ORIGINAL CONTRIBUTION

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Perspectives of Chronic Kidney Disease Patients on Readiness for Advance Care Planning at Komfo Anokye Teaching Hospital, Ghana

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This study examined the impact of advance care planning (ACP) on the quality of life for patients with chronic kidney disease (CKD) at Komfo Anokye Teaching Hospital in Ghana. It specifically investigated patients' perspectives on their readiness for ACP. Utilizing a qualitative descriptive design, one-on-one interviews were conducted with CKD patients at the renal clinic, employing a semi-structured interview guide for thematic analysis of audio data. The findings revealed a gap in understanding among CKD patients, with participants acknowledging their vulnerability to renal failure, often linked to a medical history of diabetes and hypertension. Despite recognizing potential outcomes such as dialysis dependency or death, some patients retained hope for a cure, relying on faith. The initial kidney failure diagnosis induced shock and distress, leading many patients to prefer the comfort and familiarity of home-based care, including dialysis. Meanwhile, a minority favored hospital care to protect their children from psychological trauma. Most patients deemed legal preparations unnecessary, citing limited assets or a lack of concern for posthumous estate execution. These insights emphasize the necessity for targeted education and support in ACP to enhance patient outcomes in chronic kidney disease care and end-of-life planning.

INTRODUCTION

Chronic kidney disease (CKD) poses a formidable global public health challenge, affecting about 10% of the world's population [1]. Sub-Saharan Africa, particularly Ghana, grapples with a pronounced CKD prevalence, reaching 13.9% and 13.3%, respectively [2-4]. This condition stands as a significant contributor to medical admissions, elevating morbidity, and mortality rates in

Ghanaian healthcare settings [1,5,6].

Patients diagnosed with CKD undergo a progressive decline in health, despite interventions like medications and dialysis. This persistent deterioration emphasizes the need for comprehensive palliative care, addressing not only the physical symptoms but also the psychosocial and spiritual aspects of patients and their families [7]. Central to palliative care for CKD is advance care planning (ACP), a process facilitating patients in articu-

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Abbreviations: ACP, advance care planning; CKD, chronic kidney disease; KATH, Komfo Anokye Teaching Hospital.

Keywords: Palliative care, Advance care planning, Chronic kidney disease, Patient-centered care

lating their preferences for future medical treatments in incapacitating scenarios [8]. This involves discussions on the disease, prognosis, decision-making plans, end-of-life preferences, healthcare proxies, and living wills, aiming for a compassionate end-of-life experience aligned with patient and family preferences [9].

ACP stands as a crucial component in improving the quality of life for CKD patients. This proactive approach not only empowers patients but also actively involves them in critical care decision-making processes, thereby fostering a sense of autonomy and control over their medical journey [8]. For CKD patients, managing the complexities of their condition can be particularly challenging, making the role of ACP even more pivotal. By providing a platform for open communication, discussing treatment preferences, and addressing end-of-life concerns, ACP becomes an integral part of the comprehensive care paradigm for CKD patients [9].

Healthcare professionals play a pivotal role in initiating discussions about CKD, its prognosis, and making informed decisions about future care. Early conversations are crucial, especially given the challenging decisions CKD patients face, such as treatments like dialysis [10,11]. Early discussions about ACP increase the likelihood of honoring patients' and families' wishes, enhancing end-of-life care [12,13]. In low-income countries like Ghana, where CKD patients often suffer from advanced stages, understanding financial burdens, psychosocial challenges, and care plans is essential [4]. Thus, ACP is integral to providing holistic care [14]. Palliative care, embedded in healthcare professionals' basic training, is well-suited to assist CKD patients and their families with ACP [15]. Studies show that comprehensive ACP can alleviate anxiety and depression, facilitate decision-making, address psychosocial issues early, and significantly enhance the quality of life for patients and their families [16,17].

Despite the urgency of these issues, studies among CKD patients at Komfo Anokye Teaching Hospital (KATH) have indicated a lack of insight into their condition and poor preparedness for dealing with the challenges it presents [4,5,18]. In this context, this research seeks to address fundamental questions concerning CKD patients' preparedness and their attitudes toward ACP. Conducted from the perspective of CKD patients receiving care at the renal clinic of KATH, the study aims to assess the attitude and preparedness of CKD patients for ACP. Specific objectives include evaluating the knowledge of CKD patients about their diagnosis and prognosis, exploring their preparedness for ACP, and describing their attitudes toward it. This research is vital for tailoring and enhancing ACP initiatives for CKD patients in Ghana, ultimately contributing to a more compassionate and patient-centered approach to end-of-life care.

METHODS

Design

This study utilized a qualitative descriptive design to investigate the attitudes and preparedness of patients with CKD regarding ACP. The qualitative approach is well-suited for exploring the experiences and attitudes of a specific group of respondents, addressing questions related to *what*, *why*, and *how* concerning a particular phenomenon [19]. The choice of this research method was guided by the nature of the research objectives, allowing for an in-depth exploration of patients' attitudes toward ACP among those with CKD.

Sampling

The target population of this study comprised patients with CKD who were receiving care at the KATH's renal clinic. The renal clinic provided outpatient services on Wednesdays and Thursdays, with the clinic records from 2020 estimating that around 480 patients were seen each year. Typically, there were 10 to 30 patients attending the clinic on any given day.

To be eligible for inclusion in the study, patients had to meet the following criteria: (1) Have a diagnosis of advanced CKD and be receiving care at the renal clinic for a minimum of 1 month; (2) May or may not be on hemodialysis; (3) Be 18 years of age or older. Exclusion criteria eliminated patients with: (1) Altered mental status; and (2) inability to communicate in English or local language (Twi).

The study utilized the purposive sampling technique to select participants, a non-probability method commonly employed in qualitative research. This approach involved the deliberate selection of individuals by the researcher, targeting those who can provide pertinent information related to the research topic. In the current investigation, participants were specifically chosen based on predefined criteria, ensuring their ability to offer valuable insights into the subject of interest. The interview pool consisted of 12 participants, contributing to a detailed exploration of the research objectives.

Data Collection

Data for the study were collected through interviews conducted by the lead author with the participants. A semi-structured interview guide was designed in line with the study's objectives and informed by an extensive review of relevant literature. The guide included open-ended questions with probing queries to elicit detailed responses. Before data collection, the interview guide underwent rigorous review by the research team to ensure its appropriateness and comprehensiveness. To validate and refine the instrument, a pre-test was conducted with two participants. This exercise aimed to assess question clarity and enhance the researcher's interviewing skills. Adjustments were made based on pre-test results, finalizing the interview guide.

Participants were informed that their involvement was voluntary, and they could withdraw from the study at any point without repercussions. Emphasis was placed on the confidentiality of their information, and informed consent was documented through signed or thumb printed consent forms. Participants received a copy of these forms for their reference. A suitable interview environment was arranged, with essential amenities like water and tissues readily available to address potential emotional challenges. Participants were also educated about COVID-19 prevention measures following protocols from health authorities.

Interviews were conducted face-to-face, lasting an average of 15 to 30 minutes, with some extending up to 1 hour. These discussions took place in both English and Twi (native) languages to ensure effective communication. Participants consented to audio recording of the interviews, and detailed field notes were taken to capture non-verbal cues and personal reflections. The data collection process strictly adhered to ethical standards to ensure participants' comfort and cooperation throughout the interviews.

Ethical Consideration

Ethical approval for the study (Reference: KATHIRB/ AO/062/21) was obtained from the Institutional Review Board of KATH. The research proposal also received approval from the Academic Board and Research & Ethics Committee of Ghana College of Nurses and Midwives. Additionally, the study was officially registered at the Research and Development Unit of KATH. The head of the Renal Clinic was informed about the study to seek their support and cooperation in recruiting participants.

Data Analysis

The data gathered from the semi-structured questionnaires underwent manual coding, where identification numbers were assigned to each participant. Additionally, responses were thoroughly reviewed and transcribed verbatim to ensure data accuracy. Subsequently, the data were analyzed to identify emerging themes and subthemes using an inductive approach. This involved organizing the data into conceptual categories based on the content of the responses, allowing for a comprehensive exploration of participants' perspectives and experiences.

RESULTS

Demographic Characteristics of Study Participants

The demographic profile of the patients with CKD who participated in the study was presented in Table 1. It included information regarding their sex/gender, age, marital status, number of children, educational background, religion, duration of care received from the renal unit, and any co-morbid conditions. Overall, the ages ranged between 31 and 81, with eight males and four females. The majority were married (nine) and had received formal education at different levels.

Themes and Sub-themes

Themes and sub-themes developed following a thematic analysis of transcribed data has also been presented below. Three themes and eight sub-themes were developed.

- 1. Knowledge about CKD
 - a. Diagnosis and risk factors of CKD
 - b. Clinical features
 - c. Disease progression
- 2. Attitude towards ACP
 - a. Reaction to diagnosis and prognosis
 - b. Treatment wishes and preferences
 - c. Place of care and death
 - d. Healthcare proxy
- 3. Preparation towards ACP
 - a. Prepared versus unprepared

Knowledge About CKD

The first major theme emerging from the interviews pertained to the participants' knowledge and understanding of their condition. This theme encompassed their understanding of CKD, its risk factors, clinical features, and the progression of the disease. It was further classified into three sub-themes: diagnosis and risk factors of CKD, clinical features, and disease progression.

Knowledge About the Diagnosis and Risk Factors

The majority of participants were under treatment for hypertension and were aware of their kidney disease. However, they demonstrated limited in-depth knowledge about the disease. One participant shared:

"My blood pressure was extremely high at about 260/100mmHg, prompting me to seek medical attention. After undergoing laboratory tests, the doctor informed me that I had a kidney problem." (Participant 2).

The study also explored the causes or risk factors of CKD among the participants. While the overall knowledge about kidney disease's causes and risk factors was relatively low, some participants displayed familiarity with the kidney's function. For instance:

"I had limited knowledge about the kidney, so I inquired with the doctor, who explained that the kidney is responsible for eliminating waste substances like urine

Participant	Sex/Gender Age	Age	Marital status	Number of children	Educational background	Religion	Co-morbidities	Period of receiving care from renal clinic
-	Σ	43	Married	2	Junior High School	Christian	Hypertension	1 year
N	ш	55	Widower	с	No formal education	Christian	Hypertension and Diabetes mellitus	2 months
3	Σ	65	Married	с	Form four	Muslim	Hypertension	4 months
4	Σ	81	Married	6	Tertiary	Christian	Hypertension	5 years
5	ш	41	Divorced	No child	No formal education	Christian	Hypertension	2 years
9	ш	31	Married	7	Secondary School	Christian	Hypertension	3 months
7	Σ	40	Married	7	Secondary School	Christian	Hypertension	4 years
8	Σ	44	Married	с	Tertiary	Not affiliated to any faith	Hypertension	2 months
6	Σ	33	Single	No child	No formal education	Christian	Hypertension	2 months
10	Σ	40	Married	2	Tertiary	Christian	Hypertension	1 year
11	ш	53	Married	7	,0, Tevel	Christian	Hypertension	4 months
12	Σ	77	Married	5	No formal education	Muslim	Hvpertension	3 vears

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from the body. It also produces a specific chemical aiding in red blood cell formation. Sometimes, I appear pale because of kidney damage. I require dialysis to support kidney function." (Participant 6).

A few participants who were known to have hypertension and diabetes recognized these conditions as potential precursors to CKD:

"I sought care at the renal clinic due to kidney problems. I have hypertension and prostate enlargement. This morning, my creatinine level was at 200mcmol/l, which concerns me. I've read about CKD, and if creatinine remains elevated, it's a warning sign of kidney failure. Given my hypertension, which is a CKD risk factor, I'm deeply concerned about the disease's progression." (Participant 5).

Knowledge About Clinical Features of the Disease

Clinical manifestations provide critical insights into the condition. Some participants, however, claimed they did not exhibit any signs of kidney disease. One participant expressed:

"The hospital conducted various tests, including ECG and renal function tests. After the investigations, they informed me of acute renal disease. I was taken aback by the kidney failure diagnosis, as I hadn't experienced any symptoms and was unaware of the clinical signs associated with kidney disease. I was leading a normal life and working hard, and now I'm dealing with this condition." (Participant 8).

Conversely, some participants could identify clinical features of the disease. One individual noted:

"Initially, I was informed about high blood pressure, but I didn't take the results seriously. After a few months, I began experiencing symptoms such as nausea, fatigue, loss of appetite, and a decrease in urination frequency, despite consuming ample water daily. I later noticed swelling in my ankles and feet. I returned to the hospital, and laboratory tests indicated kidney disease." (Participant 1).

This sub-theme also delved into participants' views on the potential progression of their ailment. Some acknowledged the likelihood of becoming dependent on dialysis due to their kidneys failing to regain normal function and even contemplated the possibility of death. For instance:

"The kidneys may no longer remove waste and urine from the body, resulting in complete damage, necessitating long-term dialysis. This disease can potentially lead to my demise." (Participant 9).

Another participant shared his perspective on disease progression while undergoing dialysis:

"From what I understand, I'm unable to urinate, which is why I'm on dialysis treatment. Initially, I had trouble sleeping, and my legs were swollen. However, over the past month, the swelling has decreased." (Participant 3).

In contrast, one participant expressed optimism grounded in faith, suggesting that the disease's progression ultimately rests with a higher power:

"I don't know, [pauses] I don't know [facial expression looking sad]. It all hinges on God because He knows everything. Even when a car breaks down, God provides the knowledge for mechanics to repair it. So, I trust that God will equip doctors with the necessary knowledge to treat me. My hope lies in God, and I believe He will aid in my recovery." (Participant 6).

Attitudes of CKD Patients Toward ACP

This theme explored the attitudes of patients with CKD toward ACP, as revealed during the interviews with study participants. Four distinct sub-themes emerged: reactions to the diagnosis and prognosis, preferences regarding treatment wishes, choices for the location of care and end-of-life, and considerations about legal preparations. These sub-themes were discussed below, supported by participant quotes.

Attitude to Diagnosis and Prognosis

Participants commonly expressed feelings of shock and concern when they received their CKD diagnosis and prognosis from healthcare professionals. For instance, one participant, who was both shocked and distressed by the unexpected kidney disease diagnosis, recounted:

"I was surprised and worried at the same time because I woke up one day and I couldn't eat well... I went to the hospital myself, and the doctor said they should check my hemoglobin level, and he said the level was low, hence he would be giving me a transfusion. Finally, the doctor said I should see a specialist at the renal clinic, and here I am on this dialysis machine." (Participant 7).

Another participant, who had been diagnosed with stage 4 CKD, expressed his fear regarding the disease:

"I became afraid when told that I have a kidney problem." (Participant 9).

Preferences Regarding Treatment Wishes and Choices

Some participants expressed their wishes regarding treatment preferences, particularly when their condition deteriorates or nears the end of life. These wishes included the desire to discontinue life-sustaining treatments, investigations such as scans, liver function tests, and renal function tests. One participant shared:

"I wish to stop unnecessary investigations and treatments that will not bring me back to life and, at the same time, would cause financial loss to my family because my children are young, and the money wasted on trial-and-error procedures that doctors do could be saved for them. Leave me to die because everyone will die. I want to have a peaceful death, and so when I have pain, provide me with medicine to bring it under control." (Participant 10).

Conversely, other participants did not wish to withhold life-sustaining treatments, including dialysis, even when their condition declined. One participant emphasized his treatment preference:

"My wish is to find a cure. As I am communicating with you now, if I am told there is a cure somewhere or that doctors have found a breakthrough in treatment, I will quickly pursue that treatment. When the cost of dialysis treatment is reduced, everyone will be happy, allowing those on it for 30 years to manage the costs." (Participant 8).

Additionally, some participants felt that decisions about treatment preferences should be entrusted to medical professionals who possess the necessary expertise. One participant expressed this viewpoint:

"I'm not a doctor, and I don't have the knowledge to decide because the doctor has the expertise. I lack knowledge about managing my condition, so I can't tell him what to do or not." (Participant 3).

Attitudes of Patients with CKD Toward Place of Care and End-of-Life Decisions

Participants expressed their preference for receiving care at home when their condition deteriorated. However, they expressed concerns about the potentially high cost of in-home care. Consequently, they mentioned their willingness to consider hospital-based care when their condition worsened. For example, one participant stated:

"I would prefer to be cared for at home. However, the cost of in-home care is a concern for me. If the financial aspect were more manageable, I would choose to stay at home. Otherwise, I might consider coming to the hospital." (Participant 7).

Another participant echoed this sentiment:

"I would like to receive care at home because of the long distance between my house and the renal clinic. It would be more convenient if healthcare professionals could visit me at home, especially when I'm feeling too weak to make the trip to the hospital."

However, another participant expressed a different perspective, preferring to receive care in the hospital and eventually pass away there in order to protect his children from potential psychological trauma. He explained:

"I would prefer to be taken care of in the hospital and, when the time comes, to pass away here. I don't want my children to witness my death at home, as I believe it could have a lasting psychological impact on them." (Participant 2).

Regarding the preferred place of death, most par-

ticipants expressed a desire to pass away at home. One participant emphasized:

"I would like to receive care at home. But when the end is near and my capacity diminishes, signaling that death is approaching, I want to be in the hospital, and I have informed my family to bring me here." (Participant 1).

Conversely, another participant wished not to die at home due to concerns about the potential psychological impact on his children. He stated:

"I prefer to receive care in the hospital and, if my time comes, to pass away here. I don't want my children to witness my death at home, as I believe it could have a lasting psychological impact on them." (Participant 2).

Attitude of Patients with CKD on Legal Preparation

Most participants had not prepared written documents concerning their healthcare proxy and living will. However, they had considered individuals who might take on these roles if the need arose. For instance:

One participant shared, "I haven't thought about someone standing in to take care of my affairs when the disease progresses and I can't do anything for myself. However, my wife, who knows much about the disease and what I am going through, will stand in for me." (Participant 9).

Another participant expressed, "My eldest son knows much about how my disease is progressing, and if the condition worsens and I am not in a capacity to speak concerning my medical treatment advice and other affairs, he will stand in for me" (Participant 4).

One participant had contemplated who would manage their affairs in the event of incapacity but had not yet officially appointed or documented the person:

"For my work and other affairs, I don't have anyone who is taking care of it, and I have contemplated it in my mind. However, in case I'm not able to do things myself when my condition doesn't favor me, my husband will stand in for me" (Participant 7).

Regarding wills, some participants had not prepared one because they believed they had no significant assets to leave behind. For example:

"I don't have any property to share. I live in one house with my wife and children. If I'm deceased, it belongs to them. I don't need a written or verbal document attached to it" (Participant 6).

Another participant explained, "I have no intention of creating a will, but I believe in equal sharing. If I'm deceased and gone, the way my property is shared is not my concern. My dad didn't create a will, and that's the path I am also following" (Participant 8).

However, one participant, influenced by past family experiences, had prepared a written will:

"I have a lawyer. I've discussed with him how my

properties should be distributed. My father didn't create a will, and when he passed away, the family claimed all his property from us. I've learned not to follow in my father's footsteps" (Participant 5).

Preparation of Patients with CKD Toward ACP

During the interview process, some participants displayed readiness or preparedness for ACP, while others did not. Quotes from participants illustrated their level of preparedness and readiness for ACP. The responses of patients with CKD indicating their preparedness for ACP are presented in Table 2 below.

DISCUSSION

Summary

This study, conducted at the Renal Clinic of Komfo Anokye Teaching Hospital in Ghana, investigated the attitudes and preparedness of patients with CKD regarding ACP. The findings indicated that all participants were cognizant of their kidney disease, recognizing its potential progression, with many acknowledging that their medical history of diabetes and hypertension heightened their vulnerability to renal failure. While participants generally understood the potential progression of their condition, leading to dependency on dialysis and, in some cases, death, a few remained hopeful for a cure, relying on their faith in God. The study also revealed that participants experienced shock and distress upon their initial kidney failure diagnosis. A majority expressed a preference for home-based care, including dialysis, while a minority favored hospital care to shield their children from potential psychological trauma. Regarding legal preparations, excluding one participant who had prepared a written will, most saw no need for a written or verbal will, attributing this lack of motivation to either having few assets to distribute or not being concerned about posthumous estate execution. These insights contribute to our understanding of CKD care and end-of-life planning, providing valuable input for future interventions and policies to enhance patient outcomes and experiences.

Knowledge of Patients with CKD About ACP

Patient awareness of CKD is crucial, as appropriate treatment depends on both physician awareness and patient understanding. In this study, participants demonstrated limited in-depth knowledge about CKD, aligning with findings from a Nigerian study by [20] which reported low CKD awareness and its correlation with a high mortality rate.

While most participants understood the predisposing factors and clinical manifestations of CKD, some remained unaware of the disease's cause. This finding is consistent with [21] which revealed that a significant portion of patients attributed CKD to alcohol (23%), did not have knowledge about CKD (44%), and were unsure about its cause (38%).

Clinical manifestations provided insight into the disease's occurrence and symptom presentation. Some participants in this study did not notice any CKD signs and symptoms, which is supported by [22] that CKD often lacks specific symptoms in the early stages. However, most participants could identify CKD symptoms such as fatigue, urination difficulties, edema, and shortness of breath, all of which significantly affected their quality of life. An emphasis was placed on anemia as a significant symptom leading to frequent blood transfusions, aligning with [23] which highlighted fatigue and anemia as common symptoms impacting patients' health-related quality of life.

Knowledge of Patients with CKD About Disease Progression

Patients with CKD tend to deteriorate over time and progress to end-stage kidney disease. In this study, most participants were unaware of the severity and progression of CKD, consistent with the findings of related studies in which patients displayed little knowledge of the disease's severity [24].

Attitude of Patients with CKD Toward ACP

Participants expressed their attitudes towards discussing various aspects of ACP during the later stages of their disease or end of life. These ACP topics included diagnosis and prognosis, treatment preferences, preferred place of care, health care proxies, and the creation of verbal or written wills.

Participants typically reacted with shock upon learning of their CKD diagnosis and prognosis. This emotional response corresponds with the findings of studies that have explored patient perceptions of medical treatment, such as Saunders et al. [24] and Zalai et al., [26] which reported that patients were unprepared and surprised by their diagnosis and the disease's progression.

When it came to treatment preferences, some participants expressed a desire for life-sustaining treatments like dialysis during the end of life. These preferences are partly consistent with results from a survey conducted among patients attending different renal clinics in Australia. The findings indicated that certain patients would choose dialysis over alternative comfort measures if it entailed fewer hospital visits and fewer lifestyle restrictions [27].

Furthermore, some participants preferred that physicians make decisions about treatment options when their disease deteriorated, and they approached the end of life. This preference echoes the sentiments of family

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Topic	Prepared	Not prepared
Understanding of diagnosis	"I was told that my kidney function has reduced. The kidney is damaged." (Participant 4)	"The doctor said the kidney is either in good condition or in bad condition." (Participant 1)
Progression of the disease	"The disease can cause total damage to the kidney and can be life-threatening. Additionally, it may lead me to a point where I would require dialysis treatment." (Participant 9)	"I don't know, pause I don't know" – the participant expressed with a sad facial expression. "It all depends on God because He knows. Even when a car is spoiled, God provides mechanics with the knowledge to repair the fault in the car. So, God will provide the doctors with the knowledge to be able to treat me," (Participant 6)
Treatment preference	"I don't want to be given an injection to hasten my death when [my condition] deteriorates. However, I wish to have comfort measures and to go home at God's own appointed time." (Participant 3)	"If I stop dialysis now, it is like I am sentencing myself to the grave, and I am just 44 years old. If the cost of dialysis is reduced, then even if I have to undergo it for 30 years, I can still afford it." (Participant 4)
Place of care and death	"I wish to be receiving care in my home and die in arms of my family." (Participant 7) "I want to be taken care in the hospital and die here." (Participant 2)	"God does miracles in so many ways. I believe by God's grace I will recover. I wish God postpones my death." (Participant 11)

caregivers in Ghana, as outlined by Ofosu-Poku et al. [28]. Patients and family caregivers in these contexts tend to place their trust in primary doctors and may not feel involved in the decision-making process due to their limited understanding of the disease.

ACP encompasses the patient's ability to choose the place of care. In this study, participants expressed a preference for home care, while others preferred care at a healthcare facility. Those favoring home care cited the convenience of receiving care in a familiar environment due to difficulties accessing healthcare facilities in their weakened state. This preference for home care corresponds to studies by Sandsdalen et al., [29] where patients voiced their desire to receive care at home to maintain independence.

Some patients wished to receive care at home but expressed concern about the cost, which often led them to opt for healthcare facility-based care when their condition worsened. Others preferred hospital care to protect their children from potential psychological trauma. This finding aligns with [30] which highlighted varying patient preferences for either home-based or facility-based palliative care.

Regarding the choice of a healthcare proxy, most participants implicitly knew who would take on this role, even though they had not explicitly appointed one. This reflects a common trend observed in patients who trust their family members to make decisions on their behalf when needed [31].

When it came to preparing wills, most participants lacked the motivation to create one, as they either had minimal assets to distribute or felt untroubled by the posthumous execution of their estate. This finding is consistent with thematic analysis by Musa et al. [32] in the East Midlands, UK, which suggests that patients' readiness to participate in different aspects of ACP depends on their personal values and preferences.

Patient Preparation for ACP

Participants exhibited varying levels of preparedness and readiness for ACP. Their engagement in ACP topics was determined by their values and interests, and they often shifted discussions or avoided certain topics if they lacked interest. This observation is consistent with research by Zwakman et al. (2018, 2021) [33,34], which highlight that patients' readiness to participate in different aspects of ACP is influenced by their values and preferences.

CONCLUSION

This study conducted at the Renal Clinic of KATH, Ghana, revealed a knowledge gap among CKD patients regarding ACP. Despite their awareness of the condition and its potential progression, particularly among those with diabetes and hypertension, participants acknowledge an increased vulnerability to renal failure. Some maintain hope for a cure, relying on faith even while recognizing the potential trajectory towards dialysis or death. The initial diagnosis of kidney failure induces shock and distress, underscoring its emotional impact. Preferences for care reveal a majority favoring home-based options, including dialysis, while a minority opt for hospital care to shield their children from trauma. Regarding legal preparations, a majority perceive no need, often attributing it to a lack of assets or a perceived lack of concern for posthumous estate execution. These insights underscore the imperative for targeted education and support in ACP. The study provides valuable insights for interventions and policies to enhance patient outcomes, highlighting a critical opportunity to improve patient understanding and willingness to engage in ACP. Active involvement of healthcare professionals has the potential to positively impact the overall quality of life for CKD patients, emphasizing their pivotal role in fostering a comprehensive and patient-centered approach in chronic kidney disease care.

Acknowledgments: We extend our sincere gratitude to Komfo Anokye Teaching Hospital, Kumasi, Ghana for their invaluable support to the corresponding author during her professional program in palliative care. We also express our sincere gratitude to Dr. Emmanuel Amoah Boakye for his assistance with the editing and formatting of this manuscript. His expertise significantly contributed to the clarity and quality of this publication. **Competing Interests**: The authors declare no conflict of interest.

Funding Statement: This work was supported by the Komfo Anokye Teaching Hospital, Kumasi, Ghana.

REFERENCES

- Jadoul M, Aoun M, Masimango Imani M. The major global burden of chronic kidney disease. Lancet Glob Health. 2024 Mar;12(3):e342–3.
- Hill NR, Fatoba ST, Oke JL, Hirst JA, O'Callaghan CA, Lasserson DS, et al. Global prevalence of chronic kidney disease–a systematic review and meta-analysis. PLoS One. 2016 Jul;11(7):e0158765.
- Abd ElHafeez S, Bolignano D, D'Arrigo G, Dounousi E, Tripepi G, Zoccali C. Prevalence and burden of chronic kidney disease among the general population and high-risk groups in Africa: a systematic review. BMJ Open. 2018 Jan;8(1):e015069.
- Tannor EK, Norman BR, Adusei KK, Sarfo FS, Davids MR, Bedu-Addo G. Quality of life among patients with moderate to advanced chronic kidney disease in Ghana - a single centre study. BMC Nephrol. 2019 Apr;20(1):122.
- 5. Amoako YA, Laryea DO, Bedu-Addo G, Andoh H, Awuku YA. Clinical and demographic characteristics of chronic

kidney disease patients in a tertiary facility in Ghana. Pan Afr Med J. 2014 Aug;18:274.

- Okyere P, Okyere I, Yaw FM, Osafo C. MON-266 pattern of renal diseases at Komfo Anokye Teaching Hospital, Kumasi-Ghana: a 13-year review. Kidney Int Rep. 2019;4(7):S408.
- World Health Organization. WHO definition of palliative care. Retrieved from http://www.who.int/cancer/palliative/ definition/en/Accessed 3 Aug. 2018.
- Rietjens JA, Sudore RL, Connolly M, van Delden JJ, Drickamer MA, Droger M, et al.; European Association for Palliative Care. Definition and recommendations for advance care planning: an international consensus supported by the European Association for Palliative Care. Lancet Oncol. 2017 Sep;18(9):e543–51.
- Carr D, Luth E. End of life planning and health care. Handbook of ageing and social sciences. 8th ed. New York: Academic Press; 2016. pp. 375–94.
- Davison SN. End-of-life care preferences and needs: perceptions of patients with chronic kidney disease. Clin J Am Soc Nephrol. 2010 Feb;5(2):195–204.
- Ofosu-Poku R. Who is making decisions: An open letter to healthcare professionals in the developing world. In: Cascella M, editor. Suggestions for Addressing Clinical and Non-Clinical Issues in Palliative Care. 2021. p. 95410.
- Lorenz KA, Lynn J, Dy SM, Shugarman LR, Wilkinson A, Mularski RA, et al. Evidence for improving palliative care at the end of life: a systematic review. Ann Intern Med. 2008 Jan;148(2):147–59.
- Detering KM, Hancock AD, Reade MC, Silvester W. The impact of advance care planning on end of life care in elderly patients: randomised controlled trial. BMJ. 2010 Mar;340 mar23 1:c1345.
- Holley JL. Advance care planning in CKD/ESRD: an evolving process. Clin J Am Soc Nephrol. 2012 Jun;7(6):1033–8.
- 15. Rak A, Raina R, Suh TT, Krishnappa V, Darusz J, Sidoti CW, et al. Palliative care for patients with end-stage renal disease: approach to treatment that aims to improve quality of life and relieve suffering for patients (and families) with chronic illnesses. Clin Kidney J. 2017 Feb;10(1):68–73.
- 16. Diop MS, Rudolph JL, Zimmerman KM, Richter MA, Skarf LM. Palliative care interventions for patients with heart failure: a systematic review and meta-analysis. J Palliat Med. 2017 Jan;20(1):84–92.
- Hasson F, Nicholson E, Muldrew D, Bamidele O, Payne S, McIlfatrick S. International palliative care research priorities: A systematic review. BMC Palliat Care. 2020 Feb;19(1):16.
- Eghan BA, Amoako-Atta K, Kankam CA, Nsiah-Asare A. Survival pattern of hemodialysis patients in Kumasi, Ghana: a summary of forty patients initiated on hemodialysis at a new hemodialysis unit. Hemodial Int. 2009 Oct;13(4):467–71.
- Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Adm Policy Ment Health. 2015 Sep;42(5):533– 44.
- 20. Okwuonu CG, Chukwuonye II, Ogah SO, Abali C, Adeju-

mo OA, Oviasu E. Awareness level of kidney functions and diseases among adults in a Nigerian population. Indian J Nephrol. 2015;25(3):158–63.

- Gray NA, Kapojos JJ, Burke MT, Sammartino C, Clark CJ. Patient kidney disease knowledge remains inadequate with standard nephrology outpatient care. Clin Kidney J. 2016 Feb;9(1):113–8.
- 22. Brown MA, Collett GK, Josland EA, Foote C, Li Q, Brennan FP. CKD in elderly patients managed without dialysis: survival, symptoms, and quality of life. Clin J Am Soc Nephrol. 2015 Feb;10(2):260–8.
- 23. James G, Nyman E, Fitz-Randolph M, Niklasson A, Hedman K, Hedberg J, et al. Characteristics, Symptom Severity, and Experiences of Patients Reporting Chronic Kidney Disease in the PatientsLikeMe Online Health Community: Retrospective and Qualitative Study. J Med Internet Res. 2020 Jul;22(7):e18548.
- Saunders MR, Kim SD, Patel N, Meltzer DO, Chin MH. Hospitalized patients frequently unaware of their chronic kidney disease. J Hosp Med. 2015 Sep;10(9):619–22.
- 25. Morton RL, Tong A, Howard K, Snelling P, Webster AC. The views of patients and carers in treatment decision making for chronic kidney disease: systematic review and thematic synthesis of qualitative studies. BMJ. 2010 Jan;340 jan19 2:c112.
- Zalai D, Szeifert L, Novak M. Psychological distress and depression in patients with chronic kidney disease. Seminars in dialysis. Oxford, UK: Blackwell Publishing Ltd; 2012. pp. 428–38.
- 27. Morton RL, Snelling P, Webster AC, Rose J, Masterson R, Johnson DW, et al. Factors influencing patient choice of dialysis versus conservative care to treat end-stage kidney disease. CMAJ. 2012 Mar;184(5):E277–83.
- Ofosu-Poku R, Owusu-Ansah M, Antwi J. Referral of Patients with Nonmalignant Chronic Diseases to Specialist Palliative Care: A Study in a Teaching Hospital in Ghana. Int J Chronic Dis. 2020 Mar;2020:8432956.
- 29. Canadian Healthcare Association Home Care in Canada. From the Margin to Mainstream. Ottawa, Ontario; 2009.
- Sandsdalen T, Hov R, Høye S, Rystedt I, Wilde-Larsson B. Patients' preferences in palliative care: A systematic mixed studies review. Palliat Med. 2015 May;29(5):399–419.
- 31. Boateng EA, East L, Evans C. Decision-making experiences of patients with end-stage kidney disease (ESKD) regarding treatment in Ghana: a qualitative study. BMC Nephrol. 2018 Dec;19(1):371.
- Musa I, Seymour J, Narayanasamy MJ, Wada T, Conroy S. A survey of older peoples' attitudes towards advance care planning. Age Ageing. 2015 May;44(3):371–6.
- 33. Zwakman M, Jabbarian LJ, van Delden J, van der Heide A, Korfage IJ, Pollock K, et al. Advance care planning: A systematic review about experiences of patients with a life-threatening or life-limiting illness. Palliat Med. 2018 Sep;32(8):1305–21.
- 34. Zwakman M, Milota MM, van der Heide A, Jabbarian LJ, Korfage IJ, Rietjens JA, et al. Unraveling patients' readiness in advance care planning conversations: a qualitative study as part of the ACTION Study. Support Care Cancer. 2021 Jun;29(6):2917–29.