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CARE OF PATIENTS WITH CHRONIC KIDNEY DISEASE-NURSING PERSPECTIVES

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ABSTRACT

Globally, chronic kidney disease (CKD) is a booming health challenge. High prevalence of diabetes mellitus and hypertension appears to be the main threat for this. CKD would probably be the fifth leading cause of mortality by 2040. Without adequate treatment, CKD progresses to end stage renal disease (ESRD), which needs costly renal replacement therapies. CKD affects physical, psychological and financial aspects of the lives of patients as well as their family members. Treatment leads to a considerable hike in expenditure on healthcare. Nurses play a vital role by addressing those issues mainly by coordinating between patients, health care providers and family members. They initiate patient-centered care and encourage effective communication on CKD management. By initiating patient involvement and creating family-focused care plans, nurses can amplify better outcomes. In conclusion, nurses play a vital role in the holistic care of individuals with CKD. Organizations should develop clear policies and protocols, ensure supply of resources and provide continual training for nephrology nurses. Health policies must encourage collaborative care and nursing research to enhance the quality of life among people living with CKD.

KEYWORDS: chronic kidney disease, nurses' role, patient education, virtual care, patient engagement, quality of life.

MeSH keywords:

- [Health Policy](#)
- [Nurse's Role](#)
- [Patient Satisfaction](#)
- [Patient Advocacy](#)
- [Patient Care](#)
- [Patient Participation](#)
- [Quality of Life](#)

- [Renal Insufficiency, Chronic](#)

INTRODUCTION

Worldwide, the incidence of chronic kidney disease (CKD) is escalating owing to the high prevalence of two major diseases – diabetes mellitus and hypertension [1]. Reports indicate that CKD would be the fifth leading cause of mortality by 2040 [2-4]. Usually, CKD progresses to ‘end-stage renal disease’ (ESRD) that poses threat to life without renal replacement therapy (RRT) [3-5]. Patients suffering from CKD with comorbidities can face cardiovascular complications especially when they receive dialysis [3]. With progression to ESRD, patients require expensive treatment such as dialysis or kidney transplant [5]. The complex nature of therapy for patients with CKD results in substantial physical, psychological, social, and economic burden on patients, their families as well as the health care system [6-8]. Overall, CKD adversely affects the quality of life (QoL) of patients and their family members [1, 6]. In this challenging scenario, nurses can play a pivotal role in managing healthcare of CKD patients. Nurses play a lead role in the patient care by promoting education, providing support in symptom management, and psychosocial care. Therefore, nurses’ professional excellence is of paramount importance in improving outcomes in patients having CKD. This manuscript provides an outline of the diverse role of nurses in the care of patients with CKD.

Care of patients with CKD – a challenging task

Literature highlight that majority (about 90%) of patients with CKD are unaware of having their disease [6]. This lack of awareness stems from limited capacity of health care professionals (HCPs) at the primary care level to identify the disease in its early stages [6].

Managing CKD patients poses significant difficulties owing to the disease’s multifaceted symptom burden, adverse effects of medications, dietary and fluid restrictions, social limitations and associated stigma and taboos. These factors negatively affect the well-being of CKD patients [9]. HCPs often struggle to comprehend the ‘complexity’ of the disease, owing to its fluctuating and dynamic course. Typically, HCPs focus on individual aspects, such as the illness itself, its treatment, socio-economic condition without considering the cumulative impact on health [10]. HCPs often do not work in a collaborative manner in their clinical practice that reflects their limited understanding of the holistic approach to care [10].

Nurses play a diverse role in the management of patients with CKD. Nurses render their care with empathy towards patients and family members during the critical moments. Nurses have insight into how a chronic disease affects a patient’s life. Thus, nurses are suitable persons who can easily identify the barriers of effective patient care. The table 1 depicts different barriers and the nurses’ role to overcome those.

Table 1 (Barriers of patient care and strategies to overcome.)

Barriers	Strategy to overcome
Fragmented Care	Nurses act as a liaison between patients, families, and HCPs. They should promote inter-professional collaboration among HCPs to implement comprehensive care plan ^[10, 11] . They promote shared decision-making and accountability among patients ^[11] .
Complexity of comorbidities	Nurses should integrate insights from various specialists to coordinate care by avoiding repetitive medications and conflicts ^[12, 13] . They should monitor patients' condition and report any changes.
Ineffective communication	Nurses should encourage open communication and mutual respect among the healthcare team members ^[11] . They should possess unique insights to disease conditions and provide empathetic care to enhance patient satisfaction ^[12] .
Poor patient engagement	Nurses should encourage patients in shared decision-making and empower patients to take an active role in their self-care ^[14] . They should monitor adherence to treatment and promote education on lifestyle modifications.
Lack of family involvement	Nurses should adopt family-focused care approaches by involving family members in the process of decision-making. They should provide adequate emotional support and act as resource persons for family members to support patient care ^[15] .

Nurse can manage a spectrum of care:

The nurse offers a spectrum of services that revolves around the patient- a holistic approach of patient care (Figure 1).

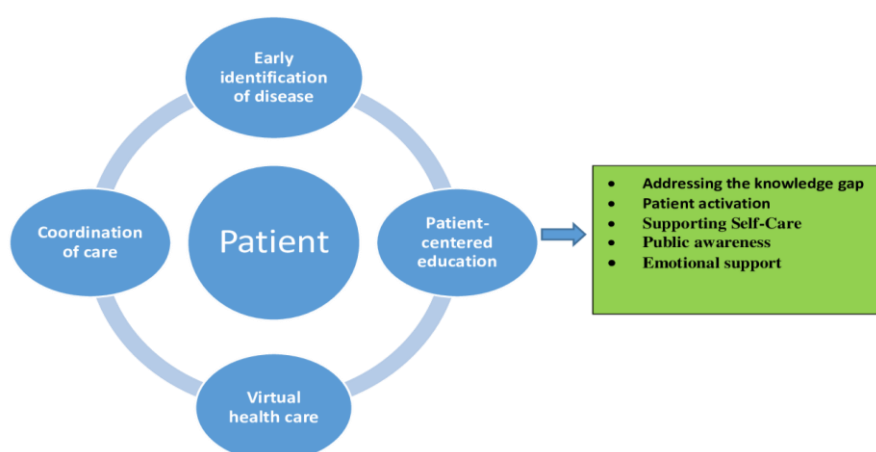


Figure 1 (Spectrum of nursing care for patients with CKD. Nurses offer a multitude of services that revolve around the patient – a holistic approach. Patient-centered education holds the lion's share).

By leveraging their knowledge and understanding, nursing professionals can effectively implement health promotion strategies to improve the QoL of patients having CKD [16]. Effective nursing care yields several benefits among CKD patients in the following ways:

A. Early identification of disease

Early detection of the disease enables initiation of lifestyle modifications and medical management to slow the disease progression. Nurses can analyse patients' medical histories, perform physical examinations, arrange various laboratory investigations including serum creatinine and urine-albumin creatinine ratio to identify early signs of CKD [17].

B. Patient-centered education

This entails informing patients regarding the diagnosis, engaging them effectively in shared decision-making, and providing necessary support for self-management. Nurses tailor an education plan according to the patient's needs, health literacy and cultural background regarding the cause of CKD, severity of disease, risk of progression and its complications [6].

- Addressing the knowledge gap: Public and patient awareness of CKD is relatively low compared to other conditions. Patient education and awareness about CKD can lead to consistent nephrology care, pre-emptive listing for transplant and greater satisfaction with renal care [18]. The differential level of competency and the gap between knowledge and practice among physicians appears to be an important barrier in delivering family-focused care. In this arena nurses can play an important role in improving patient care if they remain updated with current knowledge and best clinical practices [5, 19].
- Patient activation: Patient activation enables the individuals to take ownership of their health and build confidence [20]. Adequate knowledge and empowerment of CKD patients can achieve adequate monitoring of blood pressure and glucose levels, symptom monitoring, and lifestyle modifications such as cessation of smoking, exercise, dietary restrictions and adherence to medication [3, 21-23].
- Supporting self-care: Comprehensive education on self-care behaviors can improve patient engagement and satisfaction [22, 24]. Nurses can educate the patients in self-monitoring to manage their symptoms effectively [25].
- Public awareness: Health literacy plays a vital role in reducing gaps related with socioeconomic status. Campaigns at a national level should focus on increasing public awareness about CKD prevention. Population-based strategies should aim at screening populations at risk such as hypertension, obesity, and diabetes [2].
- Emotional support: Both patients and their families need support to cope with the emotional impact of CKD that includes fear, grief and denial. Adequate information about illness and treatment options can help in "shared decision-making" regarding treatment, thereby influencing the QoL of CKD patients [19]. The effectiveness of patient-centered care is highly influenced by the quality of nurse-patient communication [26].

C. Virtual health care

- Telephone-based outreach, web-based decision aids and self-management training can be beneficial, especially for patients with poor health literacy and those residing in rural areas [18].

Telehealth can provide timely communication, patient education and coordination among HCPs [27, 28]. Mobile technology can facilitate patient management and improve clinical outcomes through implementation of self-management programs [29, 30].

- Nurses have higher acceptance of digital technologies in patient management and supporting self-management compared to other HCPs [31]. HCPs including the nurses can empower CKD patients for self-care using remote patient monitoring (RPM) tool from a distance [32]. RPM enables patients to access medical help quickly, regardless of their remote location and provides HCPs with necessary feedback about their patient's condition [32].
- Nurse-led virtual care interventions can yield beneficial effects regarding symptom management, improvement in self-care behavior, and QoL in patients with chronic diseases [33-35].
- Recently, e-learning has emerged as a popular approach for education in the area of prevention and treatment for non-communicable diseases [2]. Early treatment, lifestyle modifications and nutritional interventions – all have the potential to delay the progression of chronic disease [2]. It is of paramount importance to promote “prevention” in the patient education for the individuals at risk of kidney disease. Education is the effective path towards self-management and patient-centered care [2].

D. Coordination of care

- A coordinated multidisciplinary team approach is essential for optimizing management, implementing shared decision-making with patients who have CKD [36]. Ineffective collaboration among team members acts as a barrier in this care process [37].
- A lack of collaborative approach among HCPs reflects their poor understanding of the holistic approach to care [10]. Integrated care models enhance collaboration among HCPs, prevent fragmented care during transitions between different settings, and finally improve patients' education, care, and experiences.
- Management of an illness with a fluctuating course, such as CKD, needs continuity of care, a consistent point of contact, and timely care coordination [10]. Nurses often exhibit greater enthusiasm than physicians do for collaboration [11]. Nurse can play a pivotal role in coordinating other members of the multidisciplinary team that includes nutritionists, pharmacists, clinicians and family members [18].
- Nurses alone or as a member of a collaborative team can contribute considerably to the virtual health care in managing CKD patients [3]. High quality care, better patient satisfaction and improved health outcomes – all depend on collaboration among nurses, physicians and other HCPs [11]. Coordinated care between HCPs and organizations is crucial for managing patients with unstable trajectories of comorbidities [10].

CONCLUSION

Nurses play a crucial role in managing several aspects in the care of individuals with chronic kidney disease. Organizations should focus on several areas such as, developing comprehensive guidelines defining team role, allocating funds, and offering continual training for nephrology nurses. Health

policies should prioritize nurse-led research and address the gap in collaborative care. Addressing these issues will strengthen nursing roles, and enhance care of individuals with chronic kidney disease.

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