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Support Systems in Renal Care: A Qualitative Assessment of Patient Perceptions and Their Role in Managing Kidney Failure

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Abstract

Background

Managing kidney failure in Ghana is complicated by high comorbidity rates, restricted treatment access, and catastrophic out-of-pocket expenses.

Objective

This study qualitatively assessed patient perceptions of available formal, informal, and institutional support systems and their influence on condition management and treatment adherence.

Methods

Using an interpretive phenomenological design, 15 adults undergoing hemodialysis at a private center in Kumasi and a public hospital in Sunyani were purposively sampled. Semi-structured interviews conducted in Twi were transcribed verbatim and analysed via manual reflexive thematic analysis underpinned by Social Support Theory.

Findings:

Three major themes emerged: Awareness of Support Systems, Healthcare Treatment and Support, and Family and Social Support. Participants reported a severe informational deficit driving late clinical presentation. Frontline clinicians provided vital emotional and appraisal support, but a breakdown in formal instrumental support due to prohibitive dialysis costs forced an unsustainable reliance on multi-generational family networks. This domestic burden induced severe caregiver fatigue, occasionally causing relational fragmentation or abandonment. Conversely, workplace and religious networks functioned as critical secondary stress buffers.

Conclusion

Managing kidney failure requires transitioning from fragmented, family-dependent models to integrated institutional frameworks. The National Health Insurance Authority should expand coverage to fully subsidise ancillary medications, decentralise regional renal units, and integrate clinical psychosocial support to safeguard vulnerable patients.

1. Introduction

Kidney failure, the terminal stage of chronic kidney disease (CKD), represents a profound systemic crisis wherein the kidneys lose their physiological capacity to filter metabolic waste products, maintain electrolyte equilibrium, and eliminate excess fluids from the intravascular space (Stevens et al., 2024; Vaqar & Upadhyay, 2023). Individuals experiencing renal failure often present with debilitating clinical manifestations, including chronic fatigue, severe peripheral edema, nausea, and systemic toxicity resulting from the accumulation of uremic waste (Wulczyn et al., 2024). The etiology of this condition is typically rooted in chronic, progressive non-communicable diseases such as diabetes mellitus and hypertension, which silently degrade renal architecture over time (Burnier & Damianaki, 2023; Gupta et al., 2023; Hoogeveen, 2022). When renal function declines below a critical threshold, life-sustaining renal replacement therapies (RRT), predominantly hemodialysis, peritoneal dialysis, or kidney transplantation, become mandatory to sustain life (Majorowicz et al., 2024; Sevarakhon et al., 2024).

In the context of sub-Saharan Africa, and specifically Ghana, the clinical burden of kidney failure is severely compounded by structural, economic, and systemic vulnerabilities. Epidemiological data indicate that low public awareness accounts for approximately 70% of kidney failure cases, a sustained trend that has directly contributed to a staggering 50% in-hospital mortality rate among renal patients over the past decade (Kpene et al., 2024; Tannor et al., 2018; Tannor & Calice-Silva, 2022). Beyond deficient awareness, the Ghanaian renal care landscape is characterised by severe resource constraints. Over 90% of individuals diagnosed with kidney failure face severely restricted dialysis access (Tannor et al., 2023). This is reflected in a national dialysis prevalence rate

of just 38.8 patients per million population, a figure that falls drastically short of the African average of 79 per million and the global benchmark of 296 per million (Tannor et al., 2023).

The financial barriers to managing this condition are equally prohibitive. A single hemodialysis session in Ghana costs an average of $53.90. When juxtaposed against the national monthly minimum wage of approximately $55.70, the economic impossibility of sustaining standard thrice-weekly treatment becomes glaringly evident. While recent policy discussions surrounding the incorporation of free dialysis into the National Health Insurance Scheme (NHIS) benefit package offer a prospective pathway for financial relief, the current reality remains one of catastrophic out-of-pocket health expenditure for the majority of families (NHIA Report, 2024). Furthermore, this economic strain is worsened by a critical shortage of specialised human resources; Ghana possesses only 0.44 nephrologists per million population, far below the low- and middle-income country (LMIC) average of 1.6 per million. Consequently, 57.5% of active dialysis centers operate without a resident or visiting nephrologist, exposing the clinical management of these patients to severe vulnerability. In rural geographies, such as northern Ghana, these systemic deficits are compounded by geographic distance to dialysis centers and a high reliance on over-the-counter self-medication, both of which drive late-stage presentations and delayed clinical diagnoses (Boateng et al., 2024a).

The requirement for continuous hemodialysis forces individuals to make radical, non-negotiable lifestyle modifications. These profound disruptions frequently trigger severe psychological distress and clinical depressive symptoms (Amoako & Owusu-Ansah, 2021). The psychosocial toll of renal replacement therapy is well-documented; patients undergoing intensive hemodialysis experience significantly higher rates of anxiety and somatisation compared to pre-dialysis CKD patients. These negative psychological states create a vicious cycle, directly undermining treatment compliance, lowering clinical outcomes, and severely eroding the patient's overall quality of life (Bioma et al., 2019).

Eminently, social support has emerged as a critical buffer against these adverse outcomes. Evidence demonstrates a significant inverse relationship between perceived social support and levels of anxiety and depression among hemodialysis patients in regional hubs like Kumasi (Amoako & Owusu-Ansah, 2021). A comprehensive, multidimensional approach to supportive care integrating family caregivers, structural health policies, community awareness campaigns, targeted screening programs, and robust institutional support is vital to optimising treatment adherence and patient survival (Boateng et al., 2024a; Boateng et al., 2024b; Tannor & Calice-Silva, 2022; Witts et al., 2024).

While the quantitative relationships between social support, anxiety, and adherence are increasingly recognised, there remains a critical gap in the literature regarding the nuanced, qualitative reality of the patients themselves. Existing medical metrics and macroeconomic indicators fail to capture how a patient subjectively interprets the quality, accessibility, and deficits of the networks available to them. To bridge this gap, this study shifts the focus from purely clinical markers to the lived experiences of the patients. Using a qualitative approach, this research explores how individuals with kidney failure perceive the formal, informal, peer, and institutional support systems available to them, and uncovers the precise mechanisms through which these perceived networks influence, constrain, or facilitate their daily management of this life-altering condition.

2. Literature Review

2.1 Kidney Failure and Patient Self-Management

Kidney failure presents a complex burden demanding rigorous, lifelong self-management. Where renal replacement therapies are unavailable, frameworks like Conservative Kidney Management (CKM) and Kidney Supportive Care (KSC) serve as essential modalities, prioritising symptom control to preserve dignity (Davison et al., 2023, 2024). Genetic screening also offers vital pathways for early detection in chronic kidney disease (CKD) (Köttgen et al., 2022). Pervasive health literacy deficits severely undermine self-management, causing suboptimal medication adherence and poor dietary compliance (Fatima et al., 2022; Shah et al., 2021). Although structured education enhances compliance (Aggarwal et al., 2018; Chauke et al., 2022), it remains insufficient in low- and middle-income countries (LMICs) due to financial barriers that force individuals to discontinue treatments (Boateng et al., 2024a; Iddrisu & Boateng, 2024). These deficits are highly pronounced in Ghana, where care is constantly threatened by catastrophic out-of-pocket costs and acute nephrologist shortages (Tannor et al., 2023). Consequently, decision-making in end-stage kidney disease (ESKD) induces intense emotional distress due to a lack of preparedness among Ghanaian patients (Adenwalla et al., 2024; Boateng et al., 2018; Buur et al., 2022). Screening and awareness programs are gradually improving early detection (Tannor & Calice-Silva,

2022; Vassalotti et al., 2025). Persistent regional disparities highlight an urgent need to qualitatively evaluate the specific support systems patients rely on to navigate kidney failure.

2.2 Public Awareness and Community-Based Health Literacy

Awareness campaigns and structured community engagement serve as fundamental mechanisms for shifting public perceptions and mitigating the global burden of chronic kidney disease (CKD). Targeted educational strategies, particularly through mobile health interventions, have demonstrated significant efficacy in improving clinical knowledge, lifestyle choices, and positive behavioural modifications among at-risk cohorts (Sarker et al., 2022). The dissemination of targeted preventative health messages using digital and mobile platforms has proven highly effective in driving community-wide prevention campaigns (Matias & Sousa, 2017). In resource-constrained settings, advocating for inclusive, community-based screening programs is essential for promoting early detection and reducing late-stage presentations (Tannor & Calice-Silva, 2022). Public information initiatives channelled through mass media and direct healthcare providers heavily influence public perceptions and health-seeking behaviours (Okpongkpong et al., 2025); however, maximising their efficacy requires the development of culturally relevant, localised interventions (Afzal et al., 2024). Furthermore, integrating kidney health frameworks into global health agendas is vital to addressing systemic inequities in access to care, directly linking localised awareness disparities to broader social determinants of health and targeted risk education (Anafi, 2023; Francis et al., 2024; Iroegbu et al., 2022; Li et al., 2020). Within the African context, structural initiatives such as the ISN Global Kidney Atlas project and localised public health drives are actively enhancing community-level engagement (Ogieuhi et al., 2024; Tannor et al., 2024). Collectively, these public literacy efforts expand early intervention opportunities and foster proactive, timely treatment-seeking behaviours among vulnerable populations.

2.3 Family and Caregiver Support Systems

Active family involvement serves as a primary pillar for enhancing self-efficacy, treatment adherence, and emotional resilience among individuals undergoing long-term hemodialysis (Isnaini et al., 2021; Wijayanti et al., 2023). Solid support structures comprising spouses, children, and extended family networks remain critical in helping patients navigate the severe physical limitations and psychological stressors induced by advanced renal disease. Beyond providing emotional reassurance, families assume operational caregiving roles essential for managing complex medication schedules and coordinating rigorous hemodialysis appointments (Ania-González et al., 2022). However, this structural dependency creates a reciprocal relationship, frequently imposing severe physical and emotional tolls on caregivers navigating end-stage kidney disease (ESKD) environments in developing nations like Ghana (Boateng et al., 2024a). Empirically, family support stands inversely correlated with psychological distress; lower levels of family cohesion are linked to increased depressive symptoms and compromised clinical outcomes (Wulandari et al., 2022). Empowering both patients and their corresponding care partners is therefore crucial, given that a patient's overall well-being remains fundamentally intertwined with the functional strength of their domestic network (Kalantar-Zadeh et al., 2021). For instance, in regions such as Northern Ghana, patients with robust family ties report higher hopefulness, emotional stability, and baseline treatment motivation (Boateng et al., 2024a). Ultimately, while informal family networks are invaluable, they run the risk of inducing severe caregiver burnout if they are not systematically balanced by external social or institutional support systems during times of prolonged financial and emotional strain (Bahall et al., 2023).

2.4 Social and Community Support System

Extending past the domestic sphere, broader community and institutional networks provide indispensable social buffers for individuals navigating kidney failure. Community-based support structures significantly reinforce coping mechanisms, encourage clinical adherence, and improve health literacy across diverse patient populations (Boonstra et al., 2021; Rhee et al., 2022). In the Ghanaian clinical landscape, targeted psychosocial interventions and nurse-led counselling sessions have proven effective in boosting treatment motivation and reducing the heavy societal stigma associated with hemodialysis (Akpakli Addo & Senoo-Dogbey, 2025; Amoako & Owusu-Ansah, 2021). Concurrently, peer-led support systems and organised patient groups foster shared problem-solving and emotional resilience; structured peer mentorship and group therapy formats significantly elevate quality of life indicators while mitigating chronic anxiety (Longley et al., 2023). Perceived social support remains a primary determinant of long-term treatment compliance among individuals managing chronic pathologies, including renal failure (Witts et al., 2024). Despite these benefits, structural disparities in social support access, particularly within rural or low-resource geographies, frequently restrict the practical utility of these networks. Critical demographic variables, including socioeconomic status, geographic location, and baseline health literacy, unevenly dictate the degree to which a patient can successfully access and benefit from institutional support

infrastructures (Rasyid et al., 2022; Wesselman et al., 2021). These systemic variations emphasise the critical need for context-sensitive, culturally tailored interventions that explicitly address the broader social determinants of health impacting renal care.

2.5 Governmental and Non-Governmental Organisation Support Systems

The capacity of macro-level institutions to mitigate the burdens of renal failure remains highly variable, characterised by deep systemic disparities in health financing (Bello et al., 2019; Yeung et al., 2021). Across Africa, severe economic deprivation prevents many patients from affording hemodialysis, leading directly to fatal outcomes (Ekuma, 2018; Okafor et al., 2012). While initiatives like the National Health Insurance Authority (NHIA) free hemodialysis program in Ghana aim to lessen financial strain, physical availability does not automatically guarantee accessibility due to persistent geographical and transport barriers (Iddrisu & Boateng, 2024; NHIA, 2024). Non-governmental actors fill critical gaps by proposing regional roadmaps and public health drives to encourage early screening (Okpechi et al., 2022; Tannor & Calice-Silva, 2022). Furthermore, although Ghanaian patients show a willingness to undergo kidney transplants, a lack of institutional backing leaves them facing catastrophic out-of-pocket costs (Bioma et al., 2020), necessitating localised care models suited for developing nations (Nkunu et al., 2022). Addressing these deficits requires aggressive policy reforms that prioritise early diagnostic screening and lifestyle interventions (Joshi et al., 2017; Neuen et al., 2023). Cost-effective care models balancing quality and affordability must integrate palliative care into renal frameworks (Diamond et al., 2021; Vanholder et al., 2017). Strengthening kidney care systems ultimately demands diagnostic infrastructure, workforce development, service decentralisation, and direct financial subsidies to dismantle barriers limiting hemodialysis access in underserved regions like Northern Ghana (Iddrisu & Boateng, 2024; Jha et al., 2016; Okpechi et al., 2021; Tannor et al., 2022).

2.6 Psychosocial and Nutrition Support System

Nutritional support is a cornerstone of kidney disease management, acting as a key determinant of overall clinical outcomes (Chan, 2021). Personalised nutrition plans are essential for managing fluid restrictions, electrolyte balance, and metabolic acidosis based on baseline renal function (Bargetzi et al., 2021; Kistler et al., 2021; Noce et al., 2021). Involving family members via health education improves dietary compliance (Mahyuvi & Hasina, 2023), while nutrition therapies during rehabilitation combat muscle wasting (Hoshino, 2021). In Ghana, collaborating with dietitians is essential to standardise nutrition practices and reduce malnutrition in intensive care units (Anku et al., 2024). Concurrently, end-stage kidney disease (ESKD) induces high rates of depression, anxiety, and social isolation, necessitating targeted psychosocial interventions (Khodarahimi et al., 2021; Yang et al., 2024). Professional social workers help patients navigate emotional distress and gruelling treatments (Hansen et al., 2022, 2023). Behavioural interventions and digital eHealth platforms have proven effective in managing fatigue, building emotional resilience, and strengthening patient self-management (Cardol et al., 2023; Marin et al., 2023; Picariello et al., 2017; Powathil & Kr, 2021). Furthermore, while personal religiosity promotes psychological well-being among Ghanaian hemodialysis patients (Asaah, 2020), internal emotional shifts fluctuate heavily based on active treatment status and financial strain (Bioma et al., 2019, 2020). These multi-dimensional challenges highlight the urgent need for comprehensive psychosocial frameworks to support treatment adherence and holistic patient well-being (Abbas & Ali, 2023).

2.7 Theoretical Framework: Social Support Theory

This study is anchored in Social Support Theory, advanced by House et al. (1988) alongside Cobb (1976) and Lakey and Cohen (2000). The framework posits that resource exchanges occur across four functional dimensions: emotional, informational, instrumental, and appraisal support. Within end-stage kidney disease (ESKD) realities, this theory offers a rigorous lens to evaluate how qualitative dynamics between patients and their interpersonal networks family caregivers, clinical teams, peers, and institutions dictate psychological resilience, treatment adherence, and quality of life. The structural size, proximity, and reciprocity of these networks act as primary mediating variables for long-term health outcomes (House, 1987). Relying intensely on family and religious communities shapes positive health behaviours and enhances self-efficacy (Isnaini et al., 2021; Puji & Indriani, 2025). Furthermore, according to the stress-buffering hypothesis, robust support acts as a psychological shield that dampens chronic stressors, prevents burnout, and facilitates successful illness self-management (Chen et al., 2018; Cohen & McKay, 2020; Vahedparast et al., 2018). Whether accessed face-to-face or via digital platforms (Sendra et al., 2020; Zhao et al., 2022), this paradigm provides a lens to examine how the presence or absence of support resources shapes the lived experiences of kidney failure patients in Ghana.

3. Methods

3.1 Design

This qualitative study employed an interpretive phenomenological approach to explore depth over breadth regarding the lived experiences and support systems of individuals diagnosed with kidney failure (Creswell & Creswell, 2023; Terrell, 2022; Yadav, 2023). Phenomenological designs are uniquely suited for health-related qualitative inquiries that aim to capture detailed, subjective insights into specific clinical conditions and the operational realities of chronic illness management (Robinson, 2024; Thomas, 2022). The study was contextually situated within two contrasting healthcare environments in Ghana to capture both private and public healthcare dynamics: the Kidney Specialist Center (KSC) in Asokwa, Kumasi, and the Sunyani Teaching Hospital (STH) in the Bono Region. Selected for their comprehensive renal services, these sites capture distinct socioeconomic realities. KSC is a specialised private facility offering multidisciplinary care with out-of-pocket costs ranging between GHC 620 and GHC 700 per session. Conversely, STH is a public tertiary hospital serving Ghana's middle and northern sectors, providing subsidised dialysis at GHC 550 per session. Both settings require substantial out-of-pocket payments, highlighting the diverse financial strains patients navigate.

3.2 Sampling

Purposive sampling was used to select information-rich cases from the active patient pools of both selected health facilities (Ahmad & Wilkins, 2024; Nyimbili & Nyimbili, 2024). This non-probability technique is highly suitable for capturing detailed insights into specific clinical conditions within health-related qualitative inquiries (Robinson, 2024; Thomas, 2022). The target population comprised adults clinically diagnosed with kidney failure who were actively undergoing hemodialysis. At the time of data collection, the active patient pool included 132 individuals at KSC (private) and 3 individuals at STH (public). Selecting a well-defined, contrasting population from both private and public healthcare environments provided a diverse range of lived experiences and support structures, enhancing the contextual applicability of the findings (Creswell & Creswell, 2023; Lewis et al., 2023; Rahman, 2023; Zickar & Keith, 2023).

To participate, individuals had to be at least 18 years old, clinically diagnosed with kidney failure, actively receiving hemodialysis at KSC or STH, and capable of providing independent, informed consent. Patients were excluded if they were unable to communicate effectively due to severe illness. The final sample size consisted of fifteen participants drawn across both facilities. This sample size was determined by the principle of data saturation, where recruitment and interviewing ceased once no new themes, patterns, or insights emerged from the data (Hennink & Kaiser, 2022; Rahimi, 2024). Saturation serves as the definitive criterion for sample adequacy in in-depth qualitative research (Ahmed, 2025; Daher, 2023). Recruitment was carefully paced to respect the clinical vulnerability of the patients (Islam & Aldaihani, 2022), resulting in a 100% response rate from all eligible individuals approached.

3.3 Data Collection

Data collection spanned a three-week period from April 4, 2025, to April 25, 2025. Following the submission of official introductory letters to secure institutional access, face-to-face interviews were conducted at the Kidney Specialist Centre from April 4 to April 21, and at the Sunyani Teaching Hospital from April 22 to April 25. Semi-structured, face-to-face interviews served as the primary data collection tool, utilising a flexible guide of open-ended questions to elicit rich narrative data regarding emotional responses to diagnosis, treatment perceptions, and personal challenges (Belina, 2023; Price & Smith, 2021). This approach allowed the researcher to probe deeper based on participant responses and explore sensitive, complex aspects of their experiences (Adeoye-Olatunde & Olenik, 2021; Ruslin et al., 2022). The interviews were conducted in person using the Twi language (translated to English) to accommodate participant preference and ensure cultural comfort. With the participants' prior permission, each session was audio-recorded to ensure structural accuracy and completeness during transcription. Data collection was executed using a semi-structured interview tool designed specifically for this investigation by the authors to capture the distinct experiences and medication compliance perceptions of the participant cohort. As a novel instrument developed for the unique contextual demands of this inquiry, it has not appeared in any prior publications (see Supplementary File 1).

3.4 Data Analysis

The data analysis process adopted reflexive thematic analysis to systematically identify, analyse, and report patterns grounded within the participants' narratives (Braun & Clarke, 2006, 2019, 2021). The analysis followed five iterative stages: (1) familiarization and preparation, involving the verbatim transcription of audio recordings and repeated reading of transcripts, field notes, and institutional documents to achieve deep immersion and record preliminary reflections (Christou, 2023; Goldsmith, 2021); (2) generating initial codes using open coding to label meaningful text segments addressing diagnosis, emotional experiences, treatment routines, and systemic support (Allsop et al., 2022); (3) searching and clustering related codes into hierarchies to isolate emerging explicit and implicit patterns; (4) interpretation of findings, which synthesized the generated themes within the context of existing literature, the

socio-cultural realities of kidney care in Ghana, and the conceptual framework; and (5) narrative presentation integrated with verbatim quotations to maintain authenticity and support interpretation validity.

To maintain close textual engagement with the raw narratives, manual coding was conducted using Microsoft Word without qualitative software. The data were processed through a rigorous three-stage framework consisting of open coding to identify discrete conceptual labels, axial coding to explore conceptual relationships and group labels into interconnected thematic categories (Al-Eisawi, 2022; Riazi et al., 2023), and selective coding to refine and integrate core categories into the final overarching themes.

To establish the authenticity, reliability, and academic rigour of these findings, the study adhered to the four-dimensional trustworthiness framework established by Lincoln and Guba (1985). Credibility was enhanced through member checking by sharing thematic summaries with participants for validation and peer debriefing, where experienced colleagues and supervisors critically reviewed the manual coding systems and thematic development (Shenton, 2004). Transferability was advanced by providing thick, rich descriptions of the two healthcare settings, participant demographics, and the broader socio-cultural contexts of Ghana, allowing readers to determine applicability to similar low-resource environments (Flanagan & Beck, 2024; Polit & Beck, 2010). Dependability was secured by maintaining a transparent audit trail that chronologically recorded every methodological step taken, tracking participant recruitment, data collection protocols, transcription, manual coding frameworks, and final interpretive decisions (Nowell & Albrecht, 2019). Confirmability was strengthened through continuous reflexive journaling to document analytical decisions and potential biases (Shufutinsky, 2020).

Furthermore, the research team practised continuous reflexivity and critical self-awareness to manage how personal backgrounds, values, and assumptions might shape the inquiry (Finlay, 2024). In line with the descriptive phenomenological approach, the primary researcher employed bracketing to consciously set aside preconceptions about kidney failure and hemodialysis during data collection and analysis, ensuring that the participants' voices remained central to the study (Giorgi, 2020; Moustakas, 1994). This conscious bracketing process allowed the researcher to systematically isolate personal assumptions throughout the analytical cycle, ensuring the findings remain strictly grounded in the participants' actual experiences (Ash, 2025; Dörfler & Stierand, 2021).

3.5 Ethical Consideration

Ethical approval

was granted by the Committee on Human Research, Publication and Ethics (CHRPE) at the Kwame Nkrumah University of Science and Technology (Reference Number: CHRPE/AP/546/25), alongside formal administrative permission from both health facilities. Participation was entirely voluntary. Signed or verbal informed consent was obtained after explaining the study's objectives, risks, and benefits in both Twi and English. To safeguard participant identities, strict anonymity and confidentiality protocols were maintained through the use of pseudonyms across all transcripts and research reports. Participants were explicitly informed of their right to withdraw from the study at any point without penalty or consequence to their routine clinical care. All data were handled with the highest standards of security to maintain strict compliance with institutional ethical protocols. Electronic copies of interview transcripts and notes were stored on password-protected devices accessible only to the research team. Hard copies of signed consent forms and field notes were secured in a locked cabinet within a secure office environment. Audio recordings were encrypted during storage and will be permanently deleted once transcripts are fully verified for accuracy. These measures were in accordance with the World Medical Association (2025) Declaration of Helsinki statement of ethical principles for medical research involving human participants to minimise any risk of unauthorised access, loss, or misuse, thereby protecting the confidentiality and integrity of participant information.

4. Results

4.1 Participants' Demographic Characteristics

The study sample comprised fifteen participants clinically diagnosed with kidney failure who were actively undergoing renal replacement therapy across the two selected healthcare facilities. Table 1 presents the various demographic profiles in terms of gender, age, comorbidities, period of receiving care from the Renal Clinic, employment status and dialysis session/week.

Table 1
Participants Profile

Code	Gender	Age	Comorbidities	Period of Receiving Care from the Renal Clinic	Employment Status	Dialysis Session/Week
1	Male	62	hypertension	1 year	Unemployed	Twice
2	Male	68	hypertension	2 years	Unemployed	Twice
3	Male	58	hypertension	6 months	Employed	Twice
4	Male	53	diabetes	4 months	Employed	Twice
5	Female	71	hypertension	3 years	Unemployed	Twice
6	Male	53	hypertension	1 year	Employed	Twice
7	Male	51	hypertension	1 year	Employed	Twice
8	Female	50	diabetes	3 years	Unemployed	Twice
9	Male	50	hypertension /diabetes	1 year	Employed	Twice
10	Male	54	hypertension	2 years	Employed	Twice
11	Female	46	hypertension	6 months	Unemployed	Twice
12	Female	50	hypertension	1 years	Unemployed	Twice
13	Male	41	hypertension	1 month	Employed	Twice
14	Female	68	hypertension	2 years	Unemployed	Twice
15	Male	51	Unknown	1 month	Unemployed	Once

Source: Field Data, 2025

From Table 1, the gender distribution of the participants was predominantly male, consisting of ten men and five women. The ages of the participants spanned from 41 to 71 years, indicating a mature adult population managing the severe physical and social disruptions of terminal renal illness during either their peak productive or retirement years.

Clinical profiles revealed that cardiovascular and metabolic conditions were highly prevalent within the sample, closely mirroring the established etiologies of end-stage kidney disease (Afrifa et al., 2026; Tannor et al., 2019). Hypertension was identified as the most pervasive comorbidity affecting eleven participants exclusively, a clinical factor known to significantly accelerate renal disease progression (Neuen et al., 2019; Pitt et al., 2021). Two individuals presented with diabetes mellitus alone, while one participant experienced a dual clinical burden of both hypertension and diabetes. The primary comorbidity for one participant remained clinically unconfirmed. Additionally, the time elapsed since initial diagnosis varied widely among the participants, capturing a broad spectrum of the illness experience that ranged from recent clinical entry at one month to long-term chronic management stretching up to three years.

Socioeconomic indicators and treatment frequencies highlighted the profound financial and logistical strains confronting the participants. A majority of the sample, totalling eight individuals, were unemployed at the time of data collection, whereas seven participants maintained active employment. This high rate of unemployment underscores severe economic vulnerability when contrasted against their rigorous clinical demands, as fourteen of the fifteen participants required hemodialysis sessions twice per week to sustain life. Only one participant was maintaining a single weekly session. Collectively, these demographic parameters depict a highly vulnerable cohort facing demanding, long-term healthcare routines that require continuous out-of-pocket expenditure within the Ghanaian healthcare landscape.

4.2 Thematic Analysis of the Findings

This section presents the qualitative findings derived from the reflexive thematic analysis of the participants' narratives. The findings in Table 2 are structured into three major themes and eight corresponding sub-themes, exploring the lived experiences, perceptions of support systems, and condition management practices of individuals living with kidney failure in Ghana.

Table 2
Support System and Influence on Condition Management

Dimension (Theme)	Finding (Sub-theme)	Nature of Support Provided	Examples of Quotes
Theme 1: Awareness of Support Systems	Subtheme 1.1: Limited Public Awareness	*Informational Support Deficit*: Deficiencies in community-level renal health literacy, screening accessibility, and symptom recognition pathways.	*"There's little awareness about kidney disease. Many don't even know the symptoms."* (P5)
	Subtheme 1.2: Absence of Government and Institutional Support	*Structural Instrumental Deficit*: The complete omission of state-subsidised pharmaceutical coverage and protective economic welfare safety nets.	*"If the government could help us with medicines, it would be a big relief."* (P3)
Theme 2: Healthcare Treatment and Support	Subtheme 2.1: Supportive Healthcare Professionals	*Formal Emotional and Appraisal Support*: Continuous psychological reinforcement, compassionate therapeutic rapport, and professional affirmation from frontline clinical staff.	*"The doctor and nurses have been very supportive; their care keeps me going."* (P14)
	Subtheme 2.2: Financial Strain and Institutional Gaps	*Formal Instrumental Support Breakdown*: Prohibitive out-of-pocket pricing schedules for active hemodialysis sessions without structural cost insulation.	*"If you can't pay for treatment, you'll eventually stop going, and that's how many die."* (P4)
Theme 3: Family and Social Support	Subtheme 3.1: Immediate Family Support	*Informal Instrumental and Emotional Support*: Multi-generational pooling of household funds, transportation coordination, physical caregiving, and baseline empathetic reassurance.	*"Without my children's help, I couldn't have survived this long."* (P5)
	Subtheme 3.2: Negative Family Experiences	*Informal Support Fragmentation*: Severe physical and economic caregiver fatigue resulting in domestic isolation, relational friction, or outright patient abandonment.	*"My family has deserted me. Nobody checks on me."* (P13)
	Subtheme 3.3: Community and Religious Support	*Communal Emotional and Spiritual Support*: Faith-based fellowship, routine prayer networks, moral encouragement, and occasional localised mutual-aid charity.	*"Sometimes my church members encourage me to stay strong."* (P12)
	Subtheme 3.4: Workplace Support	*Institutional Instrumental Support*: Formal organisational backing, retention of regular salary during medical leave, and corporate financial aid pledges.	*"My workplace continues to pay my salary and promised to support my transplant."* (P9)

Source: Field Data (2025)

The thematic matrix in Table 2 illustrates a complex web of interaction between the structural availability of support and the operational realities of managing kidney failure on a daily basis. Through the lens of Social Support Theory, the findings reveal that while formal and informal networks provide vital emotional and appraisal support, severe deficits in instrumental and informational support constantly threaten patient survival (Chen et al., 2018; House et al., 1988; Vahedparast et al., 2018).

The data show a clear conflict between the interpersonal care environment and macro-level safety nets. Frontline healthcare professionals provide strong formal emotional and appraisal support that builds psychological resilience in patients. However, this clinical motivation is frequently undermined by a complete breakdown in formal instrumental support, caused by prohibitive out-of-pocket pricing for hemodialysis sessions (Evans et al., 2022). This economic barrier forces a dramatic shift in responsibility onto the patient's immediate social network.

Consequently, the informal domestic sphere becomes the primary financial and physical lifeline. Immediate family members attempt to bridge this gap by pooling household funds and providing physical care. However, the matrix reveals that relying solely on informal networks without institutional backing is unsustainable. Over time, the relentless financial and physical strain can cause these informal networks to collapse, leading to caregiver fatigue, family friction, or outright patient abandonment (Boateng et al., 2025).

Finally, secondary networks like religious communities and workplaces function as vital secondary stress buffers. While workplaces provide crucial long-term financial security for individuals in the formal economic sector, faith-based organisations supply key spiritual and moral encouragement. Ultimately, the matrix demonstrates that managing kidney failure requires a balanced care

ecosystem. Emotional and spiritual support are vital for maintaining hope (Scherer et al., 2021), but they cannot replace the structured, sustainable financial safety nets needed to ensure treatment compliance and patient survival.

4. Discussion

The qualitative findings of this study provide a deep, contextualised understanding of the support systems available to individuals diagnosed with kidney failure in Ghana, explicitly evaluating how these networks shape condition management and treatment adherence through the lens of Social Support Theory.

4.1 Awareness of Support Systems

A profound informational support deficit undermines the management of kidney failure at the community level. Limited public knowledge regarding early warning signs directly drives delayed care-seeking behaviours and late-stage clinical presentations. In Ghana, this lack of renal health literacy accounts for approximately 70% of kidney failure cases, contributing significantly to a 50% in-hospital mortality rate for renal admissions over the past decade (Kpene et al., 2024; Tannor et al., 2018; Tannor & Calice-Silva, 2022). Social Support Theory posits that informational deficits block early preventative screenings and lifestyle changes (Joshi et al., 2017), a systemic vulnerability heavily exacerbated by an over-reliance on over-the-counter self-medication in underserved areas (Boateng et al., 2024a).

Concurrently, a severe structural instrumental deficit manifests at the national policy level, characterised by a lack of state-subsidised pharmaceutical coverage and protective safety nets. Over 90% of Ghanaian renal patients face restricted care due to prohibitive costs and resource constraints (Tannor et al., 2023). Although recent policy directives introduced free hemodialysis allocations under the National Health Insurance Authority (NHIA, 2024), physical availability does not guarantee functional accessibility due to steep transport and logistical barriers (Iddrisu & Boateng, 2024). The complete omission of state backing for advanced treatments like kidney transplantation leaves families facing catastrophic out-of-pocket expenses (Bioma et al., 2020), highlighting the urgent need for sustainable, decentralised care models that fit local economic realities (Iddrisu & Boateng, 2024; Nkunu et al., 2022).

4.2 Healthcare Treatment and Support

Formal emotional and appraisal support within clinical settings acts as a vital psychological anchor for individuals navigating terminal illness. Compassionate therapeutic rapport from doctors and nurses significantly enhances treatment motivation, reduces social stigma, and builds emotional resilience among Ghanaian hemodialysis cohorts (Akpakli Addo & Senoo-Dogbey, 2025; Amoako & Owusu-Ansah, 2021). According to Social Support Theory, positive clinical appraisal and empathetic communication build necessary resilience, helping patients cope with the intense anxiety and somatisation caused by gruelling treatment regimens (Bioma et al., 2019).

However, this supportive relationship is constantly undermined by a structural breakdown in formal instrumental support at the institutional level. A single dialysis session costs $53.90 against a national monthly minimum wage of $55.70 (NHIA Report, 2024). This severe economic mismatch forces low-income individuals to ration their care by splitting medication doses or skipping sessions, directly driving high treatment default rates and mortality (Boateng et al., 2024a; Iddrisu & Boateng, 2024). Consequently, while clinical teams provide strong emotional support, the lack of financial insulation leaves patients highly vulnerable to clinical default, reinforcing calls for decentralised services and broader insurance coverage (Tannor et al., 2022).

4.3 Family and Social Support

Informal instrumental and emotional support within the domestic sphere serves as the primary operational lifeline for renal patients. Multi-generational resource pooling, transport coordination, and daily caregiving by spouses, children, and siblings significantly improve self-efficacy and session compliance (Boateng et al., 2024b; Isnaini et al., 2021). Sociologically, patient well-being depends heavily on the functional strength of the domestic network (Kalantar-Zadeh et al., 2021), where family cohesion stands inversely correlated with severe depressive symptoms (Wulandari et al., 2022).

Conversely, chronic, long-term care strains these informal safety nets, inducing severe caregiver burnout that can lead to relational friction, neglect, or outright abandonment (Bahall et al., 2023). This domestic breakdown triggers deep isolation, highlighting the risks of relying solely on families without external institutional support (Amoako & Owusu-Ansah, 2021). Fortunately, external workplace and religious networks serve as critical stress buffers. Faith-based fellowship provides vital spiritual coping resources that soften

existential dread (Asaah, 2020), while formal workplace backing, such as salary retention, shields families from immediate financial ruin and improves treatment compliance (Boonstra et al., 2021; Longley et al., 2023; Witts et al., 2024).

5. Conclusion and Recommendations

5.1 Conclusion

This study provides qualitative insights into the lived experiences of individuals navigating kidney failure in Ghana, describing how available support networks influence condition management. Grounded in Social Support Theory, the findings show that while emotional, appraisal, and spiritual support systems are highly beneficial, severe informational and structural instrumental deficits continuously threaten patient survival. Macro-level health literacy vacuums cause delayed care-seeking, while a lack of subsidised pharmaceutical coverage and prohibitive out-of-pocket costs create an unsustainable economic environment. Consequently, the burden of survival falls heavily on informal family networks. This continuous reliance introduces high risks of caregiver burnout, family fragmentation, and patient abandonment. Although workplace and religious networks serve as valuable secondary stress buffers, they cannot substitute for formal safety nets. Ultimately, improving renal care in Ghana requires transitioning from fragmented, family-dependent survival models to an integrated institutional ecosystem that guarantees equitable financial protection and comprehensive care.

5.2 Recommendations

Based on the study findings, several targeted recommendations are proposed to enhance the supportive care infrastructure for kidney failure patients in Ghana. First, the Ministry of Health and the National Health Insurance Authority must expand benefit packages to fully subsidise ancillary medications, laboratory tracking, and transplantation frameworks while decentralising dialysis units to regional and district hospitals. Second, clinical centers should integrate medical social workers and dietitians into routine workflows to deliver standardised counselling, alongside establishing caregiver support groups to mitigate burnout and abandonment. Finally, public health directorates should launch multilingual, community-based awareness campaigns targeting early screening, symptom recognition, and the dangers of self-medication. Culturally anchoring these initiatives through partnerships with corporate bodies and religious institutions will mobilise crucial local resources, strengthen health literacy, and optimise patient care navigation across the country.

5.3 Limitations of the Study

Several limitations must be acknowledged when interpreting these qualitative findings. First, employing an interpretive phenomenological design means the insights are context-bound and not statistically generalizable across Ghana. The sample size was restricted to fifteen participants drawn from two specific centers, which may not capture the distinct realities of patients in remote rural areas. Second, the sample was heavily weighted toward the private specialised centers due to an exceptionally small active public patient pool at the teaching hospital during data collection. Additionally, the study relied strictly on self-reported, semi-structured interviews with active hemodialysis patients. This approach introduces potential recall or social desirability biases, as participants might withhold distressing accounts of domestic neglect due to cultural stigmas. Finally, because the inquiry focused exclusively on subjective patient experiences, it omitted the direct perspectives of clinicians, family caregivers, and policymakers, which are critical for a complete assessment of the renal care ecosystem.

Declarations

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Author Contributions

GKA and EAB conceptualised the study design. GKA and TK were responsible for field recruitment and data collection. GKA and TK led the qualitative data analysis and the initial drafting of the results, with significant intellectual contributions and critical revisions from EAB and AK-AD. All authors contributed to the drafting of the manuscript and have approved the final version for publication.

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Data Availability

The qualitative datasets generated and analysed during the current study are not publicly available due to participant privacy protocols, but are available from the corresponding author upon reasonable request.

Ethics Approval and Consent to Participate

Ethical approval was granted by the Committee on Human Research, Publication and Ethics (CHRPE) at the Kwame Nkrumah University of Science and Technology (Reference Number: CHRPE/AP/546/25), with formal administrative permission obtained from both participating health facilities. All participants provided voluntary informed consent prior to being interviewed.

Consent for Publication

Participants provided explicit consent for the use of their anonymised narrative data in academic publication, with the understanding that all personal identifiers would be strictly protected to preserve confidentiality.

Competing Interests

The authors declare that they have no competing financial or non-financial interests that could have influenced the implementation or reporting of this research.

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