Nursing Care for Patients with Renal Failure: Enhancing Quality of Life

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Abstract

Background: Renal failure presents complex physical, psychological, and social challenges that significantly impair patients' quality of life. Nursing care plays a central role in symptom management, education, psychosocial support, and coordination of multidisciplinary services to enhance well-being.

Methods: This narrative review synthesizes evidence presented in the report on nursing assessments, interventions, and models of care that enhance quality of life for adults with acute and chronic renal failure. Key domains examined include physical symptom management, psychosocial and spiritual support, self-management training, lifestyle interventions, and barriers and facilitators to quality-of-life–oriented nursing practice.
Results: Nursing interventions such as comprehensive symptom assessment, fluid and hemodynamic management, pruritus and pain control, infection prevention, individualized education, coping support, and structured self-management programs are shown to improve functional status, emotional well-being, treatment adherence, and patient satisfaction. Psychosocial counseling and spiritual care reduce anxiety and depression, while exercise and sleep-hygiene interventions enhance physical and psychological outcomes. Organizational support, multidisciplinary collaboration, and nephrology-specific training facilitate high-quality care, whereas limited resources, low health literacy, and high nurse workload pose persistent challenges.
Conclusions: Holistic, individualized, and continuous nursing care substantially improves quality of life in patients with renal failure. Integrating routine QoL assessments, strengthening patient education and self-management, and expanding specialized training and multidisciplinary support are essential to optimizing outcomes. Further research is needed to evaluate nursing-led interventions across diverse populations and care settings.
Keywords
Renal failure; chronic kidney disease; hemodialysis; nursing care; symptom management; quality of life; psychosocial support; patient education; self-management; holistic care.

INTRODUCTION

Renal failure encompasses a broad spectrum of kidney dysfunction, ranging from acute kidney injury (AKI) to chronic kidney disease (CKD), culminating in end-stage renal disease (ESRD) when dialysis or transplantation is necessary for survival. AKI is characterized by a rapid decline in renal function, typically reversible, whereas CKD is a progressive, persistent loss of kidney function over months to years. ESRD marks the most severe stage of CKD, when the kidneys can no longer maintain homeostasis without renal replacement therapies such as hemodialysis, peritoneal dialysis, or kidney transplantation. Globally, the prevalence of CKD and ESRD is rising, driven largely by increasing rates of diabetes mellitus and hypertension, which are the major comorbidities contributing to kidney damage. This growing burden is reflected in substantial healthcare costs and heightened mortality, with CKD patients facing a higher risk of cardiovascular events and infections. Regional disparities exist, but overall trends indicate that CKD contributes significantly to global morbidity and healthcare resource utilization (Hsu & Hsu, 2016).

Patients with renal failure endure a multidimensional burden affecting their physical, psychological, social, and spiritual well-being. Physically, symptoms such as chronic fatigue, persistent pain, pruritus, sleep disturbances, and fluid overload undermine daily function. Psychologically, patients often struggle with depression, anxiety, and a sense of hopelessness due to the chronic nature and treatment demands of their illness. Socially, limitations arise from role loss, reduced employability, and social isolation, while spiritual distress is common as patients grapple with existential concerns and loss of control over their lives. For those on

dialysis either hemodialysis or peritoneal dialysis specific quality of life (QoL) challenges include significant time commitments for treatment, strict dietary and fluid restrictions, and symptom burden during and between sessions, negatively impacting overall well-being and life satisfaction (Ramírez-García et al., 2025).

Nursing care in nephrology spans a wide spectrum of settings including conservative management of CKD, hemodialysis and peritoneal dialysis units, transplantation programs, and palliative or comfort-focused care for terminal patients. Nephrology nurses hold a central role in enhancing quality of life by virtue of their continuous patient contact, comprehensive education efforts, psychosocial support, symptom management, and coordination of multidisciplinary care. Their interventions target improving patients' self-management capabilities and addressing the complex needs associated with renal failure treatments. The nursing scope additionally involves advocating for patients, facilitating informed decision making, and providing end-of-life support, thereby contributing significantly to holistic care and outcome optimization (McKenna & Mulvanerty, 2021).

The overall aim of this review is to synthesize current evidence on how nursing care enhances quality of life for adults with renal failure, encompassing both acute kidney injury and chronic kidney disease including end-stage renal disease. The review seeks to explore nursing assessments and interventions most commonly reported to improve QoL, assess the comparative effectiveness of individualized and continuous nursing care models versus routine care, and identify key barriers and facilitators to quality of life–oriented nursing in this patient population. Specifically, the focus areas include:

- Which nursing assessments and interventions most frequently improve QoL?
- How do individualized and continuous nursing models compare to routine care?
- What are the primary barriers and facilitators to delivering QoL-enhancing nursing care in renal failure?

These foundational sections provide a detailed context for understanding the significance of nursing in optimizing care and quality of life for patients facing the complex challenges of renal failure.

Overview of Renal Failure and Quality of Life

Renal failure represents a spectrum of kidney dysfunction ranging from acute kidney injury (AKI) to chronic kidney disease (CKD) and ultimately end-stage renal disease (ESRD). AKI describes a rapid decline in renal function occurring over hours to days, often reversible, characterized by reduced glomerular filtration rate (GFR) and oliguria. In contrast, CKD is a progressive deterioration of kidney structure and function lasting over three months, classified into five stages based on GFR levels: Stage 1 (GFR $\geq$90 mL/min/1.73m^2 with kidney damage), Stage 2 (GFR 60-89), Stage 3 (GFR 30-59), Stage 4 (GFR 15-29), and Stage 5 (GFR <15), which corresponds to ESRD, the terminal stage requiring renal replacement therapy. Common etiologies vary by type; AKI often relates to factors such as ischemia, nephrotoxins, and obstruction, whereas CKD is frequently linked to diabetes mellitus, hypertension, chronic glomerulonephritis, and polycystic kidney disease. ESRD represents complete kidney failure where life-sustaining treatments become necessary. Treatment modalities encompass conservative management focusing on symptom control and slowing progression, hemodialysis, peritoneal dialysis, and kidney transplantation, each with distinct nursing care requirements and implications for patient quality of life. Patients receiving dialysis or

transplant face ongoing medical and psychosocial challenges impacting their well-being (Mohsen et al., 2023).

Renal failure induces complex pathophysiologic alterations that profoundly affect patients' quality of life and necessitate vigilant nursing assessment. Fluid overload occurs due to compromised renal excretion, manifesting as edema and respiratory distress; nurses must monitor fluid status through daily weights, intake/output records, and signs of congestion. Electrolyte imbalances, notably hyperkalemia and disturbances in sodium and calcium, along with acid-base derangements like metabolic acidosis, contribute to cardiac arrhythmias, muscle weakness, and fatigue. Anemia arises from decreased erythropoietin production, reducing oxygen delivery and causing dyspnea and cognitive decline. Uremic toxins accumulation leads to pruritus, nausea, sleep disturbances, cognitive impairment, and functional decline. Mineral and bone disorders arise from disrupted calcium, phosphate, vitamin D metabolism, and elevated parathyroid hormone, causing bone pain, fractures, and vascular calcification. These domains translate into nursing assessment priorities: close monitoring for fluid overload signs and respiratory symptoms; electrolyte levels correlated with cardiac and neuromuscular status; inquiry into pruritus and sleep quality; cognitive screening; and evaluation of physical function decline. Addressing these manifestations through targeted symptom management is vital to enhancing patient quality of life (Shah et al., 2024).

Quality of life (QoL) measurement in renal failure patients utilizes validated instruments capturing physical, emotional, and social well-being, essential for evaluating nursing interventions' impact. The Kidney Disease Quality of Life Short Form (KDQOL-36) combines disease-specific and generic health measures, addressing symptoms, burden, cognitive function, social support, and dialysis staff encouragement. The Short Form-36 (SF-36) is a widely used generic health-related QoL (HRQoL) scale assessing eight domains including physical and mental health components, fatigue, pain, and social functioning. These tools are complemented by symptom scales tailored to dialysis populations to capture symptom burden accurately. Central to modern care is the emphasis on patient-reported outcomes (PROs), which empower patients in their care and provide clinicians with insights beyond biomedical indices, enhancing holistic care strategies. Routine implementation of QoL assessments supports symptom management, psychosocial support, and personalized care planning, underlining nursing roles in monitoring and advocating for patient-centered outcomes (Sharma et al., 2023).

Nursing Assessment in Renal Failure

Nursing assessment in renal failure is essential to effectively manage the complex and multifaceted needs of patients with this chronic condition, aiming to enhance their quality of life. A comprehensive physical assessment is the cornerstone of initial and ongoing nursing evaluation, incorporating routine monitoring of fluid balance through parameters such as daily weight, presence of edema, blood pressure, and lung auscultation to detect any adventitious sounds. Attention to the status of the vascular access is critical in patients undergoing dialysis, alongside regular evaluation of skin integrity to prevent pressure injuries and infections. Nurses also monitor dialysis adequacy indicators to ensure effective treatment delivery. Early identification of complications such as hypervolemia, hypotension, arrhythmias, and infection is pivotal, as these conditions can rapidly deteriorate the patient's functional status and well-being if not promptly addressed. This comprehensive surveillance allows nurses to intervene proactively, minimizing hospitalizations and improving daily living quality (Li et al., 2021).

Functional and symptom assessment is another vital nursing role, employing standardized tools and structured questioning to systematically assess symptoms prevalent among renal failure patients, including pain, fatigue, pruritus, sleep disturbances, dyspnea, gastrointestinal symptoms, and sexual dysfunction. These symptom assessments guide the tailoring of interventions to alleviate discomfort and improve the patient's functional capacity. Additionally, nursing evaluation of activities of daily living (ADLs) and exercise tolerance provides insight into the patient's physical capabilities and limitations, guiding rehabilitation planning. Assessing falls risk is especially important in this population, given their increased vulnerability due to muscle weakness, neuropathy, and medication effects, thereby facilitating personalized safety and rehabilitation strategies (Li et al., 2021).

Psychosocial, cognitive, and spiritual assessments are integral to holistic renal care, recognizing that chronic kidney disease significantly impacts patients' mental health, coping mechanisms, social dynamics, and spiritual well-being. Routine screening for depression, anxiety, coping styles, social support networks, caregiving burden, and role functioning enables nurses to identify psychological distress early and coordinate appropriate psychosocial interventions. Spiritual assessment explores the patient's beliefs, values, and concerns regarding chronic illness, dialysis dependency, and end-of-life issues, providing essential insights to support meaning-making and psychological adaptation. Evidence suggests that addressing spiritual needs can alleviate psychological distress and enhance overall well-being, underlining the importance of integrating these assessments into routine care (Fradelos et al., 2021).

Nursing diagnoses and care planning in renal failure involve synthesizing assessment data to identify key nursing problems, such as excess fluid volume, risk for infection, impaired skin integrity, fatigue, disturbed sleep pattern, ineffective coping, and feelings of powerlessness. Utilizing structured nursing processes or systematized frameworks for care prioritization, nurses develop individualized, quality of life–oriented goals collaboratively with patients. These goals direct nursing interventions aimed at mitigating symptoms, preventing complications, supporting psychological adjustment, and empowering patients in self-management. This systematic approach ensures that nursing care is not only clinically effective but also responsive to the patient’s subjective experience and holistic needs, thus fostering improved outcomes and life quality (Cukor & Kozlov, 2020).

Symptom Management and Physical Care

Effective fluid and hemodynamic management is paramount in the nursing care of patients undergoing dialysis for renal failure. Nursing strategies must balance the removal of excess fluid through ultrafiltration during dialysis sessions while maintaining hemodynamic stability to prevent adverse cardiovascular events. Techniques such as ultrafiltration profiling can modulate fluid removal rates to reduce the risk of intradialytic hypotension. Continuous and close blood pressure monitoring during dialysis is essential to detect and rapidly manage hemodynamic instability. Nurses play a crucial role in reinforcing patient education about fluid restriction, emphasizing adherence to dietary sodium and fluid intake recommendations between dialysis sessions to minimize fluid overload. Effective volume control significantly alleviates symptoms of dyspnea and edema, reduces the frequency of hospitalizations, and ultimately enhances patients' quality of life by decreasing cardiovascular strain and improving physical comfort. Emerging dialysis technologies integrating biosensors and real-time monitoring support precision in fluid management, but the nurse's vigilant clinical assessment remains irreplaceable in individualizing care and optimizing outcomes (Canaud et al., 2019).

Pain and uremic pruritus are prevalent and distressing symptoms experienced by patients with renal failure, profoundly affecting their quality of life. Nurses utilize various nonpharmacologic strategies to ameliorate discomfort, including meticulous skin care regimens that incorporate temperature regulation and the regular application of emollients to maintain skin hydration and barrier integrity. These interventions reduce itching and prevent secondary infections caused by scratching. Nursing care involves ongoing assessment of symptom severity using validated scales, careful documentation, and coordination with prescribing clinicians to optimize pharmacologic treatments, such as the use of gabapentin or topical agents for pruritus relief. The nurse's role extends to patient education on coping mechanisms and skin care practices to empower self-management. Regular evaluation of treatment efficacy and advocating for medication adjustments are vital nursing responsibilities to ensure symptom control and improve patients' overall well-being and sleep quality, directly impacting their psychosocial health (Osakwe & Rout, 2024).

Anemia and metabolic imbalances are common complications in renal failure that require multidisciplinary collaboration involving nursing, dietetics, and medical teams. Nurses assist in promoting adherence to renal diets tailored to control phosphorus and potassium intake while ensuring protein and energy sufficiency to support tissue repair and immune function. Patient education on dietary requirements is reinforced continuously, helping patients understand the importance of nutritional balance in managing their condition. Furthermore, nurses monitor for adverse effects and efficacy of iron supplementation and erythropoiesis-stimulating agents, crucial therapies for anemia correction. Adequate anemia management has been linked to reductions in fatigue, improvements in daily functional capacity, and enhanced quality of life. Nurses perform systematic assessments of hemoglobin levels and iron indices and provide ongoing psychosocial support to encourage adherence and early identification of complications, thereby optimizing therapeutic outcomes and patient engagement in their care plan (Hashmi et al., 2024).

Infection prevention remains a cornerstone of nursing care for patients with vascular access devices such as catheters, arteriovenous fistulas, or grafts in hemodialysis. Evidence-based nursing practices include rigorous hand hygiene, strict aseptic techniques during access handling, and regular surveillance for signs of infection. Nurses educate patients on self-care measures and the importance of dressing maintenance and personal hygiene to reduce infection risks. Early detection of vascular access complications through careful inspection and prompt reporting is critical to prevent access failure, which is associated with increased hospital admissions and morbidity. Effective infection control and vascular access management are closely associated with reduced healthcare utilization and hospital stays, resulting in improved patient satisfaction and perceived quality of life. The nurse's role as an educator, assessor, and advocate for best practices in access care enhances treatment adherence and safety in this vulnerable population(Ahamed & Sallam, 2018).

Psychosocial, Emotional, and Spiritual Support

Psychosocial, emotional, and spiritual support are foundational components in the holistic nursing care of patients with renal failure, particularly those undergoing long-term dialysis. Emotional support and mental health interventions are critical in addressing the high prevalence of anxiety and depression among this patient population. Nurses play a pivotal role by employing active listening, supportive counseling, and psychoeducation to foster a therapeutic relationship and provide a safe environment for patients to express their fears,

concerns, and emotional distress. Individualized and continuous nursing interventions, such as cognitive-behavioral techniques and acceptance-based therapies, have been shown to significantly reduce anxiety and depressive symptoms in hemodialysis patients, leading to improved quality of life and greater treatment adherence. Studies demonstrate that psychological nursing interventions ranging from regular counseling sessions to group support meetings result in lower scores on standardized anxiety and depression scales and higher quality-of-life scores, as measured by instruments such as the SF-36. These interventions not only alleviate psychological distress but also reduce the incidence of complications and enhance patient satisfaction with care, underscoring the importance of integrating mental health support into routine renal nursing practice (Pizarro, 2024).

Coping, adaptation, and the maintenance of personal identity are central challenges for patients with renal failure, who must navigate significant lifestyle changes, physical limitations, and disruptions to their sense of self. Nurses facilitate adaptive coping strategies such as problem-solving, cognitive reframing, and participation in peer support groups, helping patients to integrate dialysis into their daily routines and maintain a sense of purpose and autonomy. Addressing issues related to body image, role strain, and dependency is crucial, as these factors can profoundly affect a patient's illness narrative and psychological well-being. By encouraging open dialogue about these concerns and providing tailored information about treatment options and prognosis, nurses empower patients to develop resilience and a more adaptive perspective on their condition. Research indicates that patients who receive regular assessment and support from nurses in coping with the emotional and practical challenges of dialysis report higher levels of hope, perseverance, and perceived health, reinforcing the value of ongoing psychosocial nursing interventions in fostering positive adaptation (Berma et al., 2021).

Family, caregiver, and social support are integral to the comprehensive management of renal failure, as the burden of care often extends beyond the patient to their loved ones. Nurses should actively involve family members and caregivers in patient education and care planning, ensuring that they are equipped with the knowledge and resources necessary to support adherence to treatment regimens and reduce their own stress and burden. Caregiver strain manifesting as emotional exhaustion, financial stress, and lifestyle disruption is a common issue, and nurses must recognize the signs and provide timely information, emotional support, and referrals to community resources. Multifaceted support strategies, including financial assistance, respite care, and access to peer support networks, can help caregivers navigate the complexities of renal disease care and maintain their own well-being. Effective collaboration between nurses, patients, and caregivers enhances the overall quality of care and contributes to better patient outcomes and satisfaction (Shaabna et al., 2025).

Spiritual care and meaning-making are essential aspects of nursing support for patients with renal failure, particularly given the existential and emotional challenges posed by chronic illness. Nurses should conduct respectful assessments of patients' spiritual needs, religious practices, and existential concerns, integrating these into individualized care plans when desired. Collaboration with chaplains or spiritual care providers ensures that spiritual support is provided in a manner that is both culturally sensitive and clinically effective. Spiritual well-being has been associated with lower rates of depression, higher quality of life, and improved coping in dialysis patients, with religious and spiritual coping strategies such as prayer, meditation, and participation in faith communities serving as important sources of comfort

and resilience. Evidence suggests that patients who report higher levels of spiritual well-being experience greater hope, reduced psychological distress, and a more positive outlook on life, highlighting the value of holistic, spiritually informed nursing care in enhancing the overall quality of life for patients with renal failure (LI et al., 2021).

Patient Education, Self-Management, and Empowerment

Comprehensive patient education is the cornerstone of successful renal failure management. Nurses play a critical role in providing patients with a thorough understanding of renal function, the rationale and process of dialysis, dietary and fluid restrictions, medication regimens, and the recognition of complications that require urgent attention. Patients must be educated about the physiological role of the kidneys, the progressive nature of CKD, and the consequences of untreated or poorly managed renal failure. This includes explaining how dialysis replaces the kidneys' filtration function, the differences between hemodialysis and peritoneal dialysis, and the importance of adherence to prescribed treatment schedules (Sinha & Prasad, 2025).

Equally important is teaching patients about dietary modifications, which are central to managing renal failure. Patients must understand the necessity of restricting sodium, potassium, phosphorus, and fluids to prevent complications such as hypertension, hyperkalemia, vascular calcification, and fluid overload. Nurses should provide practical guidance on food selection, label reading, and meal planning, emphasizing the importance of protein intake for wound healing and muscle maintenance while avoiding excessive phosphorus and potassium sources. Medication education is also vital, as patients often require multiple drugs to control blood pressure, anemia, mineral imbalances, and other comorbidities. Nurses must explain the purpose of each medication, potential side effects, and the importance of adherence to prescribed regimens (Sinha & Prasad, 2025).

Recognizing and responding to signs of complications such as sudden weight gain, shortness of breath, chest pain, or changes in urine output is another critical aspect of patient education. Nurses should empower patients to seek timely medical attention when these symptoms arise, thereby preventing life-threatening emergencies. Tailoring education to the patient's health literacy level, cultural background, language, and individual learning preferences is essential for ensuring comprehension and retention. This may involve using visual aids, simplified language, culturally relevant examples, and interactive teaching methods such as teach-back to confirm understanding (Skelton et al., 2015).

Self-management skills training equips patients with the tools and confidence to actively manage their condition on a daily basis. Nurses guide patients in developing routines for self-monitoring, including tracking weight, blood pressure, and symptoms such as edema, fatigue, or changes in appetite. Patients are taught to maintain symptom logs and recognize patterns that may indicate the need for medical intervention. Adherence strategies, such as medication reminders, pill organizers, and scheduled follow-ups, are introduced to help patients stay on track with their treatment plans (Welch et al., 2015).

Problem-solving skills are also emphasized, enabling patients to address common challenges such as dietary temptations, medication side effects, or social barriers to adherence. Nurses encourage patients to set realistic goals, develop action plans, and seek support when needed. Evidence demonstrates that individualized nursing interventions significantly improve self-management ability, leading to better quality of life, reduced anxiety and depression, and higher patient satisfaction. For example, studies have shown that patients who receive structured self-

management education report improved adherence to dietary and medication regimens, better control of blood pressure and laboratory values, and enhanced emotional well-being (Zhou, 2022).

Structured educational programs are highly effective in supporting patients with renal failure. Continuous nursing care, home-based follow-up, group education sessions, and tele-education are all valuable models that have been shown to improve lifestyle behaviors and quality of life. Continuous nursing care involves regular, ongoing education and support from nurses, ensuring that patients receive consistent reinforcement of key concepts and timely interventions when challenges arise. Home-based follow-up allows nurses to assess patients in their natural environment, providing personalized guidance and addressing barriers to self-management that may not be apparent in clinical settings (Tutur & Bicer, 2025).

Group education sessions foster peer support and shared learning, enabling patients to exchange experiences and strategies for coping with renal failure. Tele-education, which utilizes phone calls, video conferencing, or online platforms, extends the reach of education to patients who may have difficulty attending in-person sessions due to mobility issues, distance, or other constraints. Studies have demonstrated that tele-nursing interventions significantly improve self-efficacy, adherence to treatment, and overall quality of life among hemodialysis patients (Ellis et al., 2025).

Multidisciplinary CKD clinics play a crucial role in coordinating comprehensive care. These clinics bring together nephrologists, nurses, dietitians, pharmacists, and social workers to address the multifaceted needs of patients with renal failure. Nurses serve as coordinators, ensuring that patients receive consistent education and support across disciplines. Dietitians provide individualized nutritional counseling, pharmacists review medication regimens for safety and efficacy, and social workers address psychosocial and financial challenges. This collaborative approach has been shown to improve clinical outcomes, enhance patient satisfaction, and reduce hospitalizations (Collister et al., 2019).

The integration of technology into renal failure care has revolutionized self-management and patient empowerment. Mobile apps, telehealth platforms, and remote monitoring systems enable patients to track symptoms, monitor vital signs, and receive real-time feedback from healthcare providers. These tools reinforce education by providing reminders for medication, dietary restrictions, and appointments, as well as facilitating communication with nurses and other members of the care team (Marinho et al., 2023).

Nurses play a pivotal role in interpreting remotely collected data and providing timely feedback to patients. For example, nurses may review blood pressure readings, weight trends, or laboratory results transmitted through mobile apps and alert patients to potential issues before they escalate. This proactive approach allows for early intervention, preventing complications and reducing the need for emergency care. Technology-enabled self-management also fosters a sense of independence and control, empowering patients to take an active role in their care and improving their overall quality of life (Ellis et al., 2025).

Lifestyle Interventions and Rehabilitation

Physical activity and exercise play a crucial role in enhancing the quality of life for patients with renal failure, particularly those undergoing dialysis. Nurse-supported exercise programs tailored to the functional status and comorbidities of these patients, whether conducted during dialysis sessions or in the intervals between treatments, have shown significant benefits. Evidence indicates that exercise training can improve physical functioning, reduce fatigue, and

enhance health-related quality of life (QoL). Structured physical activity, including warm-up, strength training, and aerobic exercises, helps mitigate cardiovascular risks associated with chronic kidney disease (CKD) and dialysis patients, who often suffer from reduced physical capacity. Studies have demonstrated improvements in maximal oxygen consumption and blood pressure control among these patients, which contribute to better physical performance and overall well-being. Regular exercise regimens, typically held two to three times a week for about an hour each, have been effective over periods ranging from three months to a year, emphasizing the importance of sustained intervention in this population (Lazarus, 2019).

Sleep hygiene and daily routine are critical components of comprehensive nursing care for patients with renal failure. Sleep disturbances, including insomnia, restless leg syndrome, and poor sleep quality, are highly prevalent in patients on hemodialysis, adversely affecting their quality of life, mood, and cognitive functioning. Nurses have a pivotal role in assessing sleep disorders and supporting patients to adopt sleep hygiene behaviors such as consistent sleep schedules, relaxation techniques, and minimizing disruptions from dialysis timing. Improving sleep quality is linked to better mood regulation and cognitive outcomes, which are essential in managing the psychological and physical challenges associated with renal failure. Non-pharmacological treatments focusing on sleep hygiene such as sleep restriction therapy, stimulus control, relaxation, biofeedback, and cognitive behavioral strategies offer promising interventions that nurses can facilitate, thereby improving both sleep and overall quality of life in this vulnerable group (Soleimani et al., 2016).

In addressing work, sexuality, and social roles, nurses serve as essential counselors and advocates for patients with renal failure who face disruptions in these aspects of life. Return to work, occupational adjustments, and access to financial or vocational support are areas where nursing interventions can provide guidance and referrals, helping patients navigate the complexities of chronic illness and treatment schedules. Sexual health often remains a sensitive subject yet is integral to the quality of life. Patients frequently experience sexual dysfunction, including reduced libido, erectile difficulties, and intimacy challenges, which significantly impact their mental health, self-esteem, and relationships. Nurses are uniquely positioned to initiate sensitive, confidential discussions about sexual health, provide education, and refer patients to specialized services when necessary. Addressing the psychosocial aspects of chronic kidney disease, including sexual function and role adaptations, reinforces holistic patient care and improves psychosocial well-being and quality of life (Hough et al., 2018).

Special Populations

Older adults with renal failure face unique challenges that complicate nursing care and impact quality of life significantly. Among these challenges are multimorbidity, frailty, cognitive impairment, polypharmacy, and functional decline, all of which are highly prevalent in geriatric patients with chronic kidney disease (CKD) or end-stage renal disease (ESRD). Multimorbidity, the coexistence of multiple chronic conditions, often leads to complex care needs and can decrease the quality of life through physical disability and cognitive decline. Frailty syndrome characterized by decreased physiological reserve and increased vulnerability contributes further to poor outcomes. Polypharmacy, common in this population, exacerbates risks by increasing adverse drug reactions and cognitive impairments, such as confusion and memory loss, ultimately limiting independence. Functional decline affects mobility, self-care abilities, and the capacity to perform daily activities, all of which diminish patient autonomy and well-being. Nursing care in this context must balance prolonging life with enhancing

functional goals and comfort, requiring comprehensive geriatric assessments, medication reviews to minimize inappropriate prescriptions, and patient-centered approaches that prioritize quality of life and respect older patients' preferences and comfort (Umegaki, 2025).
For patients in low-resource settings or those with limited financial and healthcare access, barriers such as restricted access to dialysis, inadequate transportation, and inability to afford medications severely impact the management of renal failure and quality of life. These limitations can delay treatment initiation and reduce adherence to prescribed therapies, contributing to poorer clinical outcomes. Nursing strategies in such contexts must adapt creatively, employing community resources such as transportation services, local healthcare workers, and peer-support groups. Task-sharing with trained community health workers can extend the reach of nephrology care, while simplified and culturally appropriate education materials help patients and caregivers understand disease management despite literacy or language barriers. These adaptations are essential to overcoming structural challenges and improving patients' self-management, treatment adherence, and quality of life in resource-limited environments (Japiong et al., 2023).
Cultural and gender considerations also play a substantial role in nursing care for renal failure patients, influencing treatment acceptance, dietary adherence, transplantation decisions, and caregiving roles within families. Cultural beliefs might affect perceptions of illness, the use of alternative therapies, or willingness to undergo certain treatments like transplantation or dialysis, necessitating culturally sensitive nursing communication and care planning. Gender-specific issues include differences in symptom reporting women may report symptoms differently or more frequently and in caregiving expectations, where women often assume caregiver roles that can impact their own health. Additionally, women with CKD have been documented to have lower rates of transplant listing and later dialysis initiation compared to men, often due to socio-economic factors, healthcare access disparities, and cultural norms. Nursing care must address these disparities by advocating for equitable access, educating patients about treatment options, and supporting caregivers of all genders to navigate complex healthcare systems (Lewandowski et al., 2024).
End-of-life care and conservative management in renal failure present important nursing roles focused on advance care planning, shared decision-making, symptom control, and family support. Conservative kidney management, which forgoes dialysis in favor of symptom palliation and quality of life maintenance, is increasingly recognized as a valid treatment option, especially for older, frail patients or those with multiple comorbidities. Nursing responsibilities include facilitating discussions about goals of care, prognosis, dialysis withdrawal, or non-initiation, ensuring patients' values and preferences guide treatment choices. Symptom control is paramount and involves managing uraemic symptoms, pain, fluid balance, and psychological distress. Emphasis on dignity, comfort, and psychosocial support for both patients and families near the end of life is essential. Collaboration with palliative care teams also enhances care continuity and addresses complex needs through a multidisciplinary approach (Alston & Burns, 2015).

Barriers and Facilitators to Quality of Life-Oriented Nursing Care

Organizational and resource constraints remain significant barriers to delivering individualized, holistic care that addresses quality of life (QoL) for patients with renal failure. Staffing ratios are often inadequate, leading to high nurse-to-patient loads that limit the time and attention nurses can devote to personalized care. Time pressures from heavy workloads

diminish nurses' ability to perform comprehensive assessments or engage in meaningful communication with patients, impacting holistic care delivery. In addition, many nurses lack specialized training focused on QoL assessment and interventions tailored to chronic kidney disease (CKD) or end-stage renal disease (ESRD) populations, further impeding effective care. Conversely, facilitators that improve QoL-oriented care include supportive leadership that prioritizes patient-centered practices, implementation of standardized protocols for routine QoL assessments, and facilitation of access to multidisciplinary resources such as dietitians, social workers, and mental health professionals. These organizational supports enable nurses to address complex patient needs more effectively, fostering enhanced QoL outcomes (Nobahar & Tamadon, 2016).

Knowledge, skills, and attitudes among nursing staff critically influence the quality of QoL-focused care for renal failure patients. Studies identify gaps in nurses' understanding of CKD stages, relevant QoL assessment tools, and psychosocial interventions as common barriers to optimal care. Lack of nephrology-specific education and training curtails nurses' confidence and competence in delivering person-centered care that encompasses the broad physical, psychological, and social dimensions of QoL. However, ongoing nephrology-focused education and reflective practice are essential facilitators that build nurses' expertise and foster compassionate, holistic attitudes toward patients. Educational programs tailored to enhance knowledge of CKD progression, symptom burden, and psychosocial challenges empower nurses to provide tailored interventions that support self-management and psychosocial well-being. Reflective practice further reinforces person-centered care attitudes by encouraging nurses to critically appraise and adapt their approaches based on patient feedback and evolving evidence (Wang et al., 2025).

Patient-related and contextual factors present substantial barriers to engaging renal failure patients in QoL-oriented nursing care and self-management strategies. Low health literacy often impairs patients' understanding of their condition and treatment, limiting their active involvement in care decisions. Complex comorbidities, such as diabetes or cardiovascular disease, complicate care regimens and add to patients' physical and emotional burdens. Social disadvantages including economic hardship, limited social support, and stigma associated with chronic illness frequently restrict patients' ability to maintain treatment adherence and psychosocial well-being. To mitigate these barriers, nurses employ strategies such as simplified educational materials tailored to patients' literacy levels, motivational interviewing to enhance intrinsic motivation, and establishing partnerships with community organizations to support patients beyond the clinical setting. Integrative approaches that combine culturally appropriate education, psychosocial support, and community resources effectively enhance patients' engagement, self-efficacy, and quality of life (Berhe et al., 2023).

Implications for Nursing Practice, Education, and Research

Clinical practice implications in nursing care for patients with renal failure underscore the critical need for routine assessment of quality of life (QoL) and symptom burden as fundamental components, or "vital signs," in renal nursing care. Comprehensive and consistent evaluation of QoL allows nurses to screen and identify the multifaceted impact of chronic kidney disease (CKD) on patients' physical, psychological, and social well-being, which in turn guides individualized care plans. Integrated approaches that are personalized, ongoing, and multidisciplinary must be embedded into regular dialysis and CKD management to address the complexity of patient needs, improve symptom management, and enhance overall

quality of life. Such nursing-led interventions encompass education, cognitive behavioral therapy, exercise programs, and multidisciplinary coordination, all aimed at optimizing patient outcomes beyond traditional clinical parameters, reflecting a holistic and patient-centered model of care (Amoah et al., 2025).

In the realm of nursing education and policy, it is increasingly recognized that curricula and continuing professional development should incorporate renal-specific content focused on quality of life, communication skills tailored for renal patients, and support for patient self-management. Preparing nurses with the knowledge and skills to address the unique challenges faced by renal patients is essential for effective care delivery. Additionally, there are strong calls for clinical guidelines and healthcare policies to explicitly recognize QoL as a primary outcome of renal care, ensuring that it is positioned alongside traditional clinical goals such as mortality and morbidity. Aligning educational programs, clinical practice standards, and policy frameworks around this paradigm will facilitate comprehensive care delivery that prioritizes patient-centered outcomes and equips nurses to advocate for holistic renal care (Bakarman et al., 2019).

Research gaps in renal nursing care for QoL emphasize the need for robust, high-quality clinical trials evaluating the effectiveness of nursing-led interventions on patient-reported quality of life outcomes. Existing evidence calls for exploration of structured education programs, exercise regimens, tele-nursing, and other innovative nursing approaches that empower patients and improve QoL. Moreover, research should particularly focus on understudied populations such as older adults, patients in low-resource settings, those undergoing home dialysis, or receiving conservative management, as these groups have distinct care needs that are often overlooked. Investigating implementation strategies that translate evidence-based interventions into routine practice is also crucial to maximize impact. Filling these gaps will inform evidence-based standards and guide the evolution of nursing practice in a way that truly enhances the lived experience of patients with renal failure (McKie et al., 2023).

CONCLUSION

Nursing care is central to improving quality of life for patients with renal failure, whose needs span physical, psychological, social, and spiritual domains. Through comprehensive assessment, targeted symptom management, patient education, psychosocial support, and coordination of multidisciplinary services, nurses play a vital role in minimizing symptom burden and enhancing daily functioning. Quality-of-life–oriented approaches including individualized education, self-management support, and continuous therapeutic relationships empower patients to better understand and manage their condition. However, achieving holistic care requires sufficient staffing, specialized nephrology training, and organizational structures that prioritize patient-centered outcomes. Strengthening these supports will enable nurses to deliver more effective, equitable, and compassionate care. Continued research is needed to evaluate nursing-led interventions across diverse settings and populations to further optimize outcomes for individuals living with renal failure.

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