

ENSIGN GLOBAL UNIVERSITY

KPONG, EASTERN REGION

FACULTY OF PUBLIC HEALTH

DEPARTMENT OF COMMUNITY HEALTH

**EXPLORING THE EXPERIENCES OF INDIVIDUALS LIVING WITH CHRONIC
KIDNEY DISEASE IN THE SOUTH TONGU DISTRICT IN THE VOLTA REGION,
GHANA.**

BY

DZOKOTO ETHEL ESINU ADZO

(247100315)

NOVEMBER, 2025

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**A THESIS SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH,
FACULTY OF PUBLIC HEALTH, ENSIGN GLOBAL UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE MASTER OF PUBLIC HEALTH DEGREE**

NOVEMBER, 2025

ACKNOWLEDGMENT

I am deeply grateful to Almighty God for His guidance, wisdom, and strength throughout the course of this study. My sincere appreciation goes to my supervisor, Dr. Sandra Boatemaa Kushitor, for her continuous support and constructive feedback throughout this study.

I also wish to extend my appreciation to my family, especially my parents and sister, for their prayers, encouragement, and support throughout this academic journey. God richly bless you.

Also, to all participants who partook in this study, I am really grateful to you all for sharing your experiences with me and making this study a success.

LIST OF ABBREVIATIONS

Abbreviation	Meaning
CKD	Chronic Kidney Disease
RRT	Renal Replacement Therapy
ESKD	End Stage Kidney Disease
ESRD	End Stage Renal Disease

SEM	Socioecological Model
PHC	Population and Housing Census
CHPS	Community-based Health Planning and Services
eGFR	Estimated Glomerular Filtration Rate

ABSTRACT

Background: Individuals living with chronic kidney disease (CKD) face challenges such as financial constraints, stress stemming from both the illness itself and its treatment. These challenges encompass physical, psychological, emotional, and social dimensions. As CKD impacts various aspects of a person’s life, the experience of managing the disease is unique to each individual; however, there is limited research on the lived experiences of individuals living with chronic kidney disease.

Methods: This study adopted a qualitative approach to gain an in-depth understanding of the lived experiences of individuals with chronic kidney disease. Participants were purposely selected from among CKD patients receiving care at the South Tongu District Hospital and Richard Novati Catholic Hospital. Data was collected using a semi-structured interview guide through an in-depth interview. Interviews were audio-recorded, transcribed, and analyzed thematically using the Atlas.Ti software.

Results: The results revealed that CKD patients experienced symptoms that are non-specific in the early stages of the disease, such as headache, dizziness, and abdominal pain. Health-seeking was initially characterized by reliance on alternative medicines and over-the-counter medications; however, after diagnosis, patients relied solely on hospital-based treatment, especially dialysis.

Financial challenges, distance to treatment centers, and inadequate institutional support hindered treatment adherence. Support from family was the most used support system for care.

Conclusion: the findings revealed that the experiences of people living with CKD are shaped by a combination of socioeconomic and systemic factors. It highlights the gaps in institutional support while exposing the critical role of family in sustaining care. These results underscore the need for sustainable interventions such as enhancing institutional support systems and improving access to renal services to improve the experiences of people living with CKD.

Keywords: Chronic Kidney Disease (CKD), Lived experiences, Health-seeking behavior, Treatment adherence, Support systems, Dialysis.

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CHAPTER ONE

INTRODUCTION

1.0 Background

Individuals living with chronic kidney disease (CKD) face challenges such as financial strain, fatigue, and psychological stress stemming from both the illness itself and its treatment, encompassing physical, psychological, emotional, and social dimensions (Pollock *et al.*, 2024). The kidneys are vital organs responsible for filtering metabolic waste, regulate mineral concentrations such as sodium and potassium, and producing hormones that influence blood pressure and the production of red blood cells (Xie *et al.*, 2025). Irreversible damage to the kidneys leads to chronic kidney disease (CKD), a progressive condition marked by the gradual loss of kidney function. This decline impairs the kidneys' ability to perform essential homeostatic, excretory, and synthetic functions necessary for overall health (Francis *et al.*, 2024).

CKD is diagnosed when abnormalities in kidney function or structure persist for more than three months. Key indicators include abnormal albumin excretion (albuminuria), which signals damage to the kidney's filtering units, and a sustained reduction in the estimated glomerular filtration rate (eGFR), which measures the kidneys' blood-filtering capacity (Xie *et al.*, 2025). The eGFR is calculated using serum creatinine levels alongside demographic factors such as age and sex, providing a practical and widely used assessment of kidney function (Zsom *et al.*, 2022). Early detection and ongoing monitoring are critical to slowing disease progression and reducing associated health complications (Francis *et al.*, 2024; Xie *et al.*, 2025). Progressive renal disease frequently culminates in End-Stage Kidney Disease (ESKD), a condition characterized by the near-complete loss of kidney function requiring renal replacement therapy such as dialysis or transplantation (So *et al.*, 2021). The financial burden associated with providing renal replacement

services for ESKD patients is substantial. For instance, in countries like the United Kingdom and Italy, expenditures for ESKD care consume approximately 0.7% to 1.8% of the total healthcare budget, reflecting the high cost of long-term treatment and management. (Liyanage *et al.*, 2015a)

Chronic Kidney Disease (CKD) exhibits notable gender disparities in both prevalence and progression. Globally, CKD affects between 5% and 15% of the adult population in developed countries, with women generally showing a slightly higher prevalence than men (García *et al.*, 2022; Wong, 2022). Although CKD is more commonly diagnosed in women, men with CKD are approximately 50% more likely to progress to kidney failure (Balafa *et al.*, 2024). In developing countries, patients with chronic kidney disease (CKD) frequently present with advanced and complicated clinical conditions, largely due to delayed diagnosis and referral. Patients with CKD face numerous complications that negatively impact their physical and mental health. Depression is a common psychological comorbidity among individuals undergoing hemodialysis, often exacerbated by biochemical imbalances, neurological disturbances, cognitive impairments, and sexual dysfunction (Jokela, 2022). The physical manifestations of CKD and its treatment such as the presence of dialysis access points (fistulas, catheters), edema, and fatigue can alter patients' appearance and self-esteem, leading to social isolation and withdrawal from family and community activities (Adeyemi, Adebisi and Babatunde, 2021). Globally, over two million people receive renal replacement therapy (RRT) through dialysis or transplantation; however, this figure likely represents only about 10% of those in need (Stenvinkel, Fouque, and Wanner, 2020). The majority of treated patients reside in a small number of high-income countries, including the United States, Japan, Germany, Brazil, and Italy, which collectively account for just 12% of the global population. This stark disparity highlights the limited availability of RRT in developing regions, especially in Africa, where healthcare infrastructure and funding are insufficient to meet demand

(Stanifer *et al.*, 2014). Many patients with end-stage renal disease (ESRD) require hemodialysis but cannot afford it because of economic constraints, relying instead on financial support from charitable organizations (Tannor, 2018a). The increasing prevalence of non-communicable diseases such as hypertension and diabetes, both major risk factors for CKD, is expected to exacerbate this trend in Sogakope and similar communities. The lived experiences of individuals with chronic kidney disease (CKD) often remain overlooked, which poses a significant barrier to effective prevention and management strategies (Tannor *et al.*, 2019a). Research exploring the lived experiences of individuals with chronic kidney disease (CKD) is limited globally. In Ghana, there is a notable lack of studies focusing specifically on the personal experiences of people living with CKD. For healthcare providers to deliver tailored and effective nursing interventions, it is essential to gain a deeper understanding of patients' lived realities. Consequently, there is a pressing need to investigate the lived experiences of CKD patients in South Tongu District. Such research will provide valuable insights that can inform recommendations aimed at addressing and improving these experiences, ultimately enhancing the quality of care provided to clients.

1.1 PROBLEM STATEMENT

Chronic kidney disease (CKD) is decreased kidney function shown by a glomerular filtration rate (GFR) of less than 60 mL/min per 1.73 m², or markers of kidney damage, or both, of at least 3 months duration, regardless of the underlying cause. Diabetes and hypertension are the main causes of CKD in all high-income and middle-income countries, and also in many low-income countries (Webster *et al.*, 2017). Chronic kidney disease has emerged as a global public health issue, causing an increase in morbidity and mortality globally. The global prevalence of CKD is estimated at 13.4% (Kovesdy, 2022). In Africa and sub-Saharan Africa, the prevalence of CKD is

15.8% and 13.9%, respectively, and in Ghana, the prevalence of CKD is 13.3% (Tannor *et al.*, 2023). In Ghana, studies have documented the prevalence and risk factors of CKD; however, there are limited studies concerning how individuals live and cope with the condition, which is evident in the gap in the literature, particularly in rural areas such as the South Tongu (Boateng *et al.*, 2024). While other studies have focused on prevalence and clinical risk factors, which are very important, they fail to explain how the disease affects an individual's social, physical, emotional, and financial life. Health-seeking behavior is influenced by socio-economic status, cultural beliefs, knowledge, and perceptions about a disease. In rural communities, traditional medicine is widely practiced, and individuals in such communities may rely solely on traditional medicine and resort to formal health services when the state of their condition worsens. Without insights into these behaviors and the support systems that patients rely on, interventions are likely not to serve their purpose in these communities. It is therefore necessary to explore the experiences of people living with CKD in a rural setting. This study can give insights into how individuals seek care, the challenges they face, their coping mechanisms, and the role of support systems in managing the condition.

This study, therefore, seeks to fill the gap in the literature by conducting an in-depth qualitative study on the lived experiences of persons living with CKD in the South Tongu District. The findings from this study will provide valuable insights for healthcare providers, policy makers, and the community in providing interventions that are patient-centered and improve CKD care and prevention.

1.2 RATIONALE OF STUDY

The reason for exploring the experiences of individuals with chronic kidney disease in the South Tongu District is that this condition has emerged as a significant public health issue, primarily due to its main causes, which are hypertension and diabetes. Many studies have looked at the prevalence and risk factors of the disease; however, there are limited studies that have explored the experiences of people living with the condition to assess how it affects them physically, mentally, or emotionally. This study is therefore critical to understand how individuals identify specific symptoms of CKD, their health-seeking behaviors, and how they utilize support systems for care. The findings of this study are expected to make a significant contribution to the improvement of CKD care in Ghana. Findings will inform policymakers in developing sustainable strategies that address barriers to adequate care in rural and low-resource settings for persons living with CKD. In addition, the study will provide evidence to support health education programs, encourage early detection and treatment adherence. Furthermore, the findings will serve as a foundation for further studies and interventions aimed at reducing the burden of CKD in Ghana, especially in rural areas and low-resource settings.

1.3 CONCEPTUAL FRAMEWORK

The study is guided by the Socio-Ecological Model (SEM), which offers a framework for understanding the multifaceted and interactive effects of individual, inter-personal, community, institutional, and policy factors on health behaviors and outcomes (Kilanowski, 2017). This model was originally developed by Bronfenbrenner and adapted for public health research (Webster, 2025) The SEM acknowledges that health is influenced not only by individual choices but also by social and environmental contexts in which individuals live (Scarneo *et al.*, 2019).

The individual level of the SEM depicts people's traits, such as their knowledge, attitudes, and behaviors. The interpersonal level characterizes people's social and familial networks, which can impact medical procedures and lead to a range of experiences. The institutional level explains how social institutions' traits and functions, such as those of medical facilities and their staff, influence the way that decisions about health care are made. The community level of the SEM includes the physical and social environment that makes up the larger community, as well as fundamental resources. The policy level of the model is characterized by laws and policies that affect health practices at the municipal, state, and federal levels (Olaniyan, Isiguzo and Hawk, 2021).

The relevance of this model for this study is grounded on the fact that CKD is a complex condition that affects individuals not only medically but also financially, emotionally, and socially. The SEM allows for the exploration of these various levels in a more structured manner.

In this study, the individual level will focus on the personal experiences and emotional responses of individuals regarding CKD. It includes how individuals recognize symptoms, interpret them, and seek initial help. The interpersonal level explores the role of family, friends, and caregivers in providing emotional, financial support to individuals with CKD. The community level assesses how cultural beliefs, community norms, and peer influences affect health-seeking behaviors and attitudes towards CKD. The institutional level focuses on the availability, accessibility, and quality of health services in the district, which includes diagnostic services, dialysis centers, and healthcare professionals. The policy level examines health system issues such as national policies on CKD, health financing, and public awareness.

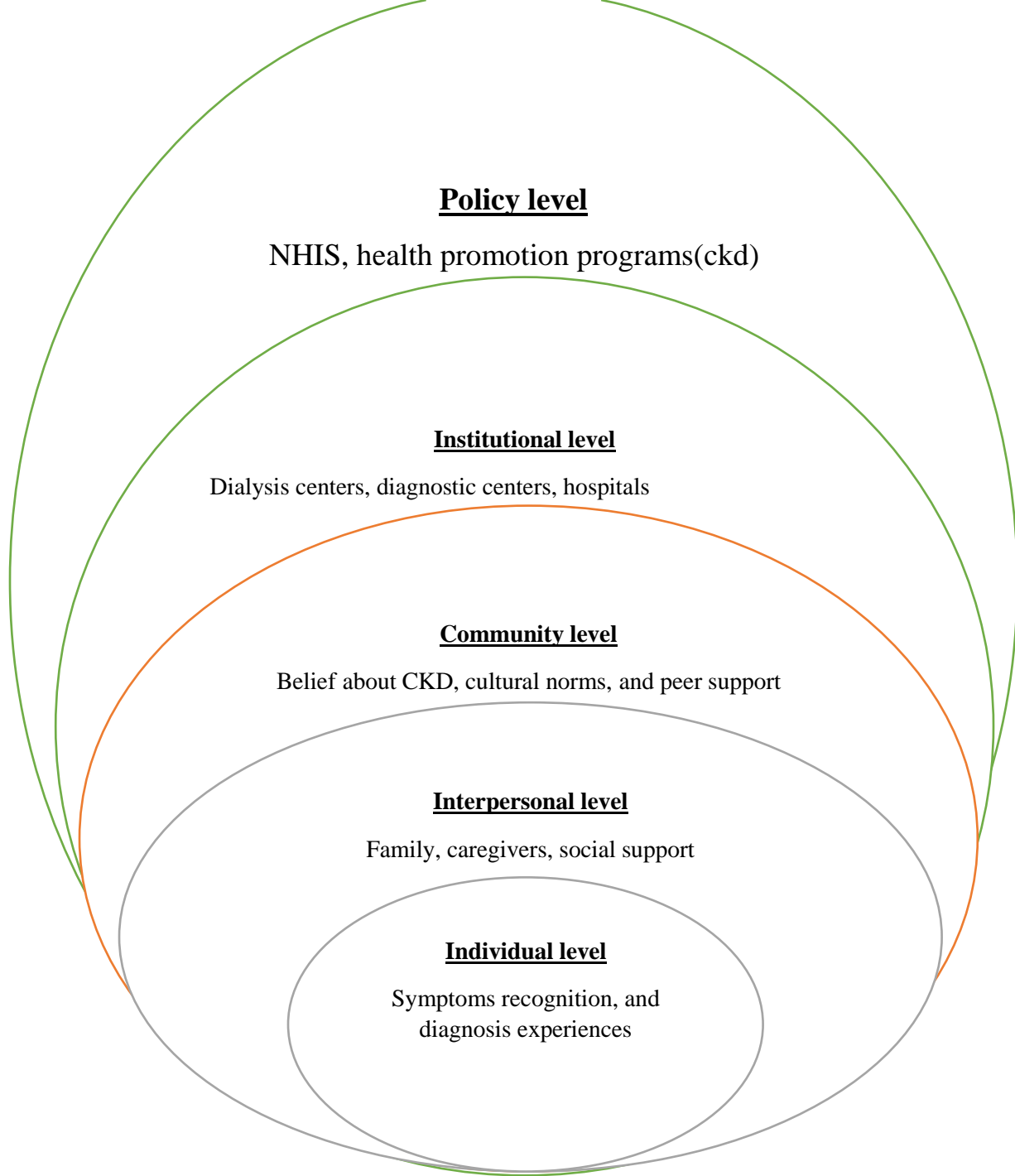


Figure 1.1: Conceptual framework adapted from the Socio-Ecological Model (Mcleroy *et al.*, 1988).

1.4 RESEARCH QUESTIONS

1. What is the process leading to the diagnosis of the condition?
2. What are the health-seeking behaviors and treatment options?
3. What are the support systems utilized for care?

1.5 GENERAL OBJECTIVE

To explore the experiences of people living with chronic kidney disease in the South Tongu District.

1.6 SPECIFIC OBJECTIVES

1. To understand the process leading to the diagnosis of the condition
2. To explore health-seeking behaviors and treatment options
3. To examine support systems utilized for care

1.7 PROFILE OF STUDY AREA

South Tongu District is situated in the southern part of the Lower Volta Basin, within the Volta Region. It is one of the 18 districts in the Volta region. South Tongu District lies between latitudes 6°10' and 5°45' North and longitudes 30°30' and 0°45' East. It is bounded to the north by the Central and North Tongu Districts, to the east by the Akatsi South District, to the west by the Ada East District of the Greater Accra Region, and to the south by the Anloga District and a short coastline. The district occupies a total land area of 665 square kilometers, representing 7.0 percent of the land size of the Volta Region (2021 PHC). The northern part of the district lies within the wet semi-equatorial zone, while the southern part is in the dry equatorial climatic zone. The total population of the district is 113,114 in the 2021 Population and Housing Census. The district population represents 6.8 percent of the regional population (1,659,040). Females constitute 53.6 percent, while males constitute 46.4 percent. The district is largely rural, with the majority (68.9%) of the population living in rural areas. The population density of the district is about 170.2 persons per square kilometer, which is lower than that of the Region (174.6 persons per square kilometer).

The district has a total household of about 31,600, with an average household size of 3.5.

The district is divided into six (6) health sub-districts (Sogakope, Dorkploame, Sotewu, DabalaAdutor, Dordoekepe, Agorta-Gamenu) for effective health service delivery and administration. Healthcare services are delivered at three (3) levels, with the first level delivered at the CHPS compounds across the district; the second level is delivered at the health centers/clinics in the district, and the third level is delivered at the hospitals in the district. The hospitals serve as referral facilities for the health centers, clinics, and CHPS compounds. (Ghana Districts: A repository of all Local Assemblies in Ghana)

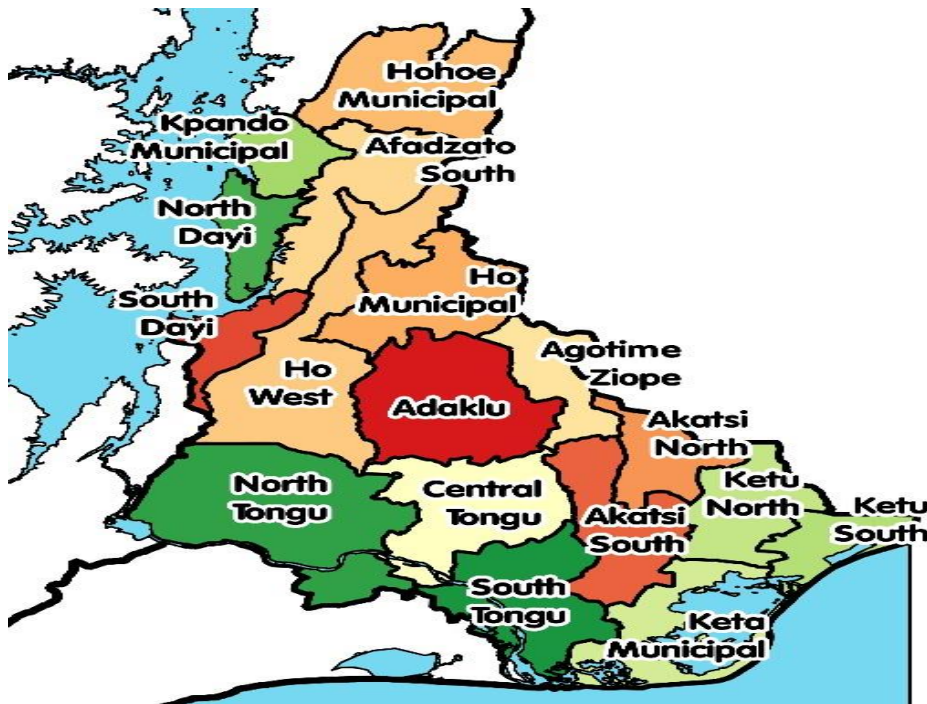


Figure 1.2 Map of the Volta Region.

Source:

https://upload.wikimedia.org/wikipedia/commons/9/9b/Districts_of_the_Volta_Region_%282018%29.png

1.8 THESIS OUTLINE

The thesis is organized into six main chapters, that is, chapters 1-6.

Chapter 1- Introduction

Chapter 1 presents the background of the study, problem statement, objectives, research questions, rationale of the study, profile of the study, and the organization of the thesis. It justifies the reason for exploring the experiences of individuals living with chronic kidney disease in the South Tongu District.

Chapter 2: Literature review

Chapter two of the thesis reviews existing literature on chronic kidney disease, including global, national, and regional prevalence. It also reviews previous studies on the lived experiences of individuals with CKD and highlights the gaps this study seeks to address.

Chapter 3: Methodology

This chapter outlines the research design, study site, study population, sampling techniques, data collection methods, and analysis plan. It also highlights ethical considerations such as confidentiality, informed consent, and approval from the relevant ethics committees

Chapter 4: Results

This chapter presents the findings of the study, including major themes that emerged from participants' narratives on living with CKD. The results are supported with direct quotations from participants to reflect their lived experiences.

Chapter 5: Discussion

This chapter discusses the findings in relation to existing literature and the conceptual framework.

Chapter 6: Conclusions and Recommendations

This chapter draws conclusions based on the research objectives and provides recommendations for policy, practice, and future studies aimed at improving CKD care.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is a review of existing literature relevant to the experiences of individuals living with CKD. The purpose of the review is to examine what is currently known about CKD and its impact on patients, while identifying the gaps this study seeks to fill.

2.1 Overview of Chronic Kidney Disease

Chronic kidney disease has emerged as a global public health issue characterized by a gradual decline in kidney function (Kalantar-Zadeh *et al.*, 2021). Chronic kidney disease (CKD) is typically defined as a reduction in kidney function, evidenced by an estimated glomerular filtration rate (eGFR) of less than 60 mL/min per 1.73 m². Additionally, CKD can be indicated by markers of kidney damage, including albuminuria, hematuria, or abnormalities identified through laboratory tests or imaging. These conditions must be present for a minimum of three months.

There are five stages of CKD based on the estimated glomerular filtration rate (eGFR). Stage 1 CKD is eGFR 90 mL/min per 1.73 m² with kidney damage (Qaseem *et al.*, 2013). Stage 2 CKD is eGFR of 60-89 mL/min per 1.73 m² (Grgurevic *et al.*, 2022). For Stage 3, CKD is categorized as 3a and 3b based on the eGFR. Stage 3a is eGFR 45–59 mL/min per 1.73 m² and Stage 3b is eGFR 30–44 mL/min per 1.73 m² (Kampmann *et al.*, 2023). Stage 4 is categorized by an eGFR of 15–29 mL/min per 1.73 m², and Stage 5 is an eGFR of <15 mL/min per 1.73 m² (Jankowski *et al.*, 2021).

The most common causes of CKD globally are hypertension and diabetes, but other potential causes are infections, polycystic kidney disease. However, risk factors that can predispose an

individual to CKD include diabetes mellitus, high blood pressure, smoking, obesity, and a family history of kidney disease (Cotun, 2022). In recent times, environmental factors have also been identified as contributing to the risk of CKD, primarily due to atmospheric pollution with hazardous chemicals and toxins such as mercury and nitrogen oxides (Meena *et al.*, 2025).

Complications such as cardiovascular diseases, anemia, electrolyte imbalance, fluid overload, sexual dysfunction, infertility, neuropathy, among others, are prevalent in the advanced stages of the disease and significantly impact the patients' quality of life (Bello *et al.*, 2017).

Management of CKD aims to slow the disease progression, treat complications, and prepare for Renal Replacement Therapy. This involves managing underlying conditions, such as hypertension and diabetes, by constantly monitoring blood pressure, blood glucose, and cholesterol levels, as well as making dietary modifications. Renal replacement therapy includes hemodialysis and a kidney transplant (Kalantar-Zadeh and Fouque, 2017; de Boer *et al.*, 2022).

2.2 Epidemiology of Chronic Kidney Disease

Globally, CKD has emerged as a major non-communicable disease with increasing prevalence and is a major contributor to morbidity and mortality rates. Approximately, about 10% of the world's population lives with CKD, which accounts for over 850million individuals living with CKD worldwide (ISN, 2023). Though CKD affects individuals from different socioeconomic backgrounds, there seems to be a higher risk among people with low socioeconomic backgrounds due to socioeconomic factors and limited access to care (Gehman, 2023).

Socioeconomic status is also a key determinant of CKD risks and outcomes. Individuals from lower-income households are more likely to have delayed diagnosis due to limited access to healthcare, limited health information, and poor diets (Zeng *et al.*, 2018). (Stats, 2023) Reported

that the prevalence of CKD is more common in people aged 65 years or older (34%) than in people aged 45–64 years (12%) or 18–44 years (6%), and slightly more common in women (14%) than men (12%) in the United States.

In sub-Saharan Africa, a study conducted by Kaze et al. (2018) revealed that the prevalence of CKD is approximately 15.8%. In Ghana, the incidence of CKD is unknown due to underreporting and underdiagnosis of CKD. However, the prevalence rate of CKD is approximately 13.3% (Tannor & Antwi, 2023b). The prevalence is particularly high in individuals with hypertension and diabetes. Chronic infections, such as HIV, hepatitis B, and C, and the rampant use of herbal medications in low-income settings, also contribute significantly to CKD prevalence (Tannor and Calice-Silva, 2022a).

2.3 Pathophysiology of Chronic Kidney Disease

The kidneys are vital organs responsible for filtering extra fluid and waste from the blood during blood flow, stabilizing blood pressure, and releasing hormones that facilitate the production of red blood cells and sustain healthy bones. Kidney dysfunction occurs when the kidneys are unable to perform this function, thus leading to CKD (Wyatt, 2023). The pathophysiology of CKD is a complicated and interconnected mechanism that includes hemodynamic changes, metabolic, inflammatory, and fibrotic processes that lead to nephron damage and a decline in the estimated glomerular filtration rate (eGFR) (Agarwal and Nath, 2020).

The pathogenesis of CKD starts when there is an underlying trigger, such as hypertension, diabetes, or any of the risk factors of CKD causes damage to the nephrons as a result of poor control and management of the underlying causes. When there is damage to part of the nephrons, the remaining nephrons respond with increased filtration as a corrective mechanism (Sugahara *et al.*, 2021). This

homeostatic response results in an increase in intraglomerular pressure and causes glomerular injury, which results in glomerulosclerosis and tubulointerstitial fibrosis, which in turn, worsens nephron destruction.

Glomerular dysfunction leads to filtration impairment, and when this occurs, filtered proteins are reabsorbed by the tubular cells, thereby causing the release of pro-inflammatory and profibrotic cytokines, which promote tissue scarring and chronic inflammation of the kidney (Cravedi and Remuzzi, 2013). Persistent renal inflammation promotes the generation of reactive oxygen species, thereby activating oxidative stress pathways that further aggravate both structural and functional damage of the kidneys (Kuo and Ko-Lin, 2010). Eventually, the progressive loss of function results in chronic kidney disease, necessitating renal replacement therapy for survival.

2.4 Risk Factors and Symptoms of CKD

A range of modifiable and non-modifiable risk factors influences chronic kidney disease. Modifiable risk factors of CKD can be controlled through medical or lifestyle changes. They include hypertension, diabetes mellitus, obesity, smoking, alcohol use, and nephrotoxic substance use. In addition to being a cause and a complication of CKD, hypertension is a significant risk factor for the disease (Hamdi *et al.*, 2022). Uncontrolled hypertension that lasts for a long time causes glomerular destruction and leads to renal hypoxia, which facilitates the progression of CKD (Pugh, Gallacher and Dhaun, 2019). Diabetes Mellitus is the second major risk factor for CKD.

Persistent high blood sugars, which are poorly controlled, predispose an individual to diabetic nephropathy. Over time, this diabetic nephropathy progresses into CKD (McFarlane *et al.*, 2018).

Obesity leads to the progression of CKD in different pathological pathways. Obesity is associated with insulin resistance, a condition where cells, such as fat and muscle cells, become unresponsive to insulin, thereby making blood sugar levels difficult to regulate. Obesity is also linked with

hypertension, which is a major risk factor and cause of CKD (Prasad, Jha, and Keerti, 2022; Ogbu and Obeagu, 2024). The use of nephrotoxic substances may also increase the risk of CKD and hasten the loss of kidney function. Examples of these substances include molds and fungi, metals like lead, arsenic, and mercury, antibiotics like aminoglycosides, cancer therapies like cisplatin, and illegal drugs like cocaine (Okoro and Farate, 2019; Yaman, 2022).

The non-modifiable risk factors of CKD are factors that cannot be controlled medically or through lifestyle modification. They include age, gender, ethnicity, low birth weight, and a family history of CKD (Liu *et al.*, 2023). However, the most prominent risk factors that influence the prevalence of CKD are hypertension and diabetes (You *et al.*, 2020).

In the early stages of the disease, individuals may not show any symptoms and can only be detected through laboratory investigations; however, as the disease progresses to the late stages, patients may experience symptoms like changes in urine output (decreased urine output), oedema (often the feet, hands, and face), hematuria, headache, fatigue and general weakness, lack of concentration, restless legs and muscle cramps, itchy skin, poor sleep, nausea, vomiting, loss of appetite and weight loss, shortness of breath, severe anemia (Taylor, 2023; Gotloib, 2024), however, another study suggests that individuals in the early stage of CKD may present with symptoms such as fatigue, nausea, and anxiety, but because these symptoms are not diseasespecific, they are mostly not recognized by physicians to be early CKD symptoms until the advanced stages of the disease, where symptoms are easily recognized (Senanayake *et al.*, 2017).

2.5 Management of Chronic Kidney Disease

The management of CKD aims to slow the disease progression, minimize complications, and improve the quality of life of individuals. It involves a multidisciplinary approach, which involves lifestyle modification, pharmacological therapy, monitoring of renal function, and, when

necessary, renal replacement therapy (Tomson and Duffy, 2019). Lifestyle modification focuses on preventing and managing modifiable risk factors through dietary management, weight management, and exercise, as well as controlling blood pressure and blood glucose levels. It also involves alcohol and smoking cessation, as well as the avoidance of nephrotoxic substances, such as herbal medicines.

Dietary management

A study conducted by (Garneata *et al.*, 2016) stated that patients who observe a strict low-protein diet can slow down the progression of CKD by reducing glomerular hyperfiltration. The required protein intake for patients with CKD, according to the Recommended Dietary Allowance (RDA) for patients who are not on dialysis, is approximately 0.6–0.8 g/kg/day, and patients on dialysis require about 1.0–1.2 g/kg/day (Zha and Qian, 2017). One of the main factors contributing to the development of CKD amongst hypertensive individuals is salt and water retention. Excessive salt intake promotes high blood pressure by causing water retention and vascular resistance, which usually results in edema that patients may present with. Reducing sodium intake to about <2g daily is necessary for controlling blood pressure levels, which will help reduce the risk of CKD and also slow the progression of the disease (Shi *et al.*, 2022). A higher incidence of hyperkalemia (high potassium) is associated with a progressive deterioration in kidney function in patients with advanced-stage chronic kidney disease (CKD); thus, in patients who have elevated potassium levels, it is necessary to limit high potassium diets (Clegg, Headley, and Germain, 2020; Picard *et al.*, 2020).

Physical Activity and Weight Management

Frequent exercise has several advantages, such as greater cardiovascular health, increased physical function, and an improved quality of life, and is essential for those with chronic kidney disease (CKD). At least 150 minutes of moderate-intensity aerobic activity per week, or as much as their tolerance permits, is advised for individuals with chronic kidney disease (Milam, 2016). A study was conducted among patients who have CKD but are not on dialysis and patients who have CKD and are on dialysis, and this study showed that physical activity had no negative impact on their overall health, but rather facilitated the slower progression of the disease (Baker *et al.*, 2022). Some physical activities that can be done include brisk walking, cycling, swimming, and aerobic dancing. In order to reduce renal strain and enhance general health, weight management in chronic kidney disease (CKD) focuses on maintaining a healthy weight. Depending on the person's stage of chronic kidney disease (CKD) and general health, this is a mix of regular physical activity and dietary changes, possibly including portion restriction, protein monitoring, and fluid management (Chintam and Chang, 2020).

Blood Pressure and Blood Sugar Control

For patients with hypertension and chronic kidney disease, it is recommended that blood pressure levels are always maintained below 130/80mmHg. The first-line medication of choice for managing an individual with hypertension and CKD is ACE inhibitors, such as Lisinopril, as it is nephroprotective (Theodorakopoulou *et al.*, 2024). Regulated blood sugar levels slow down the progression of CKD, and the preferred investigation for monitoring blood sugar levels is the glycated hemoglobin (HbA1c), particularly because it shows how blood sugar has been over 90 days (Triozzi *et al.*, 2021). For individuals with diabetes and chronic kidney disease (CKD) not

receiving dialysis, KIDGO recommends an individual HbA1c target between <6.5% and <8.0% (de Boer et al., 2020).

Renal Replacement Therapy

Renal Replacement Therapy (RRT) is a supportive treatment for individuals whose kidneys are no longer functioning well or individuals with Stage 4 and Stage 5 CKD. RRT involves some techniques, such as kidney transplantation, hemodialysis, and peritoneal dialysis, intended to replace kidney functions by eliminating waste, regulating electrolytes, and removing excess fluid (Vaidya and Aeddula, 2024). There are three types of RRT, namely, hemodialysis, peritoneal dialysis, and kidney transplantation. Hemodialysis is the most common RRT in low- and middle-income countries. A dialyzer machine is used to remove waste materials and extra fluid from the bloodstream extracorporeally. Blood from the patient is cycled through the device during hemodialysis, where it is filtered and then returned to the body. Usually, this process necessitates multiple weekly visits to a dialysis facility (Mushi, Marschall and Fleßa, 2015; Kao Rong, 2023).

Peritoneal dialysis

In peritoneal dialysis, a dialysis solution, called the peritoneal dialysis fluid, is injected into the peritoneal cavity, and it interacts with the peritoneum (the membrane lining the abdominal cavity). A peritoneal dialysis catheter, which is made of silicone rubber, is passed through the abdominal wall. The catheter has one or two cuffs. Under either local or general anesthesia, the catheter can be inserted percutaneously or laparoscopically (Kuipers *et al.*, 2019).

Kidney transplantation

Kidney transplantation is a surgical procedure where a patient with end-stage CKD is given a new kidney from a healthy donor. It is the optimal and long-term treatment for persons with end-stage

kidney disease (Abramyan and Hanlon, 2023). However, the number of people eligible for a kidney transplant is restricted due to concerns about compatibility and organ availability. Although humans are anatomically endowed with two kidneys, a single healthy kidney is sufficient to sustain normal physiological function. Individuals who donate one kidney can continue to live a healthy and productive life without significant long-term implications, provided they undergo appropriate medical monitoring (Serur *et al.*, 2017; Soriano, Penfold, and Leslie, 2023).

2.6 Processes leading to chronic kidney disease diagnosis

The diagnosis of chronic kidney disease (CKD) is frequently delayed, especially in low-resource settings within low- and middle-income countries (LMICs). This delay often occurs because earlystage CKD is more likely to be overlooked. Patients are often seen by non-specialists or primary healthcare providers who may lack the necessary knowledge to recognize the link between the non-specific symptoms of early CKD and chronic kidney dysfunction (Ameh *et al.*, 2020).

CKD is often identified through laboratory investigations of the kidney function, which includes the eGFR, the presence of proteinuria or albuminuria, and electrolyte imbalances; thus, early screening and detection are crucial for initiating timely interventions (Gaitonde *et al.*, 2017). In sub-Saharan Africa and other low-income regions, although public health education on noncommunicable diseases is available, there is limited discussion on CKD prevention and few public health programs aimed at improving kidney health, especially in low-resource settings (Tannor and Calice-Silva, 2022a).

CKD progression is best delayed if detected early; however, some factors further delay the diagnosis of CKD. Factors such as knowledge of the risk factors and causes of the disease, cultural beliefs, weak health systems, low literacy rates, poor health-seeking behavior, lack of adequate health funding, and the limited capacity of primary health care facilities for screening for kidney

disease and other NCDs. Furthermore, universal health coverage is absent in the majority of LMICs (Kalyesubula *et al.*, 2022). In low-resource settings, primary healthcare services are limited. Healthcare providers cannot easily screen or detect early kidney disease due to a lack of adequate knowledge and investigative tools. Sometimes, individuals must pay out-of-pocket for these tests, and in most LMICs, many cannot afford them, which delays diagnosis. (George *et al.*, 2022).

A study conducted in Northern Ghana found that many people with hypertension or diabetes are unaware that CKD can be a possible complication of these conditions. Additionally, individuals often rely on herbal medications or alternative treatments, partly because they are more affordable and influenced by cultural beliefs (Boateng *et al.*, 2024). The process leading to the diagnosis of CKD is thus multifactorial, involving not only clinical judgments but also individual, organizational, and sociocultural factors.

2.7 Health Seeking Behaviors

Health-seeking behaviors are processes an individual responds to health challenges and makes choices about when and where to seek care (Bello *et al.*, 2015). Health-seeking behaviors have been inextricably tied to cultural beliefs, socio-economic challenges, and structural barriers of the healthcare system (Latunji and Akinyemi, 2018). For the majority of residents, the onset of CKD symptoms such as swelling in the body, fatigue, and decreased urination is not explicitly recognized as a health problem requiring expert healthcare. Instead, such symptoms are usually attributed to spiritual or religious causes or that they result from curses, and this results in a first line of resort to traditional healers, herbalists, or religious leaders who are considered custodians of healing in society (Lekuu and Yidana, 2023).

The cultural belief in supernatural causation of chronic illnesses like CKD tends to delay healthseeking for biomedical services by the time the disease has already progressed past the late stages. Lack of awareness and knowledge about CKD among the public is also very widespread due to inadequate public health education and outreach programs on non-communicable diseases. Research has proven that in the rural areas of Ghana, such as the South Tongu District, most individuals do not acknowledge CKD warning signs and risk factors such as diabetes and hypertension, thus low perceived severity and susceptibility (Lekuu and Yidana, 2023).

Furthermore, stigma associated with kidney diseases, including beliefs that CKD is a form of punishment or linked to immoral behavior, discourages open discussions and proactive healthseeking, thereby pushing individuals to resort to home remedies or delay seeking medical intervention until complications arise (Amoako *et al.*, 2014). These cultural perceptions, coupled with entrenched trust in indigenous healthcare practices, create a fragmented health-seeking pathway where biomedical interventions are often considered a last resort. These cultural attitudes and rooted beliefs in conventional healthcare systems render the health-seeking pathway disjointed, where biomedical treatment is sometimes the last option.

The economic factors further hinder CKD patients in South Tongu District from undertaking health-seeking behavior because of the prevalence of poverty and financial instability. Most of the residents engage in subsistence farming, fishing, or petty trade with irregular incomes that make the diagnosis and treatment of CKD, including dialysis, very expensive (Lekuu and Yidana, 2023). The inadequacy of the National Health Insurance Scheme (NHIS) to provide for comprehensive CKD management forces patients to fund laboratory tests, medication, and dialysis procedures privately, and most drop or discontinue treatment due to budget constraints.

The health facilities in the Volta Region also lack specialized renal care services, and nephrology centers are primarily located in urban areas, such as Accra and Ho, with patients from South Tongu having to travel long and costly distances for specialist care (Amoako *et al.*, 2014). The geographical remoteness, combined with suboptimal transport infrastructure, makes follow-up care challenging, resulting in intermittent and low-quality patterns of care-seeking. In addition, the health system's failure to provide early CKD screening and diagnosis at primary levels of medicine leaves cases diagnosed only when patients exhibit severe complications. District health officials have also noted CKD management training gaps and a lack of essential diagnostic equipment, which affect care standards at district hospitals.

Thus, individuals with CKD in South Tongu embark on a health-seeking pathway guided by illness cultural meanings, economic hardship, and structural deficiencies that lead to late diagnosis, uncontrolled disease, and heightened risk for adverse health consequences. Breaking these multifactorial barriers requires targeted public health education, expansion of NHIS coverage for chronic diseases, decentralization of renal care, and culturally acceptable health interventions to bridge the gap between biomedical care and traditional beliefs.

2.8 Support Systems

Support systems are associations that provide individuals with resources and assistance to cope with challenges. It plays a vital role in helping an individual cope with a disease or dysfunction (Lango, 2022). In low-and middle-income countries, support systems are primarily informal and predominantly rely on family networks, community organization, and religious affiliation rather than institutional support. Family members tag along on CKD patients' hospital visits, assist with caregiver activities, and also chip in on the out-of-pocket expenditure for medication, diagnostic procedures, and dialysis sessions (Ogweno, Anjejo and Oduor, 2023)

The financial exposure of the larger percentage of households in the South Tongu District, where survival is subsistence agriculture and petty trade, limits the extent of the financial contribution families can sustain in the long term (Amoah and Duma, 2019). Support from the community is also provided, with friends, neighbors, and religious congregations (such as church fellowships) occasionally organizing mass fundraisers or donations to assist those who need severe care, such as CKD patients who cannot pay for dialysis. However, these informal safety nets are haphazard and often insufficient to cover the long-term expense of CKD treatment, especially considering the huge expense of dialysis and the lack of specialist renal services within the district itself (Tannor *et al.*, 2019). Its reliance on informal support networks, while essential, also means that patients lacking strong family or community support are severely disadvantaged, with increased risks of treatment breaks and poor disease outcomes.

Generally, institutional support networks are seriously underdeveloped, a reflection of broader systemic issues in Ghana's provision of chronic non-communicable disease care. National Health Insurance Scheme (NHIS), instituted to provide economic protection against the cost of health care, has incomplete benefits towards the provision for costs of CKD-related expenditure, excluding critical interventions such as dialysis that form the cornerstone of patient management of end-stage renal disease (Tannor, 2018)

This economic shortfall forces many patients to either forego treatment or depend on sporadic acts of benevolence by NGOs, philanthropic organizations, or religious organizations, which are typically sporadic and temporary. Furthermore, psychosocial support networks like patient counselling services or patient support groups for CKD patients are de facto nonexistent in rural settings like South Tongu, so patients and their families must cope with the psychosocial and emotional burden of the disease without professional guidance (Lekuu and Yidana, 2023). Health

care providers in the local facilities lack specialized training in renal management, thus limiting their capacity to provide in-depth patient education, ongoing monitoring, or palliative therapy.

This situation is compounded by the absence of decentralized renal clinics within the Volta Region; thus, patients have to travel to Accra or Ho for specialized care, which is too expensive for most of the patients. To improve patient support systems for CKD, there is a paramount need for policy intervention that will broaden NHIS coverage for chronic diseases, establish community-based patient education and patient support groups, and include CKD management in primary health care services across rural Ghana.

In summary, existing literature reveals the growing burden of CKD in low-and middle-income countries, with major risk factors being hypertension and diabetes. Individuals usually present to hospitals in the late stages of the disease due to the absence of symptoms or non-specific symptoms that are experienced in the early stages. Barriers to treatment identified are financial constraints, inaccessible treatment centers, and systemic barriers. However, very few studies have explored the experiences of people living with chronic kidney disease, thus indicating a gap in research which this study hopes to fill.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter focuses on the methods of the study. A qualitative design was used to explore the experiences of individuals living with chronic kidney disease in the South Tongu District of the Volta Region.

3.1 STUDY DESIGN:

This study adopted a qualitative exploratory design to gain an in-depth understanding of the lived experiences of individuals with chronic kidney disease (CKD). A qualitative approach was appropriate for exploring personal information, emotions, and perceptions that cannot be captured through numerical data. Furthermore, there was a limited number of eligible participants, which makes this study approach more feasible and appropriate for the study.

3.2 STUDY POPULATION

The study population included adults aged 18 years and above who have been diagnosed with chronic kidney disease and are receiving treatment. Participants must have lived with the condition for at least two months to ensure they have adequate experience to share.

3.3 INCLUSION AND EXCLUSION CRITERIA

INCLUSION CRITERIA

1. Participants must be aged 18 years and above
2. Participant must be clinically diagnosed with chronic kidney disease
3. Participant must have been living with the condition for at least two months or more

EXCLUSION CRITERIA

1. Individuals less than 18 years old
2. Individuals who have been diagnosed and are living with chronic kidney disease for less than two months

3.4 SAMPLING PROCEDURES

Approximately fifteen (15) to thirty (30) participants were to be recruited, depending on data saturation. During the data collection process, challenges were encountered in recruiting participants. Some of the eligible patients who had initially been identified for inclusion had

unfortunately passed away a few months after their diagnosis. This limited the available number of participants and made the recruitment process more difficult than anticipated; thus, instead of participants being recruited from the South Tongu District hospital, some of the participants were recruited from another facility in the district, namely, Richard Novati Catholic hospital.

Purposive sampling and snowballing were used to select participants who could provide relevant and diverse information regarding their lived experiences with chronic kidney disease. The selection aimed for maximum variation in terms of age, gender, socioeconomic status, and stage of kidney disease.

3.5 DATA COLLECTION METHODS AND INSTRUMENTS

Data was collected through in-depth interviews using an interview guide developed based on the objectives of the study. The interview guide was adapted from the Research on Obesity and Diabetes among African Migrants (RODAM) study (Agyemang *et al.*, 2022). Interviews were conducted in English, Twi, and Ewe, depending on participant preference, and were audiorecorded with informed consent. Each interview lasted between fifteen (15) to thirty (30) minutes and was held in a private or convenient location for the participants. The data collection instruments used were an interview guide, interview was recorded using a phone. The interview guide consisted of open-ended questions designed to explore participants' personal experiences.

3.5.1 PRE-TESTING

Before the main data collection was done, the semi-structured interview guide was pretested to assess relevance and cultural appropriateness, and the ability of the questions to produce rich and meaningful responses relevant to the study. An interview was conducted with one participant who met the study criteria but was not included in the main study. This participant was purposively

selected from the same sample site. Feedback from the pretest was used to revise the structure and flow of questions in the interview guide to ensure the reliability of the data collection process.

3.5.2 DATA ANALYSIS

For this qualitative study exploring the experiences of people living with chronic kidney disease (CKD), data analysis was conducted using thematic analysis. All interview recordings were transcribed verbatim in English in textual form on Microsoft Word for analysis. By directly transcribing participants' records verbatim, the researcher minimized personal biases. After the researcher transcribed the recording verbatim, the data were then analyzed using the Thematic Analysis technique. Thematic analysis was employed by (Braun and Clarke, 2006) Has a sixphased approach to analyzing data.

1. Familiarizing yourself with the data
 2. Generating initial codes while reading the data
 3. Organizing codes into themes
 4. Reviewing the themes
 5. Define and name each theme
 6. Produce a report based on the available information gathered through the process
- researcher made sure to analyze data collected using this approach

3.5.3 DATA HANDLING

All data collected during the study were handled in accordance with ethical principles, including confidentiality and informed consent. Each interview was audio-recorded. The audio recording and transcribed recording were stored on a secure hard drive. The data was accessible to the primary researcher and supervisor. To ensure confidentiality, no names or identifying information were associated with the data.

3.6 ETHICAL CONSIDERATIONS

Ethical approval was obtained from the Institutional Review Board of Ensign Global University before the commencement of the study. Ethical clearance was also obtained from the South Tongu District Hospital Review Board, as well as a clearance approval from the South Tongu District Health Directorate prior to data collection. Informed consent was obtained from all participants before data were collected, and participants were informed of their rights to withdraw from the study at any point without consequences. Confidentiality and anonymity were ensured.

3.7 LIMITATIONS

The study has some limitations that need to be acknowledged. The study was conducted in a single district within the Volta Region. This limits the generalizability of the findings to other regions of Ghana. Also, the sample size was relatively small and may not capture the full diversity of experiences of all CKD patients. The study also relied on participants' narratives, which may be subject to recall bias. Additionally, studies focused only on patients, including caregivers and healthcare providers, may have provided a more comprehensive understanding of the challenges surrounding CKD care.

3.8 ASSUMPTIONS

The study was based on the assumptions that participants were going to provide honest accounts of their experiences since they were the ones with the disease and also be able to recall their experiences with CKD. Also, the study assumed the experiences of CKD patients in South Tongu District would reflect the broader realities of patients in similar settings in Ghana

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter focuses on the study results. This study used a phenomenological approach to explore the experiences of living with chronic kidney disease in the South Tongu District in the Volta Region, Ghana, with direct quotes to support various points. The chapter presents the characteristics of the sample and the key findings.

4.1 Sample description

Qualitative data were obtained from interviews conducted with 15 participants. The participants were identified as P1, P2, P3.....P15; In all, there were five (5) females and ten (10) male participants. Most of the participants (14) were within the age range of 20 and 50 years. Table 4.1 below shows sample demographic characteristics of participants.

Table 4.1

CODES	AGE	GENDER	CURRENT TREATMENT
P1	21	FEMALE	DIALYSIS
P2	41	MALE	DIALYSIS
P3	24	MALE	DIALYSIS
P4	39	FEMALE	DIALYSIS
P5	49	MALE	DIALYSIS
P6	41	MALE	DIALYSIS
P7	32	FEMALE	LIFESTYLE MODIFICATION AND MEDICATION
P8	24	MALE	LIFESTYLE MODIFICATION AND MEDICATION
P9	49	MALE	DIALYSIS
P10	42	FEMALE	MEDICATIONS AND LIFESTYLE MODIFICATION
P11	55	MALE	DIALYSIS
P12	52	FEMALE	LIFESTYLE MODIFICATION AND MEDICATION
P13	32	MALE	DIALYSIS
P14	65	MALE	DIALYSIS
P15	30	MALE	LIFESTYLE MODIFICATION

4.2 Themes from the interview

The analysis of the interview highlighted three main themes and eighteen subthemes. Table 4.2 shows the main themes and sub-themes

Table 4.2

Main themes	Subthemes
1. PROCESSES LEADING TO CKD DIAGNOSIS	<ul style="list-style-type: none"> • Stages of CKD • Year of diagnosis • Perceived causes of symptoms • Symptoms of CKD • Misdiagnosis and delayed diagnosis • Descriptions of CKD • Emotional reactions to CKD diagnosis
2. HEALTH-SEEKING BEHAVIOURS AND TREATMENT OPTIONS	<ul style="list-style-type: none"> • Care facilities • Current treatment • Formal health care utilization
	<ul style="list-style-type: none"> • Self-care and alternative medicine • Treatment options • Dialysis experiences • Barriers to treatment adherence
3. SUPPORT SYSTEMS UTILIZED FOR CARE	<ul style="list-style-type: none"> • Institutional support • Peer/community and faith-based support

- | | |
|--|---|
| | <ul style="list-style-type: none">• Support from family• Recommendations |
|--|---|

4.3 Processes leading to CKD diagnosis

This theme assessed the processes leading to CKD diagnosis, seven subthemes were identified: 1. Symptoms of CKD, 2. Perceived causes of symptoms, 3. Year of diagnosis 4. Stages of CKD 5. Misdiagnosis and delayed diagnosis 6. Descriptions of CKD and 7. Emotional reactions to CKD diagnosis. Symptoms of CKD were defined as symptoms that participants were experiencing before seeking healthcare. Perceived causes of symptoms were defined as what participants thought was the cause of their symptoms. The year of diagnosis is defined as when participants were diagnosed with CKD. The stages of CKD are defined by participants' knowledge of their stage of CKD. Misdiagnosis and delayed diagnosis highlight whether participants visited the hospital several times before they were finally diagnosed, and if symptoms were worsening before CKD was identified. The descriptions of CKD explore how participants describe or understand CKD, and the emotional reactions to CKD diagnosis highlight how participants reacted to their diagnosis. Participants report on their perceived causes of symptoms, the stages of CKD, the year they were diagnosed, and their descriptions of CKD would be reported under the symptoms of CKD

4.3.1 Symptoms of CKD

Participants described a range of early symptoms, including fatigue, dizziness, swelling of the face and feet, and abdominal pains. However, most did not initially associate these symptoms with kidney disease; instead, they attributed them to common conditions such as stress or a shortage of

blood. This misinterpretation often contributed to delays in seeking medical attention. For example, one male participant explained:

“....., I was always tired even when I did something little, I told my mother how I was feeling and she said it could be because I was short of blood in my body.....” (P13, Male)

Another participant noted how his initial symptoms were overlooked until his symptoms worsened

“..... I remember I was feeling dizzy, constantly tired, and the palpitations, that was what I was experiencing; however, I later realized my feet and face were swollen as well” (P11, Male)

When asked about their understanding of CKD, most participants' description of CKD was often limited to the idea that their kidneys were spoilt or not working, indicating that participants had only a basic idea of the condition and lacked the medical understanding of the disease. As one participant noted:

“..... when we went to Ho to see the specialist, he tried to explain it for me to understand, but what I understood is that my kidneys were no longer functioning well” (P14, Male)

These findings indicate that the non-specific nature of CKD symptoms, combined with participants' limited knowledge of the disease, led to misinterpretation and delayed health-seeking.

Such delays often meant that participants underwent repeated hospital visits or received treatment for other conditions before CKD was properly identified.

4.3.2 Misdiagnosis and Delayed Diagnosis

Some participants ($n=3$) reported visiting a hospital or healthcare facility multiple times before CKD was finally identified. A 41-year-old male participant explained how he moved from Kpando to Dzemeni without improvement until he was finally referred to Peki.

“.... I first went to the hospital at Kpando, but I wasn't getting better. Then I went to Dzemeni and stayed for three days, still no improvement, before I was finally referred to Peki” (P2, Male)

Such repeated hospital visits not only delayed proper treatment but also worsened symptoms. Misdiagnosis is therefore a major barrier to timely CKD management in this setting. Beyond misdiagnosis, the way participants emotionally reacted to their diagnosis also revealed the psychological impact of living with CKD.

4.3.3 Emotional reactions to CKD diagnosis

This subtheme highlighted the emotional reactions participants exhibited upon receiving their diagnosis. Participants reported a range of emotional expressions, including shock, fear, denial, frustration, and confusion, amongst others. Some participants explained that they had never been seriously ill before, so the diagnosis came as unexpected news to them.

“I never really fell sick, so I was really confused” (P9, Male)

“.... I was just frustrated most times and sad. Hmm” (P11, Male)

One participant, however, expressed calm acceptance, reporting that they were not overly worried despite the seriousness of the disease:

“I really wasn't worried or scared” (P15, Male)

These varied emotional responses show how individuals coped differently with the diagnosis, while some struggling with distress while others appeared indifferent. Overall, CKD diagnosis was a challenging experience, indicating the psychological burden associated with CKD.

4.4 Health-seeking behavior and treatment options

This theme is made up of seven (7) sub-themes, which are care facilities, current treatments, treatment options, formal health care utilization, self-care and alternative medicine, dialysis experiences, and barriers to treatment adherence. This theme explores participants' experiences in seeking care, the treatments they received, self-care practices, and challenges faced during treatment. It reflects how participants navigated the healthcare system, adhered to treatment, and incorporated alternative strategies. Participants reported on which care facilities were utilized for treatments. These were recorded under formal health care utilization. Also, reports on self-care and alternative medicine, and current treatments were recorded under treatment options

4.4.1 Formal healthcare utilization

Participants reported attending the hospital at Ho, which serves as a tertiary facility for the management of CKD after diagnosis, where they had access to specialist consultations, laboratory investigations, and dialysis services. Most participants were referred from the district hospital. Formal healthcare became the main source of treatment once CKD was diagnosed, though patients often reached this stage after delays.

“..... they referred me to ho Trafalgar, that my kidneys have spoilt and they put me on dialysis, so I am on dialysis now” (P1, Female)

“I was referred to see a specialist in Ho, so after discharge, I immediately went to Ho” (P11, Male)

4.4.2 Treatment options

Participants reported different treatment pathways ranging from dialysis and prescribed medications to self-care, herbal remedies, and spiritual healing. For most, dialysis was the only

viable option presented after being diagnosed. A few participants, however, were informed about kidney transplantation as a long-term solution, although the associated cost placed it beyond their reach. Others were managed with medications and lifestyle modifications, particularly in the earlier stages.

“...I had to be put on dialysis immediately, But when I had a consultation with the doctor, he explained to me that the only way I could live without being on dialysis was for someone to give me one of their kidneys, but the procedure was going to cost me a lot.” (P13, Male)

Before CKD diagnosis, some participants mentioned they either got medications from over the counter without a prescription or relied on herbal or home-made medications. One participant also mentioned trying herbal medication even after a CKD diagnosis. One participant, however, said she sought spiritual healing as part of treating the CKD. These indicate that some participants sought multiple pathways to make sense of their condition. Herbal or homemade medications could counter orthodox medication being prescribed. This could counter the efficacy of prescribed drugs.

“..... I only went to the hospital just once since this whole thing started, I have been preparing my own herbs at home, I also have Efpac in the house for when I’m having headaches and body pains, so I used to take care of myself with my herbs, until now that they’ve detected this disease and now, I have to be going to the hospital for the dialysis” (P14, Male)

Overall, dialysis emerged as the main treatment option once CKD was diagnosed especially in the late stages of the disease. Reliance on herbal remedies, self-medications and spiritual healing was more common prior to diagnosis, when participants were still trying to figure out the cause of their symptoms. This shift from alternative practices to medical treatment reflects the progression of the disease and the limited treatment choices available.

4.4.3 Barriers to Treatment Adherence and Dialysis Experiences

Participants faced significant challenges in adhering to prescribed treatments, particularly dialysis. Financial strain was the most common barrier, as many struggled to afford transport costs, laboratory tests, and dialysis fees, especially those in facilities where dialysis was not covered by the National Health Insurance. Some participants occasionally missed dialysis sessions because they could not raise the required funds.

“It’s only the financial challenge that makes me miss my sessions, because so far, I’ve done sessions that I haven’t paid for yet, and it keeps piling up” (P4, Female)

Distance to treatment centers also posed difficulties. Several participants ($n=9$) described the long journeys to Ho as both costly and exhausting

“There are so many challenges, for the dialysis, let me say the place is far, from my place to Ho is far” (P1, Female)

“The fact that I have to travel all the way from here to Ho is challenging” (P10, Female) Participants also faced structural barriers such as frequent machine breakdowns and long waiting times. When machines failed, participants sometimes had to postpone treatment or sleep overnight at the facility under uncomfortable conditions

“Apart from the money issues too, there are times you go to the hospital and you’d be told that the machine is faulty and we have to rely on just two machines, or sometimes all the machines are faulty so there are no machines to cater to our need” (P11, Male)

Participants reported differing experiences with dialysis. While some participants experienced weakness and exhaustion after dialysis, others reported temporary relief from their symptoms.

“..... after the dialysis, you don’t even have the strength to do anything” (P5, Male)

“..... for me, I can walk without any support and I can do everything by myself after my dialysis session” (P2, Male)

In summary, treatment adherence was hindered by financial constraints, distance to treatment centers, and health system limitations. These barriers not only disrupted regular treatment but also affected participants’ quality of life

4.5 Support systems utilized for care

This theme has four (4) sub-themes. It seeks to explore various support systems participants use for care that helps them cope better with the disease. The sub-themes are institutional support, family support, peer/community, and faith-based support, and recommendations from participants. Institutional support system seeks to explore the support participants have received from NGOs, government, and national policies, that is, National Insurance Schemes. The family support system seeks to explore support received from family, that is, spouses, parents, siblings, and other relatives. The peer/community and faith-based support system seeks to explore the support system received from friends, the community, church, or religious organization, and the recommendations are requests made by participant that addresses their needs to make coping with the disease better.

4.5.1 Family support

Family members were the most consistent source of support. They contributed mostly financial support and also offered emotional and physical support. Family assistance was fundamental in helping participants continue treatment.

“..... my husband assists me financially” (P7, Female)

“...they encourage me not to give up any time, I say that I want to die and all that, they pray for me and provide financial support too....” (P13, Male)

4.5.2 Peer/community and faith-based support

Some participants received occasional support from friends, churches, and community members. These contributions were mostly financial and often small in scale. Although helpful, such support was irregular and insufficient to meet ongoing treatment needs

“Occasionally the church supports me with money for my medications” (P9, Male)

“.....the church once a while they support...” (P5, Male)

4.5.3 Institutional support

Institutional support was quite minimal. While the National Health Insurance scheme covered some medications and provided some subsidy for dialysis, participants emphasized that this was not enough to sustain long-term care.

“.... for now, it’s free, but the free, it’s just 8 times in the month, from the 9th time going, you have to pay for it” (P1, Female)

“...most of my medicines are covered by the health insurance, so I don’t pay so much for them...”
(P12, Female)

This limited institutional assistance has left patients to bear most of the financial burden themselves.

4.5.4 Recommendations

Participants suggested some measures to improve CKD care; financial support was the most urgent, as many could not sustain the high cost of dialysis and other treatments prescribed. They also suggested an increase in the number of dialysis machines to reduce waiting times and ease the burden of travel. In addition, participants emphasized the role of non-governmental organizations (NGOs) in assisting. They expressed hope that NGOs could complement family support by contributing funds and offering psychological interventions.

“.... I wish there was a system that helps us financially to be able to pay for our dialysis session”

(P3, Male)

“An NGO must support us who are on dialysis “(P4, Female)

These recommendations highlight the pressing need for a multi-layered support system that goes beyond family and government contributions. Financial schemes, additional machines, patient support groups, and the active involvement of NGOs could provide more sustainable care for CKD patients and further help them cope better with the disease

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter of the study is a discussion of the findings from the interview conducted, linking them to the objectives of the study and situating them within the context of existing literature. The study sought to explore the experiences of individuals living with chronic kidney disease in the South Tongu district of the Volta Region. The results highlighted some key issues, including barriers to

treatment adherence, health-seeking behaviors, and support systems utilized for care, amongst others.

5.1 Summary of Findings

The overall aim of the study was to explore the experiences of people living with chronic kidney disease in the South Tongu District of the Volta Region, Ghana. This research provides an evidence base using a semi-structured interview guide to get in-depth information on the experiences of these individuals. Major findings from the research have been categorized and discussed under three main thematic areas: processes leading to CKD diagnosis, health-seeking behaviors and treatment options, and support systems utilized for care.

Demographic characteristics include gender, age, marital status, and the particular treatment participant is on. For this study, men seemed to be more affected by the disease than women, but this finding contrasts with a study conducted by Lokpo *et al.* (2018), who reported a higher prevalence in women than in men, especially those who have hypertension. In line with this study, Vincent Boima *et al.* (2021) also observed that CKD occurred more frequently in men than in women, indicating that gender distribution may vary across different settings. One possible reason for the male dominance in this study could be attributed to delayed health-seeking behavior among men as well as other factors such as alcohol intake that may increase their risk of hypertension and kidney damage.

Another demographic characteristic was that most of the participants who had the disease were between the ages of 20 and 50 years old, as compared to those who were aged or elderly. A 13year retrospective study was conducted in Ghana in some teaching hospitals, and it indicated that most of the participants who had CKD were between the ages of 46-55 years; however, findings from that same study suggested that CKD affected people in the age ranges of 26-75 years in Ghana

(Okyere *et al.*, 2020). The variation in age distribution may be attributed to differences in study design, population characteristics, and referral patterns at various hospitals. Despite this, both findings suggest the fact that CKD is not only limited to the elderly but also significantly affects younger and middle-aged adults. Consistent with earlier research, hypertension and diabetes emerged as the leading comorbidities among affected participants. This supports the well-established evidence that these conditions are the primary risk factors for CKD progression (Amoako *et al.*, 2014b). It further highlights the need to integrate chronic disease management approaches that address hypertension, diabetes mellitus, and CKD simultaneously.

Another important demographic characteristic identified was the treatment option. Most of the participants were on hemodialysis. These findings reflect the current clinical situation that dialysis remains the most widely utilized form of renal replacement therapy in Ghana (Boima *et al.*, 2019). The high proportion of participants being on dialysis may also be attributed to the limited accessibility and availability of other treatment options, like the kidney transplant, which is commonly not performed due to donor compatibility issues, high cost, and lack of necessary infrastructure and equipment to perform such a procedure (Osafo *et al.*, 2018). These findings align with previous studies conducted in Sub-Saharan Africa where dialysis often used as a long-term renal replacement therapy in patients with advanced CKD (Naicker, 2013), unlike high-income countries, studies have indicated higher access to kidney transplant, with dialysis serving as a temporary treatment for patient while waiting for transplant rather than a long-term treatment (Liyanage *et al.*, 2015b). This difference highlights the disparities in treatment availability across regions and reinforces the need for improved renal care services in low-resource settings.

5.2 Major Findings

5.2.1 Processes leading to CKD diagnosis

The study revealed different processes through which participants arrived at a diagnosis of CKD. Most participants affirmed experiencing some symptoms, such as headache, fatigue, and vomiting, which some attributed to either stress, malaria, or a spiritual problem. Most participants seem to have presented to the hospital in the late stages of their diseases, though some mentioned visiting the hospital or a health facility several times, but CKD was not detected until later. This reflects challenges in the early recognition of CKD. Similar findings have been indicated where nonspecific symptoms presented by patients are mostly misdiagnosed, thereby contributing to the late presentation of CKD (Tannor and Calice-Silva, 2022b). Participants' perception of their symptoms was a contributing factor to how they sought care. Some participants had gradual onsets of symptoms, making them perceive their symptoms were because of stress or a minor illness, and tried to manage symptoms by themselves and only reported to a hospital when symptoms were becoming worse. Most participants reported to the hospital as their first point for treatment due to a sudden onset of symptoms, which seemed too severe and life-threatening. According to (SitjarSuñer et al., 2025), CKD symptoms usually present in the late stages; thus, non-specific symptoms such as headache, dizziness are usually not associated with CKD, therefore making it difficult for patients to present early for care. However, a participant mentioned not having experienced any symptoms at all. This finding is consistent with existing literature that suggests that most patients may not show any symptoms before CKD diagnosis (Shilpa, 2020)

Reactions to the diagnosis ranged from fear, shock, and confusion. Most participants indicated their fear, confusion, or shock at the CKD diagnosis, particularly because of the lifelong implications of the disease. Fear was often linked to uncertainties about survival. Some participants

believed that a CKD diagnosis was a death sentence, therefore causing fear and panic. The thought of being on dialysis, coupled with the financial burden that comes with stirred more emotions among participants. A study conducted by (Bonsra and Komesuor, 2025) affirms these findings as it suggests that most participants respond with emotions such as shock and fear when diagnosed with CKD. The reactions to CKD diagnosis in this study are an example of the concept of biographical disruption, where chronic illness disrupts individuals' expected life choices, forcing them to choose new identities and plans (Pranka, 2018). These findings highlight the need for integrating psychological and social support in CKD care, alongside medical treatment.

Counselling and patient education may help mitigate shock and fear and promote resilience among CKD patients.

5.2.2 Health-seeking behaviors and treatment options

Findings from this study indicated that participants utilized different care facilities ranging from local clinics to tertiary hospitals. Before being diagnosed, some participants engaged in selfmedication and alternative therapies, including the use of herbal remedies, spiritual interventions, and over-the-counter drugs without prescription to alleviate their symptoms. This finding is consistent with (Yarney *et al.*, 2022) who reported that many persons resorted to using herbal remedies, over-the-counter medication, self-medication, or spiritual healing as their first point for care before utilizing formal health-care services. Individuals may rely on self-medication or alternative medication due to financial constraints in accessing quality health care, their perceptions about a disease, among others (Sf *et al.*, 2023). Although these options often offered temporary relief of symptoms experienced, they contributed significantly to the delayed presentation and diagnosis of CKD.

After CKD diagnosis, participants reported a shift to hospital-based care, with hemodialysis being the predominant treatment option. A major reason for this was the late stage at which participants presented, leaving dialysis as the only suitable option for survival. This pattern is consistent with previous studies done in Ghana and sub-Saharan African countries, where late presentations and delayed referral contribute to the late stage of CKD (Bello *et al.*, 2018) and dialysis being the most used treatment modality (Boima *et al.*, 2021), particularly because of the cost involved in kidney transplantation, compatibility issues, and the lack of adequate facilities for such a procedure to be conducted.

Despite this reliance on hospital care, participants reported several barriers to treatment adherence, particularly those on hemodialysis as their treatment option. The most common challenges included the high financial burden of dialysis, the availability of adequate dialysis machines, and challenges with distance to accessing dialysis treatment. In line with the study, similar studies have reported that patients with CKD, especially those in the late stages, suffer financial challenges in accessing dialysis treatment (Meremo *et al.*, 2017).

The impact of these challenges that hinder treatment adherence amongst people with CKD has profound clinical consequences. limited adherence, often driven by financial constraints, availability, and accessibility of dialysis machines, often accelerates the progression of CKD. As a result, these barriers are closely linked to high rates of mortality and morbidity among the patient population (Brimoh *et al.*, 2023). These findings highlight a dual pattern of care: informal and alternative health-seeking practices in the pre-diagnosis stage, followed by an exclusive dependence on formal hospital-based treatment post-diagnosis. However, adherence to treatment remains compromised by financial and systemic barriers. Addressing these issues will require not only expanding access to affordable renal replacement treatment, particularly dialysis, which is

mostly used in low-and middle-income countries, but also establishing financial assistance mechanisms to enhance long-term treatment adherence.

5.2.3 Support Systems utilized for care

This study revealed that the primary support system available to participants was their families, who provided financial, emotional, and physical assistance to help them cope with the burden of the disease. This finding is consistent with earlier studies done in Ghana and sub-Saharan African countries, where family support plays a major role in supporting patients with chronic illnesses (Dowou *et al.*, 2023). Given the high costs associated with dialysis, the psychological and physical stress associated with the disease, reliance on family resources is often pivotal for survival. In addition to family support, some participants highlighted support from friends and faith-based organizations, specifically the church. Some support received from this informal system was emotional support, spiritual support, and, in some cases, financial support. Similar to a study done by Boakye and Armah (2023), confirms the fact that some churches provide emotional and spiritual support to individuals when they are sick. These kinds of support have an impact on the health of an individual, as reported in this study (Mukta and Akter, 2025), where social support improves and reduces the risk of psychological stress, as well as improving the overall well-being of the sick individual (Lobato *et al.*, 2018)

For institutional support, it was identified that there was limited support from government and non-governmental organizations in their care. This lack of organized institutional assistance contrasts with experiences in some higher-income countries, where government subsidies and patient support programs are readily available (Hole *et al.*, 2020). The absence of such systems in Ghana intensifies patients' dependence on family, causing a strain on household resources and increasing the risk of catastrophic health expenditure. Some participants, however, confirmed some subsidies

from the National Health Insurance Scheme, though it didn't cover the total cost of treatment, and it seemed to be available only at specific facilities. According to (Tannor *et al.*, 2023) Ghana has 51 dialysis facilities spread across nine of the country's sixteen regions; however, only 40 of these are operational, with most operational centers located in the Greater Accra region. Whilst dialysis is free in 40 facilities throughout Ghana, the burden of the disease is still felt amongst those who do not have access to these facilities. Currently, in the Volta Region, there are only two hospitals that offer free dialysis sessions, namely, Ho Teaching Hospital and Volta Regional Hospital (Hohoe), though there are other private facilities that offer dialysis sessions; this treatment comes at a cost (Tannor and Antwi, 2023b). For many individuals, the distance to treatment centers, transportation costs, and the limited number of dialysis machines reduce the practical accessibility of these services. This restricted access to institutional support aligns with reports highlighting the inequities in the distribution of renal care services across Ghana, where dialysis services are concentrated in a few tertiary hospitals, leaving many regions underserved (Iddrisu and Boateng, 2025).

These findings highlight the central role of family support in sustaining CKD patients in Ghana, while also highlighting the critical gaps in state and organizational support. Addressing these gaps will require policy reforms that expand NHIS coverage of dialysis for all facilities and not be centered in only specific facilities, as well as the establishment of targeted financial assistance and psychological support programs for patients and their families.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

The findings from this study provide an in-depth understanding of the experiences of individuals living with chronic kidney disease (CKD) in the South Tongu District of the Volta Region. These

experiences also lend support to the Socioecological Model, which believes that health and health outcomes are shaped by multiple levels of influence, including individual, interpersonal, community, institutional, and policy factors. A key finding from this study revealed that symptoms experienced by CKD patients are mostly non-specific symptoms, which are often misdiagnosed till symptoms become worse, thereby delaying the CKD diagnosis process. These symptoms not only affect their physical functioning but also the overall quality of life of the patient.

By exploring individuals' narratives, the study highlighted how health-seeking behaviors, treatment adherence, and coping strategies are shaped by cultural beliefs, financial constraints, and the availability of health system support. It was evident that before a formal diagnosis of CKD, many participants relied on alternative medications and over-the-counter medications. Following diagnosis, however, hospital-based care, particularly dialysis, became the predominant treatment option. Despite the shift, treatment adherence was hindered by financial issues, inaccessible treatment centers, and limited dialysis machines, all of which contribute to the high burden of morbidity and mortality associated with CKD.

Support systems emerged as an essential factor for coping; family members were the primary source of financial, emotional, and physical assistance, while friends and faith-based organizations such as churches provided supplementary support. There was no notable support from government or non-governmental institutions in CKD care except for the National Health Insurance Scheme, which provided some partial relief of costs, especially dialysis, but it was only available at the Ho Teaching Hospital; every other dialysis center came at a cost.

These findings highlight the need for comprehensive and sustainable strategies that address not only the clinical management of CKD but also the psychological, economic, and systemic barriers that shape the experiences of people living with CKD.

6.2 Recommendations

This research recommends that health-promotion activities on chronic kidney disease prevention be intensified, especially in remote areas where many people are unaware of the disease and its progression. Also, CKD care should be integrated into existing hypertension and diabetes interventions, given the relationship between these conditions. Incorporating CKD screening, education, and management into routine services for hypertensive and diabetic patients would facilitate early detection and reduce the risk of late presentation with advanced disease.

This research also highlights the role of support systems for coping; thus, it is recommended that government and non-governmental organizations form some partnerships to provide financial and psychological support for patients living with CKD, so that way, families are relieved from the financial burden associated with the condition.

It also recommends that the National Health Insurance Policy on dialysis be extended to all centers offering dialysis treatment and not limit it to some specific facilities only. Also, more dialysis centers should be created in different areas across the region to reduce barriers that may hinder patients from accessing quality care at an affordable cost.

Finally, it is recommended that future research continue to explore the experiences of people living with CKD in different geographical areas in the country, especially remote areas. This research has provided insights into the challenges faced by CKD patients. A study can be conducted to evaluate the effectiveness of existing interventions available for CKD patients. Further research can give a strong evidence base for advocacy programs tailored to chronic kidney disease as well

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APPENDICES

APPENDIX 1: INTERVIEW GUIDE

EXPLORING THE EXPERIENCES OF INDIVIDUALS LIVING WITH CHRONIC KIDNEY DISEASE IN THE SOUTH TONU DISTRICT THE VOLTA REGION, GHANA

SECTION A

1. Can you tell me about yourself?

(Age, family, occupation. Education)

2. How long have you been living with chronic kidney disease?

Section B

3. Could you tell me the events that led you to seek medical care before you were diagnosed with CKD?

4. What symptoms were you experiencing during the period before the diagnosis?

5. Was the diagnosis explained to you? If yes, how did you understand it?

6. What was your reaction after you were told you had CKD?

7. How do you feel about the condition now?

SECTION C

8. Could you tell me what steps you took to manage the condition?

9. What treatment options were made available to you? Which option did you settle for and why?

10. Where do you usually seek care? (hospital, clinic, herbalist, etc.) And why?

11. What challenges do you face in accessing treatment?

12. How do you feel about the care you receive from healthcare providers?

13. Have you ever missed your review or treatment sessions? If yes, why?

SECTION D

14. Who provides you with support in managing the CKD?

15. What role does your family or community play in helping you cope with the condition?

16. What kind of support have you received?

(financial, emotional, physical)

17. Are you part of any support group? (religious groups, organizations)

18. What kind of support do you wish existed for people with chronic kidney disease to help them cope better with the condition?

SECTION E

19. Is there anything else you would like to share?

APPENDIX 2: INFORMED CONSENT FORM

TITLE: EXPLORING THE EXPERIENCES OF INDIVIDUALS WITH CHRONIC KIDNEY DISEASE IN THE SOUTH TONGU DISTRICT IN THE VOLTA REGION, GHANA

GENERAL INFORMATION ABOUT RESEARCH

This study seeks to find out about your experiences living with chronic kidney disease, how you identified that you were ill, the steps you took in managing the condition, and the support systems you have and how they have contributed to helping you manage the condition. This will help us understand the challenges you face in getting proper health care services and the support you need in managing the condition. This will help us develop solutions for people living with chronic kidney disease to make living with the condition more bearable.

If you agree to participate in this study, you will be asked a couple of questions through a face-to-face interview, and the interview process will be audio-recorded. The interview will last about 15-30 minutes. Participation in this study is voluntary, and you are allowed to quit the interview at any point should you feel uncomfortable or unwilling to continue without any consequences to your care or services received at the facility.

BENEFITS/RISKS OF THE STUDY

There are no foreseeable direct risks associated with your participation in this study, except that your time will be spent answering questions.

There are no direct benefits to you, but findings from this study will help inform health

promotion interventions to address challenges associated with living with chronic kidney disease.

CONFIDENTIALITY

All information you provide will be kept strictly confidential. Your name or anything that identifies you will not appear in any report or publication. Data collected will be stored securely and accessed only by the research team.

COMPENSATION

You will not receive any payment for participating in this study except verbal appreciation.

However, a bottle of water will be given to you during the interview process.

CONTACT FOR ADDITIONAL INFORMATION

Please contact me in case of any issues related to the study

Researcher: Dzokoto Ethel Esinu Adzo

Ensign Global University Kpong.

0549671290

CONSENT STATEMENT

“I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and I am willing to give consent for my participation in this

study. I voluntarily agree to participate in this study.”

.....

.....

Participants Name

Date

.....

Participants Signature/thumbprint/mark

I certify that the nature and purpose, the potential benefits, and potential risks associated with participating in this study have been explained to the above individual

.....

.....

Interviewers Name

Date

.....

Signature

APPENDIX 3: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

CODES	AGE	GENDER	CURRENT TREATMENT
P1	21	FEMALE	DIALYSIS
P2	41	MALE	DIALYSIS
P3	24	MALE	DIALYSIS

P4	39	FEMALE	DIALYSIS
P5	49	MALE	DIALYSIS
P6	41	MALE	DIALYSIS
P7	32	FEMALE	LIFESTYLE MODIFICATION AND MEDICATION
P8	24	MALE	LIFESTYLE MODIFICATION AND MEDICATION
P9	49	MALE	DIALYSIS
P10	42	FEMALE	MEDICATIONS AND LIFESTYLE MODIFICATION
P11	55	MALE	DIALYSIS
P12	52	FEMALE	LIFESTYLE MODIFICATION AND MEDICATION
P13	32	MALE	DIALYSIS
P14	65	MALE	DIALYSIS
P15	30	MALE	LIFESTYLE MODIFICATION

APPENDIX 4: ETHICAL CLEARANCE



**GHANA
HEALTH
SERVICE**

SOUTH TONGU DISTRICT HEALTH DIRECTORATE

P.O. Box SG 6, Sogakope
Digital Address: VU-0000-8799

Quote this number and date on all correspondence

My Ref No: STMHD/2024

Your Ref No:

Date: 31st July, 2025

TO WHOM IT MAY CONCERN

APPROVAL TO CONDUCT RESEARCH

The South Tongu District Health Directorate has received a request from Ms. Ethel Esinu Adzo Dzokoto; a Postgraduate Student of the Ensign Global University to undertake a research on the topic **"Exploring the Experiences of Individuals with Chronic Kidney Disease"** within South Tongu District.

The study seeks to understand the processes leading to Chronic Kidney Disease diagnoses, explore health seeking behaviours and support systems utilized by patients Chronic Kidney Disease.

She has been granted approval to conduct this research at the South Tongu District Hospital.

Thank you.

MS. DORIS DELALI FOLLY
SENIOR HUMAN RESOURCE MANAGER
FOR: DISTRICT DIRECTOR OF HEALTH SERVICE
SOUTH TONGU

HUMAN RESOURCE MANAGER
DISTRICT HEALTH DIRECTORATE
SOUTH TONGU, V/RA

Email: info@ghs.gov.gh
Website: www.ghs.gov.gh



OUR REF: ENSIGN/IRB/EL/SN-315/03
YOUR REF:

August 4, 2025

INSTITUTIONAL REVIEW BOARD SECRETARIAT

Ethel Esinu Adzo Dzokoto
Ensign Global University
Kpong.

Dear Ethel,

ETHICAL CLEARANCE TO UNDERTAKE POSTGRADUATE RESEARCH

At the General Research Proposals Review Meeting of the *INSTITUTIONAL REVIEW BOARD (IRB)* of Ensign Global University held on Friday, August 1, 2025, your research proposal entitled **"Exploring the Experiences of Individuals with Chronic Kidney Disease in the South Tongu District of the Volta Region of Ghana"** was considered.

You have been granted Ethical Clearance to collect data for the said research under academic supervision within the IRB's specified frameworks and guidelines.

We wish you all the best.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca Acquah-Arhin".

Dr. (Mrs.) Rebecca Acquah-Arhin
IRB Chairperson



GHANA HEALTH SERVICE

SOUTH TONGU MUNICIPAL HOSPITAL

P. M.B. 4, SOGAKOFE V/R.
Digital Address: VU-0051-9932
southtongu.dhvr@ghs.gov.gh
Quote this number and date on all correspondence

My Ref No. GHS/DHS/

Your Ref No.:

Date: 31st JULY, 2025

ETHEL ESINU ADZO DZOKOTO
[STUDENT]
ENSIGN GLOBAL COLLEGE
ACCRA, GHANA

RE: PERMISSION FOR DATA COLLECTION

Your request for collection of data in respect to your academic research work is duly noted.

The Research Committee of the hospital has studied the title of your research work and has expressed readiness to provide all the needed support in the data collection process as well as in other respects for the success of your project.

You are however required to submit evidence of ethical clearance on your proposal in order to satisfy existing institutional requirement.

Thank you.

[DR. RICHARD FORSON]
MEDICAL SUPERINTENDENT

APPENDIX 5: PLAGIARISM REPORT



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**APPENDIX 6: CODING
FRAME**

Codes	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
SYMPTOMS															
abdominal pains	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0
backache	0C	0	0	0	0	0	0	1	0	1	0	0	0	0	0
blood in the urine	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Brown toilet	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
coughing blood	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
dark urine	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
diarrhea	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
difficulty breathing	0	0	0	1	1	0	0	1	1	1	0	0	1	0	0
disoriented	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
dizziness	0	0	0	0	0	0	1	0	1	1	1	0	0	0	1
Fatigue	1	0	0	0	0	0	1	0	1	0	1	0	1	0	0
frequent urination	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Green toilet	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Headache	0	1	0	0	0	1	0	1	1	0	0	0	0	0	0

pain when I urinate	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Loss of appetite	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Low blood	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Symptoms	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

palpitations	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
scanty urine	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
severe joint pains	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
sweating	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Swelling	1	0	0	1	0	0	0	0	2	0	1	0	1	0	0
Swelling in the abdomen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Vomiting	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0

waist pains	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Weakness	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0
weight loss	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Totals	8	4	1	2	4	5	4	8	6	3	4	2	8	1	6

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
Perceived cause of symptoms recognized	0	0	0	1	0	0	0	0	1	1	0	0	2	0	0
Fatigue	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Malaria	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Shortage of blood	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
spiritual problem	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Stress	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
Care facilities	1	1	0	1	1	0	1	1	0	1	1	0	0	1	1
keta	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Trafalgar/ Ho	1	0	0	0	1	0	1	1	0	1	1	0	0	1	1
Current treatments	2	0	0	1	2	0	1	1	1	2	1	2	1	1	1
Blood transfusion	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
bp and diabetes medication	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0
Dialysis	1	0	0	1	1	0	0	1	1	0	1	0	1	0	1

lifestyle modification (dietary changes, exercise)	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
• Descriptions of CKD =11	2	1	0	1	0	1	1	1	0	1	1	0	1	0	1	
damaged	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
Failing kidneys	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
fault	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
kidneys were hurt	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
malfunction	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	
shut down	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Spoilt kidneys	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
Misdiagnosis and delayed diagnosis	0	3	0	1	0	0	0	0	0	1	0	0	0	0	0
Multiple hospital visits without CKD diagnosis	0	3	0	1	0	0	0	0	0	1	0	0	0	0	0

Symptoms worsening before CKD diagnosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Emotional Reactions to CKD diagnosis	2	0	0	1	1	3	2	2	2	1	2	1	1	1	0
Confusion	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
cried	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
denial	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
devastated	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
fear	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0
frustrated	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Not scared	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Panic	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
sad	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0

Shock	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
wasn't concerned	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Totals	4	0	0	2	2	6	4	4	4	2	5	2	2	2	0

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Formal Health care Utilization Gr=26	0	0	0	3	3	1	5	0	2	3	3	1	1	2	2
Consultations with Specialist	0	0	0	1	1	0	2	0	1	1	1	0	0	1	1
Laboratory Investigations and imaging tests	0	0	0	1	1	1	3	0	1	1	1	1	1	1	1
utilization of healthcare facility	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Totals	0	0	0	6	6	2	10	0	4	6	6	2	2	4	4

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Self-Care and Alternative medicines Gr=13	1	0	0	0	1	0	1	4	2	0	0	1	1	0	2
Herbal medicine	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1

Home remedies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Over the Counter medication without prescription	0	0	0	0	0	0	1	2	2	0	0	1	0	0	1
Spiritual Healing	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
• Treatment options Gr=17	1	0	1	1	1	2	4	1	1	2	1	0	1	0	1
Dialysis treatment	1	0	1	0	1	0	0	1	1	1	0	0	0	0	0
kidney transplant	0	0	0	1	0	0	0	0	0	1	1	0	1	0	1
Life style modification	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0
Medication use	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Totals	4	0	2	2	4	4	10	10	6	4	2	2	4	0	8

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Barriers to Treatment Adherence Gr=34	5	1	3	3	5	0	1	3	3	2	2	1	2	0	3

Availability of dialysis machines	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0
Distance to treatment center	1	0	1	0	0	0	0	1	1	1	0	1	0	0	1
Faulty dialysis machines	2	1	0	0	0	0	0	1	1	0	1	0	1	0	1
Financial burden	0	0	2	3	4	0	1	1	1	1	1	0	1	0	1
• Dialysis Experiences Gr=22	2	2	1	2	3	1	0	1	2	2	2	0	2	0	2
Emotional Turmoil	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
Feeling Better	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0
Financially Draining	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
Lack Of temporary accommodation	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Missing dialysis sessions	1	0	1	1	0	0	0	0	1	1	0	0	1	0	0

Multiple Admission	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
weakness after dialysis	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Totals	14	6	8	10	16	2	2	8	10	8	9	2	8	0	10

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Institutional Support Gr=5	1	0	0	0	0	0	0	1	1	0	1	1	0	0	0
National Health Insurance subsidies	1	0	0	0	0	0	0	1	1	0	1	1	0	0	0
Support from government	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Support from NGOs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	2	0	0	0	0	0	0	2	2	0	2	2	0	0	0

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14

• Peer/Community and faith-based support Gr=6	0	0	0	1	1	0	0	2	1	0	0	0	1	0	0
Emotional support from friends	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Financial support from a faith-based organization (church, mosque)	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0
financial support from friends	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
patient support group	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spiritual support from faith-based organization (church, mosque)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Totals	0	0	0	2	2	0	0	4	2	0	0	0	3	0	0

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
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• Support from Family	1	1	4	0	2	5	1	3	3	2	2	0	2	0	1
All kinds of support (financial, emotional, physical, spiritual)	0	0	0	0	0	1	1	0	1	0	1	0	1	0	0
Emotional support from relatives	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0
Financial Support from Relatives	1	1	2	0	1	3	0	2	1	2	1	0	1	0	1
Physical Support from family (eg. Cooking)	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
spiritual support Gr=2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Totals	2	2	8	0	4	10	2	6	6	5	4	0	4	0	2

CODES	P1	P2	P3	P5	P4	P7	P8	P6	P9	P10	P11	P12	P13	P15	P14
• Recommendations Gr=21	1	0	1	1	2	1	3	1	2	1	1	1	2	1	3
create awareness	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Financial support	0	0	1	1	1	1	0	0	1	1	1	1	1	1	1
provide machines	1	0	0	0	0	0	0	1	1	0	1	0	1	0	1
support from NGOs	0	0	0	0	1	0	1	0	0	0	1	0	0	1	0
support groups	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Totals	2	0	2	2	4	2	6	2	4	2	4	2	4	3	6