SCHOOL OF NURSING AND MIDWIFERY

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

BIO-PSYCHOSOCIAL EXPERIENCES OF OBSTETRIC FISTULA SURVIVORS AT NKWANTA NORTH DISTRICT IN OTI REGION

BY

DOREEN KAFUI QUARSHIE

(11007322)

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF

MPHIL IN MIDWIFERY DEGREE

SEPTEMBER 2024

DECLARATION

Apart from references to the work of others that have been properly cited, I declare that this thesis is entirely my own work and has not been submitted in any form for a degree at any university or other academic institution. I also declare that I have been under the supervision of Dr. Ernestina Asiedua and Dr. Deborah Armah at the Maternal and Child Health Department of the School of Nursing and Midwifery, University of Ghana, Legon

DOREEN KAFUI QUARSHIE 16/10/2025

(STUDENT) SIGNATURE DATE

DR. ERNESTINA ASIEDUA 16/10/2025

(PRINCIPAL SUPERVISOR) SIGNATURE DATE

DR. DEBORAH ARMAH 16/10/2025

(CO-SUPERVISOR) SIGNATURE DATE

ABSTRACT

Obstetric fistula continues to be a significant public health concern and one of the most devastating conditions affecting women in sub-Saharan Africa. This severe childbirth injury predominantly occurs in regions with limited access to quality maternal healthcare, significantly impacting the physical and psychosocial well-being of the affected women. Despite global maternal health advancements, an estimated 2 to 3.5 million women, mostly in sub-Saharan Africa and Asia, live with untreated obstetric fistula. The study explored the bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District in Oti Region using the bio-psychosocial model as its theoretical framework. The study utilized an exploratory descriptive qualitative approach. A purposive and snowball sampling techniques were used to select 10 participants from the Kpassa community who met the inclusion criteria and consented to participate in the study. In-depth interviews using a semi-structured interview guide were conducted with these participants. All interviews were audio recorded, transcribed verbatim, coded and manually analysed using thematic content analysis. This process uncovered five main themes and 19 sub-themes, three of which aligned with the bio-psychosocial model. It encompassed the biological, psychological and social experiences of women affected by obstetric fistula and two themes emerged after content analysis which comprised spiritual experiences and coping strategies employed by obstetric fistula survivors in managing their condition. The findings in this study agree with the literature that obstetric fistula survivors encounter numerous bio-psychosocial challenges resulting in significant disabilities. The study recommends that opinion leaders and policymakers take prompt action to establish advanced fistula treatment centres throughout all regions of Ghana. These centres should offer comprehensive care addressing the biological, psychological and social dimensions of the condition alongside strategies for reintegrating affected women into society.

DEDICATION

This work is dedicated to God, who gave me the wisdom and strength to carry it out through every stage of its completion.

ACKNOWLEDGMENT

I sincerely thank the almighty God for blessing me with life and strength to complete this study. I am also grateful to my esteemed supervisors, Dr. Ernestina Asiedua and Dr. Deborah Armah, for their invaluable guidance and encouragement throughout this journey.

I am sincerely thankful to my sponsors, NORAD, for their generous financial support, which has been instrumental in making my academic journey successful. Additionally, I extend my appreciation to the project leaders of MIDRED, Prof. Florence Naab and Prof. Samuel Adjorlolo, for their efforts in granting me the opportunity to achieve this significant achievement.

I am deeply grateful to Luther Kovey, and my children, Sena Koku Adzei and Sesime Like Adzo Adzei, for their unwavering encouragement and understanding when I was not available for them.

I want to extend my gratitude to the District Chief Executive (DCE) and his team at Nkwanta North District in the Oti Region, as well as to the Assembly member for Jumbo, Mr. James, for their invaluable support during the data collection process.

A special acknowledgment goes to the obstetric fistula survivors at Nkwanta North District in Oti Region for granting their consent to participate in this study. Lastly, I extend my gratitude to all the publishers and authors whose work provided essential support for this study.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

OF	-	Obstetric Fistula
CS	-	Caesarean Section
BPS	-	Bio-psychosocial
VVF	-	Vesicovaginal Fistula
RVF	-	Rectovaginal Fistula
ANC	-	Antenatal Care
DCE	-	District Chief Executive
WHO	-	World Health Organization
QDA	-	Qualitative Data Analysis
IRB	-	Institutional Review Board
BMI	-	Body Mass Index
EmOC	-	Emergency Obstetric Care
PTSD	-	Post Traumatic Stress Disorder
LMICs	-	Low- and Middle-Income Countries
NMIMR	-	Noguchi Memorial Institute for Medical Research

CHAPTER ONE

INTRODUCTION

This chapter provides an overview of the background of the study, the problem statement, and the purpose and significance of the study. It also outlines the research objectives and questions and provides operational definitions of key terms.

1.1 Background

Childbirth is an important aspect of procreation, and the birth of a newborn baby brings joy to the family and society at large. The process is either normal through the vagina or caesarean section (CS). Most women experience birth through spontaneous vaginal delivery, and most children are born healthy (Yifru et al., 2022). It is not easy to know in advance what might happen during childbirth. Skilled birth attendants, including midwives, nurses and medical doctors provide assistance. Obstetric fistula remains a significant global health issue, especially in low-income countries and it is often regarded as a critical indicator of maternal mortality (Limenih et al., 2024; Swain et al., 2020). Obstetric fistula can occur during obstructed labour when the presenting fetal part compresses the tissues of the birth canal continually, the base of the bladder, the urethra, or occasionally the rectum leading to tissue necrosis and ischemia (Bashah et al., 2019; Swain et al., 2020; Yismaw et al., 2019).

This is often accompanied by extensive scarring complicated by severe infections and poor tissue perfusion, which leads to distortion and retraction of the surrounding tissues (Wall et al., 2021). In more severe cases, the fistula may extend to the rectum leading to both urinary and rectal fistulas (Abrams & Pope, 2021). Prolonged obstructed labour, if not addressed with timely and appropriate medical intervention, can lead to uncontrollable leakage of urine and/or faeces (Bashah

et al., 2018). These injuries primarily occur because women often lack access to essential life-saving medical services that should be universally accessible (Wall et al., 2021). Although obstetric fistula is both preventable and treatable, it continues to be a significant issue in the world's poorest countries, where the majority of women give birth without adequate medical care (Yismaw et al., 2019).

The 20th century was characterized by a high prevalence of urinary and rectal fistula cases caused by birth processes, primarily due to prolonged obstructed labour and traumatic deliveries (Chinthakanan, 2023). Over time, this trend shifted significantly, with obstetric fistula being more prevalent among women from socio-economically disadvantaged background where access to quality obstetric care remains limited (Ngongo et al., 2022). The major causes of obstetric fistulae are multifactorial, with prolonged obstructed labour being the leading factor (Mutola et al., 2025). Obstructed labour occurs in an estimated 5% of pregnancies and accounts for 8% of maternal deaths globally, impairs quality of life and causes long-life impairments (Mbinya et al., 2021). In addition, about 22% of obstructed labour is complicated by obstetric fistula and the major cause of maternal deaths in less developed countries (Costa, 2023).

Evidence indicates that key risk factors for obstetric fistula include early marriage, living in rural areas, poverty, lack of education, prolonged labour, and inadequate access to emergency medical care (Woldegebriel et al., 2023; Yifru et al., 2022). Additionally, the condition leads to severe life challenges for women, including abuse or divorce from their husbands, strained relationships, and loss of financial support (Kumsa et al., 2023). Furthermore, their medical conditions hinder their ability to find employment. Kalemo and Zgambo, as cited in Mantey et al. (2020), highlighted that women with unrepaired fistulas are at a higher risk of spontaneous abortion, with secondary infertility frequently occurring.

Obstetric fistula remains a severe and debilitating complication of childbirth, contributing to maternal morbidity and posing a significant risk to a mother's life. Many women affected by fistulas endure the condition and its detrimental effects for over half of their lifetime (Cole, 2024). Global health inequality is attributed to the absence of safe, affordable, and medically sound caesarean delivery. Although advanced countries ended these defects in the 1900s, low- and middle-income countries (LMICs) continue to suffer health inequality due to the persistence of morbidity and mortality due to obstructed or prolonged labour (Ngongo et al., 2023).

In low-and middle-income countries, many women continue to suffer from obstetric fistula without receiving treatment (Manjate et al., 2024). The high prevalence of obstetric fistula in low- and middle-income countries highlights significant shortcomings in healthcare and social support systems that fail to safeguard vulnerable women and girls. This issue also reflects deep-rooted global inequalities and inadequacies in ensuring access to maternal health resources and protection (Degge et al., 2024). According to Swain et al. (2020), it remains a significant obstetric issue in low-resource settings and is one of the most apparent indicators of maternal health challenges. Estimating the prevalence and incidence of obstetric fistula is challenging due to the scarcity of locally collected data and potentially unreliable assumptions from other sources (Whiting et al., 2022). According to available data, the World Health Organization (2018) estimates that more than 2 million women and girls globally are affected by obstetric fistula, with 50,000 and 100,000 new cases occurring each year.

Obstetric fistula remains a prevalent childbirth-related injury in sub-Saharan Africa, where many women give birth without the assistance of skilled birth attendants (Samad et al., 2022). The condition disproportionately impacts the poorest women, whose voices often go unheard, with marginalized women and girls in sub-Saharan Africa and Asia bearing the most significant burden

(UNFPA, 2023b). The incidence of obstetric fistula in sub-Saharan Africa is notably high, with approximately 10 cases reported per every 1,000 live births (Azanu et al., 2020). Due to the shame and stigma associated with the condition, many affected women delay seeking medical attention, which suggests that the actual number of cases may be higher than reported. Estimates for maternal mortality in Zimbabwe range from 1,300 to 2,800 deaths annually, although these figures are highly debated and vary significantly (WHO, 2018).

Ghana now lacks credible real-time data on the number of obstetric fistula cases (UNFPA, 2022b). However, according to the United Nations Population Fund (UNFPA), Ghana contributes to the second-highest annual number of new cases in the sub-Saharan region after Nigeria, with a record total of 150,000 cases (UNFPA, 2023b). According to Ghana Health Service, out of the 1,538 cases recorded between 2011 and 2014, only 40.1% were corrected (UNFPA, 2022b). The World Health Organization estimated that 20 to 30 additional women and girls in Ghana may suffer from pregnancy-related impairments such as obstetric fistula for every woman or girl who dies from such causes (Ndoye & Greenwell, 2023).

Birth injuries can be physically, emotionally, and financially taxing, if untreated, it can have a disastrous impact on a woman's physical health (Ndoye & Greenwell, 2023). Obstetric fistula is a potentially fatal disorder that can affect any pregnant woman, although some conditions make it more likely to occur. These include female genital mutilation practices, poverty, child marriage, teenage pregnancy, malnourishment, and limited access to obstetric treatments. They are cut off from familial, church, and social activities, leading them to withdraw and isolate themselves. They often face isolation because of separation and divorce (Bashah et al., 2019). Women who have obstetric fistula have numerous challenges while attempting to receive treatment for their condition. These challenges can partially explain their protracted delay in seeking medical

assistance for their sickness (Asiedua et al., 2023). For those who eventually seek surgical repair, social reintegration remains a significant challenge. In rural Ghana and other low-resource settings, limited access to care, combined with persistent stigma and negative societal attitudes, intensifies women's isolation and suffering (Dako-Gyeke et al., 2022; Germano, 2024). Despite medical advances in surgical repair, the comprehensive needs of obstetric fistula survivors are inadequately addressed, leaving them marginalized within healthcare systems. This neglect poses a major barrier to achieving Sustainable Development Goal 3.1, which aims to reduce global maternal mortality to fewer than 70 per 100,000 live births by 2030 (Merdad & Ali, 2018; UNFPA, 2022a; Waniala et al., 2021). Beyond these barriers, the psychological consequences of obstetric fistula are often more devastating than the physical effects (Neville, 2023). Improving obstetric care in developing countries is crucial (Orawee Chinthakanan, 2023).

Despite the national effort to improve maternal health, obstetric fistula remains a significant public health concern in many low-resource settings, particularly in Ghana. A holistic understanding of their bio-psychosocial experiences underscores the need for focused inquiry into how women navigate the complex realities of living with obstetric fistula.

1.2 Problem Statement

No woman should suffer a life-threatening or disabling injury solely from birth (Wall et al., 2021). Obstetric fistula is a preventable public health condition that disproportionately affects women in low-resource settings. While it has been virtually eliminated in developed countries through skilled obstetric care and timely interventions, it remines a leading cause of maternal morbidity in underdeveloped nations (Abrams & Pope, 2021; Id et al., 2023).

The primary cause of obstetric fistula in these contexts is prolonged obstructed labour, which could be prevented with high-quality monitoring of labour and access to timely operative delivery (Abrams & Pope, 2021). Access to healthcare facilities remains a significant challenge in many rural areas, where the nearest centres may be located miles away. This distance creates barriers that lead to delays in seeking care, prolonged obstructed labour, and ultimately the development of obstetric fistula (Nuertey et al., 2018; UNFPA, 2022b). A study in Ethiopia by Matiwos et al. (2021), revealed that most women who develop obstetric fistula give birth at home without the assistance of skilled birth attendants, which further increases the risk of complications.

Approximately 90% of affected women deliver a stillborn baby, compounding the physical and emotional toll (United Nations, 2018). Obstetric fistula survivors experience continuous incontinence and may also suffer from a range of secondary complications, including bladder infections, painful sores, neurological disorders, orthopaedic injuries, infertility, and even kidney failure (United Nations, 2018; Williams et al., 2018). These complications significantly impair biological health and daily functioning, while also contributing to social stigma, isolation, and psychological distress. Despite being entirely preventable, as evidenced by its eradication in high-income countries, obstetric fistula persists in low-income settings as a marker of health inequity, systemic failures in maternal care, and lack of access to quality obstetric services (Bari et al., 2024; UNFPA, 2023a)

Although surgical repair improves the physical health of obstetric fistula survivors, it does not resolve the psychosocial, economic, and biological challenges that hinder full (Bomboka et al., 2019; Browning & Syed, 2020). For example, in Ghana, although fistula centres provide surgical repair services, many survivors do not achieve full recovery. The primary goal of surgery is to

repair the fistula and restore biological functions; however, not all procedures are successful. Moreover, even after successful repair, stress-related incontinence persists in 23.2% of women due to residual tissue damage (Tadesse et al., 2024).

Most research in Ghana tends to focus on the anatomical closure of obstetric fistula and general experiences without thoroughly addressing the overall well-being (biological/physical, psychological, and social) of the affected women. This highlights the need for more studies that explore the broader bio-psychosocial experiences of obstetric fistula survivors and their coping strategies to understand the full impact of the condition better, especially within their marginalized communities. Additionally, there is limited information on the bio-psychosocial experiences of these women, and no records have been found in areas like Nkwanta North District in the Oti Region of Ghana. The study addresses the gap by investigating the biological, psychological and social dimensions of health and what survivors go through as they manage the condition.

1.3 Purpose of the Study

The study aimed to examine the bio-psychosocial experiences of obstetric fistula survivors in the Nkwanta North District in the Oti Region.

1.4 Specific Objectives

To fulfil this aim, the study intended to:

1. Describe the biological/physical experiences of obstetric fistula survivors.
2. Explore the psychological experiences of obstetric fistula survivors.
3. Describe the social experiences of obstetric fistula survivors

1.5 Research Questions

To gather data on the bio-psychosocial experiences of obstetric fistula survivors, the study was guided by the following questions:

1. What are the biological/physical experiences of obstetric fistula survivors?
2. What are the psychological experiences of obstetric fistula survivors?
3. What are the social experiences faced by obstetric fistula survivors?

1.6 Significance of the Study

This study uncovered bio-psychosocial experiences of obstetric fistula survivors by focusing on the biological, psychological and social challenges they encounter, which are often neglected. By shedding light on the experiences of obstetric fistula survivors, the significance of this study on obstetric fistula lies in its potential to improve the lives of affected women, reduce stigmatization and inform public health strategies.

Additionally, this research aims to contribute to enhanced healthcare services and support systems and serve as a basis for developing policy initiatives to improve access to quality care. It also seeks to promote behavioural changes related to the condition, helping to prevent its consequences and recurrence, which could adversely affect the mental health of these women.

The findings of this study will also help raise awareness about the social, psychological, and economic consequences of obstetric fistula, as well as the gaps in healthcare access and quality that lead to the condition and encourage obstetric fistula survivors and their families to seek repair services.

Furthermore, the findings of this study will guide policy development for better maternal healthcare, promote training for skilled birth attendants, support fistula repair programs and

advocate for preventive measures, especially in low-resource settings. Additionally, the findings will contribute to global health efforts by emphasizing the need for gender equity, healthcare infrastructure and comprehensive support systems for women.

Additionally, the findings will drive collaboration between governments and NGOs, enhancing resource mobilization, advocacy and long-term strategies to eradicate obstetric fistula, improve the health of women and put in place social reintegration programs. The findings of this study will also be a source of reference for further research.

1.7 Operational Definitions

Bio-Psychosocial: Biological, psychological and social factors and their complex interactions in understanding health and illness.

Coping strategy: Any method the women employ to manage their situation or deal with the effects of obstetric fistula.

Foot Drop: Weakness of the muscles of the feet because of damage to the sciatic nerves.

Obstetric fistula: An abnormal connection between the birth canal and bladder and/or rectum caused by prolonged obstructed labour.

Survivor: A person who has experienced an obstetric fistula and has endured through its impact.

1.8 Organization of the Study

The study is structured into six chapters. Chapter One presents the background of the study, including the problem statement, study objectives, research questions, significance of the study,

and the organization of the study. Chapter Two reviews relevant literature, focusing on the concept and awareness of obstetric fistula while examining its biological, psychological, and social dimensions. Chapter Three outlines the methodological approaches, detailing the study design, study setting, target population, sampling procedure, sample size, study instruments, data sources, data management, analysis, and ethical considerations. Chapter Four presents the results and findings, including demographic data of the participants and their various experiences supported by graphical representations and direct verbal quotes. Chapter Five discusses the findings of the study in detail, while Chapter Six summarizes the study, discusses its implications and limitations, draws conclusions and offers recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Obstetric fistula has been documented since ancient times, with evidence of the condition discovered in the remains of Queen Henhenit, the wife of King Mentuhotep II of Egypt, dating back to approximately 2050 BC (Drew et al., 2022). Since its initial discovery, research on obstetric fistula has expanded, focusing on surgical treatment and prevention. This ongoing research aims to deepen the understanding of the condition and enrich the literature on its various aspects.

The pertinent literature review on the bio-psychosocial experiences of obstetric fistula survivors is represented in this chapter. The complex interactions between biological, social and emotional aspects of obstetric fistula survivors are covered in detail in this literature review. The goal is to identify the difficulties and bio-psychosocial experiences of women who have survived obstetric fistula by looking through a variety of academic publications. This was done with an emphasis on the study objectives and guided by the conceptual framework. Electronic databases used for the study included Google Scholar, Science Direct, PubMed, MEDLINE, CINAHL, EBSCOhost, JSTOR, Epistemonikos, scholarly journals and articles, search terms employed included boolean operators like “AND” and “OR” in addition to the keywords.

2.1 Theoretical Framework

This part presents the theoretical framework that directs and informs this study. Despite the complexity of obstetric fistula, the following frameworks were found related to the study: the socioecological model, the psychosocial model, and the bio-psychosocial model.

2.1.1 Socio-ecological Model

The socio-ecological model is a framework developed by Urie Bronfenbrenner, an American developmental psychologist, in 1970 (Tong & An, 2024). The framework explores how various social and environmental factors influence individuals and communities and emphasizes the interconnectedness of multiple levels of health and well-being. The socio-ecological model operates on five interdependent levels: the individual level, interpersonal level, community level, organizational level, and the policy/systems level.

2.1.1.1 Individual level

This level focuses on personal attributes such as knowledge, attitudes, and behaviours. For obstetric fistula survivors, individual-level factors include women's awareness of the condition and their health-seeking behaviours. The socio-ecological model demonstrates that factors at multiple levels shape individual behaviours (Olaniyan et al., 2021). Lack of knowledge about preventive measures and available treatments can lead to delayed care and a higher prevalence of obstetric fistula.

2.1.1.2 Interpersonal level

This refers to relationships with family, friends, and peers that can impact health outcomes. The model demonstrates that support from loved ones such as family and friends is vital as it can encourage women to seek treatment and help them overcome stigma (Bashah et al., 2019). The

model demonstrates that community networks and support groups can offer emotional and practical support to affected women.

2.1.1.3 Community level

Community resources, norms, and practices influence the management of obstetric fistula. Communities with robust healthcare infrastructure and maternal health education programs are better equipped to prevent and treat obstetric fistula. Social norms and attitudes towards the health of women and childbirth can either hinder or facilitate access to care and support (Chanie et al., 2025)

2.1.1.4 Organizational level

Healthcare organizations and institutions play a vital role in providing care to women with obstetric fistula. This includes the provision of specialized medical facilities, training for healthcare providers, and the implementation of effective care protocols (Tang et al., 2023).

2.1.1.5 Policy/Systems level

National and international policies influence the prevalence and management of obstetric fistula. Policies that improve maternal health rights and address gender inequality can significantly impact the incidence of obstetric fistula. The model demonstrates that policies that improve maternal healthcare access, support reproductive health rights, and address gender inequality are essential for creating supportive environments for women (Yifru et al., 2022).

The socio-ecological model focuses on external factors and their interactions but may not adequately address personal agency, subjective experiences, and the internal meaning survivors attach to their experiences. Additionally, there is limited focus on an individual's psychological and biological factors, which cannot be considered for the study.

2.1.2 Psychosocial Model

The Psychosocial model, described by Cantos-egea and Tous-pallarés (2023), offers a valuable framework for understanding the complex interactions between social exclusion and health outcomes, particularly in marginalized groups like obstetric fistula survivors. This model highlights the role of psychosocial determinants, such as self-acceptance, social integration, and purpose in life, all of which are crucial in managing stress and maintaining overall well-being, especially for individuals facing significant social challenges. This model underscores the importance of addressing psychological and social factors in public health strategies to reduce health disparities and promote equality.

In the context of obstetric fistula, interventions aimed at improving the psychosocial factors could significantly enhance the well-being of survivors. The psychosocial model developed by Cantos-Egea and Tous-Pallarés offers a valuable framework for understanding the complex challenges faced by obstetric fistula survivors, as it highlights how social exclusion, stigma, and limited resources shape health outcomes and recovery (Cantos-egea & Tous-pallarés, 2023). Focusing on the interplay between psychological and social consequences, comprehensive care that includes medical treatment and psychosocial support will be better suited, promoting better health outcomes and social reintegration for vulnerable women.

The psychosocial model is limited in its applicability in addressing the health interventions of obstetric fistula survivors because it lacks a comprehensive explanation of an individual's holistic health.

2.1.3 Bio-psychosocial Model

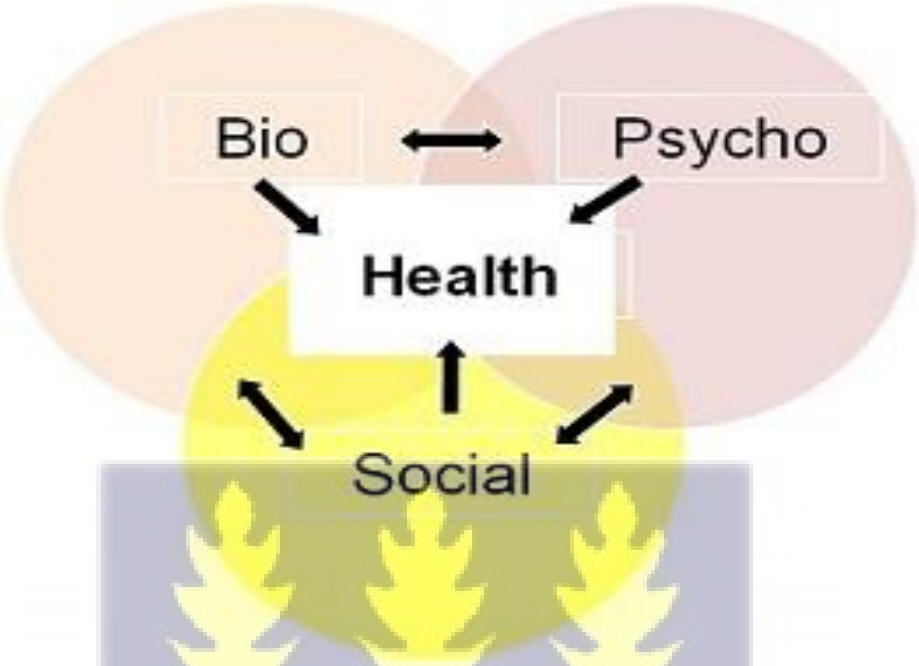

Figure 2. 1: Theoretical framework of bio-psychosocial model by Engel (1977)

2.1.3.1 Justification / Application of the bio-psychosocial model

The study explored a concept of the bio-psychosocial model of health as it considers the complex interactions between biological, psychological and social aspects to provide a comprehensive strategy for enhancing the well-being of obstetric fistula survivors. This model helps understand the multifaceted nature of the condition and its impact on affected women. The bio-psychosocial model introduced by George Engel in 1977, considers the social environment in which an individual lives, including the healthcare system (Kusnanto et al., 2018). Engel argued that health and illness result from the interaction between biological, psychological and social factors. Engel recognized the need for a holistic approach to healthcare and thus developed the bio-psychosocial (BPS) model. He argued that the biological perspectives of disease often

overlook the social, psychological, and behavioural dimensions of illness. Engel believed that the bio-psychosocial (BPS) model would enable healthcare professionals to understand the subjective experiences of illness and suffering of their patients (Taukeni, 2020).

In 1977, Engel argued that illness occurs because of the interplay between biological, genetic, and biochemical components and psychological, behavioral and social factors. The bio-psychosocial paradigm highlights that health and illness result from the complex interactions between these three domains rather than being solely determined by biological factors (Taukeni, 2020).

2.1.3.1.1 Biological factors

Biological factors play a significant role in shaping our bodies' responses to illness and impacting overall health. In the case of obstetric fistula survivors, these biological elements often manifest as physical challenges, including faecal and urinary incontinence, along with a heightened risk of infection (WHO, 2018). Biological factors are key contributors to the development of obstetric fistula. The condition occurs as a result of prolonged or obstructed labour, which leads to ischemia and necrosis and an abnormal connection between the vagina and the bladder or rectum. This causes continuous, uncontrollable leakage of urine/faeces or both, leading to considerable physical discomfort and an increased risk of infections (Nendela et al., 2023). Addressing the condition requires surgical repair and continued medical treatment to manage both the direct physical damage and related health complications. Additionally, biological factors contributing to obstetric fistula include young maternal age, genetic predispositions (e.g., pelvic size and structure), malnutrition, and inadequate prenatal and delivery care (Swain et al., 2020).

2.1.3.1.2 Psychological factors

The psychological effects of obstetric fistula are deeply significant. The bio-psychosocial model highlights how individuals adapt and adjust to their illness. For women affected by obstetric fistula, the psychological impact can be severe, often including depression, anxiety, shame, embarrassment, and a reduced sense of self-worth due to social stigma and the effects of the disease on their daily lives. The constant leakage of urine or faeces can lead to feelings of shame, guilt, low self-esteem, and more distress resulting in social isolation (Kader et al., 2020). Psychological variables can impact physical health, such as how stress affects immune system function and psychological elements also affect how people view and handle health issues. Psychosocial support and counselling are crucial components of comprehensive care for these women to help them cope with their mental health challenges and improve their overall well-being.

2.1.3.1.3 Social factors

The social constituents cover the social setting, which includes interpersonal, societal, and cultural effects. Social factors significantly influence the prevalence and impact of obstetric fistula. The condition is poorly understood in many communities and is associated with cultural taboos. As a result, obstetric fistula survivors frequently face stigmatization and ostracization from their communities and even their families. The condition often leads to social isolation, divorce, and economic hardship due to the inability to work or engage in community activities (Amenu Sori et al., 2021). The isolation exacerbates their psychological distress and can hinder their access to necessary medical care and social reintegration programs.

Moreover, many of these women are from impoverished backgrounds and lack access to healthcare services, which contributes to the persistence and severity of their condition. Additionally, the wellness of obstetric fistula survivors is significantly impacted by the

socioeconomic determinants of health (UNFPA, 2018). Social variables can impact health through social support networks, socioeconomic position, and healthcare access.

Engel's bio-psychosocial model highlights the importance of an integrated approach in treating and supporting obstetric fistula survivors. This model emphasizes that addressing biological, social, and psychological factors is crucial. To achieve a comprehensive understanding of the biological/physical, social, and psychological experiences of obstetric fistula survivors as well as their coping strategies, the study recommends Engel's model (1977). This approach aims to provide a deeper insight into the overall bio-psychosocial experiences of fistula survivors.

2. 2 Application of the Conceptual Framework to the Study

In 1948, the World Health Organization (WHO) defined health in its founding charter. According to this definition, health is not merely the absence of disease or infirmity but also a complete physical, mental, and social well-being (Krahn et al., 2021). The WHO emphasized that "physical, mental, and social well-being" are integral to health, advocating for a holistic view beyond physical alone (Rozanski, 2023). Therefore, optimal health results from the interaction of biological, psychological, and social factors. Understanding how these factors interact is essential to effectively managing obstetric fistula, as any disruption in one aspect can lead to more severe health issues.

The biological dimension focuses on the physical aspect of obstetric fistula, including the etiology, symptoms, and medical treatment. Most studies investigate the medical interventions required to repair fistula and manage complications. Surgical repair is the primary treatment, but ongoing medical care is crucial to address issues like infections and incontinence (Ruder & Emasu, 2022). Factors that are likely to cause obstetric fistula include cephalopelvic disproportion and

immune system dysfunction. Effective surgical intervention is critical for a fistula survivor to gain good physical health. Studies indicate that timely and skilled surgical repair significantly improves physical outcomes for obstetric fistula survivors (Mohamed et al., 2018; Traore et al., 2022). Good nutrition and general health are also fundamental to recovery.

Psychologically, women diagnosed with obstetric fistula often suffer from trauma, post-traumatic stress disorder (PTSD), and low self-esteem, which are common among obstetric fistula survivors' mental health challenges: depression and anxiety are also prevalent. Research indicates that providing psychological support can enhance the quality of life and emotional resilience of fistula survivors (Paluku et al., 2024). This model enables the researcher to better understand the psychological distress experienced by these survivors.

Socially, stigma and isolation are major concerns for obstetric fistula survivors. Evidence suggests that a lack of social support network could be detrimental to health and well-being (Johannes & Roman, 2025). The level of social support from family, peers, and family circumstances greatly influences whether survivors will be reintegrated into society. The model emphasizes the importance of social dynamics in facilitating the reintegration of individuals with obstetric fistula into their communities.

In this study, the bio-psychosocial model was used to understand the bio-psychosocial experiences of obstetric fistula survivors. By considering biological predispositions, psychological resilience, and social support networks, a bio-psychosocial approach allows for a more nuanced understanding of individual differences in health outcomes. This is particularly important in the context of obstetric fistula, where survivors may experience different levels of physical damage, psychological trauma, and social support.

2.3 Related Literature

A literature review is essential for developing a research idea. It consolidates existing knowledge, allowing the researcher to identify knowledge gaps. This process helps clarify how the research can contribute to a deeper understanding of the topic and assists in formulating research questions.

2.3.1 Obstetric-Related Conditions

According to Swain et al. (2020), the number of times a woman gives birth makes them more knowledgeable as compared to nulliparous women. Likewise, antenatal care (ANC) that is offered to women before delivery plays a very significant role in the likelihood of mothers developing obstetric fistula or not. Thus, the result from the study field indicated that mothers who were given antenatal care follow-up had more knowledge of obstetric fistula than those who did not get the ANC follow-up. Research participants were said to have some appreciable understanding of the association of prolonged labour, home birth, sexually transmitted infections (STIs), and teenage pregnancy, among others, such as low-income family planning items usage, as contributing factors to the prevalence of obstetric fistula among women in LMICs (Azanu et al., 2020). Access to a skilled birth attendant at delivery and emergency obstetric care is critical for preventing obstetric fistula.

According to Haika Osaki et al. (2024), the primary cause of pregnancy-related deaths worldwide is the lack of skilled obstetric care. They identified three critical delays contributing to this issue: **a**. the delay in the decision to seek care, **b**. the delay in reaching the appropriate healthcare facility and **c**. the delay in receiving care after arriving at the facility. The Three-Delay Model, proposed by Thaddeus and Maine in 1994, emphasizes that life-threatening obstetric emergencies are unpredictable, and once complications occur, timely and effective treatment is the

only way to prevent adverse outcomes; notably, such conditions have been virtually eliminated in developed countries with strong educational systems and readily accessible obstetric care (Wall et al., 2021). The prevention phase is crucial to addressing obstetric fistula (Mantey et al., 2020). A lack of trust in the healthcare system can impact the reluctance and delays in seeking care for women. Experiences of disrespectful treatment, as highlighted in a study by Millicent et al., (2017), discourages women from choosing facility-based delivery services.

Ngongo (2020) conducted a retrospective analysis in East and Central Africa involving 4,396 women who sought obstetric fistula repair and delivered between 1990 and 2014. The findings indicated that the majority of women with obstetric fistula had undergone an unnecessary cesarean section, with the condition being attributed to surgical errors. A qualitative study by Odonkor and Yeboah (2023) in Ghana examined the challenges rural women living with obstetric fistula face. The study included 30 women, revealing that 36.1% had lived with the condition for less than 5 years while 3.9% had endured it for more than 20 years.

2.3.2 Obstetric Fistula Awareness in LMICs

A qualitative study by Mgaya and Mwila (2023) explored the awareness creation campaign and education of obstetric fistula in Tanzania. The study found that a significant number of women, along with a smaller proportion of community members, had adequate awareness of the causes and risks associated with obstetric fistula. At the same time, a sizeable proportion of the study groups had misconceptions about the causes, risks, clinical manifestations, the best ways to prevent obstetric fistula, and how delays in accessing medical care affect mothers.

A quantitative cross-sectional study conducted by Rundasa et al. (2021) among 400 women of reproductive age (14–49 years) in Southwest Ethiopia assessed awareness of obstetric fistula and its associated factors. The mean age of participants was 30.26 years, and 53% reported having

heard of obstetric fistula. Educational status was found to be a significant predictor of awareness. Women who could not read or write were 84% less likely to have good awareness compared to those with secondary education or higher. Similarly, women with only primary education were 83% less likely, and those with secondary education were 70% less likely to be aware than women with education above the secondary level. These findings highlight a strong positive association between higher education levels and increased awareness. Despite the prevalence of the condition, the study revealed that nearly half of women of reproductive age had poor awareness of obstetric fistula, underscoring the need for targeted health education interventions.

A cross-sectional study by Azanu et al. (2020) assessed the knowledge of obstetric fistula among prenatal attendees and midwives in the Mfantsiman Municipality in Ghana. The study employed 393 prenatal attendees and 45 midwives. Findings revealed that 62.8% of the 393 mothers surveyed had adequate awareness of obstetric fistula, while 37.2% had lower awareness levels, and 56.6% held misconceptions about its causes and risk factors. The study recommended prioritizing education for prenatal attendees on the causes and prevention of obstetric fistula.

Id et al. (2023) conducted a quantitative cross-sectional study on the awareness of obstetric fistula among reproductive-aged women in The Gambia, using a sample of 11,823 participants. Of these, 18.9% were aged 25–29, 63.3% were married, 42.3% had attained secondary education, 40.2% were unemployed, and the majority (96.5%) identified as Muslim. Regarding access to information, 37.8% of women reported listening to the radio at least once a week, 85.5% had never read a newspaper or magazine, 55.7% watched television weekly, 76.0% owned a mobile phone, and 61.7% used the internet within the preceding 12 months. The findings revealed that overall awareness of obstetric fistula was low, with only 12.8% of women reporting awareness of the condition. Age, marital status, and education were significantly associated with awareness.

Women aged 45–49 were more than twice as likely to be aware of obstetric fistula compared to those aged 15–19. Additionally, married women and those with higher educational attainment had greater odds of being aware than their counterparts. Socioeconomic status and access to communication channels also influenced awareness, as women from higher-income households, professionals, radio listeners, and mobile phone owners demonstrated higher levels of awareness. The study concluded that awareness of obstetric fistula among Gambian women remains inadequate, despite the influence of socio-demographic and media-related factors. The authors further recommended that women with higher levels of awareness be actively engaged in educational efforts, as awareness alone does not necessarily equate to comprehensive knowledge of the condition.

2.3.3 Factors Associated with Obstetric Fistula Awareness

The main factor concerning obstetric fistula is sociodemographic (Al-Maisary & Al-Kaaky, 2024). Obstetric fistula cases continue to dominate on a global scale. The development of respective continence is directly proportional to the incidence levels of obstetric fistula. Educational literacy levels of women and resource availability often match the scale of prevalence. The more knowledgeable women are, the more they are said to be exposed to information on obstetric fistula and the better their situation and care. Bello et al. (2020), stated that women in Nigeria are at a greater risk of developing obstetric fistula when living in rural areas. This increased risk is attributed to their marginalization regarding healthcare infrastructure and their geographical isolation from health centres that can provide timely emergency obstetric care (EmOC).

Age at childbirth significantly influences pregnancy outcomes such as obstetric fistula development (Cole, 2024). The long-term effects of obstetric fistula include a low quality of life and disabilities. In Ghana, the legal age of marriage is 18 years; however, according to Ghana

Statistical Service (2022), (6%) of women reported being married at age 15, (23%) were first married at 18 years, more than one-third (38%) of the population were married by age 20, and two-thirds (67%) were married by age 25. Similarly, a quantitative study by Wali (2024) investigated the prevalence of vesicovaginal fistula and coping strategies by women in Kebbi state, Nigeria, with 49 women purposively selected for the study. The findings revealed that most respondents (30.7%) were between 15 and 18 years old. Most participants had entered marriage soon after reaching menarche and subsequently experienced early pregnancies before they were psychologically prepared for childbirth. The study concluded that the socio-cultural practice of early marriage, combined with prolonged labour, was a key contributing factor to the prevalence of VVF in the region. The study recommended the introduction of health education programs focused on early marriage and reproductive health for girls and women, along with the implementation of laws to prevent early marriage and set a legal standard for the age of marriage. These efforts would require active involvement from both the government and healthcare workers.

Similarly, a case-control study conducted by Woldegebriel et al. (2023) investigated factors associated with obstetric fistula among women of reproductive age (15–49 years) in Ethiopia. The study included 280 women, of whom the majority of cases (44%) were aged 34–49 years, while the largest group of controls (37.1%) was aged 15–23 years. Educational status varied between groups, with more than half of the cases (57.1%) and 42.4% of the controls having no formal education. A higher percentage of cases (84.3%) compared to controls (64.8%) resided in rural areas. Marital status also varied, with 68.6% of cases and 58.6% of controls being married. The study identified age at first marriage as a significant risk factor. Women who married before the age of 18 were 3.3 times more likely to develop obstetric fistula compared to those who married at 18 or older. This association might be due to an increased risk of obstructed labour among young

adolescents, whose pelvic bones might not yet be fully developed, thereby increasing their chances of obstetric fistula during childbirth. Based on these findings, the authors recommended discouraging early marriage through community awareness initiatives. They emphasized the need for stronger legal frameworks by policymakers to protect young girls from early marriage and its associated health consequences.

A quantitative study conducted by Azongo et al. (2016) investigated the bio-psycho-social impacts and challenges faced by women with obstetric fistula in the Northern Region of Ghana, involving 100 respondents from the fistula center at Tamale Central Hospital. The findings revealed that women living with obstetric fistula were less likely to be employed or engaged in income-generating activities. In this rural setting, where many individuals lack access to education, 85% of the respondents had no formal education, 10% had completed primary education, 4% had secondary education, and only 1% had tertiary education. The study also highlighted that the lack of educational background is likely to contribute to women's vulnerability and limited economic opportunities. Among the participants, 50% were farmers, 16% were petty traders, 28% were housewives and 4% were hairdressers. The study concluded that women with higher levels of education, better income, and strong family support are generally more inclined to seek healthcare promptly. This is a significant finding, as poverty directly impacts the overall health of obstetric fistula survivors, hindering their regular access to healthcare services.

2.3.4 Biological / Physical Experiences of Obstetric Fistula Survivors

Many researchers have highlighted the biological/physical effects of obstetric fistula on survivors. In addition to these challenges, women often endure labour pain in silence, which increases the likelihood of complications.

A study by Degge et al. (2020) qualitatively explored the birthing experiences of obstetric fistula survivors in Northern Central, Nigeria. The study purposefully recruited 15 participants using a narrative inquiry approach. Participants were aged 14-42 at the time of fistula development. Six participants had completed primary education, seven women were subsistence farmers, seven had no form of occupation, while one was a student in secondary school. For nine of the women, fistula occurred at the first delivery, while for the remaining six, fistula occurred between the second and fifth deliveries, and thirteen women had stillbirth. The findings revealed that women in this region tend to be passive participants during childbirth, which contributes to the development of obstetric fistula. Additionally, inequitable maternal health services in rural locations are inherently linked to health care and these contribute to the increasing incidence of obstetric fistula. The narratives revealed that mothers, mothers-in-law, and grandmothers played a central role in reinforcing cultural expectations around childbirth. They were also key decision-makers regarding whether or not to seek medical care when labour failed to progress, thereby influencing women's access to timely obstetric interventions, which may predispose the woman to various physical disabilities. The study described this as structural violence in our society. The study recommended that the government should focus on addressing the inequitable access to maternal health in rural locations.

Animut et al. (2019) conducted a qualitative study in Ethiopia that examined the lived experiences of 10 women affected by obstetric fistula. All participants were farmers; six had no formal education, while four were able to read and write. Five of the participants were married and the other five divorced. On average, the women lived with fistula for 12.6 years before seeking medical treatment. The study revealed that participants experienced uncontrollable leakage of urine and feces through the vaginal canal, which led to constant wetting of clothing and beddings,

genital sores, burning sensations, itching, and offensive odor. In addition to these complications, some women reported physical impairments, including difficulty with mobility. Prolonged labour was also reported, frequently resulting in stillbirths or neonatal deaths shortly after delivery. Based on these findings, the authors emphasized the importance of incorporating physical therapy into the continuum of care to better support women living with obstetric fistula.

Consistent with earlier findings, Dako-Gyeke et al. (2022) qualitatively explored the lived experiences of 55 women with obstetric fistula in Northern Ghana through focus group discussions. The study revealed that participants endured severe physical challenges, including persistent pain and continuous leakage of urine and/or feces. Furthermore, the study highlighted harmful coping strategies, such as intentional fluid restriction, which led to dehydration, concentrated foul-smelling urine, and subsequent burns and sores on the genitals and thighs. These experiences underscored the urgent need to prioritize surgical interventions and allocate adequate resources to improve both the accessibility and quality of fistula repair services, thereby enhancing the overall well-being of affected women.

The abnormal passage created by the fistula can irritate surrounding tissues, contributing to pain. Prolonged labour-related injury to the sciatic nerves can lead to foot drop in some women with obstetric fistula, resulting in an inability to lift the front part of the foot (Mohamed et al., 2018). A qualitative study by Boene et al. (2020) explored women's experiences of care during pregnancy, delivery, and postpartum in Southern Mozambique. The study included 14 women with obstetric fistula and 14 women without obstetric fistula. The findings revealed that women with obstetric fistula often suffered from discomfort and the constant need to change their clothes due to incontinence. Most of the women with obstetric fistula also reported experiencing foot drop, which prompted them to seek medical care. The study highlighted the importance of increasing

awareness and developing guidelines for preventing, detecting, and managing obstetric fistula. Similarly, Odonkor and Yeboah (2023) qualitatively explored the challenges of rural women living with obstetric fistula in the Central Region of Ghana, involving 36 participants. The study revealed that the most common physical problems among the women included urinary and faecal incontinence, rashes, sores, and foot drop. It also highlighted that these physical injuries often led to strained relationships between the women and their partners. The findings align with Mantey et al., (2020), who conducted a qualitative study involving 32 obstetric fistula survivors in Ghana. Their study also identified physical injuries, sores, rashes, urinary incontinence, frequent urinary tract infections, and foot drop as common experiences.

Bashah et al. (2018) conducted a systematic review to examine obstetric fistula outcomes from the perspective of patients in sub-Saharan Africa. Out of the 127 papers retrieved, only 16 met the inclusion criteria, with just two being qualitative studies. The study highlighted that the impact of obstetric fistula extends beyond its physical symptoms, as incontinence-related fistula brings significant mental and medical challenges. The study further revealed that some women limit their food intake to manage leakage, leading to weight loss. Additionally, survivors experience infertility, cessation of menstruation, and, most tragically, the loss of their babies. The review established a strong link between the biological and psychological effects of obstetric fistula, both of which profoundly affect the quality of life and overall health of survivors. However, a notable research gap exists, as many studies that met the criteria lacked sufficient qualitative depth, highlighting the need for more in-depth qualitative research in this area. Qualitative insight can bridge these gaps by shedding light on the complex challenges obstetric fistula survivors face, offering a more comprehensive understanding of the factors affecting their bio-psychosocial well-being.

The inadequate qualitative data limits the understanding of the bio-psychosocial experiences that obstetric fistula survivors face, preventing a comprehensive insight into their specific challenges and needs. This indicates a shortage of qualitative research in this field. A more holistic approach incorporating qualitative methods is essential to better capture the complexities of the bio-psychosocial factors that influence the well-being of obstetric fistula survivors.

Mohamed et al. (2018) conducted a qualitative study in Somalia to explore the lived experiences of women with obstetric fistula following corrective surgery. The study involved 21 participants aged between 15 and 55 years, of whom 47.6% were aged 15–24, 33.3% were aged 25–34, and 19% were 35 years or older. Most participants (71.4%) had no formal education, while only 28.6% had some form of schooling, with a single respondent attaining education beyond secondary level. The duration of living with obstetric fistula ranged from 1 to 21 years, and all participants were married at the time of fistula development. The findings revealed that obstetric fistula imposed severe physical challenges, including persistent urine and fecal incontinence, skin rashes, sores, wounds around the genitalia, and an offensive odor. The constant leakage was a major source of concern for the women, often forcing them into social isolation and restricting their participation in community life. The study emphasized the need to expand access to basic emergency obstetric and newborn care across underserved areas as a preventive measure against prolonged labor, thereby reducing the risk of obstetric fistula.

Women frequently seek care in a deteriorated state of general health, requiring a prolonged recovery period both before and after surgical repair. This weakened and often distorted condition makes the outcome of their treatment difficult to predict (Wall et al., 2021). While surgery is typically the primary treatment for the physical symptoms of obstetric fistula, it is essential to note that many women continue to experience the condition even after successful surgical closure

(Camara et al., 2024). The findings are supported by Ezekiel et al. (2021) who conducted a quantitative study investigating the social characteristics and morbidity patterns of women with obstetric fistula at a repair centre within a university teaching hospital in Jos, Nigeria. The study included 49 women who had undergone surgical intervention for fistula. Results showed that prior to the development of the condition, 28 participants (57.1%) were married in monogamous unions, 15 (30.6%) in polygamous unions, while 12.2% were single. Furthermore, 33 women (67.3%) had experienced at least one previous repair, with 14 (28.6%) undergoing two repairs, six (12.2%) undergoing three repairs, and three women (6.1%) each requiring four and five surgical procedures, respectively. The study further revealed that almost all participants had not achieved childbirth following the repair, with many reporting gynaecological morbidities such as vulval dermatitis and dysuria. Other health complications included lower abdominal pain, weight loss, backache, and foot drop. Additionally, the majority of pregnancies that resulted in obstetric fistula ended in neonatal loss.

Although successful surgical repair often provides immediate physical relief from incontinence (Ahmad et al., 2019), many women still face challenges in rebuilding their self-esteem and may withdraw from social life even after being cured. A quantitative cross-sectional study conducted by Aynalem et al. (2022) in Northwest Ethiopia assessed 182 obstetric fistula survivors who had undergone surgical repair. The findings revealed that most respondents were aged 30 years and above, with the majority (66.5%) divorced, 36.8% unable to read and write, and 75.3% residing in rural areas. Notably, 83% of the participants reported improvements in their quality of life after repair compared to before treatment. However, obstetric fistula survivors had a relatively lower proportion of incontinent women as the study reported that 21.4% continued to experience urinary incontinence during daily activities such as walking, sitting, and lying, which

further lowers their self-esteem. The study recommended integrating health education into fistula centres to empower survivors to promote prevention strategies in their communities.

2.3.5 Psychological Experiences of Obstetric Fistula Survivors

In addition to the severe physical consequences that women face, there are numerous long-lasting psychological and social impacts. Women who experience uncontrollable urine leakage, constant wetness, and unpleasant odour often endure discrimination, stigma, and internalized shame, which can lead to depression and social isolation. Moreover, 90% of mothers experience profound grief and sorrow following the loss of a baby who is stillborn or dies shortly after birth (Id et al., 2023). The prevalence of depression among women with obstetric fistula is well documented in various studies. The onset of anxiety and depressive symptoms may be linked to the loss of a child (Matiwos et al., 2021). Kurniawati et al. (2024) emphasized that the psychological effects of obstetric fistula on women are often more severe than the physical injuries caused by the condition; depression is common, usually accompanying relapse.

Kader et al., (2020) conducted a quantitative study in Bangladesh to examine the factors associated with obstetric fistula and its impact on women's mental health. The study purposively recruited 108 women aged 15–35 years, the majority of whom (68.5%) were between 16 and 25 years. Most participants were literate (71.3%), married (77.7%), and unemployed (78.7%). Regarding educational attainment, 53% had completed primary education, 14% secondary education, 28.7% were illiterate, and 4.6% reported informal education. The study revealed that women living with obstetric fistula experienced significantly higher levels of depression compared to other gynecological patients, with 9.35% reporting moderate depression, 69.4% severe depression, and 21.3% extreme depression. These findings underscore the substantial

psychological burden associated with obstetric fistula and highlight the need for rehabilitation programs and psychological support services to improve the well-being and social reintegration of affected women.

The psychological burden associated with obstetric fistula is further illustrated in a quantitative cross-sectional descriptive study conducted by Egwu et al. (2024) in Cross River State, Nigeria. The study investigated the psychosocial impact of obstetric fistula among 210 women recruited from three hospitals. Findings revealed that 28.1% (59) of participants were between 30 and 39 years of age, 64.3% (135) had no formal education, and 80% (168) were farmers. Additionally, 38.6% (81) were grand multiparous at the time of fistula development, and 38.1% (80) had no living children. Depression emerged as the most prevalent psychosocial challenge, affecting 83.3% (175) of participants. The authors emphasized that traumatic childbirth experiences, coping with stillbirth, and the persistent leakage of urine or feces, in combination with multiple medical and psychological challenges, significantly contribute to varying levels of depressive illness among women living with fistula. Based on these findings, the study recommended a collaborative and holistic approach to addressing the care and support needs of affected women.

The psychological impact of obstetric fistula is profound, often manifesting in feelings of suicidal thoughts. Konan et al. (2021) conducted a quantitative study in Côte d'Ivoire to examine the psychosocial experiences of women living with obstetric fistula, recruiting 39 survivors. The findings revealed that the majority (92.3%) of participants resided in rural areas, and 79.5% developed fistula between the ages of 14 and 31. Regarding marital status, all respondents (100%) reported being married before developing the condition; however, only 28.2% were able to maintain their marriages after onset. The study further highlighted that 56.4% of participants

experienced suicidal ideation, mainly due to humiliation, sadness, and a lack of social support, which compounded their psychosocial distress. Based on these findings, the authors emphasized the need for collaborative interventions to facilitate psychosocial rehabilitation and enable survivors to reintegrate more effectively into their communities.

Nduka et al. (2023) conducted a comprehensive review to examine the psychosocial effects of obstetric fistula on Nigerian women and the resources available to support them. After reviewing 620 papers, eight met the inclusion criteria, with five specifically addressing issues such as the risk of separation and the loss of identity experienced by women with obstetric fistula, all of which have psychological repercussions. The review highlighted that women with obstetric fistula face significant shame and stigma due to their incontinence. Additionally, the study emphasized the need to address broader systemic issues within the healthcare systems that hinder the provision of psychosocial support. Although the findings from Nduka et al. (2023) provide valuable insight into the psychosocial effects of obstetric fistula in developing countries, they may not fully reflect the unique context of Ghana. The well-being of obstetric fistula survivors in Ghana could be influenced by particular cultural, social and psychological factors that may not have been thoroughly addressed in the systematic review. This highlights a research gap, as the study needs to gain firsthand empirical data from the Ghanaian context.

To address this issue, further research using qualitative or mixed methods is required to explore the bio-psychosocial experiences of obstetric fistula survivors in Ghana and their coping strategies, providing a more comprehensive understanding of the situation in a similar environment.

Obstetric fistula survivors often isolate themselves to avoid stigma from others and society at large. These women experience profound psychological trauma due to a complete loss of status

and dignity (Mantey et al.,2020). Some studies have emphasized issues of low self-esteem and diminished societal status. Long-term emotional and psychological consequences experienced by women following obstetric fistula surgery remain inadequately addressed (Drew et al., 2016). In line with these assertions, a quantitative cross-sectional study conducted by Azongo et al. (2016) assessed the biopsychosocial impact and challenges faced by women with obstetric fistula in Northern Ghana. The study recruited 100 participants from the Tamale Fistula Centre, comprising women of reproductive age (15–50 years), with the majority being in their middle ages. Nearly half of the women (45%) were married and living with their husbands, while 26% were divorced. Educational attainment among the participants was generally low, with 85% reporting no formal education, 10% with primary education, 4% with secondary education, and only 1% attaining tertiary education. In terms of occupation, 50% were farmers, 28% were housewives, 16% engaged in petty trading, and 14% were hairdressers. The findings further revealed significant psychosocial distress, with 59% of women reporting self-discontent and 97% indicating low self-esteem as a result of social avoidance and stigmatization. Additionally, the study highlighted that affected women often faced difficulties in participating in cultural activities and fulfilling their roles as mothers and wives. The authors concluded by underscoring the importance of raising public awareness and providing education on obstetric fistula while also encouraging affected women to preserve self-respect and maintain personal hygiene.

However, Chimamise, Shiripinda, et al. (2021) conducted a longitudinal study in Zimbabwe that examined the quality of life of obstetric fistula survivors before and after surgical repair. The study recruited 29 women who underwent transvaginal surgical repair, of which 27 achieved successful closure, while two continued to experience stress incontinence. Participants were between 17 and 26 years old, with the majority (24) residing in rural areas. Twelve women

had been living with obstetric fistula for more than five years, whereas nine had lived with the condition for less than one year. The findings revealed that relief from constant wetness and foul odor, along with improved physical health, enabled survivors to regain self-esteem and self-confidence, both of which were crucial for improved psychological well-being. The authors recommended strengthening post-repair support to sustain survivors' physical and psychosocial recovery.

2.3.6 Social Experiences of Obstetric Fistula Survivors

Obstetric fistula can severely impact social networks and home relationships, as well as limit the ability of women to engage in economically productive activities. This often exacerbates poverty and increases vulnerability to abuse and violence, all of which are worsened by the stigma associated with the continuous leakage of urine or faeces. Social isolation is a common outcome as women with obstetric fistula frequently withdraw from their communities. Women with obstetric fistula in Somalia acknowledged their inability to participate in social events, such as festivals and religious gatherings, due to the unpleasant odour caused by their condition (Mohamed et al., 2018). This stigma often forces many women to live in isolation, avoiding social interactions. Matiwos et al. (2021) conducted a quantitative cross-sectional study in Ethiopia to assess the quality of life and associated factors among 289 women living with obstetric fistula. The mean age of participants was 27 (6.1) years. Nearly half (51.2%) were living with their spouses, while more than half (54%) were unable to read or write. In addition, 50% of respondents were unemployed, and 52.6% reported poor social support. Experiences of stigma and discrimination were also common, with 83% of the women reporting having been discriminated against. The study further revealed that poor social support was significantly associated with lower quality of life scores across the physical, social, and environmental domains. The authors

recommended that the Ministry of Health intensify community awareness and promote early treatment of obstetric fistula to improve survivors' well-being.

Divorce is a frequent outcome among obstetric fistula survivors, with many women expressing concern about resuming sexual activities with their spouses after the condition. Literature indicates that women continue to struggle with challenges such as trauma and rejection arising from broken relationships and marriages (Bomboka et al., 2019). Even in cases where women are accepted back by their families, they may still face maltreatment (Camara et al., 2024). In a quantitative study by McCurdie et al. (2018) on vesicovaginal fistula in Uganda involving 93 participants, it was revealed that 30% of women reported divorce as a direct consequence of their condition, only a few maintained relationships with their spouses after developing obstetric fistula. In addition to stigma and prejudice, these experiences can lead to severe psychosocial issues, including feelings of blame, hatred, depression, and even suicidal thoughts (Bashah et al., 2019).

A similar study conducted in Malawi by Drew et al. (2016) explored the quality of life of obstetric fistula survivors, revealing that despite improvements in their physical condition following surgical repair, many women continue to face relationship challenges. These difficulties, particularly within their marriages, often stem from their inability to satisfy their partners sexually. In a qualitative study in Somalia, Mohamed et al. (2018) reported that nearly half (47.6%) of the women with obstetric fistula experienced immediate divorce following corrective surgery. The study highlighted that many husbands initiated divorce due to the persistent urine leakage and associated odour. In contrast, others ended the marriage because the women were unable to meet their sexual needs or because of concerns about potential infertility. As the recovery process from obstetric fistula can be prolonged, leaving some women unable to conceive for years, this further contributed to marital dissolution.

A similar finding was reported by Ketevi et al. (2021), who examined the life experiences of women with obstetric fistula in Togo. Their study, which included interviews with 76 women, revealed that 46% of the participants indicated that their spouses had rejected them following the onset of the condition. Additionally, the study identified that 38.2% of the mothers of these women were the most attentive and supportive figures in their lives.

When a woman is abandoned by her partner, it can diminish her motivation to seek help or hold hope for recovery. These stories illustrate the systemic violence that many women face in society. Given that, prolonged social isolation is often associated with high levels of psychological distress among women with obstetric fistula. Few studies have employed the level of empathy these women exhibit toward others enduring similar (Id et al., 2023).

Many researchers have identified poor social support as a significant issue faced by obstetric fistula survivors. Studies have shown that some women delayed seeking medical treatment, with one of the critical enablers for health-seeking behaviour being social support (Wella et al., 2021). Nweke and Igwe (2017) qualitatively explored the psychosocial experiences of women with vesicovaginal fistula in Nigeria. Data was collected through focused group discussions involving 100 women living with obstetric fistula. The study revealed that the majority of women were abandoned by their spouses. While 33% reported receiving some form of social support, 67% had no social support. The study also found that women hospitalized for obstetric fistula repair experienced diminishing levels of practical support and interest from their husbands, particularly as the illness became more prolonged.

In contrast, a similar study conducted in Uganda by Hotchkiss et al. (2024) explored social support among women with genitourinary fistula. This study involved 33 participants in focus group discussions and an inductive analysis was employed to generate themes throughout the

process. The findings revealed that some husbands offered various forms of financial support, helping their wives access obstetric fistula care, pay caregivers, and manage their condition. The study also highlighted that those supportive husbands assumed household responsibilities traditionally carried out by their wives, such as preparing meals and cleaning. Boene et al. (2020) presented a similar contrasting perspective in Mozambique, where they qualitatively explored women's care experiences during pregnancy, delivery, and postpartum. In their study, 14 obstetric fistula survivors were purposively selected. The findings revealed that many of these women received support from their husbands and relatives, indicating that their condition did not necessarily result in divorce.

Cultural barriers are well-documented as significant obstacles for women, even after obstetric fistula repair, as various sociocultural factors can hinder their reintegration into society (Kabayambi, 2021). This issue was further explored in a study by Amodu et al. (2017), which explored sociocultural practices in the Hausa community of Northern Nigeria. The study revealed that a complex interplay of gender-based power imbalances, societal expectations, and traditional beliefs influence the health of women and girls in these communities. It highlighted three primary factors that increase the risk of obstetric fistula among women in Hausa folklore society: early marriage and childbearing, reliance on traditional birthing practices, and cultural barriers that prevent timely healthcare access during labour. The study noted that in Hausa culture, expressing pain during labour is seen as taboo, resulting in many cases of obstructed labour going unnoticed. The authors emphasized the need for systemic change to address the spatial and sociocultural barriers that prevent women and girls from receiving optimal maternal and reproductive healthcare. These combined psychological, social and physical consequences contribute to a high risk of mental health issues, including depression and suicide, among the affected women.

In many cultures, superstitious and cultural beliefs heavily influence how people interpret health issues, including the experiences of obstetric fistula survivors. Survivors may explain their suffering and the social shame attached to their condition by attributing it to supernatural forces, curses, or divine punishment. Some obstetric fistula survivors, not fully understanding why they have been afflicted, attributed the condition to witchcraft or viewed it as a disease sent by God. As a result, they often seek traditional, local, or spiritual healing methods. Hurissa et al. (2023) explored the health-seeking pathway of obstetric fistula survivors in Ethiopia by purposively selecting 21 participants. The study revealed that most women initially sought help from religious and traditional healers, such as Muslim leaders, for fistula care. Unfortunately, these treatments often worsened their condition, and only after prolonged trials with these traditional methods did they eventually return to fistula centres for medical treatment. The study underscores the importance of addressing these cultural obstacles to ensure obstetric fistula survivors can access timely medical treatment.

Lyimo and Mosha (2019) conducted a qualitative study to explore the reasons for delays in seeking treatment among women with obstetric fistula in Tanzania. The study emphasizes the impact of traditional practices on healthcare decisions. The findings indicated that participants, their families, and community members held diverse beliefs about the causes of obstetric fistula. While most participants believed that they resulted from complications during delivery, a smaller number attributed it to surgical procedures. Some women believed that their condition was caused by witchcraft, while others viewed it as the will of God. Many families sought traditional healing, with local healers often being the first choice for treatment. The study noted that relatives and community members were frequently encouraged to seek the help of local healers, driven by the belief that the condition was linked to witchcraft.

Degge et al. (2024) explored the illness narratives of obstetric fistula survivors in North-Central Nigeria, revealing that some obstetric fistula survivors sought cures beyond orthodox medicine. Those who turned to traditional healers eventually reported unproductive experiences. Chimamise et al. (2021) conducted a cross-sectional study in Zimbabwe to examine the health-seeking behaviors of women living with obstetric fistula and to identify reasons why they continued to endure the condition. The study recruited 21 participants whose ages ranged from 17 to 75 years. Among them, seven women had lived with fistula for less than one year, five had lived with the condition for one to five years, and one participant had endured fistula for as long as 57 years. The findings revealed that a lack of awareness about the availability of fistula repair services prevented some women from seeking treatment, even when services were accessible. Furthermore, some participants perceived the condition as a form of punishment from a supreme being for their past wrongdoings, which led them to seek unproductive treatment from traditional healers. The study concluded by recommending increased awareness campaigns on the availability of obstetric fistula repair services, particularly in hard-to-reach communities.

In Ghana, Asiedua et al. (2023) explored the health-seeking experiences of 37 women with obstetric fistula. The study found a strong belief in witchcraft and divine punishment, with many survivors attributing their prolonged illness to supernatural forces due to their inability to understand their condition. A similar study by Bulndi et al. (2023) reported that women were seeking treatment for their fistula from native healers and traditional practitioners. The study emphasized that limited literacy levels and lack of awareness about proper medical options increased the likelihood of participants turning to ineffective or inappropriate remedies. These findings underscore a significant gap in health education and the dissemination of medical knowledge, as cultural beliefs often obscure the societal realities of obstetric fistula. In contrast,

Mantey et al. (2020) found that none of the participants in their study reported seeking traditional or herbal treatments for their condition.

Obstetric fistula survivors often struggle to maintain a steady source of income, exacerbating their poverty levels. Due to their inability to work, many women affected by obstetric fistula become a financial burden on their families (Mccurdie et al., 2018). Similarly, Nendela et al. (2023) conducted a study in Kenya exploring women's experiences of care following stillbirth and obstetric fistula with 20 participants selected through purposive sampling. The study revealed that women frequently faced adverse treatment and marginalization after stillbirth, even before the fistula was diagnosed. As a result, their fistula was impacted by the stigma of childbirth complications and ongoing health issues. Employment was often terminated as women were deemed unclean and unfit to work, especially in jobs that required cleanliness, such as cleaning for others. Additionally, some women could not work due to incontinence, leg pain, or walking difficulties caused by nerve damage. The inability to afford essential hygiene products further compounded their despair, with some women experiencing suicidal thoughts, being rejected by family and friends, and many being forced to beg on the streets. These attitudes of marginalization pushed them deeper into poverty, leaving them trapped in anger, trauma, depression, and disillusion with long-term adverse effects on their psychosocial well-being. Similarly, a qualitative study by Ayadi et al. (2023) revealed that income-generating activities were significantly reduced, resulting in financial instability. This was mainly due to the inability of the affected women to engage in household chores and participate in work-related activities, further limiting their economic opportunities and deepening their financial struggles.

Due to the stigma surrounding obstetric fistula, survivors may face rejection from religious groups as well. Touhidi Nezhad et al. (2020) noted that the shame and stigma associated with the

condition disrupt religious practices, isolating women from their places of worship and preventing them from practicing their faith. The social stigma linked to obstetric fistula serves as a significant barrier to the reintegration of survivors into society, often viewed as a mark of disgrace or divine punishment; this stigma leads to the marginalization of affected women. It not only impacts their mental health but also limits their access to economic and educational opportunities. As a result, many survivors live in poverty and encounter considerable difficulties in rebuilding their lives after surgery (Khan et al., 2024). Jarvis et al. (2017) examined the experiences of family caregivers involved in the rehabilitation process of obstetric fistula survivors in Northern Ghana. They found that stigma persisted even after successful surgical repair. Family members often faced ridicule and, in some cases, survivors and their relatives relocated to begin life anew in order to avoid community denouncement. Although relatives expressed joy at having their loved ones return home post-repair, the study further revealed that the caregiving responsibilities were far more demanding than they had initially anticipated.

Being accepted in a community where individuals rely on and support one another is important for survival and overall well-being. In Ghanaian culture, ensuring that a sick family member recovers is seen as a collective duty of the clan, as health is closely linked to the individual's well-being (Dako-Gyeke et al., 2022). In addition, families are expected to provide a safe environment for one another during difficult times in many African rural communities.

2.3.7 Coping Strategies

Coping refers to behavioural and cognitive tactics used by individuals to tolerate or mitigate the effects of stressors and their associated consequences (Wali, 2024). Coping strategies among obstetric fistula survivors often involve a mix of practical and psychological methods, reflecting the complex nature of their experiences and the need to manage both physical and social

challenges. Lazarus' concept of defense appraisals or cognitive coping intersects with Freud's idea of ego defense mechanisms, suggesting that coping strategies often serve as both psychological defense and a practical solution to immediate problems (Rabo, 2023).

A qualitative study by Mohamed et al. (2018) explored the experiences of women with obstetric fistula following corrective surgery in Somalia. The study involved 21 participants and found that these women employed several practical strategies to manage their condition. They used artificially made sanitary towels to control odour and absorb urine, helping prevent public embarrassment. Additionally, the study revealed that many women admitted their inability to participate in social gatherings like festivals and other religious meetings due to the odour and stigma associated with their condition. In Uganda, Fekecha et al. (2022) found that women with obstetric fistula modified their behaviours to minimize exposure and manage their condition. They reduced their water intake to decrease urinary output, thereby avoiding the embarrassment of frequent wetness. This strategy underscores how individuals will uphold social norms and mitigate stigma. These findings demonstrate that women with obstetric fistula utilize a combination of practical and cognitive strategies to cope with their condition, focusing on managing both the physical symptoms and the associated social stigma.

In a qualitative study, Fekecha et al. (2022) investigated the challenges and coping mechanisms among women living with unrepaired obstetric fistula survivors in Ethiopia. The study found that these women experience significant social difficulties and employ various coping strategies. Some survivors turn to spiritual sites and seek out spiritualists, hoping that spiritual rituals or prayers will provide relief. Others resort to drinking alcohol, believing that it helps them forget their sorrows and escape their distress.

Ignoring negative responses from people is the way some fistula survivors cope with their condition. A cross-sectional study by Kabayambi and Barageine (2018) assessed the coping mechanisms of women living with obstetric fistula in Uganda, involving 30 participants; 75% of the survivors chose to ignore negative comments from others, while 30% sought solace in their religious communities. In Ghana, Mantey et al. (2020) found that the leakage of urine and faeces associated with obstetric fistula creates an unpleasant odour that leads to social exclusion. As a result, many women adopt various strategies to conceal their condition from the public. Most women bathe several times daily, wash their clothes daily, carry perfumes, and wear multiple layers of clothes to absorb the leakage. However, a significant number of people have withdrawn from society altogether.

Religion can positively impact emotional well-being and is often used to cope with illness. A study by Touhidi Nezhad et al. (2020) in Iran examined the experiences of women with rectovaginal fistula and found that religion played a significant role in how survivors managed their condition. The study highlighted that woman employed both positive and negative religious coping strategies to deal with their challenges. Those who utilized positive coping strategies generally found it easier to manage their condition, while those who relied on negative strategies often experienced cognitive distortions and negative emotions. The research concluded that more women adopted positive religious coping strategies, facilitating better coping with their circumstances. Conversely, negative coping strategies were linked to increased cognitive distortions and adverse emotional states. The study focused on women who had undergone fistula repair, suggesting that their experiences of positive coping might be influenced by their access to surgical treatment.

Nevertheless, other studies have highlighted different coping strategies used by affected women. For instance, Hotchkiss et al. (2024) in Uganda found that many women with obstetric fistula cope by isolating themselves to avoid public exposure. Additionally, some survivors manage their condition by disregarding negative comments from others and turning to prayer, hoping for divine intervention.

Recent studies have highlighted the importance of comprehensive care models that integrate physical, psychological, and social support for obstetric fistula survivors. These models typically include surgical repair, psychological counselling, social reintegration programs and economic empowerment initiatives. Evidence suggests that such holistic approaches significantly improve the quality of life and bio-psychosocial well-being of obstetric fistula survivors. For instance, community-based rehabilitation programs that provide psychological support and vocational training have been shown to enhance self-esteem, reduce stigma, and improve economic independence among survivors (El Ayadi et al., 2024).

2.4 Summary of Literature Review

An integrated literature review was conducted using the bio-psychosocial model, and the objectives of the study were to examine the bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District in the Oti Region. The three domains of the bio-psychosocial model comprise biological, psychological, and social domains. Physically, the women reported physical issues, which included leakage of urine, leakage of faeces, foot drop, vulval pain, and irritation. To live with this condition, fistula survivors adopted coping strategies such as frequent bathing and washing of rags, avoiding people, and isolating themselves. However, most of the women reported that they went through the surgery multiple times before they were declared

healed, and a few of the women are waiting to seek surgical treatment. Literature suggests that physical consequences extend beyond the fistula itself as survivors may also experience fatigue, malnutrition, and other health issues due to their compromised state.

Psychologically, the women mentioned that they went through post-traumatic stress disorders like depression, suicidal tendencies, and anxiety. The constant physical discomfort and the stigma associated with incontinence contribute to a sense of shame, loss of self-worth, and hopelessness. Literature suggests that adequate psychological support will help improve their quality of life. Socially, obstetric fistula survivors reported experiencing social ostracism by their family members and the broader community due to the stigma associated with their condition. Consequently, marital breakdown with women abandoned by their husbands and loss of economic support systems perpetuate the cycle of poverty and marginalization, but most of them indicated that family members and friends assist them. A few reported low social support, where relatives, husbands or friends barely supported them. Most of the women reported stigma and discrimination from family and friends because of the attribution of the condition to witchcraft and spiritual sources. Most of the women lost their husbands and never remarried again because of the condition. A few reported abandonments from their spouses. Adequate care and rehabilitation to address the bio-psychosocial needs of obstetric fistula survivors will help to rebuild their lives.

CHAPTER THREE

RESEARCH METHODS

3.0 Introduction

This chapter presents the methodology used for conducting the study. It covers the study site, study design, research setting, population, sampling techniques, sample size, data collection tools, data management and analysis, research rigor and ethical considerations. An exploratory descriptive approach was adopted to examine the bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District, Oti Region. Additionally, the chapter entails the procedures implemented to ensure the reliability and validity of the research.

3.1 Research Philosophy

The key philosophical paradigm that supports the study is the constructivist paradigm. This paradigm emphasizes subjective realities and the meaning participants attach to their experiences. According to Creswell and Creswell (2018), constructivism is founded on the idea that individuals strive to make sense of their world by developing subjective meanings from their experiences. From an ontological perspective, constructivists hold that multiple realities exist rather than a single objective truth. Additionally, individuals construct their realities based on their experiences and interactions with their social environments (Turin et al., 2024). This aligns with the idea that truth is subjective and context dependent. Epistemologically, constructivism posits that knowledge is subjective and co-constructed. Individuals create knowledge through their interactions with others and their environment. The researcher shares a similar view and posits that knowledge is co-constructed and context-dependent through interactions with the environment, with both the researcher and the participants involved in creating meaning.

The goal of the constructivist researcher is to focus on the participants' views regarding the situation being studied and to interpret the meanings that participants assign to their world (With et al., 2021). In this study, the researcher actively engaged with participants rather than remaining detached, fostering a collaborative effort to generate understanding. The philosophical underpinnings shaped the researcher's approach to understanding participants' experiences and made the research meaningful. From an ontological point of view, the researcher believes that reality is subjective, and each obstetric fistula survivor's experience of the condition is socially constructed, unique and shaped by various factors such as culture, social relationships and personal background. Additionally, multiple realities exist as constructed by individuals. For example, a constructivist researcher would approach the study with the belief that there is no single "truth" or "reality" about obstetric fistula. Instead, each survivor constructs their reality based on their experiences. This means that one woman may view her condition as a curse while another may interpret it as a medical condition with social consequences.

Through the constructivist lens, the researcher focused on the meanings that obstetric fistula survivors ascribed to their bio-psychosocial experiences. In this study, the constructivist paradigm was chosen to help elicit a better understanding and ensure the practical construction of the multiple realities based on the nature of the phenomenon, which involves exploring the bio-psychosocial experiences and views of the participants. The researcher critically examined how her background, values, preconceived and subjective opinions (personal reflexivity) about obstetric fistula would influence the research process; hence, steps were taken to prevent such occurrences by writing them down. In addition, methodological rigour was thoroughly applied to avoid potential biases throughout the study.

3.2 Research Design

The study employed a qualitative research approach using an exploratory descriptive design to capture the depth and diversity of the stories and emotions of bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District of the Oti Region of Ghana. A qualitative approach was considered appropriate because it allows for the exploration of sensitive, complex and deep personal issues that are not easily captured through quantitative measures (Creswell & Poth, 2018). It is further used to delve into a phenomenon and concentrate on retaining rich meaning to generate ideas to inform the research (Lim, 2025). The researcher delved deep into collecting non-numerical data to get a rich understanding of the phenomenon using a semi-structured interview guide.

Additionally, the exploratory descriptive design was appropriate for the study as it provides a rich description of participants' lived realities and is used when little is known about the phenomenon (Tushe Mirela, 2025). In the context of Nkwanta North District in Oti Region, there is limited prior research on obstetric fistula survivors. Therefore, the study design facilitated the interaction between the researcher and the participants, thereby enabling the researcher to obtain in-depth and complex information regarding the realities of the participants.

3.3 Study Setting

The study was conducted in Kpassa in the Nkwanta North District of the Oti Region, Ghana. Nkwanta North District was purposefully selected for this study due to its socio-demographic and healthcare characteristics, which make it particularly relevant for exploring the bio-psychosocial experiences of obstetric fistula survivors. The district is predominantly rural with

limited access to quality maternal healthcare services and skilled birth attendants, all of which are known factors for the development of obstetric fistula.

Nkwanta North District was established in 2008 through a legislative instrument (LI 1846). The district shares borders with Nanumba South District to the north, the Republic of Togo to the east, Kpandai District to the west, and Nkwanta South to the south. Covering a total surface area of approximately 1,098.9km square kilometres, the Nkwanta North District had a population of 126,096 as per the 2020 Population and Housing Census, with males accounting for 62,622 (49.7%) and females 63,474 (50.3%) (Nkwanta North District Assembly, 2024). The ethnic groups in the district include Konkombas, Basares, Ewes, Akans, and other tribes from the Northern Region. Konkomba is the dominant ethnic group, followed by Basare (Nkwanta North District Assembly, 2017).

Unemployment in the district is notably low. Among the economically active population, 99.1% are employed, while less than one percent (0.9%) are unemployed. The unemployed individuals consist of those looking for a job for the first time (42.1%) and those who have worked before but are now seeking employment (57.9%). There is a slight difference in the proportion of economically active males (78.3%) compared to females (77.2%), with both genders having nearly equal employment rates at 99.0% (Nkwanta North District Assembly, 2024).

Among the unemployed, a higher proportion of females (62.8%) are first-time job seekers than males (52.1%). Access to educational infrastructure and services is limited, particularly for males and those from lower-income backgrounds (Nkwanta North District Assembly, 2024). The district struggles with poor educational outcomes, including low adult literacy and high dropout rates, especially among females. Additionally, there is a low school enrollment, particularly for girls, and the district needs more qualified educational personnel. High illiteracy and dropout rates,

particularly among females, further reflect these challenges. In the Nkwanta North District, only 10.8% of the population aged three years and older have completed tertiary education. This indicates that nearly 90% of individuals who attended school in the district have education levels below tertiary (Nkwanta North District Assembly, 2017). The district also faces high mortality rates, particularly among children and mothers, exacerbated by financial barriers that limit access to healthcare services. The district is served by 18 health facilities consisting of 13 Ghana Health Service facilities, two Christian Health Association of Ghana (CHAG) facilities and three private health facilities (Nkwanta North District Assembly, 2024). However, the district faces challenges with access to National Health Insurance Services, resulting in low NHIS coverage.

This issue is mainly due to the limited capacity of the district office to facilitate NHIS activities effectively. Residents often travel long distances to Nkwanta South and Bimbilla to renew their NHIS cards, further complicating access to essential health services (Nkwanta North District Assembly, 2024). The total fertility rate in Nkwanta North District for women aged 15-49 is 4.7 births per woman. Nkwanta North District has a current population density of 92.4 per square kilometre (Ghana Statistical Service, 2022). The demographic structure shows a rural population of 59,196 and an urban population of 66,900. The economy of the district is predominantly agrarian with agriculture and related activities being the primary occupations. Agriculture, forestry and fishing account for 84.4% of the employed population, meaning that eight out of every 10 individuals aged 15 years and older are engaged in these sectors (Nkwanta North District Assembly, 2024).

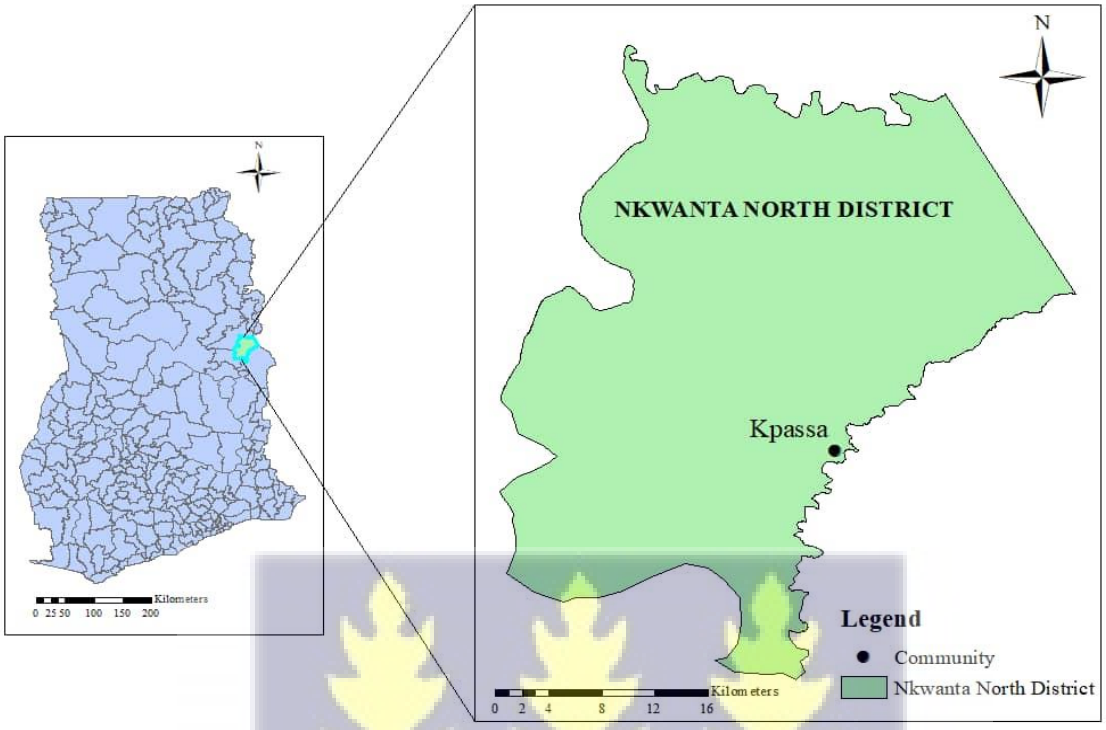

Figure 3.1: Map of Nkwanta North District

3.4 Study Population

The population of interest consisted of obstetric fistula survivors in Kpassa, located in the Nkwanta North District in Oti Region.

3.5 Inclusion Criteria

The study was guided by the following inclusion criteria:

1. Women with obstetric fistula who were 18 years of age or older at the time of the study were eligible to participate.
2. Obstetric fistula survivors who had sought surgical repair, irrespective of the outcome.

3. Women who have not sought surgical repair

3.6 Exclusion Criteria

1. Obstetric fistula survivors with other co-morbidities were not considered.
2. Obstetric fistula survivors who were not in their best state of mind were not considered.

3.7 Sampling Technique and Sample Size

In the study, the researcher employed purposive and snowball sampling techniques to identify women who have survived the condition. Sampling involves selecting a subset of individuals from a larger population to represent the entire target population effectively (Stratton, 2023). Purposive sampling (a non-probability sampling technique) involves deliberately selecting research participants to provide relevant data sources that address the research question (Johnson et al., 2020; Stratton, 2024). This approach focuses on identifying and selecting knowledgeable and experienced individuals with the phenomenon of interest (Etikan et al., 2016).

In this study, the researcher established specific criteria based on the research objectives and the research questions. Potential participants were selected based on the inclusion criteria. The researcher collaborated with community gatekeepers, such as public health officials and the Assembly member of the community, to identify and contact eligible participants, given that women living with obstetric fistula are often stigmatized and difficult to locate. The local public health official, who had access to a list of potential participants, contacted a few of the women privately who had mobile phones to invite them to participate in the study since the official did not know where they resided. This allowed them to decide whether to participate in the study. The initial participant was purposively selected based on the inclusion criteria. Verbal and informed consent was obtained from the participants, outlining the purpose of the study, its significance, and

the voluntary nature of the participation. The participants were subsequently screened to confirm that they met the goal, objectives and inclusion criteria, ensuring that the information provided was relevant and valuable to the research. After the initial round, assistance was sought from the other survivors to locate the remaining fistula survivors they know within their social network, thereby employing the snowball sampling method (Ting et al., 2025). The referred individuals were approached, the study was explained and their participation was sought. The researcher reached out directly to individuals who met the specified goals and objectives of the study, provided them with information about the study and invited them to participate. This combined purposive and snowball strategies ensured that the study captured a diverse range of experiences from women living with obstetric fistula in the community.

Creswell and Creswell (2018) noted that qualitative research often requires only smaller sample sizes. A smaller sample size is typically adequate to reach the study's point of diminishing returns. Recruitment continued until saturation, meaning additional interviews no longer provided new information (Saunders et al., 2019). Saturation was employed as a guiding concept when gathering data during this study. Hence, 10 participants were selected for the research based on the point at which saturation was reached.

3.8 Data Collection Tool

Data was collected using face-to-face interviews with a semi-structured interview guide written in English with open-ended questions. Using qualitative data is an excellent approach to learning about the attitudes and actions of your target audience. Choosing a research instrument wisely is essential to gather data that will enable analysis and ultimately develop a credible and convincing response or answer to the research questions and objectives (Adosi, 2020). The most effective way to understand participants' perspectives is through in-depth interviews. These

interviews provide a flexible and natural setting for participants to share detailed information about their personal experiences. While the guide provided a framework for the interviews, some flexibility was allowed in the order and nature of the questions using prompts to capture the participants' unique experiences better. The interview tool was developed by the researcher, informed by the bio-psychosocial model and relevant literature and aligned with the objectives of the study.

The interview guide is divided into four sections. Section A gathers demographic information from the participants, including age, occupation, ethnicity, educational level, marital status, and duration of the fistula. Section B focuses on the biological/physical experiences associated with obstetric fistula. Section C focuses on the psychological experiences of the condition. Lastly, section D explored the social experiences related to obstetric fistula.

3.9 Pre-testing of the Interview Guide

The research instrument was pre-tested with two obstetric fistula survivors at Jumbo (Nkwanta North District) to ensure data quality. This pre-testing allowed the researcher to evaluate the suitability and appropriateness of the tool and provided an opportunity to clarify and refine any ambiguous questions. The insights gained from this pre-testing process were used to improve the interview guide, ensuring that it effectively prompted relevant and meaningful responses for the study.

3.10 Data Collection Procedure

Before meeting with the participants, ethical clearance (NMIMR-IRB CPN 064/23-24) was obtained from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR) at the University of Ghana (Appendix C). An introductory letter (Appendix D) from

the School of Nursing and Midwifery, University of Ghana, was presented to the Nkwanta North District Assembly; a permission letter (Appendix E) was secured from the DCE at the Nkwanta North District Assembly. A meeting date was arranged by the Human Resource Manager at the District Assembly to meet with the Medical Superintendent at the Nkwanta North District Health Directorate, where permission was subsequently obtained from the Health Directorate. The Assembly member for the area was also contacted, and additional permission was granted. With the assistance of the local public health official, women who met the inclusion criteria were contacted via their phone numbers. For those without mobile phones, contact was made through the initial participants. Interviews were conducted with those who willingly agreed at the location of their choice.

The researcher met with the participants on the scheduled date at their preferred location. Before the interview, participants were reminded of their rights as outlined in the consent form and were once again informed about the voluntary nature of their participation. The interview was scheduled at a convenient time and place for the participants, ensuring they felt comfortable and could provide honest and open responses. Each participant was assigned a pseudonym to protect their identity before the interview began. Additionally, field notes were taken, and a digital audio recorder was used with participants' permission. The interviews were conducted in the participants' native languages, Konkomba and Akan, which they were fluent in. Informed consent was obtained from each participant before the interviews, which lasted 30-45 minutes each. The researcher faced initial challenges in recruiting participants as three individuals declined to participate in the study even after the purpose was explained to them. Their decisions were respected, and the researcher sought consent from other participants willing to be involved in the study.

3.11 Data Management

This section describes how data was managed throughout the data collection procedure, storage, organization, and security. Audio recordings were labelled using the codes assigned to participants, stored on a secure digital recorder, and transferred to a password-protected computer. Transcriptions and coded data were stored in Microsoft Word document files on the same computer. Consent forms signed by participants were also stored in a cabinet under lock and key. Only the researcher and supervisors have access to the information. Additionally, field notes were written in dedicated notebooks and digital files. Data transcriptions were labelled with participants' codes and dated. Additionally, participants' identities were anonymized using pseudonyms to protect their identities. Signed consent forms were stored in a locked cabinet separately from data files to maintain confidentiality.

3.12 Data Analysis

The data was analysed using thematic content analysis, which began immediately after data collection. The audio-recorded interviews were transcribed verbatim in the Akan and Konkomba languages. Both deductive and inductive approaches were employed to identify sub-themes, including those based on theoretical frameworks and themes that emerged directly from the data.

Thematic analysis is a widely used and theoretically adaptable approach for analysing qualitative data, allowing for identifying and exploring patterns or themes within a dataset (Byrne, 2022). Manual data analysis was conducted simultaneously with data collection using the six-step reflexive thematic analysis framework (Braun & Clarke, 2021). In the initial stages, the researcher listened to the audio recordings multiple times to thoroughly understand and appreciate the content. The data was then transcribed verbatim, clarifying any ambiguities to enhance familiarity

with the data. The researcher read and re-read the transcripts to identify the key ideas and themes. The transcribed data was analysed using line-by-line deductive coding, which aimed to capture the meaning and essence of each sentence, thereby reducing the amount of data. This coding process was guided by the constructs of the bio-psychosocial model. The transcripts were reviewed multiple times to identify recurring phrases and response patterns that facilitated the coding process. Follow-up interviews were conducted with participants for clarification until data saturation was achieved. The identified patterns and phrases were then categorized into sub-themes manually. These sub-themes were further grouped to create broader, more generalized themes based on consistency and relationships observed within summarized data. The researcher revisited the transcript and reviewed the categorized data to confirm the accuracy of the codes and sub-themes within the identified themes.

The process was repeated several times until the researcher was confident that all the themes and the sub-themes accurately represented the interview transcripts. The themes and sub-themes were then organized, and a detailed and reflexive account was written, supported by participant quotations. Since the researcher was not fluent in the Konkomba language, a translator was recruited for assistance. However, the researcher was fluent in the Akan language and could translate the transcripts from the Akan language to English. The original and the translated versions were compared for accuracy, clarity and consistency. Throughout the analysis, the researcher remained mindful of potential biases and assumptions stemming from her academic background and personal experiences. The researcher maintained an ongoing dialogue with the data by repeatedly revisiting it to deepen understanding. Additionally, member checking was done to gather feedback from participants, allowing the researcher to assess whether the interpretations of the data aligned with the participants' perspectives and experiences.

3.13 Ethical Consideration

Ethics involves addressing the moral issues of conducting research (Mirza et al., 2023). According to Bos (2020), ethics involves exploring what is considered right and wrong and the principles guiding what researchers should do. Research ethics focuses on safeguarding the human rights of participants, particularly their right to protection. This study adhered to strict ethical guidelines to respect participants' rights. The researcher is responsible for protecting participants from harm, respecting their perspectives, building trust, preventing misconduct, and upholding the integrity of the study (Creswell & Creswell, 2018). Ethical clearance was obtained from the Noguchi Memorial Institute for Medical Research with the clearance number NMIMR-IRB CPN 064/23-24 (Appendix C). An introductory letter from the School of Nursing and Midwifery of the University of Ghana (Appendix D) was sent to the Nkwanta North District Assembly at Kpassa of Oti Region. Permission was also obtained from the Municipal Health Directorate and the Assembly member of the community. The interview guide was reviewed for cultural and context appropriateness to ensure it was fit and devoid of stigmatizing words or phrases that could cause harm to participants. A document detailing the goals and objectives of the study was provided to potential participants. All potential advantages, risks, and drawbacks related to the study were sufficiently disclosed to them. Anonymity and confidentiality were guaranteed to the attendees.

Additionally, they received sufficient notice that participation in the interview is entirely voluntary and that they may withdraw from it at any moment and choose not to answer any question. Those who verbally consented to participate in the study were contacted again to get their signed consent to participate. After that, a consent form was handed to the prospective participants. The consent form was translated into the participants' native language by a translator,

and those who agreed were required to thumbprint to show readiness to participate. The participants were then assured of confidentiality and anonymity. The participants were assured that the information gathered would be used strictly for academic purposes, with access limited to the researcher and the supervisors.

3.14 Methodological Rigour

Establishing trustworthiness is vital for ensuring the credibility and reliability of qualitative research findings (Ahmed, 2024). It is essential to confirm the validity and dependability of the conclusions drawn from an exploratory descriptive qualitative study. The credibility of research is a key factor in determining its value. It is thought that there is a more suitable criterion for assessing qualitative research. According to Johnson et al. (2020) rigour in qualitative research ensures that the research design, methodology, and results are clear, accessible, repeatable, and devoid of bias. Guba and Lincoln (1982) suggest four requirements for the study to meet the reliability process: credibility, transferability, reliability, and confirmability. Applying rigour and quality criteria is essential for the researcher, academic dissemination, and effective peer review of a study.

3.14.1 Credibility

Triangulation was employed through various strategies to enhance credibility (Cypress, 2017). To establish credibility, prolonged engagement was ensured by spending enough time with participants; this allowed the researcher to gain a deeper understanding of the context and build rapport with the participants before the interview (Korstjens & Moser, 2018). This rapport-building helped the researcher to gain an understanding of the experiences of the participants. It also helped capture rich data that might take time to be evident during brief interactions. In addition, the researcher acknowledged and set aside her biases and assumptions through self-

reflexivity, adopting a more objective posture throughout the data collection process. The researcher maintained an audit trail by keeping a comprehensive record of interviews, observations and other data collection activities, including dates and time. Additionally, peer debriefing was ensured by discussing findings and the research process with peers and colleagues who provided an outside perspective. This helped the researcher to identify biases and ensured that the analysis was grounded in the data rather than personal opinions.

3.14.2 Transferability

Transferability refers to the extent to which research findings can be applied or generalized to other settings or contexts (Riazi et al., 2023; Ul & Kakar, 2023). To ensure transferability, the study included comprehensive descriptions of the research context, methodology and the characteristics of the participants, which will allow readers to determine whether the findings apply to other settings or situations. Additionally, transferability was achieved by comparing findings with those from studies conducted in different settings or populations. This helped the researcher to assess whether the study findings resonated with broader experiences. Furthermore, the researcher vividly described the methodology used in the study by explaining how participants were selected, the data collection procedure, and how the data was analysed. This allows others to replicate or adapt the research process in a new setting and assess the transferability of the findings.

3.14.3 Dependability

Dependability refers to the degree to which the study can be replicated (Nyirenda et al., 2020). To enhance dependability, an audit trail was created by thoroughly documenting every phase of the research process, which allows an external auditor to follow the process easily. The researcher documented critical decisions made throughout the study, including any changes in the analysis process. Additionally, the researcher ensured dependability by consistently using the same

semi-structured interview guide for all participants. Furthermore, the researcher engaged in reflexivity by recognizing and documenting personal biases and experiences that could influence the research process. This thorough record-keeping promoted transparency and allowed for traceability, enhancing the dependability of the research. It also provided valuable insights into potential biases, supporting a more credible and rigorous study.

3.14.4 Confirmability

Confirmability is the final criterion and ensures that the research findings are based on the participants' perspectives rather than researcher bias. It measures the extent to which others can verify the findings (Nyirenda et al., 2020). Confirmability was ensured by the researcher through member checking, maintaining a reflexive journal, and peer debriefing. Member checking was ensured by including participants in the verification process, ensuring that the experiences of participants were accurately reflected. Reflexivity is where the researcher examines her own experiences, biases, and views that might affect the research process (Yip, 2024). It involves a self-critical stance where researchers consider their impact on the research context and the interpretation of data. This process helps acknowledge and manage the researcher's subjectivity. Reflexivity was achieved by ongoing self-reflection about biases, beliefs, and assumptions that may influence the research. A reflexive journal was kept, enabling the researcher to keep track of her biases, thoughts, and assumptions.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.0 Introduction

This chapter presents the findings from the study exploring the bio-psychosocial experiences of obstetric fistula survivors in the Nkwanta North District of the Oti Region. It begins with an overview of the demographic characteristics of the participants, followed by a comprehensive presentation of the themes and sub-themes identified in the study. To ensure confidentiality and privacy, the names of participants have been replaced with pseudonyms. The findings are categorized according to the three domains of the bio-psychosocial model and the objectives of the study. The chapter further presents the demographic information of the participants in a tabular form.

4.1 Demographic Information of Participants

A total of 10 obstetric fistula survivors participated in the study, all of whom belonged to the Konkomba tribe and resided in Kpassa at Nkwanta North District in Oti Region. The ages of the participants ranged between 30 and 50 years; however, this may not accurately represent their true ages as most of them were uncertain about their exact ages and relied on estimates due to the absence of birth records. In some cases, the stated ages did not correspond with their visibly older appearances. Among the 10 participants interviewed, two had formal education but had dropped out in classes 3 and 5, respectively. The participants' marital status, parity, and duration of living with obstetric fistula, however, varied considerably, as indicated in Table 4.1.

Regarding the marital status of the participants, all were living with their partners before developing an obstetric fistula. However, at the time of the interview, only three participants were still married, while two participants were divorced, and five participants were widows. Regarding employment status, eight participants were engaged in farming and petty trading before the onset of the fistula, while two were apprentices in hairdressing. At the time of the interview, nine participants continued to engage in farming or petty trading, although they were not very active in farm work. One participant was unemployed and relied on her partner and relatives for her basic needs. While all the participants spoke the Konkomba language fluently, nine participants understood the Akan language and could speak.

For the duration of the participants who had experienced obstetric fistula, one participant has been living with obstetric fistula for 4 years, one participant lived with fistula for 10 years, four (4) participants lived with fistula between 11-20 years while four participants lived with fistula between 21-30 years. Regarding religion, nine participants were Christians, while one participant was a traditionalist.

Table 4.1: Demographic Information of Participants

Pseudonym	Age	Educational Background	Occupation	Marital Status	Parity	Duration of Fistula	Age at Marriage
FS 1	45	None	Farmer	Widow	7	22	16
FS 2	39	None	Farmer	Married	9	4	16
FS 3	46	None	Farmer	Widow	2	25	17
FS 4	50	None	Farmer	Divorced	8	30	20
FS 5	34	Primary school dropout	Unemployed	Married	3	18	16
FS 6	39	None	Farmer/ Petty trader	Divorced	3	10	15
FS 7	49	None	Farmer	Widow	7	20	14
FS 8	43	None	Farmer/ Petty trader	Widow	4	20	15
FS 9	40	None	Farmer	Widow	5	24	16
FS 10	30	Primary school dropout	Farmer	Married	3	13	16

Source: Fieldwork, 2024

4.2 Organization of Themes and Sub-themes

Using the thematic content analysis, five main themes and nineteen sub-themes were generated from the data after reviewing the ten interview transcripts. Among the five main themes, three (3) themes with corresponding sub-themes align with the objectives of the study and the constructs of the bio-psychosocial model. Two other main themes and five sub-themes emerged from the content analysis. The themes and sub-themes are detailed in Table 4.2.

Table 4.2: Themes and Sub-themes

Theoretical Themes	Emerged Themes	Sub-themes
Biological/Physical experiences of obstetric fistula survivors		• Continuous leakage of urine/faeces or both • Infections and genital sores • Pain • Odour
Psychological experiences of obstetric fistula survivors		• Depression • Anxiety • Loss of identity and low self-esteem • Suicidal thoughts
Social experiences of obstetric fistula survivors		• Stigma and discrimination • Self-isolation • Divorce/ Abandonment • Social support • Socio-economic experience • Cultural beliefs on the causes of obstetric fistula
	Spiritual experiences of obstetric fistula survivors	• Attribution to witchcraft • Divine will of God • Management Preferences
	Coping strategies	• Problem-focused coping • Emotional-focused coping

Source: Fieldwork, 2024

4.3 Biological/Physical Experiences of Obstetric Fistula Survivors

As part of the objectives of the study, the theme aimed to assess the biological/physical experiences of obstetric fistula survivors. The participants indicated that they experience physical problems that affect them in many ways. This main theme from the theoretical framework

generated four (4) sub-themes, which include continuous leakage of urine/faeces or both, infections and genital sores, pain, and odour.

4.3.1 Continuous Leakage of Urine/Faces or Both

The participants shared varied views regarding how they leaked urine and faeces, no matter where they found themselves or how well they were dressed. Some participants expressed their views as far as physical experiences are concerned.

A few participants shared their stories as these;

> *"After I gave birth through caesarean section, I had the condition, and I was leaking urine. My husband was told to send me to KATH for repair, but he refused, and I have been left with the condition. I have been living with the condition for over 22 years now."* ***(FS 1)***

Another participant shared a similar story;

> *"The time I was not pregnant, I was not leaking urine, but when I delivered, I started leaking the urine. Whenever I put on my pantie, it gets wet. Even when I use a rag, it gets wet. I have never heard of any disease like this before, and I did not know about it. I have been living with the condition for 18 years"* ***(FS 5)***

Initially, some participants viewed the incontinence of urine as normal secretion after delivery but later got to know that it was a health problem after noticing that the leaking was not stopping.

FS 8, a 43-year-old widow who was leaking both urine and faeces narrated her experience;

"When I was going to deliver my child, my labour was prolonged for 3 days, so they did surgery for me, and I got the disease. I realized later that I started leaking both urine and faeces, which was so devastating. Whenever I get pregnant, the leakage will increase and reduce at a point. So, I went to the hospital for them to check, which was on and off. Because of this, they normally book me for operation. When I am walking, the urine and faeces leak, and I begin to smell." ***(FS 8)***

4.3.2 Infections and Genital Sores

The Participants were interviewed about the physical problems they faced, reporting varying degrees of physical health problems, such as genital sores and discomfort at the vulva. These issues were attributed to skin irritation around the genital area caused by constant leakage of urine and inadequate personal hygiene.

FS 1, a 45-year-old woman shared her experience as;

"When I was using rags, I started experiencing irritation and discomfort in my private part, and I also notice some sores around the area because of the constant itches; it was very painful. I experience this often, and it has not been easy. I rub some white ointment around the area, and the itches will go, and the sore will also heal. When I started using diapers, the sores and the itching stopped." ***(FS 1)***

FS 7, a 49-year-old woman who has lived with the condition for 20 years, also narrated;

"Apart from leakage of urine, I used to experience some itches in my private part. It develops into sores, which makes me uncomfortable. I normally buy ointment

*from a man who comes around to sell drugs and apply it. It gives me some comfort when I apply it." **(FS 7)***

FS 3, a 46-year-old woman who has lived with the condition for 25 years had this to say;

*"I have been experiencing itches, and when I scratch them, they turn sore all over my private part. It is a very uncomfortable experience. I buy ointment from the drug store and apply; sometimes I get relief, and sometimes, I do not." **(FS 3)***

To the contrary, one participant reported experiencing no other physical problem apart from the leakage of urine since her condition was mild and that she could manage her hygiene well.

FS 4, a 50-year-old woman who has lived with fistula for 30 years puts it this way;

*"I did not experience any other serious physical problem apart from the leakage of urine. Because of the way I take care of myself, I do not experience itches and irritation because my condition was mild, and not many people were aware I had the condition." **(FS 4)***

4.3.3 Pain

Some participants reported experiencing frequent pain. In addition to vulval irritation and sores, they noted that the pain was often exacerbated by the constant irritation of the genital sores caused by the acidic nature of their urine. FS 10, a 30-year-old woman, described how she experienced severe pain in the vulval area;

"... When it happened like that, I was experiencing pain because of the urine touching the place. I told my mother-in-law that the urine that was coming out

smelled and was not normal, but she did not believe me. She said it was blood and that it was normal for every postpartum woman to experience that." ***(FS 10)***

In dealing with the pain, some participants resorted to the use of ointment and creams and limited their walking distances. FS 2, a 39-year-old farmer who adopted strategies to avoid the pains, shared her experience;

"I also experience a lot of pain in my private part and around the thighs, and when it starts, it becomes very uncomfortable. I buy some ointments, apply them, and sleep for some time. By the time I wake up, the pain is gone, then I will be fine and lead a normal life." ***(FS 2)***

Another participant shared a similar story;

"*I experience some rashes and pain in my private part and some itches. I scratch it, and it generates sores, and the pain increases. I normally go to the drug store, and those who sell medicine inject me with Procaine penicillin, and the itches and pain will stop. As I am talking to you now, I am experiencing some discharge from my private part, and when I enquired, they said it is 'white.'* ***(FS 5)***

4.3.4 Odour

Most participants attested that odour was one of the striking experiences they must live with. Most of them affirmed that they could not afford diapers since they did not have the means to reduce the effect of the odour. They could not also go closer to people for fear of ridicule.

This is what FS 1, a 45-year-old farmer, experienced;

"…I was smelling of urine, so when I was discharged from the hospital, the condition got worse. I eventually had a catheter pass. I have not been using diapers because my husband did not even have money to buy diapers for me. The way I am suffering, hmm…the children went to buy Dettol and scented soap for me to use because I smell. I could not go to people whenever there was any issue in the family; if you are a human being and you cannot go closer to people, then what kind of human being are you?" ***(FS 1)***

Similarly, this participant narrates her experience this way;

"The condition left me with odour to the extent that my husband and his family members sent me away; They beat me and sent me away saying I smelled, I came back to stay in my father's house with much pain in my heart. I could not work because my strength would not allow me. I lived with the condition for 10 years." ***(FS 6)***

4.4 Psychological Experiences of Obstetric Fistula Survivors

Psychological experience is the range of emotional and mental challenges that significantly affect the well-being of obstetric fistula survivors, the ability to share feelings, fears, happiness, and anxiety as one suffers the disease. This main theme generated four sub-themes, namely depression, loss of identity and self-esteem, anxiety, and suicidal ideation. Participants reported several psychological issues. The majority of the participants experience some of these problems on a daily basis as they go about their daily activities, including worry about their condition (odour) and scornful remarks from associates and other people. This invariably resulted in suicidal ideations among participants.

4.4.1 Depression

Findings from the study established that most of the women were depressed because of the bad treatment from associates and other people. It was clear that these women were depressed because of the treatment they received from their spouses, family, and friends. This treatment made them feel useless, to the extent of making them feel they served no purpose on earth. This is how a few of the women shared their experiences as far as the feeling of depression is concerned;

> *"I did not know what I did to deserve this condition…when people insult me because of the disease, it hurts me, and I cry a lot, I get worried. I have been praying to God to heal me so that I will be free from insults and abuses from people."* ***(FS 4)***

A woman who was highly emotional revealed;

> *"Eii…it affected me so much that sometimes, I stay in my room alone and weep when my father is not around. I wept every day. Sometimes, I refused to eat and felt like killing myself. Sometimes, I ask myself, why don't I die and leave this world so that I will be free? What wrong did I do in this world that this condition has come upon me?"* ***(FS 9)***

Another emotional story from a participant;

> *"I was so disturbed and disheartened, and I almost gave up. When I got to know of the disease, l was very young, so I asked myself whether I had to live with this condition for the rest of my life. At that time, I wanted to die and leave this world."* ***(FS 10)***

4.4.2 Anxiety

Generally, participants were very emotional and worried because of the problems they were facing with the disease and the way family members and friends treated them, especially their loved ones. The following narration summarizes what most of them reported. FS 5, a 34-year-old woman, had the condition during the delivery of her first child when she was very young. She narrates her story;

> *"When l had the condition, I was very much worried and didn't know what to do. I was very young, and my partner also ran away when I had the condition. I always asked God why my case is different. I was always crying to God to forgive me and heal me so that I could lead a normal life. I went to church and prayed to God to forgive me if I had sinned against him or any other person."* ***(FS 5)***

FS 6, a 39-year-old woman who went through a similar experience, had this to share;

> *"I felt constantly worried and anxious, always thinking about my situation. Most of the time, I stayed in my room reflecting on why this condition had befallen me. Sometimes, I ask God why this happened to me. At one point, I reassured myself, knowing deep down that I had not done anything wrong. I am aware that I am not the only one with this condition, but it has deeply affected me."* ***(FS 6)***

FS 1, a 45-year-old farmer, narrates how worrisome it was following life with an obstetric fistula after childbirth.

> *"I do not know the kind of disease that had befallen me. I get worried to the extent that, sometimes, I stay in my room without food and cry for three days. I think about*

a lot of things, and I keep asking myself why my case is different from others. This life is unfair. What kind of life is this?" ***(FS 1)***

4.4.3 Loss of Identity and Low self-esteem

Some of the participants affirmed that their families and community abandoned them due to the stigma associated with the condition. This isolation erodes their sense of belonging and self-worth. The trauma of childbirth complications, coupled with the ongoing struggle of living with a fistula, leads to some psychological stressors. Survivors internalized societal stigma and viewed themselves as "damaged" or "unclean," further impacting their self-image. The cumulative effect of these experiences results in a profound crisis of identity. A few women emotionally shared how they felt when the condition was noticed;

"My world was crushed into pieces, and I saw myself worthless. I thought about my condition so much. The condition made me think that I had lost my dignity because I was very young at that time and did not understand life as I understand it now ..." ***(FS 9)***

Another woman described her experience as follows;

"It has affected who I was, and my identity has been lost. What is disturbing me now is that this condition has affected my self-image because, had it not been for the disease, I would have finished learning my trade and working to make a living. I do farm work now with my partner." ***(FS 10)***

4.4.4 Suicidal Thoughts

The participants expressed that they felt hopeless about their prospects for social and family acceptance, especially in a community where obstetric fistula is poorly understood. The women were trapped in their condition with no viable treatment options, which intensified their feelings of hopelessness as most of them lived with the condition for a very long time before identifying treatment options. The sense of a bleak future can further contribute to suicidal thoughts. FS 1, a 45-year-old woman, shared her emotional experience this way;

> *"…When my children were with me, I used to tell them that during pregnancy and delivery, when the doctors performed the surgery and I developed this condition, it would have been better if I had died during the process rather than endure this kind of suffering."* ***(FS 1)***

Similar to the narration of other participants, FS 9 is a 40-year-old farmer who was very young (16 years) at the time when she developed an obstetric fistula. She saw her life as hopeless and wished she had died and left this world in peace.

She narrates her ordeal;

> *" At that time, I was still young and had no more children. I considered committing suicide, but I knew God would not forgive me. There were moments when I questioned why I was still living. I wondered what wrong I had done to deserve such a burden in life."* ***(FS 9)***

4.5 Social Experiences of Obstetric Fistula Survivors

This refers to one's commitment to her relationship with other people around her. Six sub-themes were generated from the main theme of the theoretical framework, which includes stigma and discrimination, self-isolation, divorce/abandonment, social support, economic impact, and cultural beliefs. Generally, many survivors face severe social stigma due to their condition. Most of the participants reported scornful remarks from associates and other people. The majority reported rejection, abandonment, and stigma. This continually results in social isolation and self-ostracism among the participants. These issues greatly impacted the lives of the affected women in that their ability to continue doing things they previously did was affected. The majority of the participants were not able to mingle with people in public due to the negative reactions from people. This further strengthened their desire to stay in isolation, and they felt stigmatized. Both the enacted (stigma that involves external actions and behaviours directed towards the stigmatized person) and the felt stigma (internal experience and perception of shame and anxiety that individuals with a stigmatized identity feel) were reported.

4.5.1 Stigma and Discrimination

The participants reported that stigma and discrimination contribute to the embarrassment that they go through daily. At certain times, the stigmatizing nature of obstetric fistula coupled with traumatic experiences like insults from family, friends, and loved ones make their lives more challenging. The study found that stigma and discrimination were mostly associated with neighbours, friends and in some cases, family members, including rivals and even husbands (enacted stigma). Some of the participants reported enacted stigma, which was mostly associated with family, friends, and loved ones.

Some of the participants shared similar experiences;

> *"The way I was closer to some friends and some family members totally changed towards me when I had the condition. They mocked and chuckled at me. Sometimes, I was surprised at them and felt bad because of their actions. I decided not to go to them again."* ***(FS 5)***

Another woman had this to say;

> *"Before I had the condition, I used to visit my friends and chat with them. I would go everywhere I wanted, I was kind to them before I got the condition; I could not go to them anymore, but ever since I developed the condition, when I visited them, they insulted and mocked me as if they did not know me…. Even my siblings laughed at me, mocked me, and mistreated me because of that. They said I no longer had a husband and questioned why I was still here."* ***(FS 6)***

A similar experience was shared by FS 8;

> *"…when my friends heard about my condition, they mocked and insulted me whenever they saw me, acting as if they didn't know me. I was kind to them before I got the condition, and now they gather and gossip about me. I know it is not my fault that I have this condition."* ***(FS 8)***

To the contrary, a few participants reported that their family members and spouses treated them well.

FS 2, a 39-year-old participant shares her story;

> *"When I had the condition, my husband treated me well as well as my co-wives. He supported me to the extent that he provided me with all I needed, including my co-wives. Other family members were also supportive, they were all praying that I would receive healing. I never felt neglected at all, they didn't give me any problem at all…"* ***(FS 2)***

However, one participant reported that her incontinence of urine was mild and that she did not tell anyone about it apart from her husband and children, who also concealed it from the public. She recounts that she goes to public places without thinking of mockery, insults, and stigma from people.

FS 7, a 49-year-old woman, shares her story this way;

> *"…when I had the condition, people were not aware that I had that condition because mine was mild, and I did not tell anyone apart from my husband and children, who also concealed it from everyone. They were ok with me; I did not have bad experiences with people. I go for social gatherings with no thoughts of people mocking me..."* ***(FS 7)***

4.5.2 Self-isolation

Due to the stigma, obstetric fistula survivors experience self-isolation. They are often excluded from activities and social gatherings, leading to withdrawal from society. The inability to control some bodily functions and the fear of embarrassment causes many to stay at home,

avoiding public spaces altogether. Most of the participants reported self-isolation to avoid embarrassment and humiliation (felt stigma).

FS 9 revealed her frustration in this statement;

> *"Hmmm… I do not visit people anymore, not even my friends. Sometimes, when friends come to see me, they are told I am not around. Other times, if I am doing household chores and they visit, I ask them to go home, and I will come to see them later. I was afraid that if I sat down and got up, I would soil myself, and people would see it and mock me."* ***(FS 9)***

A similar experience was shared by FS 10;

> *"As for friends, they did not do anything to me, but because of my condition, I feel too ashamed to visit them due to the leakage of urine and the smell. I may embarrass myself in front of them. Mostly my family members mock me, so I avoid visiting them too. If I must attend a funeral, I wear a diaper to prevent leakage."* ***(FS 10)***

Another woman puts hers this way;

> *"I do not visit people because I am afraid I might soil myself with urine, and the odour is extremely embarrassing. So, if there is a funeral or any important event in my clan, I try to get some money, buy a diaper, wear it, and attend. However, if the funeral is not within my family, I do not even bother going."* ***(FS 1)***

4.5.3 Divorce / Abandonment

Participants gave an account of what happened in their marital homes and their relationship with their partners. Some of the women recounted how they were neglected by their partners during the time they had the condition for fear of stigmatization and the women's inability to satisfy their

sexual desires. Some of them described how they were neglected and pushed away by their supposed spouses/partners.

A few women recounted their ordeal painfully;

> *"…So, I realized that I have never been the same. I have gone through a lot; it was at that same time that my partner also left me without any notice. I only found out that he had left. I did not know what to do, and my mother-in-law was not truthful. I have never set my eyes on him again till now."* ***(FS 5)***

Another participant shares her story;

> "*My husband and his family sent me away because of the condition; They beat me and sent me away saying "I smell" I came back to stay in my father's house empty-handed…as for my ex-husband, I do not think he is aware of my recovery because he is very far from here. I know he will not accept me again because I heard he has married another wife..."* ***(FS 6)***

While some participants were facing divorce because of obstetric fistula conditions, others faced different challenges in their marriages. One woman reported that after the death of her first husband, her second partner she had a son with also divorced her because she gave birth to a baby boy, which in Konkomba land is interpreted to mean reincarnation of the former husband.

FS 8, a 43-year-old woman, explained;

> *"When I had the disease after the delivery of my first child, I lost the baby and later lost my husband. My second husband, whom I married, sent me away because I delivered a baby boy. One thing about Konkomba people is that if you deliver a boy*

and your husband dies, your next delivery should be a girl when you remarry. It is interpreted that if you deliver a boy, you have given birth to your dead husband." ***(FS 8)***

4.5.4 Social Support

Some cultures have strong community support systems that help women with obstetric fistula. These communities may rally around affected women, providing them with care and assistance and sometimes facilitating access to medical treatment. However, this is less common due to the pervasive stigma. Findings from this study revealed that a few of the participants received support mainly from their spouses. Most participants reported that their family members support them in their own ways. Some participants also reported that they had no support from their spouses, not even family and friends and that they depended on their own strength. Furthermore, the financial support they receive from benevolent people, together with the meager amount they get from their farm, is what they mostly depend on for their livelihood since they are unable to perform tasks that could earn some income.

A few women shared their experiences;

"Some family members and friends have been supportive; they even buy diapers and soap for me. Occasionally, they help me with planting my crops during farming season. My partner had another wife, so he would spend time with her and neglect me. When my husband became ill, he focused on treating himself and ignored me until he passed away." ***(FS 1)***

A participant revealed this;

> *"My brother has been supportive. At the time I was going for the surgery, I did not have money, and my partner, too, did not have money to assist me in going through the surgery. My brother supported me throughout the surgery until I recovered and came back home. I am very grateful to my brother for his support…".* ***(FS 5)***

Another woman shared her story this way;

> *"When my father died and I moved in with my partner, he (partner) was supporting me financially until he also died. I have been doing some farm work lately, though not very actively; my children also assist in their own way with the little they get. Hmmm… how to feed sometimes becomes a problem. Hmmm… my late husband's brother also assisted me financially when I was going for the surgery the last time."* ***(FS 9)***

A few participants mentioned that they had co-wives who were very supportive and praying for their recovery.

FS 3, a 46-year-old woman narrates her experience;

> "*…I and my co-wives are staying together with our children; they know I have the condition, and they do not maltreat me. Because they know I do not have strength, they give me some to eat whenever they cook. I do not have any problem with any family member; they understand my situation, so they do not treat me badly….".* ***(FS 3)***

Another participant revealed this;

> *"When I had the condition, my husband supported me so much that I never felt unwanted in the family. I am in the same house with my co-wives, and they were also supportive, including other family members, they were all praying that I receive healing. They did not give me any problem at all, I never felt rejection from any of them…"* ***(FS 2)***

However, a participant does not receive any social support; rather she depends on her own strength to secure her livelihood.

She narrates her story;

> *"…No one was willing to help me when I had the condition. Even when I needed assistance, neither family nor friends would offer support. I do not rely on anyone; I depend on my own strength and the little I earn from my petty trading to manage everything, including taking care of my children. Sometimes, my children also help by selling for me."* ***(FS 8)***

4.5.5 Socio-economic Challenges

The socio-economic challenge is another sub-theme that was identified. Most participants reported losing their livelihoods because they were unable to continue their farm work and other petty trading. However, those who remained in petty trading did not do without obstacles, as some participants reported being mocked and avoided when selling their wares at the market. Some of them allow their children to go and sell to generate income for the family. Some participants who went through the surgery reported that they did not have the strength to continue the farm work again since they were afraid that the fistula site might reopen. They have become a burden on their

relatives who cannot shoulder their burden. Some participants reported that they depend solely on the benevolence of people to survive.

Some participants shared their stories;

> *"When I had the condition, I was looking for money to go for treatment. When I sell, they do not buy and whatever money I get, I use it on my condition. I was a farmer, but now I cannot work again because I am afraid that when I work, the fistula will return. After the fistula surgery, I was told not to perform difficult tasks for some time."* ***(FS 2)***

Another woman had this to share;

> *"I have been working hard to find a cure for myself, but I had no money. Because of the condition, I could not do any work to earn income. I kept praying to God for the means to heal myself. By God's grace, I could gather some money and go for the surgery. I am now free from fistula but cannot do hard work."* ***(FS 4)***

A participant described her challenges in accessing her farm, noting that it would be nearly impossible without a motorbike. She mentioned that the discomfort from her continuous urinary incontinence made it difficult for her to leave the house, which in turn impacted on her ability to earn a living. Consequently, she relies entirely on her partner's menial job to support herself.

FS 5, a 34-year-old woman shares her experience;

> *"Due to my condition, I can no longer engage in farming activities actively. Whenever I cannot access a motorbike, I cannot make it to the farm. Walking there causes me discomfort, including sores on both sides of my thighs, and I experience*

*significant urine leakage while walking. Even after my surgery, I do not still feel strong enough to return to farming."(**FS 5)***

However, FS 8, a 43-year-old woman who does petty trading, nearly aborted her plans to sell because of how people treated her. She reported that she had no livelihood other than selling yam flour meal (Wasawasa). She decided to ignore how people treated her and concentrate on her business.

She shares her experience;

*"...I sell 'Wasawasa' (yam flour meal), but because of how people mocked me, I considered stopping. However, since I had no other source of income, I had to keep selling. The people who care about me continue to support me by buying from me. My children also sell, and their customers buy from them as well. Even if someone buys just one cedi or five cedis worth, I manage to sell everything by the end of the day." **(FS 8)***

4.5.6 Cultural Beliefs on the Causes of Obstetric Fistula

The traditional practice of consulting a soothsayer to determine the origin of a disease condition is still common in our society today. Some people believe that obstetric fistula is caused by sorcery. Various causes of obstetric fistula were attributed to the participants. Most of the participants believe in the superstitious origin (sorcery) of obstetric fistula, while others also do not believe in these superstitions. Obstetric fistula is seen as a form of divine retribution or a curse. For some, it could be seen as a form of suffering or a test of faith. In other traditions, it could be seen as a result of past actions or "karma". This view might stem from the belief that such suffering

is a consequence of not adhering to cultural norms. Some participants reported that people have suspicions of wrongdoing as the cause of obstetric fistula.

A few women narrate their stories;

> *"I have heard people say a lot of things about the disease…hmmm…ahh…some people's perception is that you have gone to do something wrong, that is why you had that disease, so you must bear the consequences alone. In our tradition, you are seen as an evil-doer and a curse; no one will want to come closer to you."* ***(FS 10)***

A participant narrates her story;

> *"In our community, some people believe that this disease will befall you if you have done something wrong. So, they assume I might have done something wrong, and that is why somebody bewitched me. People are quick to judge their neighbours without considering how they might make you feel."* ***(FS 5)***

Similarly, FS 6, a 39-year-old woman, shared her experience on how her family members perceive the origin of obstetric fistula, attributing it to wrongdoing and her inability to visit her uncles which is why the gods are punishing her;

> *"…they said that I did something wrong, that is why I got the disease, and that I am evil. They also said that I have breached the rules of our tradition and that I do not like visiting my family members to check on them, especially my uncles; that is why I got the disease, and the gods are punishing me for that."* ***(FS 6)***

4.6 Spiritual Experiences of Obstetric Fistula Survivors

Spiritual experience involves deep personal reflection and the ability to maintain hope and attempt to find meaning in suffering and circumstances. This is a major theme that emerged after data transcription. Three sub-themes generated include attribution of the development of fistula to co-wives and witchcraft, the will of God, and treatment preferences. Many women with obstetric fistula experience profound spiritual suffering, social ostracization, abandonment by spouses and families, and loss of societal status, resulting in a crisis of faith, with survivors questioning why they are suffering and feeling abandoned by a higher power. Data from this study made it obvious that in the midst of suffering, many women embarked on a spiritual quest to find meaning in their condition. This involves deepening their faith and seeking solace in religious practices and prayers. Some participants reported that some religious institutions played a critical role in this process, offering emotional and spiritual support to the depressed soul so that their spiritual journey would be transformed into powerful symbols of resilience and hope.

4.6.1 Attribution to Witchcraft

In some cultures, obstetric fistula complications may be attributed to tensions or conflicts among people. Such beliefs might suggest that a woman's suffering is due to supernatural retribution or jealousy among people. The association with spiritual causes can also increase the stigma and isolation experienced by obstetric fistula survivors. According to one participant, she is convinced that her co-wife is responsible for her condition.

FS 1, a 45-year-old woman narrates her story;

> *"I strongly believe that my co-wife is responsible for my condition. I say this because when she married my husband, she did not have children with him. She has said many negative things about me and my children, even accusing me of*

trying to make our husband love me more because I have been able to give him many children. If it were not for Konkomba tradition of marrying multiple wives, I wouldn't even have a co-wife. When I was pregnant, she became sick and sought healing. As soon as she returned to the house, I went into labour and lost my baby that was when the condition started." ***(FS 1)***

Another participant narrates her story;

"(Laugh)…Ehhh…some people have been saying that this disease is spiritual, and it is a punishment from the gods. They also say that, if you do something wrong, that is when you will have the condition. They have never seen this disease before. They also say it may be a disease from the witches and wizards." ***(FS 9)***

Similarly, some participants lacked trust in others, believing they could be bewitched.

FS 8, 43 years old, shared her experience;

"I believe someone is responsible for my condition. Some people are very wicked and will intentionally try to destroy you. Others have even said that my attitude is the reason I developed this condition. If someone dislikes you, he /she can charm or bewitch you and make your life miserable." ***(FS 8)***

Conversely, some of the participants did not believe obstetric fistula had a superstitious origin. FS 4, a 50-year-old woman, shared her experience, explaining that her difficult labour led to the condition; She believed she had done nothing wrong to bring about such an illness.

"I did not think somebody was responsible when I had the condition. Whenever I get pregnant, my labor becomes very difficult. Whenever I go to deliver, it takes

some days for me to deliver. I think it is because of the difficult labour I normally experience that is why I had the disease after delivery. I do not believe somebody is responsible for my condition" ***(FS 4)***

4.6.2 Attribution to the Divine Will of God

The participants gave religious and mystical interpretations of the causes and meanings of obstetric fistula. Some participants reported that their condition is the divine will of God and not from man.

A few participants shared their stories;

"I think this condition is from God rather than from any human being or any evil force. The way the illness developed led me to conclude that no one else could be responsible for it. I never considered blaming anyone, as I believe it originated from a natural cause." ***(FS 7)***

FS 4, a 50-year-old woman also recounted her experience;

"I see the condition as coming from God. I pondered over it for a long time, trying to understand why I deserve this affliction. Whether it is God's will or something else, I don't know, but I prayed for healing. I believe that only God can provide that healing." ***(FS 4)***

However, some participants thought they were receiving a punishment from God for a wrongdoing they were unaware of.

FS 10, a 30-year-old woman puts it this way;

> *"I believe the disease has a spiritual origin. I do not know how to explain it…hmmm…but I felt that I might have wronged someone or offended God in a way and that this was my punishment. I decided to go to church and pray to God, hoping for healing. When you have this condition, people assume you must have done something wrong. Ultimately, you are the only one who truly knows what you are going through."* ***(FS 10)***

4.6.3 Management Preferences

This concerns the treatment modalities used by participants to treat obstetric fistula. Their spiritual experiences determine their health-seeking behaviour. Most of the participants experienced some difficulties accessing treatment for their condition due to financial constraint, lack of family support, their perception of the cause of the condition, and ignorance about where to get treatment. Data from the study revealed that some participants have lived with the condition for many years, exposing their ignorance about where and how to seek care for their condition. Most of the participants reported that surgery was the only option for them, even though some reported unsuccessful surgery and preparing to do another surgery. Participants indicated that they initially resorted to traditional healing practices for the treatment of obstetric fistula. Participants recounted that the traditionalists they consulted gave them concoctions and other things to take. They indicated that despite all these concoctions that were given to them, they did not receive healing.

FS 8, a 43-year-old woman, shared her experience of how her treatment failed;

> *"I moved from one traditional healing centre to the other seeking healing; I had to seek traditional and spiritual healing at three different places. They gave me a lot of concoctions and other things to use. I did as they said, but I never got well. They have a lot of rules and regulations you must adhere to. I did all that, but I didn't see their effectiveness."* ***(FS 8)***

A similar experience was narrated by FS 7, 49-year-old woman;

> *"I started looking for healing from other places, moving from one traditionalist to another and from one church to the other, thinking I would be free from this condition, but I didn't receive healing. They gave me herbal preparations and a combination of leaves and other things, but they did not work. I had to stop going to them because they could not heal me."* ***(FS 7)***

It became apparent in this study that some participants were aware of the possible cure for obstetric fistula. A woman expressed how her father discouraged her from seeking traditional healing because it did not work for her aunty. FS 9, a 40-year-old woman, shares her story this way;

> *"My father told me that when my Aunty suffered the disease, they sought traditional healing and they were not successful. Anytime they go to the herbalists, they are given a lot of conditions they need to fulfil. It was very hectic and discouraging. He discouraged me from seeking traditional healing and told me to go to the hospital to seek medical treatment for my condition. At the health facility, they will not give you a lot of conditions to fulfil."* ***(FS 9)***

Participants recounted that they prefer surgical treatment to other treatment modalities since there are some trained experts and specialists who can give them the needed surgical interventions. Some participants affirmed that surgery was their only option because they did not believe in traditional healing methods. Nevertheless, those who went through traditional healing processes eventually resorted to surgical interventions to be totally healed. Considerably, most participants reported their inability to afford the medical treatment even though they got to know of the cure for the condition. FS 6, 39-year-old woman shared her experience;

> *"…I was told that if you do not seek surgical repair, the condition will not subside…l received healing when l went for the surgery. I am not the only person who had the surgery; we were many, so I couldn't have sought traditional healing…"* ***(FS 6)***

Another woman (FS 10, 30 years) shared her story;

> *"…I heard about the surgery at Mankessim and I decided to go there so that they can help me. I did not go to any traditionalist for any treatment because they would give me concoctions and the condition will not go. I knew I would not receive healing there…"* ***(FS 10)***

FS 5, a 34-year-old narrates her story;

> "*The condition persisted for a while; I didn't have money to seek treatment. I decided to look for a job to support myself. A certain woman offered me a job in Accra with the intention of getting some money to support myself and go for treatment, if there is any. I was able to gather some money on my own. I heard about the surgery at Mankessim and decided to go for the surgery…"* ***(FS 5)***

4.7 Coping Strategies

After data transcription, coping strategies also emerged as schemes employed by obstetric fistula survivors. Two sub-themes were generated, which include problem-focused coping and emotional coping. Regarding coping strategies, participants affirmed that they adopted diverse coping mechanisms to deal effectively with life's threats and confrontational situations. They maintained that they largely resorted to less tedious work, prayers, faith in God, and walking away as mechanisms to cope with the situation.

4.7.1 Problem-focused Coping

Problem-focused coping involves taking direct steps to address the source of stress or find practical solutions to manage the situation. All participants devised similar ways of handling themselves to reduce the strength of the odour as well as the psychological impact of the disease. Some participants used rags, and those who could afford diapers used them. Additionally, to control or reduce the strength of the odour that emanates from them, participants took to frequent washing of the rags for reuse; sometimes, participants used scented soap to wash the rags and bathe whenever they could afford

FS 9, a 40-year-old woman in an attempt to stay clean and odourless reports how she used to do it;

> *"About the leakage of urine too, I use rags when I am going to bed, I put a lot of rags on my bed to soak the urine. Sometimes, I wake up at dawn when no one is awake and wash all my soiled items and dry them in my room, clean up before everybody wakes up."* ***(FS 9)***

Another woman reported that;

> *"If you are not closer to me, you will not smell the scent and even know that I have the condition because of how I carry myself. When I take the injection "Procaine Penicillin," the urine does not flow much; I buy diapers and use them in case I want to go to the farm so that I can work for hours before I change it. The urine doesn't flow much at the farm, so I change when I am done with farm work and ready to come back home. But the day I couldn't afford a diaper, I used a rag. Because I feel shy of the condition, sometimes when I wash my rags, I dry them in my room so that nobody sees them."* ***(FS 5)***

FS 5 revealed how she does it;

> *"I cannot afford diapers, so I normally use a rag to absorb the urine; I change it multiple times. When they get wet, I wash them with soap and washing powder and dry them. In the night when they become wet, I soak them and wash them the next morning when I wake up from bed."* ***(FS 3)***

A few of the participants reported that they used perfumes and Dettol to mask the odour. On the other hand, FS 6, a 39-year-old woman, resorted to perfumes and Dettol. She narrated;

> *"…when it happens like that, I buy Pampers, "Tobali" (Perfume), and geisha soap. Even if you use only geisha to wash, you can't sit beside anyone otherwise, they will still smell the urine on you. When I use Dettol, it helps small so that I will not smell."* ***(FS 6)***

4.7.2 Emotional-focused Coping

Emotion-focused coping refers to strategies aimed at managing emotional distress rather than directly addressing the cause of the problem. Most participants devised various strategies for dealing with their situation including attending church, praying, and fasting. Some survivors chose to withdraw from social interactions to protect themselves from emotional pain. FS 10, a 30-year-old woman, in an attempt to be psychologically stable and walk away from people who mock her, narrates her story;

> *"If I am passing and they chuckle and mock me, I pass without paying attention to them. I ignore them completely and focus on where I am going. Whether they chuckled or not, I did not bring the condition upon myself. If God does not lift you, even if your enemies are responsible, you need to have faith in God because everything will be ok with you."* ***(FS 10)***

FS 1, a 45-year-old woman, recounted how she used to give offerings at church, hoping that God would heal her through the offering. She describes her experience as follows;

> *"I go to church and pray. Sometimes, I fast, and I give an offering to God with the hope that I will be healed. I know I have not done anything wrong; I have not offended anyone; I know I have not also snatched anybody's husband to go through this."* ***(FS 1)***

While some participants give offerings to God with the hope that their prayers will be answered one day, others listen to God's words at church to motivate them to cope.

FS 5, a 34-year-old woman shares her story;

> *"…I decided that I would forget what people would say, move on with my life, and see what God will do. As for human beings, they will always talk and treat you badly. Also, when I go to church, I listen to God's words and I encourage myself with that."* ***(FS 5)***

A few participants reported that isolating themselves from people is the best way to avoid mockery from them. FS 8, a 43-year-old woman who adopted isolation as a form of coping, narrates her story;

> *"If I would not go out, I would have to be in my room. I try to avoid people so that they do not mock me. But if it becomes necessary that I go out for a program or any gathering, I buy diapers the big size and wear them."* ***(FS 8)***

4.8 Summary of Findings

Obstetric fistula survivors experience numerous bio-psychosocial problems. Physically, complications such as incontinence of urine and faeces, vaginal infections, pain, vulval irritations and itches, genital sores, and odour were evident among the participants. These women employed measures such as washing soiled clothes and rags with disinfectants, bathing with scented soap, using perfumes, rubbing ointments, and self-isolation were some of the strategies adopted in managing their physical problems.

Psychologically, women with fistula also experience intense emotional suffering, feelings of shame, depression, loss of identity, suicidal ideations, and self-identity problems. These come as a result of scornful remarks from associates and other people. Survivors also experienced

nightmares and memories of their childbirth experience, which has left them with long-lasting emotional scars. Most women experienced a diminished sense of self, which stripped them of their roles in their families and communities. Women who were once seen as valuable members of society are now being viewed as a burden, further eroding their sense of self-worth and identity. They struggle to reconcile their condition with their sense of identity and worth in society by developing coping strategies to help deal with the condition.

Social problems reported by these women included stigma and discrimination, self-isolation, divorce, cultural beliefs and economic effects as a result of their condition. They reported that their offensive odour led to their spouses abandoning and neglecting them. Consequently, the women attributed the cause of obstetric fistula to the evil activities of co-wives, witchcraft accusations and the divine will of God. However, some of them believed that their fistula was not caused by supernatural forces. Motivational factors that led them to seek surgical repair manifested after the failure of traditional healing practices. Management modalities mainly used by these women were traditional healing practices and surgical interventions. Social support received by the fistula survivors was in the form of treatment, financial and emotional support from spouses, family and friends.

Coping strategies adopted by these women were in the form of problem-focused coping and emotional-focused coping, where perfumes and other detergents were used to mask the effect of the odour, religious coping in the form of praying and listening to the word of God as motivation and walking away from unsavoury comments that will demoralize them.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

The chapter discusses the research findings in relation to existing literature. It begins by examining the demographic characteristics of participants, followed by an analysis of the various themes identified in the study.

5.1 Demographic Characteristics

The age range of the participants spanned from 30 years to 50 years, indicating that all participants were in their reproductive years at the time of the interviews. Furthermore, these women were either first-time mothers (Primiparous) or had given birth multiple times (multiparous) when they developed obstetric fistula. A significant majority of participants had married at a younger age, increasing their risk of developing obstetric fistula, as their bodies were not yet fully matured for childbirth. In such cases, early marriage often tends to early pregnancy, where the pelvic bones are not yet adequately developed for labour. Most women in this study reported experiencing obstetric fistula during their first delivery. Some participants stated that their families arranged their marriages when they were just about 14 -16 years old.

The finding suggests that women who married at a younger age were less informed and had limited awareness of obstetric fistula at the time they experienced the condition. Consequently, the study drew a relationship between the age of the participants and their rural dwelling status. The results of this study established that participants who married at a younger age were less knowledgeable and had a low awareness of obstetric fistula at the time they experienced the

condition. In line with findings by Id et al. (2023), Cole (2024) and Wali (2024) reported that age is a key factor in determining the level of awareness of obstetric fistula among women of reproductive age. These studies suggest that young women, particularly adolescents and young adults often have lower awareness of the condition and its causes, prevention and treatment options. This limited awareness is frequently linked to a lack of access to reproductive health education. At the same time, older women, through life experience or increased exposure to healthcare settings, may have a higher level of awareness. These findings underscore the importance of tailoring education and outreach efforts to different age groups to improve awareness and prevention strategies. Raji et al. (2018) support this perspective that women who marry before the age of 18 and live in rural areas often have limited knowledge and lower awareness of obstetric fistula.

Data in this study revealed that most participants had no access to formal education and were less likely to get more profitable employment to increase their livelihood. This indicates that illiteracy has a link with the development of obstetric fistula and subsequently affects women's inability to seek treatment appropriately. This study also found that a lack of educational opportunity increases women's vulnerability by limiting their access to sustainable economic activities. Data from the Nkwanta North District Assembly (2024) similarly indicates low educational enrolment, particularly among females in the district. Additionally, poor educational outcomes, high illiteracy rates and significant dropout rates are especially prevalent among women in this area. A similar assertion was made by Azanu et al. (2020), who established that women with higher educational backgrounds are more likely to seek adequate health care and that women who are in employment showed about five times more awareness of obstetric fistula than unemployed women and housewives. This indicates that acquiring formal education gives the

individual a higher chance of seeking information and acquiring meaningful employment to secure one's future.

The findings of this study also revealed significant variations in the length of time the women had lived with obstetric fistula, ranging from 4 to 30 years at the time of the interview. While most participants had sought medical care for their obstetric fistula, only a few had undergone successful surgical repairs and some had not received any treatment. For some of the women, the delay in seeking treatment was due to their lack of awareness that treatment options existed. Additionally, their rural residence may have been attributed to the difficulty in accessing healthcare facilities, given the limited availability of medical services in these areas. Some participants also cited financial constraints as a major factor in their inability to seek timely medical treatment, as they could not engage in meaningful work to generate income. Similar findings have been reported in other studies. Consistent with the findings of Tembo et al., (2020) and Odonkor and Yeboah, (2023), it was revealed that some women can live up to over 70 years without undergoing fistula surgical repair. This suggests that many women endure obstetric fistula for several years without seeking medical intervention or achieving successful repairs. Asiedua et al., (2023) reported that most women lived with obstetric fistula for over 10 years before receiving surgical treatment. While the duration varies across studies, this difference could be attributed to potential variations in the sociodemographic characteristics of the respondents.

Among the 10 participants, nine identified as Christians, while one was a traditionalist. This reflects the predominant Christian background of the population in Ghana. The participants believed that prayers and faith in God can make everything possible. This indicates that religion plays a role in helping obstetric fistula survivors come to terms with their condition and strengthen their faith, which in turn enables them to cope more effectively with their circumstances.

5.2 Biological / Physical Experiences of Obstetric Fistula Survivors

This section discusses the physical experiences of obstetric fistula survivors. Participants in this study shared a range of experiences related to their condition. Obstetric fistula causes a persistent abnormal connection between the bladder and /or the rectum and the vagina. As reported, this condition results in continuous and uncontrollable leakage of urine/faeces or both, leading to significant physical discomfort and a heightened risk of infection for the women.

In this study, all participants experienced urinary incontinence, while one participant reported faecal incontinence in addition to urine. The findings indicate that obstetric fistula survivors often lose the sense of feeling to urinate or defecate, necessitating constant preparedness for the unexpected flow of urine and faeces along with associated issues such as rashes, pain, genital sores and infection. Participants noted that experiencing offensive odour due to persistent leakage creates significant hygiene challenges. Maintaining cleanliness is difficult for them as they often need help to afford adequate hygiene supplies. These findings are consistent with studies conducted in Ethiopia (Animut et al., 2019) and Somalia (Mohamed et al., 2018) which highlighted that obstetric fistula leads to various physical problems, including skin irritations, genital sores and incontinence. The study reported that obstetric fistula brings consequences of physical challenges including skin irritation, genital sore, and incontinence of urine/faeces or both. These physical issues also contribute to strained relationships with spouses, family and friends.

Additionally, most participants after delivery, initially viewed it as normal secretions but later understood that it was instead a health problem after realizing that the leakage was not stopping and was beyond their control. Some participants noticed the condition when the stench was becoming unbearable. This is consistent with the findings of Boene et al. (2020) in Mozambique, which found that the women did not initially know the disease until the discovery

of persistent secretions. The study revealed that the prolonged leakage of secretions after delivery triggers the awareness and realization of the condition.

Most participants in this study reported experiencing significant pain and infection due to their condition. The development of genital sores and associated pain is largely attributed to the constant wetness caused by urinary leakage, which irritates the skin and leads to excoriation when scratched. The continuous dripping of urine results in inflammation and discomfort, particularly affecting the vulva and thighs. Participants resorted to applying ointments and creams to alleviate their pains. These findings align with Dako-Gyeke et al. (2022) in Ghana, who observed frequent pain and leakage of urine and /or faeces in women with obstetric fistula. As a result, they face challenges in maintaining hygiene and often experience frequent infections in the genital and urinary tracts, along with skin irritation and ulceration in the genital area. In addition, to alleviate pain and discomfort, ointments and creams were applied to the sores. The study underscores the urgent need for effective surgical repair to address the condition. If the physical problems associated with obstetric fistula are not addressed, they can lead to severe complications and potential premature mortality due to their significant impact on the lives of affected women (Id et al., 2023).

Successful repair frequently relieves women from incontinence (Ahmad et al., 2019). Most participants in this study reported that after undergoing surgical repair, their psychological well-being improved as they experienced acceptance from family, friends and the broader community, even though family, friends, and the community did not accept some. A few women, whether they had successful or unsuccessful surgeries, as well as those still awaiting surgery, reported experiencing stigma and isolation from co-wives, family members and friends. Some participants shared how they endured multiple repair attempts before finally recovering. Resonating with the

findings of Kumsa et al. (2023) in Nigeria and Aynalem et al. (2022) in Northwest Ethiopia, their study revealed that most obstetric fistula survivors experienced urinary incontinence of varying severity even after surgery. Most of the survivors endured surgery multiple times before they recovered. While surgery is typically the primary treatment for the physical symptoms of obstetric fistula, it is essential to note that many women continue to experience the condition even after successful surgical closure. Although surgical repair is expected to fully heal the wounds and enable them to resume their daily activities, it is noteworthy that many women continually experience complications from the condition even after a successful fistula closure.

5.3 Psychological Experiences of Obstetric Fistula Survivors

Psychologically, women living with obstetric fistula face numerous challenges and experiences relating to their condition. In fulfilling the societal expectation of childbearing, the journey to motherhood becomes a traumatic experience for these women. Several aspects of obstetric fistula, including a traumatic birth experience, loss of a child, divorce and stigma, increase the likelihood of psychological disorders. Studies indicate that these women often struggle with feelings of shame, anxiety, social isolation and depression. Participants in this study described how obstetric fistula affected their behaviour, attitudes, beliefs, emotions, self-esteem and perception of life. The condition has also impacted their coping ability and serves as a constant psychological reminder of their situation. Many could no longer continue their work, trade or farming activities, which were their primary means of livelihood. Consequently, their psychological well-being is compromised as they are unable to participate in gender roles as they did before the illness.

The current study identified anxiety symptoms among participants. The anxiety was triggered by various factors, including a lack of financial means to sustain themselves or care for their children, especially after losing their husbands and support systems. Other contributing factors included the physical symptoms of the condition and the uncertainty surrounding their future health. Additionally, the stigmatization from family and friends is further exacerbated by their anxiety. These findings align with those of Matiwos et al. (2021), who reported that sigma was associated with anxiety symptoms, negatively impacting patients' physical, psychological, and social quality of life. Moreover, 90% of mothers experience feelings of devastation and grief after giving birth to a child who is stillborn or dies shortly after birth (Id et al., 2023).

Depression was one of the psychological experiences reported by obstetric fistula survivors. The findings demonstrated that depression among these women was multifaceted. Their inability to work and engage in income-generating activities, discrimination and stigma were the main sources of their depression. The findings of this study are in line with a study by Matiwos et al. (2021), who reported that 49.1% of obstetric fistula survivors in Ethiopia suffered depressive symptoms, which might be related to their inability to work and acceptance into society. The study emphasized the need for the government to design specific programs to improve the quality of life through job generation and stable income. Similar issues of depression among obstetric fistula survivors have been documented by Egwu et al. (2024) in South Nigeria, Kurniawati et al. (2024) in Indonesia and Kader et al. (2020) in Bangladesh. These studies found that experiences of traumatic childbirth, stillbirth and complications such as continuous urine or faecal leakage, combined with extensive medical and psychological challenges, contributed to varying degrees of depressive illness in these women. These studies underscore the significant psychological toll of

obstetric fistula and emphasize the importance of integrating mental health into the care and rehabilitation of affected women.

Data from this study revealed that obstetric fistula survivors suffered perpetual worry, loss of dignity and low self-esteem, which was influenced by low social support. In this study, obstetric fistula survivors believed that childbearing is a biological mandate of the woman and, therefore, such treatment should not be meted out to women who must perform their gender roles by going through this painful moment of labour and coming out with complications. Some studies have reported low self-esteem and loss of status and loss of dignity in society. This is consistent with the findings of Khisa et al. (2017) who reported that lack of social support and economic dependency led the women isolate themselves from society. Such experiences eroded women's self-worth and compounded their financial hardship. Additionally, Azongo et al. (2016) found that 59% of survivors do not appreciate themselves, and 97% of the women stated low self-esteem as people avoided them. There is, therefore, the need to care for fistula survivors physically, psychologically, and socially.

In this study, obstetric fistula survivors reported hopelessness and isolation due to their persistent symptoms and social rejection. Many expressed despair about ever achieving family and social acceptance, exacerbated by limited access to effective treatment, which intensified their feelings of being trapped in their condition. This sense of a bleak future contributed to suicidal thoughts, aligning with Konan et al. (2021) who reported suicidal thoughts among obstetric fistula survivors as a result of the humiliation and sadness that come with the condition. The study called for collaborative interventions to deal with the condition. Additionally, recent studies such as those by Hurissa et al. (2023) and Bulndi et al. (2023), have highlighted the need for integrated

psychosocial support to help survivors navigate these challenges with a focus on counseling, support groups and community reintegration efforts to mitigate these severe mental health impacts

5.4 Social Experiences of Obstetric Fistula Survivors

This theme focused on the experiences of fistula survivors in terms of how society treats them. Survivors of obstetric fistula frequently experience significant social challenges, impacting their quality of life. The present study discovered that some of the participants experienced some negative social consequences such as social stigma and discrimination, socioeconomic impact, abandonment by spouses, and marital breakdown.

Stigmatization and discrimination were significant social experiences reported by participants in the study. Drawing on Gibbons and Birks's (2016) social stigma theory, both enacted and felt stigma were identified. Most participants reported self-isolation to avoid embarrassment and humiliation. The majority of the participants experienced various forms of stigma, with some reporting abandonment by their spouses. This abandonment could be attributed to the discomfort caused by urine leakage during sexual intercourse, which may be disgusting to the husband or due to the woman's inability to satisfy her partner sexually. In addition to spousal abandonment, some participants faced stigma within their own families, while others were stigmatized by their community members. This stigma can be linked to cultural misconceptions and taboos surrounding women with obstetric fistula. As a result, many women isolated themselves to avoid mistreatment from others (felt stigma). The study aligns with the findings of Hotchkiss et al. (2024) in Uganda, who found that many women with obstetric fistula coped by isolating themselves to avoid public exposure. In addition, Nweke and Igwe (2017), Mantey et al. (2020), and Lyimo and Mosha (2019) reported that many women with obstetric fistula are abandoned by

their spouses as the illness progresses, the women often receive less support and interest from their husbands.

The researchers observed that obstetric fistula survivors frequently isolate themselves to avoid stigma from others and the broader society. They also found that stigmatization serves as a significant barrier to seeking treatment. To address this issue, it is crucial to involve traditional leaders in raising awareness and combating the stigma associated with obstetric fistula.

Women with obstetric fistula suffer relationship problems with their husbands/partners due to their inability to satisfy their husbands; they face divorce/separation from their spouses. In the current study, although some participants were still in their marriages, a few reported some form of divorce. Participants expressed their views regarding how obstetric fistula has affected their marriages with their partners. A few participants in the current study were found to be in good relationships with their spouses and living with them. Most of the women were widowed at the time of the interview. A few of the women in this current study reported remarrying two to three times. However, some participants reported losing their spouses and remaining unmarried due to their condition. As cited in Mantey et al. (2020), in sub-Saharan Africa, over 50% of women with obstetric fistula are divorced by their partners, married women often return to their parents' homes, and those who are single generally remain so. This finding is consistent with the studies conducted in the Southern region of Malawi by Changole et al. (2019) and Uganda by McCurdie et al. (2018) which also documented high rates of divorce and challenges with remarrying among women affected by obstetric fistula. In their study, only a few women reported that they were still living with their spouses. Therefore, it is crucial to involve husbands in awareness campaigns about obstetric fistula to encourage their support and understanding.

Lower social support emerged as another finding in this study. Family members are perceived as the most reliable source of support in times of illness. In this study, a few participants reported good social support as most of them are widows, and some others are facing divorce coupled with their inability to access social support services. A few women acknowledged that they received support from their husbands, other family members, co-wives and friends. This social support was in the form of financial aid, physical assistance in their farms and provision of food and other personal consumables. However, a few of the participants reported abuse and lack of support from their husbands, other family members, friends, and co-wives. Moreover, the support is subject to the kind of family and friends the woman may have. For instance, some family and friends may have wrong beliefs about the condition and may attribute it to a punishment for the evil committed by the woman. Children of the women were also supportive in helping to maintain personal hygiene, as a few participants reported that their children bought them hygiene materials. In general, social support was limited, and the problem of support diminished in all aspects, resulting in hopelessness. Congruent with the current finding, Belayihun and Mavhandu-Mudzuis (2018) reported lower rates of social support, which affected the prevalence of anxiety and depressive symptoms among obstetric fistula survivors in Ethiopia. Similar findings by Odonkor and Yeboah (2023) revealed that family support was limited to providing basic needs such as food, detergent, and clothes and accompanying them to the hospital. Their study revealed that the family members who provided the least support were the husbands, as some did not offer any support.

In contrast, Hotchkiss et al. (2024) in Uganda and Boene et al. (2020) in Mozambique reported higher social support for obstetric fistula survivors. Their study revealed that many women received support from their husbands and their condition did not necessarily lead to

divorce. Husbands provided various financial support, including accessing obstetric fistula care, paying for caregivers to assist their wives, and providing money for caregivers to manage their condition. In addition, women relied on multiple forms of social supports, from close family members to more distant individuals and organizations. Social support may help to improve the quality of life of obstetric fistula survivors.

Loss of job/means of livelihood is another economic challenge faced by obstetric fistula survivors. Income-generating activities were significantly reduced, resulting in financial instability. This is because of the inability of the affected women with obstetric fistula to perform household chores and income-generating activities. Reports in this study confirm that most of the women lost their jobs and were unable to fend for their families because of their fistula condition. Most participants reported that they could not do their farm work and other petty trading as they used to do due to the physical fatigue they experienced when carrying out their daily activities. Some participants who went through the surgery reported that they did not have the strength to continue the farm work again since they were afraid that the fistula site might reopen. They have burdened relatives who cannot also shoulder their burden. However, those who remained in petty trading did not do without obstacles, as some participants reported being mocked and avoided when they went to sell their wares at the market. Some of these attitudes towards the participants made them stop their trading activities and decide to stay home. Some participants reported that they depend solely on the benevolence of people to survive. Congruent with the findings of McCurdie et al. (2018), Nendela et al. (2023), and Ayadi et al. (2023) who asserted that obstetric fistula survivors found it difficult to maintain a source of income because of their incontinence and leg pain and ended up being a burden on their families. They further noted that employment was

sometimes terminated as women were considered unclean and unable to work or clean for other people.

5.5 Spiritual Experiences of Obstetric Fistula Survivors

Spiritual experiences encompass a deep reflection and the ability to maintain hope and attempt to find meaning in suffering and circumstances. Despite the challenges, many survivors demonstrate remarkable spiritual resilience. The findings of the study showed that the participants placed meaning on their disease condition. The participants gave the causes and meanings of obstetric fistula religious and mystical interpretations. They attributed the cause of the disease to witchcraft and the will of God. These findings are consistent with the findings of Hurissa et al. (2023) in Ethiopia, Chimamise et al. (2021) in Zimbabwe, and Asiedua et al. (2023) in Ghana who found that fistula survivors believed that their condition was caused by a supernatural entity hence attributing the cause of their condition to punishment from the gods for their wrongdoing and activities of witchcraft, with some believing that their condition is the will of God. Because of this widely held view, there should be a targeted effort to demystify such beliefs through education.

Various factors, including the perceived causes of the condition, availability of healthcare services and cultural beliefs, influence management preferences and health-seeking behaviour for obstetric fistula. In the current study, women initially sought traditional healing practices or spiritual healing options because of perceived beliefs about the condition and inadequate education by healthcare workers on where to seek care. However, almost all participants got to know their obstetric fistula status first at the hospital, where some of them had an indwelling catheter inserted to avoid leakage of urine. Some participants believed that traditional/local treatment could heal them faster and better since they could not afford the surgical treatment. However, some of the

participants reported recurrent unsuccessful surgery. This surgical failure could be a result of patient factors like the degree of fistula. A few participants revealed that they heard from other sources that surgery is the only cure for the condition. The findings of the study are in line with the study by Lyimo and Mosha (2019), who revealed that most family members sought traditional/local healing for their fistula-surviving relatives. Participants believed traditional healers were their first option for help with their health problems.

Hence, the community members recommended treatment from local healers because of the belief that the woman's condition was associated with witchcraft. Similarly, in North-Central Nigeria, Degge et al. (2024) revealed that some fistula survivors looked beyond orthodox medicines for a cure, and those seeking care from traditional healers concluded that it was a fruitless experience. Studies by Hurissa et al. (2023) in Ethiopia and Bulndi et al. (2023) in North-central Nigeria found that most of the women initially sought treatment for obstetric fistula from religious and traditional healers, including Muslim leaders. However, these attempts often resulted in complications. After prolonged trials with traditional care methods, these women eventually returned to specialized fistula centres for proper medical intervention. This highlights the need for increased awareness about appropriate healthcare services for fistula to reduce delays and avoid complications from unproven remedies. However, in Ghana, Mantey et al. (2020) revealed that none of the participants in their study reported seeking traditional or herbal treatments for their condition.

5.6 Coping Strategies

Regarding coping strategies, nearly all the women in this study adopted similar approaches to managing their condition. The coping strategies identified were mainly problem-focused coping

and emotional-focused coping, which aimed at helping the fistula survivor manage stigma and discrimination. Religiously, participants often relied on their faith in God and distancing themselves from others as coping mechanisms. Some of the women who adopted positive religious coping strategies facilitated better coping with their circumstances. Physically, the women reported using sanitary pads and rags and waking up at night to clean their soiled bedding. They also used perfumes and scented soaps to mask the odour to prevent social stigma. Some women mentioned reducing their water intake and eating less food to minimize urine leakage. While these coping strategies were common among participants, some could not effectively adopt them due to a lack of access to necessary sanitary materials. Psychologically, in an effort to preserve their mental and emotional well-being, the women developed strategies to cope with the challenges of incontinence, often isolating themselves from the public to avoid stigma and embarrassment.

Similar coping strategies have been observed by Mohamed et al. (2018), Touhidi Nezhad et al. (2020), and Mantey et al. (2020) who found that women who adopted positive religious coping strategies were better able to manage their conditions. Conversely, those who relied on negative religious coping were more likely to experience cognitive distortions and negative emotions. Their studies showed that many women with obstetric fistula bathed several times a day, washed their clothes daily, and frequently carried perfumes. Some women wore multiple layers of clothing or used sanitary pads to absorb the urine and the faeces, while many withdrew from society. Their study also highlighted they minimized fluid intake to pass less urine and avoid drawing attention to their condition. Relying on various coping strategies such as joining support groups, learning self-care practices, and engaging in income-generating activities will help to improve survivors' independence.

CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents a summary of the study, implications of the findings and limitations of the study, conclusion and recommendations.

6.1 Summary of the Study

Obstetric fistula continues to be a significant public health challenge and the primary cause of maternal morbidity and mortality in developing countries. It is a condition that widely affects women in low-resource settings where access to quality maternal care is limited. Thus, the study explored the bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District in Oti Region using the bio-psychosocial model of health as the organizing conceptual framework.

Ethical approval was sought from the Noguchi Memorial Institute for Medical Research (Appendix C). An introductory letter (Appendix D) from the School of Nursing and Midwifery at the University of Ghana was obtained for the study. A copy of the introductory letter was given to the Nkwanta North District Assembly for approval. Permission was also obtained from the Health Directorate and the Assembly member of the area. Consent was sought from obstetric fistula survivors in the community who were interviewed (Appendix A). Literature was drawn from qualitative and quantitative studies on obstetric fistula experiences. The study employed an exploratory descriptive qualitative design, and data was collected using a semi-structured interview guide. A total of 10 obstetric fistula survivors were recruited, interviews were audio

recorded and transcribed verbatim. These were done concurrently with data analysis following the principles of thematic content analysis, which lasted from April 2024 to August 2024. Five main themes with nineteen sub-themes were derived after thematic content analysis was done manually guided by the six-step reflexive thematic analysis. The major themes were the biological/physical experiences of obstetric fistula survivors, psychological experiences of obstetric fistula survivors, and social experiences of obstetric fistula survivors. Two emerged themes were the spiritual experiences of obstetric fistula survivors and the coping strategies used by the women in dealing with the effects of the condition.

The key findings of the study underscore the urgent need for attention to obstetric fistula, a condition that continues to be overlooked in the developing world. The research reveals that affected women, often from marginalized communities characterized by poverty, illiteracy, and lack of awareness, face significant challenges. Notably, some women were married at an age when their bodies were not fully developed for pregnancy, labour and delivery.

Obstetric fistula survivors, despite the numerous challenges they face, demonstrate remarkable resilience as they navigate the path to healing. These women endure emotional trauma, abuse, rejection, and limited social support from their husbands, family members, and friends. They confront societal stigma from the very community that exposed them to the condition when they were unable to make decisions for themselves. The profound impact of the condition on their self-esteem and life perspective is undeniable. However, they employ various coping strategies to confront the condition, a testament to their strength and determination. It is noteworthy that most participants initially had limited knowledge about obstetric fistula and were unaware of available treatment options. Some reported that healthcare professionals did not know where exactly to seek care and advised continued medication without improvement. This lack of effective treatment led

to societal accusations, attributing their condition to witchcraft, curses, the evil deeds of co-wives, divine will, or faulty caesarean sections. Consequently, many participants were discouraged from seeking medical treatment at the health facilities and instead turned to traditional healing practices, prayer camps and churches.

The experiences of obstetric fistula survivors, as highlighted in the current study and supported by existing literature, are deeply distressing. These individuals often face stigma and isolation from the very society that has contributed to their condition, resulting in diminished dignity and low self-esteem. Furthermore, societal misconceptions and cultural beliefs about the condition exacerbate social exclusion and hinder community support. The physical impairment and social marginalization they experienced severely limited their ability to work, leading to significant economic hardships. This economic vulnerability further impedes their access to healthcare and other essential services.

6.2 Implications of the Findings

The findings of this study present vital implications that must be addressed. These implications apply to nursing practice, education and training, research, and policy formulation.

6.2.1 Implications for Nursing Practice

The findings of this study highlight that obstetric fistula survivors face a range of bio-psychosocial challenges that require attention. Physically, some participants reported that although their surgical repairs initially seemed successful, urethral incontinence persisted. Many women continue to experience leakage of urine and deal with infections even after undergoing surgery. To enhance the quality of health care services, it is essential to update and enhance clinical practice

protocols regularly. Additionally, providing specialized training for more surgeons in fistula repair is crucial to ensure they possess the necessary skills and expertise for effective treatment.

The study also found that obstetric fistula survivors face significant psychological challenges that exacerbate their fears. Most participants shared that most nurses and midwives had limited idea of where to seek surgical repair. This deepened their fears and led them to attribute their condition to supernatural causes, increasing their mental distress. The study underscores the urgent need for improved knowledge among nurses and midwives about how and where to seek care. This is a clear gap in health education, particularly for women and their families in rural areas. The situation calls for ongoing education and capacity building for healthcare professionals to address this urgent need. Regular seminars on obstetric fistula and its consequences should be organized, and the professionals should be well-equipped to handle the complex needs of survivors. Public health nurses should be mandated to conduct regular follow-up visits, support and encourage treatment-seeking behaviour among obstetric fistula survivors.

Participants often attributed their condition to supernatural and mystical forces. To address this, nursing and midwifery administration should focus on dispelling these beliefs and promoting early treatment to prevent further complications. Involving traditional leaders and community members is crucial in raising awareness, combating the stigma and dispelling these beliefs associated with obstetric fistula. Additionally, survivors reported experiencing low social support and abandonment from their husbands/partners, family, and friends. Nursing practice can help mitigate this issue by educating and involving family members, particularly husbands/partners, in understanding obstetric fistula, encouraging them to support their wives and relatives, and raising awareness to combat stigma. Furthermore, traditional leaders should be engaged in efforts to reduce the stigmatization of women with obstetric fistula.

6.2.2 Implications for Future Research

While there has been progress in understanding the bio-psychosocial experiences of obstetric fistula survivors, several gaps remain that should be addressed in future research. Research is required to know the current prevalence and incidence of obstetric fistula, as data on these are limited. There is also a limited number of current studies on the long-term outcomes of women who undergo fistula repair surgery. Research should focus on their reproductive health and long-term social and economic reintegration. Additionally, while research has explored the biological and social aspects of obstetric fistula, there is a need for studies that explore the cultural and contextual factors that shape women's experiences. Understanding how gender dynamics affect the experiences of fistula survivors could inform more effective interventions. Finally, given the high levels of stigma and isolation these women face, more research is needed on community-based programs that could support fistula survivors.

6.2.3 Implications for Policy Formulation

The women reported facing stigma from families and friends and abandonment by the very husbands/ partners who fathered their children, along with limited social support. The experiences of the survivors are influenced by a combination of biological, psychological, and social factors, all of which need to be addressed holistically to enhance their quality of life. Therefore, a multidisciplinary approach is essential, incorporating programs that provide counseling, skill training, and community reintegration efforts, which are crucial in helping survivors rebuild their lives and restore their dignity.

Moreover, there are limited repair centres. The affected women had to travel long distances across regions to reach centres such as Mankessim in the Central Region and Tamale in the Northern Region, to access surgical repair services. This placed significant physical and financial

strain on the women and their families. As a result, a policy is needed to establish well-equipped specialist centres in areas with a high incidence of obstetric fistula to enable rural women to access health care services earlier. Additionally, strong political commitment and sustained investments in maternal and child healthcare are crucial for making significant progress in preventing new cases of obstetric fistula.

The study found that the majority (80%) of participants married at a young age, increasing their risk of developing obstetric fistula due to their bodies not being fully mature for childbirth. Most participants reported experiencing the condition during their first delivery. In this context, early marriage poses a significant risk as it is often followed by early pregnancy when the pelvic bones may not be adequately developed for labour. Empowering women and girls with access to economic opportunities can enhance their financial independence, reducing their susceptibility to early marriage. Furthermore, a policy on improving access to education, particularly in underserved communities, can encourage girls to delay marriage and enhance their socio-economic prospects.

6.3 Limitations of the Study

A key limitation of the study was that interviews were conducted in Akan and Konkomba (local languages) and subsequently transcribed into English. This process could result in the loss of subtle meanings for certain words or expressions. To address this, the researcher employed regular discussions with translators during and after data collection to clarify ambiguous terms and ensure consistency across interviews. Another limitation was the reliance on self-reported data obtained through interviews, which may have been influenced by recall bias or social desirability effects. Furthermore, the researcher's presence and interactions with participants may have

introduced additional influence on participants' responses. These limitations were mitigated through prolonged engagement with study participants, as well as the use of probing and repeated questioning techniques to validate responses. Finally, the inherently subjective nature of qualitative data analysis carries the potential for researcher bias. To minimize this, strategies such as member checking, reflexivity and peer debriefing were employed to enhance the credibility and trustworthiness of the findings.

6.4 Conclusion

Obstetric fistula is both a public health issue and a life-threatening condition for affected women who face numerous bio-psychosocial challenges that heighten their vulnerability. The stigma associated with obstetric fistula exacerbates the challenges survivors face, often leading to abandonment, rejection, and economic hardships. Nurses play an integral role in addressing these multidimensional needs of survivors. While surgical repair generally has possible outcomes, particularly improving the physical well-being of obstetric fistula survivors, it does not fully address all health concerns, such as psychosocial, socio-economic, and social support needs. According to WHO, health encompasses the absence of disease or infirmity and complete physical, mental, and social well-being (Krahn et al., 2021). Therefore, a holistic patient-centred approach is necessary to support the physical, emotional, and social recovery of obstetric fistula survivors. Additionally, advocating for preventive maternal health measures and policies that ensure better access to timely obstetric care is vital in reducing the occurrence of obstetric fistula. Ultimately, an interdisciplinary approach involving healthcare providers, mental health professionals, policymakers, and opinion leaders is essential to addressing the complex needs of obstetric fistula survivors and supporting their reintegration into society.

6.5 Recommendations

Based on the findings of the study, several recommendations have been made for the Ministry of Health (MoH), Ghana Health Service (GHS), Ministry of Education, and Ministry of Gender, Children, and Social Protection.

6.5.1 Ministry of Health, Ghana (MoH)

The Ministry of Health should;

- Enhance access to skilled birth attendants by employing trained nurses and midwives, ensuring that pregnant women, particularly in rural areas, have access to skilled personnel during childbirth.
- Develop and implement community-based rehabilitation programmes that offer psychological support and vocation to help survivors rebuild their self-esteem, reduce stigma, and improve economic independence.
- Collaborate with the government to develop transportation infrastructure, particularly in rural areas, to ensure the timely transfer of women experiencing labour complications to appropriate facilities.
- Enact policies requiring all health facilities to have a clinical psychologist or a trained counselor to provide support for the psychological needs of obstetric fistula survivors.
- Collaborate with the government to establish dedicated fistula treatment centres or enhance existing healthcare facilities to provide specialized fistula repair surgeries.

6.5.2 Ghana Health Service (GHS)

The GHS should;

- Expand the deployment of trained, skilled birth attendants in underserved regions to improve maternal healthcare access.
- Collaborate with the government to train more fistula surgeons.
- Facilitate the creation of survivor-led support groups by establishing advocacy and support groups to address the challenges faced by obstetric fistula survivors.
- Implement policies that empower public health nurses to assist survivors in reintegrating into normal life and provide ongoing support.
- Collaborate with District Assemblies to intensify awareness campaigns on the causes and the consequences of obstetric fistula, promoting prevention and early treatment.
- Progressively expand the recruitment and transportation of obstetric fistula survivors to fistula repair centres.

6.5.3 The Ministry of Gender, Children and Social Protection

In fulfilling its mandate of women empowerment, the Ministry should;

- Prioritize education and awareness campaigns targeting young girls, focusing on the consequences of early marriages.
- Initiate a nationwide campaign aimed at reducing stigma by educating communities, traditional leaders, and families about obstetric fistula.
- Promote partnerships with local NGOs and women's groups to provide financial support for survivors, helping them rebuild their lives.

REFERENCES

Abrams, M., & Pope, R. (2021). Obstetric and Gynecologic Genitourinary Fistulas. *Clinical Obstetrics and Gynecology*, *64*(2), 321–330. https://doi.org/10.1097/GRF.0000000000000623

Adosi, C. (2020). Qualitative Data Collection Instruments : the Most Challenging and easiest to use. *Institute for Educational Planning and Administration*, *September*, 0–7. https://www.researchgate.net/publication/344251614

Ahmad, A. A., Qudairi, M. Al, Jalambo, A. A., Elser, M., Alnahhal, K., Elessi, K., & Kalloub, M. (2019). Retrospective analysis of arteriovenous fistula patency and failure in patients on dialysis for end-stage kidney disease in the Gaza strip. *The Lancet*, *393*, S3. https://doi.org/10.1016/S0140-6736(19)30589-6

Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, *2*(January), 100051. https://doi.org/10.1016/j.glmedi.2024.100051

Al-Maisary, M. M., & Al-Kaaky, N. S. (2024). OBSTETRIC FISTULA: RISK FACTORS AND SOCIO-DEMOGRAPHIC CHARACTERISTICS AMONG PATIENT ADMITTED IN AL-SADAQA TEACHING HOSPITAL, ADEN, REPUBLIC OF YEMEN (1\(^{st}\) JAN 2014 - 31\(^{st}\) DEC 2019). *Electronic Journal of University of Aden for Basic and Applied Sciences*, *5*(1), 35–43. https://doi.org/10.47372/ejua-ba.2024.1.325

Amenu Sori, D., Tura Debelew, G., & Asefa Hordofa, Z. (2021). *Consequences of Obstetric Fistula: Lived Experiences of Fistula Patient Women in*. 1–13. https://doi.org/10.21203/rs.3.rs-777167/v1

Amodu, O. C., Salami, B., & Richter, S. (2017). Obstetric fistula and sociocultural practices in

Hausa community of Northern Nigeria. *Women and Birth*, *30*(5), e258–e263. https://doi.org/10.1016/j.wombi.2017.02.009

Animut, M., Mamo, A., Abebe, L., Berhe, M. A., Asfaw, S., & Birhanu, Z. (2019). *" The sun keeps rising but darkness surrounds us " : a qualitative exploration of the lived experiences of women with obstetric fistula in Ethiopia*. 1–10.

Asiedua, E., Maya, E., Ganle, J. K., Eliason, S., Ansah-Ofei, A. M., Senkyire, E. K., & Adanu, R. (2023). Health-seeking experiences of women with obstetric fistula: a qualitative study at two fistula centres in Ghana. *BMJ Open*, *13*(8), e064830. https://doi.org/10.1136/bmjopen-2022-064830

Assembly, N. N. D. (2024). *for 2020-2023 for 2020 Part a : Strategic Overview*.

Ayadi, A. M. El, Mitchell, A., Nalubwama, H., Miller, S., Semere, W., Barageine, J. K., Korn, A. P., Obore, S., Byamugisha, J., El, A. M., Mitchell, A., Nalubwama, H., Miller, S., Semere, W., Barageine, J. K., Korn, A. P., Obore, S., & Lucas, R. (2023). *The social , economic , emotional , and physical experiences of caregivers for women with female genital fistula in Uganda : A qualitative study*. https://doi.org/10.1080/17441692.2023.2242458

Aynalem, G. L., Kassie, B. A., Baye, C., Tamiru, A. T., Anteneh, K. T., Berhe, A., Fentahun, W., Debele, T. Z., Yirdaw, B. W., Rade, B. K., & Enyew, M. M. (2022). *Long-Term Effects of Obstetric Fistula on the Overall Quality of Life among Survivors Who Had Undergone Obstetric Fistula Repair , Central Gondar Zone , Northwest Ethiopia , 2020 : A Community-Based Study*. *2022*, 1–8. https://doi.org/10.1155/2022/6703409

Azanu, W. K., Dassah, E. T., Agbeno, E. K., Ofori, A. A., & Opare-Addo, H. S. (2020). Knowledge of obstetric fistula among prenatal clinic attendees and midwives in Mfantsiman

municipality, Ghana. *International Journal of Gynecology and Obstetrics*, *148*(S1), 16–21. https://doi.org/10.1002/ijgo.13034

Azongo, T. B., Yakong, V. N., Wombeogo, M., Bavo Azongo, T., & Yakong, V. N. (2016). *Bio-psycho-social impacts and challenges of obstetric fistula on women in northern Ghana*. *5*(1), 77–88. https://doi.org/10.9790/1959-05127788

Bari, K., Oliver, V. L., Abbas, S., Marthias, T., & Kane, S. (2024). *The economic consequences of obstetric fistula : A systematic search and narrative review*. *July 2023*, 238–249. https://doi.org/10.1002/ijgo.15370

Bashah, D. T., Worku, A. G., & Mengistu, M. Y. (2018). Consequences of obstetric fistula in sub Sahara African countries, from patients' perspective: A systematic review of qualitative studies. *BMC Women's Health*, *18*(1), 1–12. https://doi.org/10.1186/s12905-018-0605-1

Bashah, D. T., Worku, A. G., Yitayal, M., & Azale, T. (2019). *The loss of dignity : social experience and coping of women with obstetric fistula , in Northwest Ethiopia*. 1–10.

Belayihun, B., & Mavhandu-Mudzuis, A. H. (2018). Psychological distress in women with obstetric fistula in Ethiopia: A multi-center, facility-based, cross-sectional study. *Ethiopian Journal of Health Development*, *32*(4), 210–217.

Bello, O. O., Morhason-Bello, I. O., & Ojengbede, O. A. (2020). *Nigeria, a high burden state of obstetric fistula: a contextual analysis of key drivers*. *8688*, 1–12.

Boene, H., Mocumbi, S., Högberg, U., Hanson, C., Valá, A., Bergström, A., Sevene, E., & Munguambe, K. (2020). *Obstetric fistula in southern Mozambique : a qualitative study on women ' s experiences of care pregnancy , delivery and post- partum*. 1–13.

Bomboka, J. B., N-mboowa, M. G., & Nakilembe, J. (2019). *Post - effects of obstetric fistula in Uganda ; a case study of fistula survivors in KITOVU mission hospital (MASAKA),*

Uganda. 1–7.

Bos, J. (2020). *for Students in the Social Sciences*.

Braun, V., & Clarke, V. (2021). Conceptual and Design Thinking for Thematic Analysisfile:///Users/ksiamisang/Desktop/mark.pdf. *Qualitative Psychology*, *9*(1), 3–26.

Browning, A., & Syed, S. (2020). Where we currently stand on obstetric fistula treatment and prevention. *International Journal of Gynecology and Obstetrics*, *148*(S1), 1–2. https://doi.org/10.1002/ijgo.13030

Bulndi, L. B., Bayes, S., Adama, E., & Ireson, D. (2023). North-central Nigerian women's experiences of obstetric fistula risk factors and their perceived treatment services: An Interpretive Description. *Women and Birth*, *36*(5), 454–459. https://doi.org/10.1016/j.wombi.2023.02.007

Byrne, D. (2022). A worked example of Braun and Clarke ' s approach to reflexive thematic analysis. *Quality & Quantity*, *56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Camara, M., Johri, M., Id, H. K., & Toure, M. A. (2024). *PLOS GLOBAL PUBLIC HEALTH Experiences of community reintegration after obstetric fistula repair at Jean Paul 2 hospital , Conakry , Guinea*. 1–11. https://doi.org/10.1371/journal.pgph.0003581

Cantos-egea, J., & Tous-pallarés, J. (2023). *Model of psychosocial determinants of health in processes of social exclusion*. *June*. https://doi.org/10.3389/fpubh.2023.1156569

Changole, J., Thorsen, V., Trovik, J., Kafulafula, U., & Sundby, J. (2019). Coping with a disruptive life caused by obstetric fistula: Perspectives from Malawian women. *International Journal of Environmental Research and Public Health*, *16*(17), 1–14. https://doi.org/10.3390/ijerph16173092

Chanie, W. F., Berhe, A., Tilahun, A. D., Liyew, B., Baye, C., Akalie, T. A., Alemu, D. S., & Limenih, M. A. (2025). *Community perceptions and determinants of obstetric fistula across gender lines*. 1–11.

Chimamise, C., Munjanja, S. P., Machinga, M., & Shiripinda, I. (2021). Health seeking behaviors of women living with obstetric fistula in Zimbabwe: A qualitative cross sectional study. *Social Work in Public Health*, *36*(5), 548–557. https://doi.org/10.1080/19371918.2021.1931617

Chimamise, C., Shiripinda, I., Munjanja, S. P., & Machinga, M. (2021). A comparison of quality of life of obstetric fistula survivors in Zimbabwe before and after surgical treatment. *African Journal of Urology*, *27*(1). https://doi.org/10.1186/s12301-020-00118-6

Cole, G. (2024). *women - children - mental / physical health Summary + Key Takeaways + Q : What is an obstetric fistula , its causes , and its medical consequences ?* 1–21.

Costa, H. (2023). *Knowledge and practice of obstetric care providers on prevention of obstetric fistula 2023: an institution-based cross-sectional study*. *November*, 1–10. https://doi.org/10.3389/fgwh.2023.1234013

Creswell, J. W., & Creswell, J. D. (2018). Mixed Methods Procedures. In *Research Defign: Qualitative, Quantitative, and Mixed M ethods Approaches*.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design*. https://catalog.libraries.psu.edu/?f%5Ball_authors_facet%5D%5B%5D=Creswell%2C+John+W.

Cypress, B. S. (2017). *Rigor or Reliability and Validity in Qualitative Research : Perspectives , Strategies , Reconceptualization , and Recommendations*. *36*(August), 253–263. https://doi.org/10.1097/DCC.0000000000000253

Dako-Gyeke, M., Kodom, R. B., & Ntewusu, J. (2022). Suffering yet surviving: Narratives of women living with obstetric fistula in the Northern Region of Ghana. *Journal of Human Behavior in the Social Environment*, *32*(2), 252–273. https://doi.org/10.1080/10911359.2021.1875099

Degge, H. M., Laurenson, M., Dumbili, E. W., & Hayter, M. (2020). Insights from birthing experiences of fistula survivors in North-central Nigeria: Interplay of structural violence. *Nursing Inquiry*, *27*(4), 1–10. https://doi.org/10.1111/nin.12377

Degge, H. M., Laurenson, M., Dumbili, E. W., Saxby, H., & Hayter, M. (2024). Journey for a cure: Illness narratives of obstetric fistula survivors in North Central Nigeria. *Sociology of Health and Illness*, *46*(3), 437–456. https://doi.org/10.1111/1467-9566.13715

Drew, L. B., Ruder, B., & Schwartz, D. A. (2022). *No Title:A Multidisciplinary Approach to Obstetric Fistula in Africa*.

Drew, L. B., Wilkinson, J. P., Nundwe, W., Moyo, M., Mataya, R., Mwale, M., & Tang, J. H. (2016). Long-term outcomes for women after obstetric fistula repair in Lilongwe, Malawi: A qualitative study. *BMC Pregnancy and Childbirth*, *16*(1), 1–12. https://doi.org/10.1186/s12884-015-0755-1

Egwu, N. D., Babafemi, A., Daniyan, C., Ejemot-nwadiaro, R., & Okpe, A. (2024). *Psychosocial Burden of Obstetric Fistula Among Women in South-South Nigeria*. *43. No. 1,*.

El Ayadi, A. M., Obore, S., Kirya, F., Miller, S., Korn, A., Nalubwama, H., Neuhaus, J., Getahun, M., Eyul, P., Twine, R., Andrew, E. V. W., & Barageine, J. K. (2024). Identifying opportunities for prevention of adverse outcomes following female genital fistula repair: protocol for a mixed-methods study in Uganda. *Reproductive Health*, *21*(1), 1–13. https://doi.org/10.1186/s12978-023-01732-7

Engel, G. L. (2012). The need for a new medical model: A challenge for biomedicine. *Psychodynamic Psychiatry*, *40*(3), 377–396. https://doi.org/10.1521/pdps.2012.40.3.377

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). *Comparison of Convenience Sampling and Purposive Sampling*. *5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Ezekiel, A., Kingsley, C. O., Ijairi, J. M., Mufutau, A. A., Olaniyan, S. T., & Lucy, I. (2021). Social Features and Morbidity Patterns of Women with Obstetric Fistulae at an Obstetric Fistula Centre in a University Teaching Hospital in Jos, Nigeria. *European Journal of Medical and Health Sciences*, *3*(4), 44–52. https://doi.org/10.24018/ejmed.2021.3.4.844

Fekecha, B., Id, H., Koricha, Z. B., & Dadi, L. S. (2022). *Challenges and coping mechanisms among women living with unrepaired obstetric fistula in Ethiopia : A phenomenological study*. 1–20. https://doi.org/10.1371/journal.pone.0275318

Germano, E. (2024). The Silent Suffering: Obstetric Fistula in Ethiopia. *The Columbia University Journal of Global Health*, *13*(2), 1–9. https://doi.org/10.52214/cujgh.v13i2.11986

Ghana Statistical Service. (2022). *Ghana 2021 Housing and Population Census*. *3*.

Gibbons, B., & Birks, M. (2016). Is it time to re-visit stigma? A critical review of Goffman 50 years on. *British Journal of Mental Health Nursing*, *5*(4), 185–189. https://doi.org/10.12968/bjmh.2016.5.4.185

Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication & Technology*, *30*(4), 233–252. https://doi.org/10.1007/BF02765185

Haika Osaki a, B., A, J. B. S., , Nanna Maaløe a, B., , Columba Mbekenga b, C., & A, M. S. (2024). *It is because the treatment of this lady is a cascade": Accumulation of delays and*

the occurrence of obstetric emergencies in an urban maternity unit in Tanzania.

Hotchkiss, E., Nalubwama, H., Miller, S., Ryan, N., Barageine, J., Byamugisha, J., & Ayadi, A. M. El. (2024). *Social Support among Women with Genital Fistula in Uganda*. *25*(3), 320–335. https://doi.org/10.1080/13691058.2022.2041098.Social

Hurissa, B. F., Koricha, Z. B., & Dadi, L. S. (2023). Understanding Healthcare-Seeking Pathways and Dilemmas Among Women with Obstetric Fistulas in Ethiopia: A Qualitative Inquiry. *International Journal of Women's Health*, *15*(January), 135–150. https://doi.org/10.2147/IJWH.S395064

Id, R. T., Budu, E., Asiam, P. D., Aguadze, S., & Acheampong, F. (2023). *Awareness of obstetric fistula and its associated factors among reproductive-aged women : Demographic and health survey data from Gambia*. 1–13. https://doi.org/10.1371/journal.pone.0283666

Ismail Garba Wali, J. S. and A. M. O. (2024). *PREVALENCE OF VESICO VAGINAL FISTULA AND COPING STRATEGIES OF WOMEN IN KEBBI STATE, NIGERIA*. *8*(2), 106–112. https://doi.org/DOI: https://doi.org/10.33003/fjs-2024-0802-2240

Jarvis, K., Richter, S., Vallianatos, H., & Thornton, L. (2017). Reintegration of Women Post Obstetric Fistula Repair: Experience of Family Caregivers. *Global Qualitative Nursing Research*, *4*. https://doi.org/10.1177/2333393617714927

Johannes, C., & Roman, N. V. (2025). Applying the Social Ecological Model to Explore Physical Activity Levels and Psychosocial Factors among Undergraduate University Students: A Narrative Literature Review. *The Open Public Health Journal*, *18*(1), 1–15. https://doi.org/10.2174/0118749445392277250428114135

Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, *84*(1), 138–146.

https://doi.org/10.5688/ajpe7120

Kabayambi, J. (2021). *Advances in Preventive Medicine and Health Care Re-Integrating Fistula-Repaired Women into Society in Central Uganda : A Community Participatory and Action Approach*. *August*. https://doi.org/10.29011/2688-996X.001027

Kabayambi, J., & Barageine, J. (2018). *Coping mechanisms of obstetric fistula affected women in Uganda*. *13*(2).

Kader, S., Rahman, M., Tulsan, S., Podder, V., Pial, R., & Saha, M. (2020). Associated factors for obstetric fistula among young women and its possible effects on their mental well-being. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*, 224–228. https://doi.org/10.4103/mjdrdypu.mjdrdypu_171_19

Ketevi, A.A., Ajavon, D.R.D., Douaguibe, B., Bassowa, A., Assogba, C.S., Tenete, A.W., Koffi, N.M.K., Fiagnon, K., Aboubakari, A.-S. and Akpadza, K. (2021). *Life Experience of Women with Obstetric Fistula in Togo*. *8*, *1-8. do*.

Khan, S., Kotcher, R., Herman, P., Wang, L., Tessler, R., Cunningham, K., Celebrezze, J., Medich, D., & Holder-Murray, J. (2024). Predictors of recurrence and long-term patient reported outcomes following surgical repair of anal fistula, a retrospective analysis. *International Journal of Colorectal Disease*, *39*(1). https://doi.org/10.1007/s00384-024-04602-1

Khisa, W., Wakasiaka, S., McGowan, L., Campbell, M., & Lavender, T. (2017). Understanding the lived experience of women before and after fistula repair: a qualitative study in Kenya. *BJOG: An International Journal of Obstetrics and Gynaecology*, *124*(3), 503–510. https://doi.org/10.1111/1471-0528.13902

Konan Koffi Paulin, Traore Brahim Samuel, Aka Rita Ahou, D. J. and Y.-T. Y., & Jean-Marie.

(2021). *Psychosocial Experience of Women with Obstetric Fistula: Case of Patients Consulting the Obstetric Gynecology Department of the Korhogo Regional Hospital (Côte d'Ivoire)*. *6*, 35–41.

Korstjens, I., & Moser, A. (2018). Series : Practical guidance to qualitative research . Part 4 : Trustworthiness and publishing. *European Journal of General Practice*, *0*(0), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Krahn, G. L., Robinson, A., Murray, A. J., Havercamp, S. M., & Nisonger, T. (2021). *It ' s time to reconsider how we de fi ne health : Perspective from disability and chronic condition*. *14*. https://doi.org/10.1016/j.dhjo.2021.101129

Kumsa, H., Mislu, E., Arage, M. W., Abera, A., Hailu, T., & Tenaw, L. A. (2023). Successful surgical closure and continence rate of obstetric fistula in Africa: systematic review and meta-analysis. *Frontiers in Global Women's Health*, *4*(October), 1–14. https://doi.org/10.3389/fgwh.2023.1188809

Kurniawati, E. M., Rahmah, F., Hardianto, G., & Paraton, H. (2024). *Psychosocial conditions in patients with vesicovaginal fistula at a referral hospital in Surabaya , Indonesia*. *17*(1), 5–9.

Kusnanto, H., Agustian, D., & Hilmanto, D. (2018). *Biopsychosocial model of illnesses in primary care : A hermeneutic literature review*. 497–500. https://doi.org/10.4103/jfmpc.jfmpc

Lim, W. M. (2025). *What Is Qualitative Research ? An Overview and Guidelines*. https://doi.org/10.1177/14413582241264619

Limenih, M. A., Melesse, A. W., Baye, C., Shewabere, B., Mekonnen, E. G., Hassen, H. Y., Berhe, A., Alemu, D. S., & Chanie, W. F. (2024). *Deciphering community-level knowledge of obstetric fi stula and determinants : perspectives*. *December*.

https://doi.org/10.3389/fgwh.2024.1426578

Lyimo, M. A., & Mosha, I. H. (2019). Reasons for delay in seeking treatment among women with obstetric fistula in Tanzania: A qualitative study. *BMC Women's Health*, *19*(1), 1–8. https://doi.org/10.1186/s12905-019-0799-x

Manjate, N. J., Martins, J. D., Amado, R., Nhanombe, A., & Canana, N. (2024). *Estimating the cost for obstetric fistula repair in hospitals of Mozambique : a low - income country*. https://doi.org/10.1186/s13561-024-00542-2

Mantey, R., Kotoh, A. M., Barry, M., & Redington, W. (2020). Womens' experiences of living with obstetric fistula in Ghana–time for the establishment of a fistula centre of excellence. *Midwifery*, *82*, 102594. https://doi.org/10.1016/j.midw.2019.102594

Matiwos, B., Tesfaw, G., Belete, A., Angaw, D. A., & Shumet, S. (2021). Quality of life and associated factors among women with obstetric fistula in Ethiopia. *BMC Women's Health*, 1–9. https://doi.org/10.1186/s12905-021-01458-3

Mbinya, M. M., Margaret, K. N., Kodhiambo, M. O., & Omwenga, V. (2021). *Socio-Demographic Factors Influencing Utilization of Obstetric Fistula Services among Women of Reproductive Age in Makueni County , Kenya*. *34*(2), 149–163.

Mccurdie, F. K., Moffatt, J., Jones, K., Katherine, F., Moffatt, J., Jones, K., Mccurdie, F. K., Moffatt, J., & Jones, K. (2018). Vesicovaginal fistula in Uganda Vesicovaginal fistula in Uganda. *Journal of Obstetrics and Gynaecology*, *0*(0), 1–6. https://doi.org/10.1080/01443615.2017.1407301

Merdad, L., & Ali, M. M. (2018). *Timing of maternal death : Levels , trends , and ecological correlates using sibling data from 34 sub-Saharan African countries*. *5*, 1–13.

Mgaya, A., & Mwila, P. M. (2023). AMREF Awareness Creation Campaign and Reduction of

Obstetrics Fistula Stigma: Evidence from Misungwi District, Tanzania. *Asian Research Journal of Arts & Social Sciences*, *21*(2), 14–29. https://doi.org/10.9734/arjass/2023/v21i2463

Millicent, V., Senior, D., Associate, B. V. W., Associate, J. R. L., & Dean, A. (2017). Experiences of women receiving childbirth care from public health facilities in Kumasi , Ghana. *Midwifery*, *55*(September), 90–95. https://doi.org/10.1016/j.midw.2017.09.010

Mirza, H., Bellalem, F., & Mirza, C. (2023). Ethical Considerations in Qualitative Research : Summary Guidelines for Ethical Considerations in Qualitative Research : Summary Guidelines for Novice Social Science Researchers. *Social Studies and Research Journal*, *11*(May), 441–449.

Mohamed, A. A., Ilesanmi, A. O., & Dairo, M. D. (2018). *The Experience of Women with Obstetric Fistula following Corrective Surgery : A Qualitative Study in Benadir and Mudug Regions , Somalia*. *2018*.

Mutola, S., Chomba, B. M., Ng, N., Menda, D. M., Louis, V. R., & Michael, L. W. (2025). Surgical success in obstetric fistula repair and associated factors: findings from a retrospective cohort study in Zambia. *BMC Surgery*, *25*(1). https://doi.org/10.1186/s12893-025-02910-z

Ndoye, M., & Greenwell, T. (2023). Obstetric Fistula. *Urinary Fistula*, 197–228. https://doi.org/10.1007/978-3-031-15317-4_16

Nduka, I. R., Ali, N., Kabasinguzi, I., & Abdy, D. (2023). The psycho-social impact of obstetric fistula and available support for women residing in Nigeria: a systematic review. *BMC Women's Health*, *23*(1), 1–12. https://doi.org/10.1186/s12905-023-02220-7

Nendela, A., Farrell, S., Wakasiaka, S., Lecturer, S., Mills, T., Lecturer, S., Khisa, W., Omoni,

O. G., & Lavender, T. (2023). *Women ' s experiences of care after stillbirth and obstetric fistula : A phenomenological study in Kenya*. *March*, 2475–2484. https://doi.org/10.1111/hex.13841

Neville, C. W. (2023). *Quality of Life After Obstetric Fistula Among Women in Developed Countries*. *3*(2), 45–51.

Ngongo, C. J. (2020). *Delivery mode for prolonged , obstructed labour resulting in obstetric fistula : a retrospective review of 4396 women in East and Central Africa*. 702–707. https://doi.org/10.1111/1471-0528.16047

Ngongo, C. J., Raassen, T. J. I. P., Mahendeka, M., Bisanzio, D., Lombard, L., & Bann, C. (2023). *Living with obstetric fistula : learnings from nine African countries*. 8–10. https://doi.org/10.1136/bmjgh-2023-012509

Ngongo, C. J., Raassen, T. J. I. P., Mahendeka, M., Lombard, L., van Roosmalen, J., & Temmerman, M. (2022). A retrospective review of genital fistula occurrence in nine African countries. *BMC Pregnancy and Childbirth*, *22*(1), 1–9. https://doi.org/10.1186/s12884-022-05051-w

Nkwanta North District Assembly. (2017). *Republic of Ghana Nkwanta North District Assembly (NNDA) DISTRICT MEDIUM TERM DEVELOPMENT PLAN (DMTDP 2014-2017)*.

Nkwanta North District Assembly. (2024). *for 2020-2023 for 2020 Part a : Strategic Overview*.

Nuertey B.D, Sackey S.O, G. B. B., & N, A. M. (2018). *RISK FACTORS , ASCRIBED CAUSES AND EFFECTS OF OBSTETRIC FISTULA AMONG WOMEN IN NORTHERN GHANA : A CASE CONTROL STUDIES*. *7*(1).

Nweke, D. N., & Igwe, M. N. (2017). Psychosocial experiences of subjects with vesicovaginal fistula: A qualitative study. *Global Journal of Medicine and Public Health*, *6*(1).

www.gjmedph.com

Nyirenda, L., Kumar, M. B., Theobald, S., Sarker, M., Simwinga, M., Kumwenda, M., Johnson, C., Hatzold, K., Corbett, E. L., & Sibanda, E. (2020). *Using research networks to generate trustworthy qualitative public health research findings from multiple contexts*. *5*, 1–10.

Odonkor, S. T., & Yeboah, T. N. (2023). Challenges of rural women living with obstetric fistula: A phenomenological study. *Women and Birth*, *36*(1), e1–e9. https://doi.org/10.1016/j.wombi.2022.04.001

Olaniyan, A., Isiguzo, C., & Hawk, M. (2021). *The Socioecological Model as a framework for exploring factors influencing childhood immunization uptake in Lagos state ,*. 1–10.

Orawee Chinthakanan, P. S. and A. S. (2023). *Vesicovaginal Fistulas : Prevalence , Impact , and Management challenges*. 1–12.

Paluku, J. L., Bartels, S. A., Kataliko, B. K., Furaha, C. M., Aksanti, B. K., Kalole, B. K., Kamabu, E. M., Lwanzo, C. M., Kasereka, J. M. L., Mukuku, O., Tsongo, Z. K., Wembonyama, S. O., Mpoy, C. W., & Juakali, J. S. (2024). Access to High Quality Surgical Repair Services is a Fundamental Right of Patients with Obstetric Fistulas: A Study on Quality of Life Data in the Democratic Republic of the Congo. *International Journal of Women's Health*, *16*(April), 645–653. https://doi.org/10.2147/IJWH.S451929

Rabo, A. A. (2023). *African Journal of Social and Behavioural Sciences (AJSBS) Volume 13 , Number 2 (2023) ISSN : 2141-209X RELATIONSHIPS AMONG SOCIAL SUPPORT , COPING STRATEGIES , AGE AND PSYCHOLOGICAL WELLBEING OF VESICOVAGINAL FISTULA PATIENTS AT MURTALA MUHAMMAD SPEC*. *13*(2).

Raji, M. O., Hassan, M., Yusuf, M. H., Yusuf, R., Ahmad, A., & Raji, H. O. (2018). *Section : Community Health Knowledge , Effect of Vesico Vaginal Fistula (VVF) and Satisfaction*

with VVF Repair Related Services in a Fistula Repair Facility in North Western Nigeria Section : Community Health. *5*(9), 5–10.

Riazi, A. M., Rezvani, R., & Ghanbar, H. (2023). *Research Methods in Applied Linguistics Trustworthiness in L2 writing research : A review and analysis of qualitative articles in the Journal of Second Language Writing*. *2*(January). https://doi.org/10.1016/j.rmal.2023.100065

Rozanski, A. (2023). New principles, the benefits, and practices for fostering a physically active lifestyle. *Progress in Cardiovascular Diseases*, *77*, 37–49. https://doi.org/10.1016/j.pcad.2023.04.002

Ruder, B., & Emasu, A. (2022). *The Promise and Neglect of Follow-up Care in Obstetric Fistula Treatment in Uganda*. 37–55. https://doi.org/10.1007/978-3-030-84514-8_3

Rundasa, D. N., Wolde, T. F., Ayana, K. B., & Worke, A. F. (2021). Awareness of obstetric fistula and associated factors among women in reproductive age group attending public hospitals in southwest Ethiopia, 2021. *Reproductive Health*, *18*(1), 1–7. https://doi.org/10.1186/s12978-021-01228-2

Samad, N., Das, P., Opoku, B., & Seidu, A. (2022). *Association between place of delivery , assistance during delivery and fistula occurrence in Afghanistan*. *November 2021*, 580–587. https://doi.org/10.1093/inthealth/ihab074

Saunders, M., Lewis, P., & Adrian, T. (2019). "Research Methods for Business Students"-Eighth Edition Chapter 4: Understanding research philosophy and approaches to theory development. In *Pearson Education Limited* (Issue March). https://www.researchgate.net/publication/330760964_Research_Methods_for_Business_Students_Chapter_4_Understanding_research_philosophy_and_approaches_to_theory_develop

ment%0Ahttps://www.pearson.com/nl/en_NL/higher-education/subject-catalogue/business-and-m

Stratton, S. J. (2023). *Population Sampling : Probability and Non-Probability Techniques*. *April*. https://doi.org/10.1017/S1049023X23000304

Stratton, S. J. (2024). *Purposeful Sampling : Advantages and Pitfalls*. *April*, 2024–2025. https://doi.org/10.1017/S1049023X24000281

Swain, D., Parida, S. P., Jena, S. K., Das, M., & Das, H. (2020). *Prevalence and risk factors of obstetric fistula : implementation of a need-based preventive action plan in a South-eastern rural community of India*. 1–10.

Tadesse, S., Mekete, D., Negese, S., Belachew, D. Z., & Namara, G. T. (2024). *Urinary incontinence following successful closure of obstetric vesicovaginal fistula repair in Southern Ethiopia*. 1–9.

Tang, Y., Zhang, F., & Xu, D. R. (2023). The implications of decolonization on China ' s academic global health : a dialogue with Stephen Gloyd at the Luhu Global Health Salon. *Global Health Research and Policy*. https://doi.org/10.1186/s41256-023-00299-x

Taukeni, S. G. (2020). *Biopsychosocial Model of Health Psychology and Psychiatry : Open access Biopsychosocial Model of Health*. *July*.

Tembo, N. N., Maluwa, A., Odland, J., Mukwato, K., Kwaleyela, C. N., Zulu, J. M., & Maimbolwa, M. C. (2020). *Barriers in seeking fistula repair services among women with obstetric fistula in Zambia : The case of Muchinga , Luapula , Eastern and Southern Provinces*. *3*(1), 13–20.

Ting, H., Memon, M. A., Ramayah, T., & Cheah, J. (2025). *Snowball Sampling : A Review and Guidelines for Survey*. *March*. https://doi.org/10.14707/ajbr.250186

Tong, P., & An, I. S. (2024). *Review of studies applying Bronfenbrenner ' s bioecological theory in international and intercultural education research*.

Touhidi Nezhad, F., Jalali, R., & Karimi, F. (2020). Women's experiences of rectovaginal fistula: An ethno- religious experience. *BMC Women's Health*, *20*(1), 1–7. https://doi.org/10.1186/s12905-020-00992-w

Traore, D., Wesson, J., Id, M. H. W., Nguyen, T., Toure, C., & Baumgartner, J. N. (2022). *Integrated mental health screening for obstetric fistula patients in Mali : From evidence to policy*. 1–11. https://doi.org/10.1371/journal.pone.0238777

Turin, T. C., Raihan, M. M. H., & Chowdhury, N. A. (2024). *Paradigms of approaches to research*. *17*(2), 4–7. https://doi.org/10.3329/bsmmuj.v17i2.73973

Tushe Mirela. (2025). *A Worked Example of Qualitative Descriptive Design : A Step Guide for Novice and Early Career Researchers*. 5181–5195. https://doi.org/10.1111/jan.16481

Ul, Z., & Kakar, H. (2023). *CUNY Academic Works Criteria for Assessing and Ensuring the Trustworthiness in Qualitative Research How does access to this work benefit you ? Let us know !*

UNFPA. (2022a). *Maternal Morbidity: the end to obstetric fistula*. https://ghana.unfpa.org/en/news/maternal-morbidity-end-obstetric-fistula

UNFPA. (2022b). *Motherhood in Distress: Engineering Ghana to end Obstetric Fistula*. https://ghana.unfpa.org/en/news/motherhood-distress-engineering-ghana-end-obstetric-fistula

UNFPA. (2023a). No Title. *Obstetric Fistula*. https://ghana.unfpa.org/en/news/unfpa-supports-mercy-womens-catholic-hospital-end-fistula-0

UNFPA. (2023b). *UNFPA mobilizes partners to end Obstetric Fistula in Ghana by 2030*.

https://ghana.unfpa.org/en/news/unfpa-mobilizes-partners-end-obstetric-fistula-ghana-2030

United, N. (2018). *a /73/285*. *12671*(July).

Wall, L. L., Ouedraogo, I., & Ayenachew, F. (2021). Contemporary Issues in Obstetric Fistula. *Clinical Obstetrics and Gynecology*, *64*(3), 491–500. https://doi.org/10.1097/GRF.0000000000000630

Waniala, I., Nakiseka, S., Nambi, W., Naminya, I., Ajeni, M. O., Iramiot, J., Nekaka, R., & Nteziyaremye, J. (2021). *Prevalence , Indications , and Community Perceptions of Caesarean Section Delivery in Ngora District , Eastern Uganda : Mixed Method Study*. *2020*.

Wella, K., Chilemba, E., Namathanga, A., & Chakhame, B. (2021). Sexual & Reproductive Healthcare Social support for women after fistula repair : A scoping review. *Sexual & Reproductive Healthcare*, *29*(May), 100649. https://doi.org/10.1016/j.srhc.2021.100649

Whiting, D., Shane, A. I., Pope, R., Payne, S., & Venn, S. (2022). Female urinary incontinence in sub-Saharan Africa. *BJU International*, *130*(5), 543–549. https://doi.org/10.1111/bju.15903

WHO. (2018). *Obstetric fistula*. https://www.who.int/news-room/facts-in-pictures/detail/10-facts-on-obstetric-fistula

Williams, G., Williams, A., Tozer, P., Phillips, R., Ahmad, A., & Jayne, D. (2018). *The treatment of anal fistula : second ACPGBI Position Statement – 2018 The treatment of anal fistula : second ACPGBI Position Statement – 2018*. *May 2019*. https://doi.org/10.1111/codi.14054

With, D., Application, T., & Education, I. N. (2021). *by Brighton Kumatongo and Kenneth Kapalu Muzata The University of Zambia*. *5*(1), 16–32.

Woldegebriel, A. G., Gebrehiwot, G. G., Desta, A. A., Ajemu, K. F., Berhe, A. A., Woldearegay, T. W., Ghebremedhin, K. D., & Bezabih, N. M. (2023). Factors associated with obstetric fistula among reproductive age women in Ethiopia: a community based case control study. *Reproductive Health*, *20*(1), 1–8. https://doi.org/10.1186/s12978-023-01622-y

Yifru, B., Berhan, Y., Ali, M., Tassew, A., & Nonogaki, A. (2022). *Universal Health Coverage Policy and Progress towards the Attainment of Universal Sexual and Reproductive Health and Rights Services in Ethiopia*. *1*.

Yip, S. Y. (2024). Positionality and reflexivity: negotiating insider-outsider positions within and across cultures. *International Journal of Research and Method in Education*, *47*(3), 222–232. https://doi.org/10.1080/1743727X.2023.2266375

Yismaw, L., Alemu, K., Addis, A., & Alene, M. (2019). Time to recovery from obstetric fistula and determinants in Gondar university teaching and referral hospital, northwest Ethiopia. *BMC Women's Health*, *19*(1), 1–8. https://doi.org/10.1186/s12905-018-0700-3

APPENDICES

APPENDIX A: INFORMED CONSENT FORM

Project Title: Bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District in Oti Region

Principal Investigator: Doreen Kafui Quarshie

Address: School of Nursing and Midwifery, University of Ghana, Legon, Accra

General Information about Research

The main purpose of this study is to explore the bio-psychosocial experiences of obstetric fistula survivors at the Nkwanta North District of the Oti Region. This exploration will help identify areas where interventions can enhance the life of these fistula survivors. Participants will be interviewed using a semi-structured interview guide designed for sessions lasting 30-45 minutes. The interview will be audio-recorded or written down to ensure that no vital information is missed. Participation in the study is entirely voluntary, and individuals have the right to refuse or withdraw at any time without facing any negative consequences.

Possible Risks and Discomforts

The study poses no significant risk and is designed to ensure your safety. However, participation may involve minor discomforts, such as feelings of anxiety or anger when recalling specific experiences, as well as potential stress. Should you choose to withdraw from the study at any time, your decision will not impact your current or future healthcare services. Additionally, the researcher will coordinate with a counselor or clinical psychologist before the study begins to support any participant who may become emotional while recounting challenging life experiences.

Possible Benefits

Your participation in this study may not benefit you directly. However, your experiences may potentially help facilitate a positive change in the field of nursing by informing policy decisions that will enable health workers to help improve the well-being of obstetric fistula survivors. You will be supported with Gh₵50 to cover the cost of transportation in case the interview is conducted outside your home.

Confidentiality

Your identity will be kept confidential, and your name will not be associated with any published or reported information. Measures will be implemented to ensure your privacy is protected. Although the interview will be audio recorded, your name will be replaced with a pseudonym to protect your identity. During the interview, you will be assigned a code to replace your name. As previously stated, participation is voluntary, and you can withdraw anytime if you feel uncomfortable.

Compensation

This research is mainly for academic purposes, and participants will not be paid for their participation. Your time and participation in this study will be greatly appreciated, and you will be provided with snacks in the form of soft drinks and bottled water after the interview to keep you hydrated.

Voluntary Participation and Right to Leave the Research

As I mentioned earlier, your participation in this study is entirely voluntary. You have the right to decline participation or withdraw at any time without facing any negative consequences. Your decision will not affect any current or future healthcare services you may receive.

Contacts for Additional Information

Principal investigator

Name: Doreen Kafui Quarshie

Contact: 0243180315

Email: kquarshie@hotmail.com

Principal Supervisor

Name: Dr. Ernestina Asiedua

Contact: 0546279865

Email: easiedua@ug.edu.gh

Co-investigator

Name: Dr Deborah Armah

Contact: 0243187228

Email: kussiwaah@yahoo.com

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions about your rights as a research participant, you can contact the IRB Office between the hours of 8 am-5 pm through the landline 0302916438 or email addresses: nirb@noguchi.ug.edu.gh

VOLUNTEER AGREEMENT

The above document describes the benefits, risks, and procedures for the research title

(Bio-psychosocial experiences of obstetric fistula survivors at Nkwanta North District in Oti Region) has been read and explained to me. I have been allowed to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ _____

Date Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks, and procedures were read to the volunteer. All questions were answered, and the volunteer has agreed to participate in the research.

_____ _____

Date Name and signature of a witness

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

_____ _____

Date Name Signature of Person Who Obtained

Consent

APPENDIX B: INTERVIEW GUIDE

Introduction

The main objective of this research is to explore the bio-psychosocial experiences of obstetric fistula survivors within the Nkwanta North District in the Oti Region of Ghana. As you participate in this interview, you are assured that all responses provided will be confidential. Your identity will be kept confidential. The interview will last 30 to 45 minutes; your participation is voluntary. The interview will be recorded or written verbatim because I do not want to miss your responses. The interview is conversational, and you should feel free to provide further clarification on issues. Your decision to participate in the study will be much appreciated. Thank you for agreeing to participate in the study.

Interview Start Time: ……..

Interview End Time……Date:……2024.

SECTION A: BIO-DATA OF PARTICIPANT

1. **Demographic Data of Participant**

(a) Participant name/code……

(b) Participant's age ……

(c) Educational level ……

(d) Religion……...

(e) Previous occupation

(f) Current occupation

(g) Number of children

(h) Marital status

(i) If married, are you in the same house with your partner?

(j) If you are a divorcee, did it happen because of your condition?

(k) Did you give birth naturally (vaginally) or CS?

(l) Have you sought treatment?

(m) Number of years living with obstetric fistula before receiving treatment.

SECTION B: BIOLOGICAL/PHYSICAL EXPERIENCES OF OBSTETRIC FISTULA

1. Could you tell me all about yourself?
2. Could you tell me about when and how you were diagnosed with obstetric fistula?
3. Tell me about the symptoms you experience and how they affect your daily life and your overall physical health
4. Are there ongoing physical problems or complications you are currently dealing with?
5. What challenges or discomfort have you faced in receiving treatment or care for your condition?

SECTION C: PSYCHOLOGICAL EXPERIENCES OF OBSTETRIC FISTULA

1. Could you describe any change in your mood or mental health since you were diagnosed with obstetric fistula?
2. Describe how the condition affected your self-image, self-esteem, and sense of identity?
3. Describe the strategies or methods you use/ used to cope with the emotional challenges of living with obstetric fistula.
4. Share with me how you perceive life in this situation.

SECTION D: SOCIAL EXPERIENCES OF OBSTETRIC FISTULA

1. Could you tell me how your condition has affected your relationship with your spouse, other family members and friends? (social reaction).
2. Share with me your perception of the disease in your community.
3. How has your condition impacted your ability to work?
4. Have any financial challenges been associated with your medical care or daily life due to the disease?
5. Share with me other means of treatment you have encountered
6. Share with me the kind of support available to you.

Thank you!

APPENDIX C: ETHICAL CLEARANCE FROM IRB, NMIMR. UNIVERSITY OF GHANA

UNIVERSITY OF GHANA

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR)
COLLEGE OF HEALTH SCIENCES
INSTITUTIONAL REVIEW BOARD

10th January 2024

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824 **IRB 00001276**

NMIMR-IRB CPN 064/23-24 **IORG 0000908**

On 10th January 2024, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) Conducted an expedited review and approved your protocol titled:

TITLE OF PROTOCOL : **Psychosocial wellbeing of Obstetric Fistula survivors At Nkwanta North District at Oti Region**

PRINCIPAL INVESTIGATOR : **Doreen Kafui Quarshie, MPhil Cand.**

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 9th January 2025. You are to submit annual reports for continuing review.

Signature of Chair: .....

Dr. Abraham Hodgson
(NMIMR – IRB CHAIR)

P. O. Box LG 581, Legon, Accra, Ghana | Tel +233 (0) 302-2916438
Email: nirb@noguchi.ug.edu.gh | www.noguchimedres.org | www.ug.edu.gh

UG

APPENDIX D: INTRODUCTORY LETTER

UNIVERSITY OF GHANA

SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref: 11007322

13th December, 2023

The Municipal Chief Executive
Nkwanta North District Assembly
Oti Region

Dear Sir/ Madam,

LETTER OF INTRODUCTION – ETHICAL CLEARANCE

I write to introduce to you **Doreen Kafui Quarshie** an MPhil Midwifery student in the Department of Maternal and Child Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements for the MPhil. programme, the student is to undertake a research study and she intends to use your facility as the main study site for the research.

The title of her research is **"Psychosocial Wellbeing of Obstetric Fistula Survivors at Nkwanta North District in Oti Region."**

I write to seek your permission to enable her undertake this necessary assignment and to also have access to basic information for the research.

Thank you.

Yours faithfully,

Mr. Charles A. Klutse
(School Administrator)

P. O. Box LG 43, Legon, Accra, Ghana | Tel: +233 (0) 303 970 801
Email: nursing@ug.edu.gh | Website: www.nursing.ug.edu.gh

APPENDIX E: INTRODUCTORY LETTER FROM NKWANTA NORTH ASSEMBLY

OFFICE OF THE NKWANTA NORTH DISTRICT ASSEMBLY

Post Office Box 1
Kpassa – Oti Region
Tel: 07127315

Our Ref: NNDA.02/10/17/011

Your Ref:.....

Date: 22nd April, 2024

TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION

The Management of Nkwanta North District Assembly writes to introduce Miss Doreen Kafui Quarshie, a student in the Department of Maternal and Child Health at the school of Nursing and Midwifery, University of Ghana who is to undertake a research study for her MPhil Programme titled "Psychosocial Wellbeing of Obstetric Fistula Survivors at Nkwanta North District in Oti-Region".

Kindly offer her all the necessary assistance she may need in this exercise.

Counting on your cooperation.

SEVLO AGYEI
DISTRICT COORINATINGDIRCTOR
For: DISTRICT CHIEF EXECUTIVE