuanced approach to ensure effective treatment. In the field of community nursing the complexities of managing diseases involve a strategy that combines clinical expertise, patient education and unwavering support.<sup>21</sup> The foundation of this approach is carefully established during the assessment and diagnosis phase, where community nurses utilize methods such as thorough health evaluations, physical exams, reviews of medical history and collaborative discussions with patients. This thorough process aims to gain an understanding of an individual's health status and provides the basis for interventions.

Once the assessment phase is complete attention shifts to medication management- an aspect in the care of chronic diseases.<sup>22,23</sup> Community nurses work closely with healthcare providers to ensure that patients not receive their medications but also understand their importance. This includes educating patients about dosage, frequency, potential side effects and the critical need for adherence. Regular medication reconciliation is also emphasized as it helps address any discrepancies or concerns related to polypharmacy or potential drug interactions. By taking an approach like this one can prevent complications. Achieve

optimal therapeutic outcomes which significantly contributes to overall success, in managing chronic diseases. Community nursing interventions go beyond the aspects and also involve promoting health and encouraging lifestyle changes. In this role nurses work closely with patients to develop plans, for making changes. They focus on promoting eating habits encouraging physical activity and providing support to help people quit smoking.

The goal is to create strategies that are tailored to each individual's needs because a one-size-fits-all approach isn't always effective in achieving long-term health improvements. Empowering patients with knowledge and skills for managing their health is an aspect of the clinical approach to chronic diseases. Community nurses also play a role as educators sharing information about recognizing symptoms making lifestyle adjustments and the importance of regular medical checkups. They also educate patients on the usage of monitoring devices such, as glucometers or blood pressure cuffs enabling them to engage in their healthcare and empowering them to take charge of their overall well-being. Regular follow-up and monitoring are components of managing diseases effectively. Community nurses establish communication with patients through scheduled visits or virtual check-ins. These interactions provide opportunities, for assessing progress addressing concerns, and reinforcing self-management strategies through education. Community nurses play a role, in ensuring the being and optimal outcomes of individuals with chronic conditions. Their ongoing care and support are not beneficial but essential, for maintaining overall health and overall patient satisfaction. The collaborative nature of managing diseases places community nurses in a coordinating role, among various healthcare professionals. They become facilitators ensuring communication between patients and specialists and promoting seamless continuity of care. The use of technology also contributes to enhancing the efficiency and effectiveness of interventions. Telehealth services remote monitoring devices and health applications are instrumental, in enabling communication, between patients and healthcare professionals. This allows for adjustments to management plans and proactive interventions.

Emergency preparedness and crisis management are also aspects of community nursing. Nurses with training are prepared to handle emergencies related to diseases. Their preparation not only includes educating patients about recognizing warning signs but also providing guidance on actions, during crises. This proactive approach ensures that patients are not only aware of emergencies but also have the knowledge and resources necessary to navigate unexpected challenges greatly contributing to their overall safety and well-being.

## CONCLUSION

Community nursing interventions play a role, in the management of chronic illnesses. This multifaceted

approach, which includes educating patients making home visits utilizing telehealth and coordinating care has shown success in improving outcomes and reducing the burden on healthcare systems. However, there are still challenges to overcome such as staffing shortages and integrating technology. It is essential to address these challenges in order to maximize the impact of community nursing interventions. The dedication of community nurses to holistic care highlights the importance of tailoring strategies to meet each patient's needs. As the healthcare landscape evolves, ongoing research and innovation are vital for developing strategies that enhance the efficiency and sustainability of community nursing interventions, in managing diseases. Ultimately community nursing remains at the forefront of efforts to manage illnesses by prioritizing outcomes and overall well-being with a patient-centered approach.

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