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COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY



QUALITY OF LIFE OF WOMEN LIVING WITH INFERTILITY IN THE TAMALE

METROPOLIS

BY

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**A THESIS SUBMITTED TO THE COLLEGE OF HEALTH SCIENCES, UNIVERSITY
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NOVEMBER 2025

DECLARATION

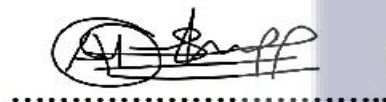
I, Aliu Hadhrat Iddrisu, declare that this thesis, titled "Quality of life of women living with infertility in Tamale Metropolis" is entirely my work, completed with the assistance of my supervisors. Additionally, I declare that, except for duly acknowledged published works and books, this thesis has not been submitted in whole or in part for a degree or award at this university or any other institution.



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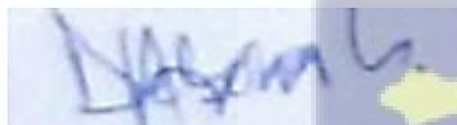


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DEDICATION

This study is dedicated to all women with fertility issues whose strength and perseverance stimulated this piece of work. That this research may help to understand more and aid their lives.



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ABSTRACT

Background: Infertility remains a major reproductive health concern globally and is particularly significant in Ghana, where motherhood is highly valued as a marker of womanhood and social identity. Women living with infertility often face challenges that extend beyond biomedical dimensions, affecting their health, socioeconomic stability, psycho-spiritual well-being, and family relationships. Despite this, limited research has explored the lived experiences of women living with infertility in northern Ghana, particularly within the Tamale Metropolis.

Objective: This study explored the quality of life of women living with infertility in the Tamale Metropolis, drawing on the Holistic Quality of Life Model to capture health, social, psychological, spiritual, and family dimensions of their experiences.

Methods: An exploratory descriptive qualitative design was employed. Ten women of reproductive age (18–45 years), diagnosed with infertility for at least one year and attending gynecological clinics at Tamale Teaching Hospital, were purposively selected. Data were collected through in-depth interviews guided by a semi-structured interview guide developed from the Holistic Quality of Life Model, study objectives, and literature review. Interviews were audio-recorded, transcribed verbatim, and analyzed thematically using NVivo software. Trustworthiness was enhanced through supervision by experienced qualitative researchers and mentoring by a professor in infertility and women's health.

Findings: Five major themes emerged: (1) health and functioning, including physical health challenges, emotional distress, reduced daily functioning, and negative self-perception; (2) socioeconomic impact, comprising financial burden, career disruption, stigma, cultural pressures, and economic vulnerability; (3) psycho-spiritual impact, with grief, faith-based coping, and reliance on religious and traditional healing; (4) family and social support, highlighting spousal support, extended family responses, pressures, gendered expectations, and social comparison; and (5) coping strategies and recommendations, including personal resilience, peer support, healthcare utilization, community education, and spiritual/alternative therapies.

Conclusion: Infertility profoundly affects the holistic quality of life of women in the Tamale Metropolis, with implications beyond physical health to psychological, socio-economic, spiritual, and family domains. Nursing and midwifery practice must adopt culturally sensitive, family-

centered, and holistic approaches. Education should strengthen infertility-related content, while health policies must address affordability and stigma. Further research is needed to design interventions that enhance the well-being of women living with infertility.

Keywords: Infertility, Quality of life, Women, Ghana, Holistic Quality of Life Model, Qualitative research



LIST OF ABBREVIATIONS

IVF - In Vitro Fertilization

WHO - World Health Organization

RQ - Research Question

PH - Public Health

HRQOL- Health Related Quality Of Life

QOL- Quality of Life

PCOS-Polycystic Ovarian Syndrome

ART- Assisted Reproductive Technology



CHAPTER ONE

INTRODUCTION

1.0 Introduction

This is the opening chapter of the thesis which provide clarity on the background terms, problem statement, objectives and the focus of the thesis.

1.1 Background

The World Health Organisation defines quality of life (QoL) as an individual's sense of fulfilment based on certain criteria and goals formed by cultural and societal norms. QoL entails assessing an individual's entire well-being, which goes beyond clinical symptoms and includes the physical, emotional, and social consequences of a condition. Schipper and colleagues also emphasise the impact of sickness and therapy on quality of life, focusing on the patient's perspective.

Basic human desires, such as procreation and the desire to raise a family, inextricably link to an individual's overall well-being. Infertility is a difficult condition that may be heart breaking to both individuals and couples. Infertility is defined by the World Health Organisation (2020) as the failure to obtain a clinical pregnancy after 12 months or more of frequent unprotected intercourse. Infertility can be classified as primary or secondary. Primary infertility is defined as the failure to conceive following one year of unprotected intercourse (WHO, 2018). Secondary infertility is the inability to conceive again following a previous pregnancy, regardless of the outcome (WHO, 2018).

Infertility is a major global public health issue that affects millions of women and has serious implications for their well-being. In Sub-Saharan Africa, up to 30% of couples may have

infertility (Annan-Frey et al., 2023). In Ghana, infertility affects about 11% of women of reproductive age (Polis et al., 2020). Women in Tamale Metropolis confront specific issues connected to infertility, which have a profound influence on their physical, mental, and social health. The high incidence of infertility in Africa exacerbates psychological and social demands on women, who frequently carry a disproportionate burden as a result of cultural expectations surrounding childbearing (Abeongo, 2018).

Infertility in women in the Tamale Metropolis can have serious implications, including social isolation, marital instability, and psychological problems like worry and despair (Kiani et al., 2022). The cultural emphasis on reproducing frequently leads to feelings of inadequacy and solitude, thus lowering their quality of life (Annan-Frey et al., 2023). Limited access to affordable reproductive therapies in the region exacerbates these issues, leaving many women without the assistance or tools they need to address infertility.

A comprehensive strategy is required to completely comprehend the quality of life of women coping with infertility in the Tamale Metropolis. This approach entails investigating the physiological, psychological, and sociological aspects of their life, as well as the coping mechanisms they employ. This complete understanding can help to inform initiatives and policies aimed at enhancing the well-being of infertile women in the region.

Infertility affects approximately 10% of the global population, with a rate of 30% in Sub-Saharan Africa (Nwobodo & Isah, 2011; Tabong & Adongo, 2013; Naab, Lawali, & Donkor, 2017). In Ghana, the prevalence of infertility varies by region, with urban areas having greater rates than rural ones (Polis et al. 2020). Infertility can be caused by environmental, occupational, genetic, or viral reasons (Siristatidis et al., 2020; Hart, 2016), with the most prevalent being ovulatory disorders, fallopian tube damage, and uterine abnormalities. Aduloju et al. (2015) and Diamond (2017) report that the cause of 30% of cases is unknown.

Infections, the consequences of improper abortions, and disorders like polycystic ovarian syndrome (PCOS) and endometriosis heavily influence infertility in Ghana. Access to fertility treatments and healthcare facilities is frequently limited, especially in rural regions (World Bank, 2022), and many women lack access to specialised fertility clinics, compounding the problem (Macrotrends, 2024). Infertility also carries a considerable societal stigma, which causes emotional misery, social isolation, marital instability, and mental health issues for women.

In Ghanaian society, where childbearing is regarded as a hallmark of womanhood, infertility is heavily stigmatised. Women who are unable to bear children are frequently perceived as incomplete (Armah et al., 2020; Naab et al., 2017). While both men and women experience feelings of failure and inadequacy, women bear a disproportionate emotional burden due to cultural expectations. Infertile women frequently endure rejection and social marginalisation (Pedro, 2017).

Women, especially during their reproductive years, are more prone to face mental health issues (Kuehner, 2017). Women who are unable to conceive are more likely to experience psychological problems such as depression, anxiety, and suicidal ideation. According to research, infertile couples have a greater risk of sexual dysfunction than the general population (Ercan et al., 2013; Shahraki et al., 2018), although this component of well-being is frequently overlooked.

Infertility exposes women to additional difficulties such as partner violence, worsening emotional strain and weakening social support systems (Aduloju et al., 2015; Esan et al., 2022). Evidence shows that couples managing infertility experience pessimism, loss of control, and isolation, which further reduces their well-being (Shahraki et al., 2018). These observations indicate that infertility affects multiple dimensions of daily life and limits women's ability to

achieve stable physical and mental health. The present study therefore focuses on understanding the quality of life of women living with infertility in the Tamale Metropolis, given the need to address the social and psychological consequences linked to this condition.

1.2 Problem Statement

Pregnancy and childbirth are important roles for women in both developed and poor countries. To achieve desired fertility, maintain stable relationships, and participate fully in social and community life, an ideal reproductive health environment should provide support for women to navigate the reproductive cycle. Quality of life within such an environment reflects emotional well-being, social support, and the ability to meet personal and cultural expectations. Recent evidence from global studies shows that infertility disrupts these expectations and produces psychological distress, social isolation, and reduced overall well-being among affected women (Namdar et al., 2017; Dourou et al., 2023). These findings indicate that infertility affects emotional health, daily functioning, and interpersonal relationships, making it a significant public health concern. The World Health Organization recognises infertility as a global health issue because of its broad social and psychological consequences, which underscores the need for continued research on the lived experiences of affected women.

The context of the Tamale Metropolis presents unique sociocultural dynamics that intensify the burden of infertility. Evidence shows that cultural and ethnic norms strongly influence how women perceive infertility and how communities respond to those who experience it (Bakhtiyar et al., 2019). In Tamale, motherhood is regarded as a central marker of womanhood and social status. Women who are unable to conceive face pressure from extended family members, community expectations, and marital obligations. These pressures generate emotional strain, stigma, fear, and strained relationships within households. Studies from

similar cultural settings show that such expectations heighten the psychological impact of infertility and contribute to significant distress among affected women (Daibes et al., 2018). These observations suggest that women living with infertility in Tamale may experience complex psychosocial challenges shaped by deeply rooted cultural beliefs about fertility and motherhood.

The consequences of these challenges extend to marital stability, mental health, and social participation. Evidence shows that infertility contributes to relationship tension, partner remarriage, and reduced quality of life, which requires careful attention in clinical and psychosocial care (Dural et al., 2016). These implications highlight the need to understand how infertility affects quality of life in settings where reproductive expectations are strong and community influence is significant. Given these concerns, the present study investigates the quality of life of women living with infertility in the Tamale Metropolis to guide interventions that respond to their psychological, social, and cultural needs.

1.3 Purpose of the Study

The purpose of the study is to investigate the quality of life of women living with it in Tamale Metropolis, Ghana.

1.4 Research Questions

1. What is the health and functioning of women living with infertility in the Tamale Metropolis?
2. How have socio-economic factors affected women living with infertility in the Tamale Metropolis on their quality of life?
3. How has infertility affected your psycho-spiritual aspect of life?
4. How does the level of social support from family affect the quality of life of women experiencing infertility in the Tamale Metropolis?

1.5 Specific Objectives

1. To explore the health and functioning of women living with infertility.
2. To describe the socio-economic factors affecting women with infertility.
3. To assess the psycho-spiritual factors affecting women with infertility.
4. To describe the perceived emotional support from a family of women with infertility.

1.6 Significance of the study

The results of the study will contribute to knowledge on the impact of infertility on the quality of life of women living with it in Tamale Metropolis. This will serve as an important source of information for clinical practice among health practitioners. Also, the study findings will inform key stakeholders including Ministry of health, and the Ghana Health Service on the formulation of policies on infertility management and serve as a guide in decision-making on care of women living with infertility in Ghana and beyond.

1.7 Operational Definitions

Dysmenorrhea: Dysmenorrhea is defined as the pain associated with menstruation, which may range from mild to severe and can impact daily functioning.

Health-Related Quality of Life (HRQoL): HRQoL refers to an individual's or group's perceived physical health, psychological health, social relationships, and environmental health over time.

Infertility: Infertility is defined as a disease of the male or female reproductive system, characterized by the inability to achieve pregnancy after 12 months or more of regular, unprotected sexual intercourse. It may occur due to male, female, or unexplained factors (WHO, 2024a).

Primary Infertility: Primary infertility refers to the condition in which a couple has been married for at least one year and has not achieved conception despite engaging in regular, unprotected sexual intercourse.

Quality of Life (QoL): In this study, Quality of Life is defined as “an individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (World Health Organization, 2024b).

Secondary Infertility: Secondary infertility refers to the condition where a couple who has previously achieved at least one conception, regardless of the outcome, is unable to conceive again after at least 12 months of regular, unprotected sexual intercourse.

1.8 Organization of the Study

This study is organised into six Chapters; chapter one entails the study's background, problem statement, study purpose, study objectives, and significance of the study. Chapter Two consist of the theoretical framework and literature review, while Chapter Three consists of the methodology employed for the study. The findings of the research are presented in Chapter Four, while Chapter Five covers the discussion of the findings in relation to existing literature. Finally, Chapter Six includes the summary, recommendations, limitations, implications and conclusion of the study.



CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.0 Introduction

This chapter provides a comprehensive literature assessment on the quality of life of women enduring infertility. The review is organised around several important study aims, including an examination of the impact of infertility on the quality of life of women experiencing infertility. To obtain relevant material, the researcher used a variety of bibliographic databases such as PubMed, Google Scholar, and Scopus. Furthermore, this chapter offers the theoretical framework that underpins the study, shedding light on the model used to guide data analysis and interpretation. The next sections will provide detailed literature on conceptualising quality of life in infertility, health and functioning of women living with infertility, socioeconomic

factors affecting women with infertility, psycho-spiritual factors affecting women with infertility, and perceived emotional support from family and social networks. The last section outlines the summary of the literature review process and the main findings presented.

2.1 The Theoretical Framework in which this Study is situated

Three theoretical frameworks were first examined to investigate the quality of life (QoL) of infertile women in the Tamale Metropolis. These frameworks include the Holistic Quality of Life Model, Wilson and Cleary's Quality of Life Model, and the Bio-Psychosocial Model. The Holistic Quality of Life Model, however, was chosen as the best fit.

2.1.1 The Bio-Psycho-Social Model

The Bio-Psycho-Social (BPS) Model, created by George L. Engel in the late 1970s, was the first theoretical framework taken into consideration for this investigation. This model was first presented by Engel (1977) as a substitute for the conventional biomedical model, which primarily relied on biological factors to explain and treat illness. According to the BPS model, which combines biological, psychological, and social elements, health and illness are the outcome of these three dimensions' dynamic interaction (Borrell-Carrió, Suchman, & Epstein, 2004). For example, a person's health outcomes are impacted by social relationships, emotional health, environmental factors, and physiological and genetic processes.

The model is mainly intended for use in quantitative research methodologies, where each of the three domains can be operationalised and measured, even though it offers a broad conceptualisation of health and well-being. Instead of focussing on quantifiable variables, the current study uses a qualitative phenomenological approach, which aims to comprehend lived experiences and subjective meanings. Because it does not adequately fit the study's methodological orientation, the BPS model was determined to be inappropriate as the guiding framework for this investigation.

2.1.2 Wilson and Cleary's Quality of Life Model

Wilson and Cleary's Quality of Life Model, which offers an organised route connecting clinical and biological factors with subjective quality of life outcomes, was the second framework examined. According to Wilson and Cleary (1995), the model depicts a continuum that starts with biological functioning, moves on to symptom status and functional health, and ends with general health perceptions and overall quality of life. Its capacity to link clinical indicators with patient-reported outcomes has led to its widespread use in health-related quality of life (HRQoL) research (Ferrans, Zerwic, Wilbur, & Larson, 2005).

In the context of the current study, the Wilson and Cleary model has significant limitations despite its advantages. Its primary focus is biomedical and functional, emphasising health issues and how they directly affect people's quality of life. This limited focus might ignore important sociocultural, psychological, and spiritual factors that greatly influence infertility, especially for women in the Tamale Metropolis (Sosnowski, Cella, & Wyrwich, 2017). In this context, infertility is not just a medical condition; it is also a profoundly social and cultural problem that impacts women's identities, roles in the home, and spiritual health. The Wilson and Cleary model was deemed insufficient for directing this investigation since it fails to specifically address these more extensive contextual elements.

2.1.3 The Holistic Quality of Life Model

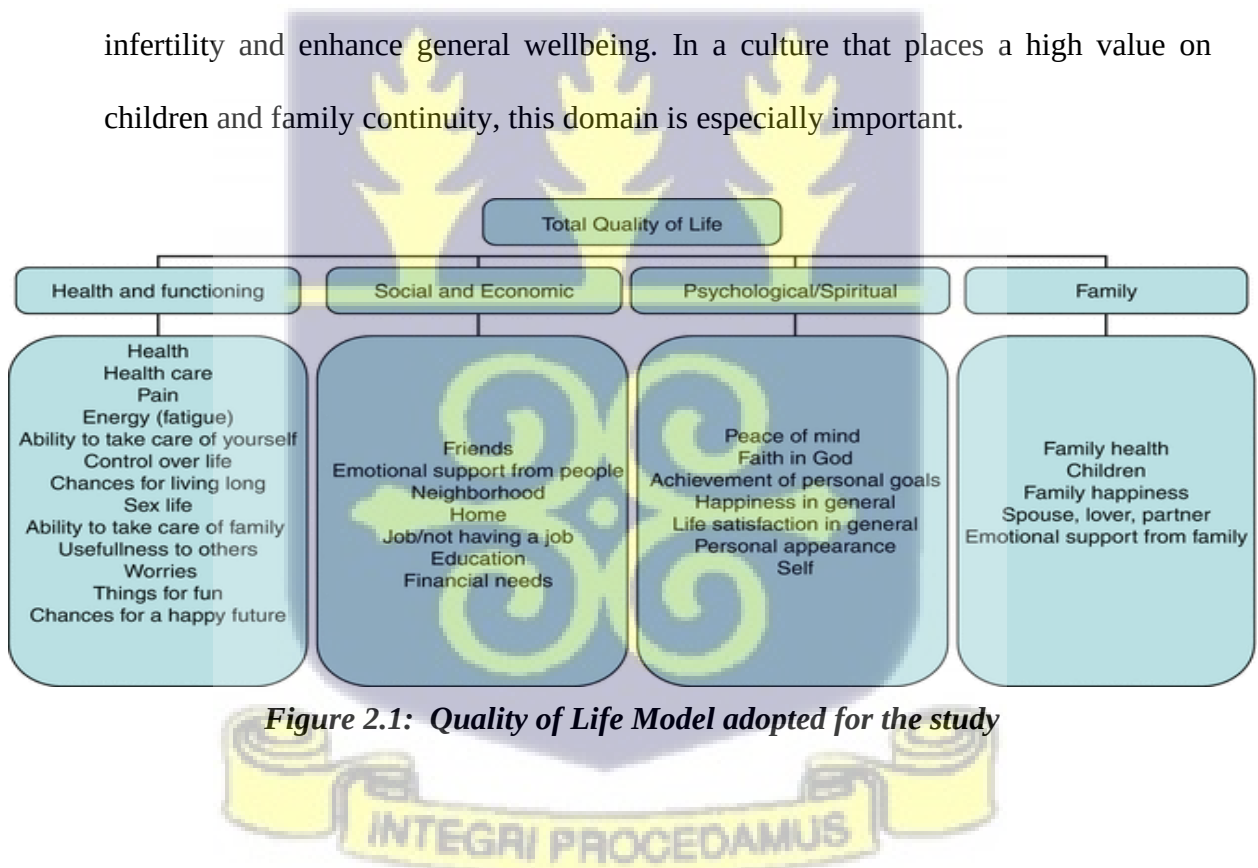
In the end, the Holistic Quality of Life (QoL) Model was chosen as the best theoretical framework for this research. According to Ferrans and Powers (1992), this model views quality of life as an integrated phenomenon that encompasses the larger social, psychological, spiritual, and familial components of human experience in addition to physical health. In order to comprehend the lived realities of infertile women in the Tamale Metropolis, it identifies four

essential domains: family, psychological and spiritual well-being, social and economic well-being, and health and functioning. Refer to **figure 2.1** for the model diagram.

- **Health and functioning:** Physical health, pain, energy levels, self-care and interpersonal care skills, independence in day-to-day activities, sexual health, and healthcare access are all included in the first domain, health and functioning. Since infertility is frequently accompanied by exhaustion, hormonal imbalances, uncomfortable medical procedures, and issues with sexual health, this dimension is extremely important for women who are experiencing infertility. Furthermore, women's general well-being and ability to manage their health are impacted by Tamale's frequently restricted access to fertility-related healthcare services. Thus, this domain enables the study to document how women's experiences of infertility are influenced by physical health issues and access to care.
- **Social and economic well-being:** Friendships, peer emotional support, education, employment and job security, financial stability, and living conditions make up the second domain, social and economic well-being. In the context of infertility, women in the Tamale Metropolis frequently experience strained peer relationships, social stigma, or exclusion from community networks due to their infertility. Economic difficulties could also arise because infertility treatments are expensive, and women who are financially reliant on their partners might experience additional stress. Thus, this dimension emphasises how the quality of life for women who are infertile is impacted by the intersection of social isolation and financial strain.
- **Psychological and spiritual well-being:** Peace of mind, faith in God, happiness, life satisfaction, reaching personal goals, and self-perception are all covered in the third domain, psychological and spiritual well-being. Infertility is commonly linked to emotional distress, such as sadness, anxiety, shame, and a diminished sense of self-

worth, in Northern Ghana. At the same time, a lot of women find strength and hope in their spirituality and belief in God. Therefore, this area is essential for investigating how women deal with the psychological effects of infertility while finding solace in their spiritual convictions to preserve their sense of purpose and fulfilment in life.

- **Family:** Marital relationships, children, family health, family happiness, and emotional support from family members are all included in the fourth domain, family. Women's identities and social roles in the Tamale Metropolis are significantly shaped by family structures and expectations. Infertility can cause marital tension, disturb family harmony, and expose women to neglect or criticism from in-laws. On the other hand, a spouse or family member's emotional support can lessen the negative consequences of infertility and enhance general wellbeing. In a culture that places a high value on children and family continuity, this domain is especially important.



2.1.4 Justification of Theoretical Framework: Holistic Quality of Life Model

The holistic Quality of Life Model was chosen for this study due to its comprehensive, integrative, and culturally sensitive approach to understanding infertility in women. It considers social, cultural, spiritual, and familial elements that are essential to exploring lives of women

leaving with infertility with the sociocultural context in Northern Ghana. The model is also consistent with qualitative design, which focuses on meanings and subjective experiences rather than quantifiable variables. It is flexible and sensitive to context, considering areas like spirituality, family, and socioeconomic circumstances. In the Tamale Metropolis, where infertility is often viewed through social, cultural, and religious lenses, these elements are especially important. The holistic QoL model is a more comprehensive and sensitive framework than the Bio-Psycho-Social or Wilson and Cleary models, making it an ideal choice for understanding infertility in women.

When combined, these four domains constructs of the model including social, economic, psychological, spiritual, and familial aspects provided the opportunity to explore these areas among women living with infertility to ascertain their perceived quality of life. This study is better equipped to document the whole range of experiences of infertile women in Tamale by using the Holistic Quality of Life Model, which will give the researcher a thorough appreciation of how infertility affects their lives than the bio-psychosocial and Wilson's Quality of life models.

2.2 Literature Review

2.2.1 Overview of infertility as a global and local public health issue

Infertility meets the criteria of a public health concern due to its high prevalence, psychosocial impact, and inequities in care access. WHO (2023) highlights that infertility prevalence is similar across all income levels, underscoring the universality of the issue. At the same time, ART access remains limited in LMICs, largely due to prohibitive costs and weak regulation (Dyer et al., 2024).

The mental health burden further amplifies its public health relevance. Recent meta-analyses confirm that infertility is associated with poorer quality of life and elevated levels of depression

and anxiety (Peng et al., 2024; Aimagambetova et al., 2023). These findings reinforce the call for integrating psychosocial services within fertility care.

Sociocultural expectations and limited health-system capacity shape infertility in Ghana. Studies indicate that childbearing is strongly linked to social identity, and women bear the greatest psychosocial and marital strain when infertility occurs (Donkor & Sandall, 2007; Osei et al., 2024). Stigma, isolation, and marital conflict are recurrent themes, while male factor infertility is often under-recognised (Naab et al., 2019).

Population-based evidence remains scarce, but Kodzi et al. (2020) examined perceived infertility among Ghanaian women and found notable prevalence, indicating unmet informational and health-care needs even before biomedical diagnosis. Access to ART services is largely restricted to private facilities, with costs often running into thousands of U.S. dollars, far beyond the reach of most households (Hörbst, 2021). These services are also excluded from the National Health Insurance Scheme (NHIS), leaving couples to rely on out-of-pocket financing (Osei et al., 2024).

Equally concerning is the lack of comprehensive regulation. Ghana lacks a dedicated ART policy framework, creating ethical challenges around quality assurance, donor protection, and consumer safety (Akotia, 2020). This regulatory vacuum raises public health concerns, particularly given the growth of private-sector fertility services. At the policy level, Ghana's reproductive health strategy emphasises prevention of infertility through infection control and safe motherhood initiatives (GHS, 2015). However, infertility diagnosis and treatment are not systematically integrated into public reproductive health services, representing a clear gap in universal health coverage (UHC).

Infertility is defined by the World Health Organisation (WHO) as a disease of the reproductive system characterised by the failure to achieve pregnancy after 12 months or more of regular

unprotected sexual intercourse. It is categorized as primary (no prior pregnancy) or secondary (occurring after a previous pregnancy) (WHO, 2024a). Measurement, however, remains complex and contested. Boivin et al. (2022) note that prevalence estimates vary widely depending on study design, recall period, and definitions, which complicates comparisons across countries and over time. Despite this variability, infertility is now recognized as a common condition with global distribution.

A recent WHO (2023) analysis across 133 studies estimated that about one in six individuals experience infertility in their lifetime, with comparable prevalence across high-, middle-, and low-income regions. These findings challenge earlier assumptions that infertility is primarily a “developing world” problem and reframe it as a universal public health issue (WHO, 2023).

Beyond epidemiology, infertility carries significant psychosocial consequences. Contemporary systematic reviews confirm that individuals with infertility have higher risks of depression, anxiety, and distress, which frequently contribute to discontinuation of treatment (Aimagambetova et al., 2023; Peng et al., 2024; Szkodziak et al., 2022). Consequently, scholars and clinicians emphasise the integration of psychological care within infertility services rather than treating it solely as a biomedical issue.

Another important shift in recent literature is recognition of male factor infertility. Although male factors contribute to nearly half of infertility cases, health systems and sociocultural narratives often neglect men, placing disproportionate blame on women (WHO, 2024a). The policy discourse increasingly advocates for male-inclusive services, standardized semen analysis, and culturally sensitive education to reduce stigma and delays in care.

Finally, access to infertility care is profoundly unequal. High-income settings heavily concentrate assisted reproductive technologies (ART), while low- and middle-income countries (LMICs) face significant cost barriers. Estimates suggest that sub-Saharan Africa

would require approximately 1,500 ART cycles per million people to meet demand, yet actual delivery is far below this figure (Dyer et al., 2024). The inequity points to the need for innovative, affordable ART models and financing reforms to reduce out-of-pocket burdens.

2.2.2 Definition of infertility and its prevalence worldwide and in Ghana

Infertility has increasingly been recognized not only as a biomedical condition but also as a social and public health concern. The World Health Organisation (WHO, 2024) defines infertility as a disease of the reproductive system, characterised by the failure to achieve a clinical pregnancy after at least 12 months of regular unprotected sexual intercourse. Within this framework, infertility is further categorized into primary infertility, when an individual or couple has never achieved a pregnancy, and secondary infertility, which occurs after at least one previous pregnancy. These distinctions are critical because they highlight the different pathways through which infertility can affect individuals and families.

Building on this standard, the International Committee for Monitoring Assisted Reproductive Technology (ICMART), in collaboration with WHO, developed the International Glossary on Infertility and Fertility Care to harmonise definitions globally (Zegers-Hochschild et al., 2017). This glossary not only standardizes the 12-month threshold but also distinguishes between measures of fecundity, fecundability, and infertility. It also acknowledges that while the traditional definition is anchored in heterosexual intercourse, there is a growing need for inclusive, access-orientated definitions to accommodate single individuals and same-sex couples who may require fertility care for reasons unrelated to biological dysfunction (Zegers-Hochschild et al., 2017; WHO, 2024). This broadened framing reflects an evolving consensus that infertility is as much about access to reproductive technologies as it is about clinical pathology.

Globally, infertility is a common condition, and recent estimates confirm that it is a universal phenomenon rather than a problem limited to specific regions. The WHO (2023) analysis of 133 studies across all income settings reported that approximately 17.5% of adults, around one in six people, experience infertility during their lifetime. Importantly, the prevalence rates were found to be remarkably similar across high-, middle-, and low-income countries, suggesting that infertility is not constrained by geography but is a shared human experience. A methodological review by Cox et al. (2022) supports this conclusion, estimating lifetime infertility prevalence at about 17.5% and 12-month period prevalence at 12.6%. However, this review also cautions that prevalence estimates vary significantly depending on definitions, measurement approaches, and study design. For example, population-based studies often yield higher prevalence estimates than clinical samples, and the recall period for failed conception attempts can dramatically influence reported figures. This variability complicates global comparisons and trend analysis, making methodological transparency critical in infertility research.

The global evidence also emphasizes important differences between primary and secondary infertility. Vander Borgh and Wyns (2018) note that while primary infertility is often associated with genetic, hormonal, or anatomical factors, secondary infertility is disproportionately linked to preventable causes such as reproductive tract infections, unsafe abortions, postpartum complications, and untreated sexually transmitted infections. This observation has significant public health implications, particularly in low- and middle-income countries (LMICs), where access to quality reproductive health services remains uneven. Thus, while advances in assisted reproductive technologies (ART) offer hope to many, addressing preventable causes of infertility remains a cornerstone of public health interventions worldwide (WHO, 2024).

Compared to global data, Ghana's evidence on infertility prevalence is relatively limited, yet existing studies provide important insights. Population-based studies remain scarce, with most research relying on perceived infertility, community surveys, or facility-based data. A nationally representative study by Polis et al. (2020) examined women's perceptions of infertility and found significant levels of perceived subfertility. While perceived infertility does not always equate to clinical infertility, it is nevertheless policy-relevant because it shapes health-seeking behaviour and contributes to psychosocial burdens such as stigma and marital strain.

Community-level research in Ghana has similarly documented the prevalence of infertility. For instance, Geelhoed et al. (2002), in a rural Ghanaian study, reported infertility levels using a 12-month self-reported definition. Although dated and geographically limited, their findings highlight the feasibility of community-based assessments and demonstrate persistent knowledge gaps about causes of infertility. More recently, facility-based studies such as Arhin et al. (2019) provide additional perspectives. Their retrospective analysis of infertility cases in a tertiary hospital in Ghana found an infertility prevalence of about 12% among clinic attendees. However, as with many facility-based studies, these figures are not representative of the general population due to selection bias, since individuals who seek care may differ significantly from those who do not.

Despite differences in methodologies, Ghanaian studies converge on the finding that infertility is not rare and carries profound social consequences. Kisiwaa et al. (2024) demonstrated that women undergoing in vitro fertilisation (IVF) in Ghana often face high levels of distress when treatment is unsuccessful, compounded by financial strain since ART services are largely accessed through the private sector and financed out-of-pocket. Indeed, the cost of a single IVF cycle in Ghana is prohibitive for most households, and the absence of coverage under the National Health Insurance Scheme further widens inequities in access to care (Hörbst, 2021).

Overall, the evidence underscores that while the biological prevalence of infertility in Ghana is consistent with global patterns, the social and health-system context creates a distinctive burden. The absence of standardized, population-based clinical prevalence data makes it difficult to compare directly with global figures, but the available evidence suggests significant unmet need. Addressing this requires investment in both preventions, through infection control, safe motherhood, and post-abortion care, and treatment, including affordable ART and stronger regulation of fertility services. Thus, infertility in Ghana represents both a biomedical and a systemic challenge, situated within global trends yet shaped by local socio-cultural and economic realities.

2.2.3 Justification for studying the perceived impact of infertility on women's quality of life

Infertility is increasingly acknowledged as a major life crisis with profound consequences for women's quality of life (QoL). While it is often framed primarily as a biomedical issue, a growing body of literature demonstrates that the effects of infertility extend far beyond reproduction, encompassing psychosocial, relational, cultural, and economic dimensions (Peng et al., 2024; Szkodziak et al., 2022). Understanding these broader impacts is crucial, particularly in contexts such as sub-Saharan Africa, where motherhood is strongly tied to social identity and marital stability (Donkor & Sandall, 2007; Naab et al., 2019).

Globally, numerous studies have documented that infertility is associated with poorer mental health outcomes, including higher rates of depression, anxiety, and stress compared to fertile populations (Aimagambetova et al., 2023; Peng et al., 2024). Women frequently report feelings of loss, stigma, and diminished self-worth, which in turn negatively influence their social relationships and daily functioning (Szkodziak et al., 2022). Moreover, infertility affects multiple domains of QoL, including emotional well-being, marital satisfaction, financial

stability, and even occupational performance. A systematic review by Aimagambetova et al. (2023) concluded that psychological distress is one of the most significant barriers to continued treatment, which emphasises the value of assessing women's subjective experiences alongside clinical outcomes.

In low- and middle-income countries, the perceived impact of infertility is further amplified by cultural expectations around fertility and lineage continuation. In many African societies, including Ghana, motherhood is considered central to womanhood, and infertility often results in stigma, marital conflict, and, in some cases, divorce or polygyny (Donkor & Sandall, 2007; Osei et al., 2024). Women are disproportionately blamed for childlessness, even when male factor infertility contributes equally to cases (WHO, 2024). This gendered burden magnifies psychosocial distress and makes the study of women's lived experiences especially relevant.

Economic considerations also justify such inquiry. Fertility treatments, particularly assisted reproductive technologies (ART), are prohibitively expensive in many low-resource settings. In Ghana, ART is largely accessed through private facilities and financed out-of-pocket, with costs far exceeding average household incomes (Hörbst, 2021; Kissiwaa et al., 2024). For women and couples, the financial strain of repeated unsuccessful treatment cycles adds to emotional distress, creating a cumulative negative effect on quality of life. As Kissiwaa et al. (2024) found in their study of Ghanaian women undergoing IVF, unsuccessful treatments often exacerbate feelings of despair, hopelessness, and financial insecurity, thereby highlighting the intersection between health inequities and QoL outcomes.

Furthermore, studying perceived impacts is critical because objective biomedical outcomes alone cannot capture the lived realities of infertility. Perceptions often shape health-seeking behaviour, adherence to treatment, and coping strategies (Naab et al., 2019). For example, women who perceive infertility as a socially isolating condition may resort to traditional

healing methods or withdraw from social participation, which further deteriorates quality of life. By centering women's perspectives, research can illuminate coping mechanisms, resilience factors, and the role of cultural and community support in mitigating distress.

From a policy perspective, evidence on the perceived impact of infertility on QoL provides valuable insights for developing responsive health interventions. In Ghana, infertility is not systematically integrated into national reproductive health programs, and psychosocial services remain limited (Osei et al., 2024). Documenting the lived consequences for women strengthens the case for incorporating infertility into broader reproductive health and universal health coverage agendas. It also emphasizes the need for holistic care models that address not only biomedical treatment but also psychosocial support and financial protection.

In sum, investigating the perceived impact of infertility on women's quality of life is justified on three grounds: (1) it highlights the multidimensional nature of infertility, extending beyond biomedical definitions to encompass social, psychological, cultural, and economic realities; (2) it reflects the unique gendered burdens faced by women in contexts like Ghana, where childbearing is central to social status; and (3) it provides critical evidence to inform culturally sensitive, equitable, and holistic interventions. Without such understanding, infertility risks being addressed in narrow biomedical terms, overlooking the lived experiences of those most affected.

2.2.4 Conceptualizing Quality of Life in Infertility

2.2.4.1 Definitions of quality of life (QoL) and its significance in healthcare

The concept of quality of life (QoL) has become central in health research and practice, particularly as the focus of healthcare has shifted from merely prolonging survival to enhancing overall well-being. The World Health Organisation (WHO, 1997) defines QoL as “an individual's perception of their position in life in the context of the culture and value

systems in which they live and in relation to their goals, expectations, standards, and concerns.” This definition underscores the multidimensional and subjective nature of QoL, as it reflects how individuals experience their lives rather than relying solely on objective health indicators.

In healthcare, QoL is particularly significant because biomedical outcomes alone often fail to capture the lived realities of illness and treatment. For instance, two patients with the same clinical prognosis may report very different levels of well-being depending on their psychological resilience, social support, financial security, and cultural context. Karimi and Brazier (2016) emphasized that health-related quality of life (HRQoL) provides a more patient-centered perspective by accounting for both functional status and subjective well-being. This has become a crucial evaluative dimension for chronic and non-life-threatening health conditions where treatments may not restore full health but aim to optimize daily functioning and life satisfaction (Cummins, 2020).

In the context of infertility, the significance of QoL lies in the fact that infertility does not directly threaten physical survival but profoundly influences emotional stability, marital relationships, social roles, and financial security (Boivin et al., 2011). Unlike many other health conditions, infertility often challenges deeply held cultural and personal values related to identity, lineage, and womanhood, making its psychological and social consequences as important as biomedical ones (Donkor & Sandall, 2007). Consequently, examining QoL in infertility research provides a holistic understanding of the burden of the condition, identifies hidden psychosocial needs, and supports the development of interventions that go beyond clinical treatment to improve the lived experiences of affected individuals.

2.2.4.2 How infertility impacts QoL differently in various cultural and socioeconomic contexts

While infertility universally affects quality of life, its impact is mediated by cultural norms, gender roles, and socioeconomic conditions, leading to wide variations across settings. In high-income countries, infertility is often primarily framed as a medical challenge, with individuals and couples focusing on access to assisted reproductive technologies (ART) as a solution. Although treatments may alleviate distress for some, repeated unsuccessful attempts often lead to significant psychological burdens, including heightened anxiety, depression, and marital conflict (Gameiro et al., 2014; Peng et al., 2024). The stigma attached to infertility in these contexts tends to be less overt, but feelings of personal inadequacy, loss of control, and diminished self-esteem are commonly reported (Szkodziak et al., 2022).

In contrast, in low- and middle-income countries (LMICs), the psychosocial consequences of infertility are often amplified by strong pronatalist cultural expectations. In many African societies, including Ghana, motherhood is not only highly valued but also central to women's identity and social status. Women who are unable to bear children often face stigma, marital instability, exclusion from social networks, and, in some cases, domestic abuse (Donkor & Sandall, 2007; Naab et al., 2019). In such settings, infertility can severely undermine a woman's perceived worth within her family and community, leading to profound psychological distress and social isolation. Moreover, because infertility is often assumed to be a woman's problem, men's infertility is under-recognized, reinforcing gendered inequities (Inhorn & Patrizio, 2015; Hörbst, 2021).

Socioeconomic context further influences the extent of QoL disruption. In high-income countries, although ART is expensive, insurance coverage or subsidized healthcare may reduce the financial burden. However, in LMICs such as Ghana, fertility treatment is predominantly

financed out-of-pocket, and services are concentrated in urban private clinics (Hörbst, 2021; Kissiwaa et al., 2024). This means that access to ART is limited to wealthier populations, leaving the majority of infertile couples without viable treatment options. For those who attempt treatment, the financial strain can lead to catastrophic health expenditures, compounding emotional distress with economic insecurity (Osei et al., 2024).

Cultural worldviews also shape how infertility is conceptualized and experienced. In collectivist societies, childlessness is often perceived not just as a personal misfortune but as a failure to fulfil broader family and communal obligations, intensifying social pressure on women (Inhorn & Patrizio, 2015). By contrast, in individualistic societies, infertility is more likely to be internalized as a personal challenge, often framed in terms of self-identity, autonomy, and psychological well-being. These differences highlight the importance of adopting culturally sensitive approaches in both research and clinical practice when assessing and addressing QoL among infertile populations.

2.2.5 Health and Functioning of Women Living with Infertility

The health and functioning of women living with infertility are influenced by a combination of biological, psychological, and social factors that intersect to shape their overall well-being. While infertility itself is often understood as a biomedical condition, its impact extends far beyond reproductive incapacity, affecting physical health, mental well-being, and access to healthcare. Furthermore, these consequences are often mediated by cultural contexts, health system limitations, and socioeconomic conditions, particularly in low- and middle-income countries such as Ghana. This section critically examines the literature on the physical, psychological, and healthcare-related dimensions of infertility, as well as comparative evidence on the health outcomes of women with and without infertility.

2.2.5.1 Physical health implications of infertility

Infertility is frequently associated with underlying physical health problems, many of which are related to hormonal and gynecological conditions. Polycystic ovary syndrome (PCOS), endometriosis, uterine fibroids, and tubal damage are among the most common contributors to female infertility (Johansson et al., 2022). These conditions not only compromise fertility but also impose additional burdens on women's physical functioning, such as pelvic pain, irregular menstruation, and metabolic complications. For instance, PCOS is associated with insulin resistance and increased risk of type 2 diabetes, linking infertility to long-term chronic disease outcomes (Skiba et al., 2018).

Hormonal imbalances are particularly relevant because they often manifest through systemic disruptions such as irregular menstrual cycles, fatigue, and weight fluctuations, which can significantly affect daily functioning and overall health (Mayo Clinic, 2023). Moreover, infertility treatments themselves, including ovulation-inducing drugs and assisted reproductive technologies (ART), may cause side effects such as bloating, headaches, and ovarian hyper stimulation syndrome, further complicating women's physical health experiences (Palomba et al., 2018).

Chronic stress has also been identified as a physical consequence of infertility. Evidence suggests that prolonged stress can influence reproductive endocrinology, altering cortisol and prolactin levels, which in turn can exacerbate fertility problems (Zegers-Hochschild et al., 2022). Stress-induced immune dysregulation has also been linked to poor reproductive outcomes. In contexts like Ghana, where infertility is heavily stigmatized, the chronic stress experienced by women is compounded by societal and familial expectations, leading to somatic symptoms such as headaches, fatigue, and gastrointestinal problems (Naab et al., 2019). Thus,

infertility not only arises from physical conditions but also perpetuates additional physical health burdens through stress-related pathways.

2.2.5.2 Mental health consequences (anxiety, depression, self-esteem issues)

The mental health implications of infertility are well documented, with evidence showing that infertility is associated with increased rates of anxiety, depression, and reduced self-esteem (Peng et al., 2024; Szkodziak et al., 2022). Unlike many chronic diseases, infertility often strikes at the core of identity and self-worth, especially in cultures where motherhood is central to womanhood. Chachamovich et al. (2010) argue that infertility is unique among health conditions in that its psychological impact may outweigh its physical effects.

Women experiencing infertility often report persistent feelings of grief, loss, and diminished purpose. Depression has been shown to be significantly more prevalent among women with infertility compared to their fertile counterparts (Kiani et al., 2021). Similarly, anxiety disorders are common, driven by uncertainty about future reproductive outcomes and the high emotional toll of repeated treatment failures (Gameiro et al., 2014). Self-esteem issues are particularly pronounced in societies where childbearing is equated with female identity and social acceptance. In Ghana, studies have shown that infertile women are often labelled as “incomplete” or “useless”, which exacerbates internalized stigma and leads to social withdrawal (Donkor & Sandall, 2007; Naab et al., 2019).

Furthermore, the cyclical nature of infertility treatment, with alternating hope and disappointment, creates emotional instability that can result in long-term psychological trauma. Recent meta-analyses demonstrate that the prevalence of depression in infertile women is comparable to that observed in patients with life-threatening conditions such as cancer (Peng et al., 2024). This highlights the urgent need to address infertility not only as a medical condition but also as a significant mental health concern.

2.2.5.3 Access to healthcare services and treatment options for infertility

Access to infertility care remains a major determinant of health outcomes, with significant global disparities. In high-income countries, assisted reproductive technologies (ART), such as in vitro fertilization (IVF) and intrauterine insemination (IUI), are relatively accessible, though often constrained by cost and insurance coverage (ESHRE, 2022). By contrast, in low- and middle-income countries (LMICs), access is limited by cost, geographic availability, and health system priorities.

In Ghana, infertility treatment services are concentrated in urban private facilities, with limited availability in rural areas (Hörbst, 2021). Most couples must pay out-of-pocket for diagnostic tests and ART, making treatment prohibitively expensive for the majority of the population (Osei et al., 2024). This lack of access reinforces health inequities, as wealthier couples are more likely to benefit from advanced technologies while poorer women remain untreated, often resorting to herbal or spiritual remedies. The reliance on unregulated traditional therapies can expose women to harmful practices, further undermining their health and delaying biomedical interventions (Naab et al., 2019).

Even when treatment is available, the psychological and logistical burden can be immense. Gameiro et al. (2014) report that up to 30% of couples discontinue fertility treatments prematurely, citing reasons such as emotional exhaustion, financial strain, and lack of support. In Ghanaian contexts, where extended families often exert strong influence, decision-making around treatment is also shaped by socio-cultural expectations and gendered power dynamics (Donkor & Sandall, 2007). Consequently, access to healthcare for infertility must be understood not only in terms of availability and affordability but also in terms of cultural acceptability and psychosocial support.

2.2.5.4 Comparison of health outcomes between women with and without infertility

Comparative studies consistently demonstrate that women with infertility experience poorer physical and psychological health outcomes compared to their fertile counterparts. For instance, Chachamovich et al. (2010) found that infertile women report lower scores across multiple domains of quality of life, including emotional well-being, marital satisfaction, and social functioning. Similar findings have been replicated in both high-income and low-income contexts, highlighting the universality of infertility's impact.

Women with infertility are also at greater risk for psychosomatic illnesses such as hypertension, sleep disturbances, and chronic pain, often mediated by stress and anxiety (Zegers-Hochschild et al., 2022). Conversely, women with children often report greater life satisfaction and social integration, even when facing other health challenges. In Ghana, Donkor and Sandall (2007) noted that women without infertility were more likely to enjoy stable marriages and higher social standing, while infertile women were frequently marginalised and at risk of marital instability or divorce.

The health disparities extend beyond individual well-being to societal outcomes. Infertile women may be excluded from community leadership, inheritance, or social networks, which further undermines their access to resources and protection. In this sense, infertility operates as both a biomedical condition and a social determinant of health, widening health inequities between fertile and infertile women.

2.2.6 Socioeconomic Factors Affecting Women with Infertility

Infertility is not only a biomedical condition but also a profoundly social and economic issue that shapes women's lives in multiple ways. Its impact extends into areas such as household economics, employment opportunities, marital stability, and broader social participation. These socioeconomic dimensions are particularly pronounced in low- and middle-income countries,

where infertility intersects with entrenched gender norms, limited healthcare resources, and cultural expectations of motherhood (Dyer & Patel, 2012; Inhorn & Patrizio, 2015). In Ghana, where fertility and childbearing remain central to social identity and family continuity, the socioeconomic consequences of infertility are especially severe (Naab et al., 2019; Donkor & Sandall, 2007). This section critically reviews the literature on four key dimensions of the socioeconomic impact of infertility: the economic burden of treatment, employment and financial implications, social stigma and discrimination, and marital instability linked to infertility.

2.2.6.1 Economic burden of infertility treatments

The financial burden associated with infertility care is one of the most significant challenges facing women and couples. Assisted reproductive technologies (ART), such as in vitro fertilization (IVF) and intrauterine insemination (IUI), are widely recognized as costly and often inaccessible in many parts of the world (ESHRE, 2022). In high-income countries, partial insurance coverage may reduce costs, yet affordability still remains a barrier for many couples (Chambers et al., 2014). In contrast, in sub-Saharan Africa, ART services are scarce, largely restricted to private urban facilities, and paid for entirely out-of-pocket, making them unaffordable for the majority of the population (Hörbst, 2021).

In Ghana, the cost of one IVF cycle is estimated to range between USD 3,000 and USD 5,000, far exceeding the average annual household income (Osei et al., 2024). This means that only a small, affluent segment of society can access biomedical treatment, while others are forced to rely on herbal remedies, spiritual interventions, or remain untreated altogether. Even when women manage to pursue treatment, the repeated cycles often required for success amplify financial strain, leading to debt, asset liquidation, and long-term economic vulnerability (Dyer, 2009). Such financial pressures may contribute to heightened distress, as women are forced to

balance the high costs of treatment against other household needs, such as education and food security.

2.2.6.2 Employment and financial implications of infertility

Infertility has direct and indirect implications for women's employment and financial security. Studies show that infertile women often experience reduced workplace productivity due to emotional distress, time spent in medical consultations, and the physical side effects of treatment (Boivin et al., 2020). For those undergoing ART, work absences for medical appointments may result in job insecurity, lost wages, or stalled career progression.

In many cultural contexts, including Ghana, infertility also affects women's long-term financial security through its relationship with inheritance rights and social safety nets. In patrilineal systems, childless women may be excluded from property ownership, inheritance, or even support from extended family networks, further exacerbating economic vulnerability (Hörbst, 2021). Additionally, given that older women in Ghana often rely on their children for care in later life, infertility undermines this form of social protection, leaving them more financially insecure in old age (Naab et al., 2019).

Financial dependence on husbands or extended families is another critical issue. Without children, women may feel less secure in their marriages and households, making them more vulnerable to economic neglect, especially if the husband chooses to remarry or divorce (Donkor & Sandall, 2007). Consequently, infertility not only undermines women's current economic stability but also threatens their future financial resilience.

2.2.6.3 Social stigma and discrimination in Ghanaian society

The stigma associated with infertility remains pervasive and is one of the most significant social consequences for women in Ghana. Motherhood is often viewed as a central marker of womanhood and social identity, and infertility is therefore perceived as a failure to fulfil

expected gender roles (Dyer, 2009; Naab et al., 2019). Women with infertility are frequently subjected to derogatory labels, social exclusion, and even accusations of witchcraft, all of which negatively affect their social integration and self-esteem (Donkor & Sandall, 2007).

This stigma often translates into tangible forms of discrimination. Infertile women may be excluded from community gatherings, family decision-making, and leadership opportunities (Inhorn & Patrizio, 2015). Within marriages, they may face humiliation from in-laws and pressure on husbands to seek children outside the marital relationship. In some cases, stigma escalates into verbal abuse, domestic violence, or forced separation, reflecting the entrenched gendered nature of infertility in Ghanaian society (Naab et al., 2019).

The internalization of stigma further compounds women's suffering. Many women report feelings of shame, secrecy, and withdrawal from social life, which in turn diminishes opportunities for economic advancement and community support (Donkor & Sandall, 2007). Thus, stigma not only harms psychological health but also perpetuates cycles of socioeconomic disadvantage.

2.2.6.4 Marital instability and societal pressures linked to infertility

Infertility has profound implications for marital stability, particularly in societies where procreation is considered the primary purpose of marriage. Research across Africa and Asia shows that infertility is a leading cause of marital conflict, polygamy, and divorce (Dyer, 2009; Inhorn & Patrizio, 2015). In Ghana, women often bear the disproportionate blame for infertility, even though male factors account for nearly half of all cases globally (Zegers-Hochschild et al., 2022). This gender bias exacerbates women's vulnerability within marriage.

Donkor and Sandall (2007) observed that infertile Ghanaian women are frequently pressured by husbands or in-laws to accept a co-wife, endure extramarital affairs, or face outright divorce. Such outcomes not only jeopardize emotional well-being but also leave women socially and

economically disadvantaged. Marital instability further undermines women's access to resources, inheritance, and long-term security, reinforcing the socioeconomic cycle of vulnerability.

Moreover, societal pressures to conceive extend beyond the marital household to the wider community. Public scrutiny of a woman's childbearing status may intensify stress and compel couples to exhaust financial resources in pursuit of treatment, even at the expense of other critical needs (Naab et al., 2019). The interaction of marital instability and societal pressure underscores how infertility, although medical in nature, is deeply entrenched in social structures and gender norms that shape women's lived realities.

2.2.7 Psycho-Spiritual Factors Affecting Women with Infertility

Infertility is a condition that extends beyond biomedical explanations and treatment. For many women, particularly in societies where motherhood is closely tied to feminine identity, infertility represents a profound psychological and spiritual challenge. The psycho-spiritual dimensions of infertility encompass emotional distress, coping strategies, religious and cultural interpretations, and the impact on self-identity and self-worth (Greil et al., 2011; Naab et al., 2019). In contexts such as Ghana, where religious and traditional worldviews strongly influence perceptions of health, infertility is not only seen as a medical condition but also as a spiritual or moral problem requiring faith-based or traditional interventions (Donkor & Sandall, 2007; Osei et al., 2024). This section critically examines four key psycho-spiritual aspects: emotional distress and coping mechanisms, the role of religion and spirituality, cultural beliefs and traditional healing practices, and the impact of infertility on self-identity and self-worth.

2.2.7.1 Emotional distress and coping mechanisms

Infertility is consistently associated with significant emotional distress, including feelings of sadness, guilt, anger, anxiety, and depression (Greil et al., 2011). The distress is often

compounded by the cyclical nature of hope and disappointment during treatment or repeated unsuccessful conception attempts (Gameiro et al., 2013). In Ghana, women frequently report psychosocial suffering due to societal pressure and stigmatization, with many describing feelings of isolation and diminished social participation (Naab et al., 2019).

Coping strategies vary widely, with some women adopting active coping mechanisms such as seeking social support, joining peer groups, or pursuing medical treatment, while others resort to avoidant strategies like denial or withdrawal from social settings (Schmidt et al., 2005). Cultural context shapes coping behavior's significantly; in Ghana, women often seek solace in prayer, spiritual consultations, or reliance on extended family for emotional support (Donkor & Sandall, 2007). Although some coping mechanisms are adaptive and promote resilience, others, such as secrecy and withdrawal, can reinforce psychological distress and limit access to care.

2.2.7.2 Role of religion and spirituality in managing infertility

Religion and spirituality play a central role in how women interpret and cope with infertility. In highly religious societies such as Ghana, infertility is often conceptualized as a spiritual challenge rather than solely a biological condition (Osei et al., 2024). Many women perceive infertility as a test of faith, a punishment for past sins, or a spiritual attack by malevolent forces (Naab et al., 2019). Consequently, religious coping, through prayer, fasting, consultation with pastors, and participation in church healing sessions, becomes a common response.

Faith can serve as both a protective and a risk factor. On one hand, religious beliefs provide women with hope, meaning, and resilience, buffering against depression and hopelessness (Krause & Pargament, 2018). On the other hand, when conception does not occur despite intense religious commitment, women may experience spiritual disillusionment, feelings of divine abandonment, or pressure from religious communities that reinforce guilt and stigma

(Umezulike & Efetie, 2004). Thus, spirituality remains a double-edged sword, capable of fostering resilience while simultaneously reinforcing psychosocial distress depending on the context of belief and community responses.

2.2.7.3 Cultural beliefs and traditional healing practices related to infertility

Cultural beliefs and traditional practices significantly influence perceptions of infertility in Ghana and across sub-Saharan Africa. Infertility is frequently attributed to supernatural causes such as witchcraft, curses, or ancestral displeasure (Dyer, 2009). These cultural interpretations lead many women to pursue traditional or alternative healing methods, including herbal medicine, rituals, and consultations with traditional priests (Hörbst, 2021).

Traditional healing is often sought either as a first line of treatment, due to accessibility and cultural familiarity, or as a last resort when biomedical options fail. While such practices can provide psychological comfort and community support, they may also delay biomedical interventions, exacerbate financial strain, and at times expose women to harmful practices (Naab et al., 2019). Moreover, reliance on cultural explanations may reinforce the blame placed on women, particularly when infertility is interpreted as evidence of spiritual impurity or moral failing (Donkor & Sandall, 2007). Thus, cultural and traditional healing practices remain a critical dimension of infertility experiences that must be understood within broader healthcare and socio-cultural frameworks.

2.2.7.4 Impact of infertility on self-identity and self-worth

The inability to conceive profoundly impacts women's self-concept, particularly in societies where womanhood is socially constructed around the role of motherhood. Research consistently shows that infertility undermines women's sense of self-worth, femininity, and social identity (Greil et al., 2011; Donkor & Sandall, 2007). In Ghana, childbearing is seen as central to securing marital stability, social respect, and future security. As such, women with

infertility frequently experience feelings of inadequacy, shame, and diminished self-esteem (Naab et al., 2019).

These effects on identity are compounded by external stigmatization and internalized blame. Women often report perceiving themselves as incomplete or “failed” women, a perception reinforced by community narratives and marital pressures (Osei et al., 2024). This erosion of self-identity contributes to psychological distress and can influence broader aspects of women’s quality of life, including social participation, health-seeking behaviour, and economic opportunities. Importantly, such identity struggles highlight the intersection of individual psychology with broader cultural, religious, and gender norms, emphasizing that infertility is not merely a private health matter but a deeply embedded social experience.

2.2.8 Perceived Emotional Support from Family and Social Networks

Emotional support from family, spouses, and social networks is a central determinant of how women experience and cope with infertility. Research suggests that supportive relationships buffer the psychological and social burden of infertility, while unsupportive or stigmatising interactions can exacerbate distress (Greil et al., 2011; Donkor & Sandall, 2007). In many cultural contexts, particularly in Ghana and other African societies, infertility is considered not only a personal issue but also a family and community concern, where the ability to conceive is tied to collective expectations and lineage continuity (Naab et al., 2019). Consequently, the presence or absence of emotional support can significantly influence women’s quality of life, shaping their coping strategies, resilience, and willingness to seek treatment.

2.2.8.1 Importance of family and peer support in coping with infertility

Family and peer support serve as crucial protective factors against the psychological consequences of infertility. Studies show that women who perceive strong support from close relatives and friends report lower levels of anxiety and depression compared to those who feel

isolated (Yilmaz & Çalışkan, 2020). Support can take the form of emotional reassurance, financial assistance for treatment, or practical help in navigating healthcare systems (Greil et al., 2011).

In Ghana, family ties are deeply embedded in social life, and women often rely on siblings, mothers, and close relatives for advice, encouragement, and financial contributions toward medical or spiritual care (Naab et al., 2019). Peer support, particularly from other women experiencing infertility, also provides a shared space to normalize experiences, reduce stigma, and foster solidarity (Osei et al., 2024). Such networks offer validation and companionship that can counterbalance negative societal attitudes. However, the degree of support varies significantly depending on family structures and cultural attitudes toward infertility.

2.2.8.2 Negative and positive family dynamics affecting women with infertility

While families can be a source of comfort, they can also perpetuate distress. Negative family dynamics, such as blame, criticism, or pressure to conceive, are common in patriarchal societies where women are held responsible for childbearing (Donkor & Sandall, 2007). In Ghana, women often face intrusive questioning, derogatory remarks, and even exclusion from family rituals because of their infertility (Naab et al., 2019). In extreme cases, infertile women are subjected to emotional abuse or pressured into accepting polygamous marriages as a way for husbands to secure offspring (Dyer, 2009).

On the positive side, families that adopt empathetic and supportive attitudes play a critical role in mitigating psychological harm. Acceptance, encouragement, and joint problem-solving can help women feel less isolated and reduce the internalized stigma associated with infertility (Greil et al., 2011). Therefore, family responses are double-edged, acting either as a coping resource or as a significant source of distress, depending on cultural attitudes and relational dynamics.

2.2.8.3 Role of spouse/partner in providing emotional support

The role of the spouse is perhaps the most influential in determining how women experience infertility. Studies consistently show that supportive marital relationships buffer the emotional strain of infertility and promote adaptive coping (Martins et al., 2014). Spouses who provide reassurance, empathy, and active involvement in treatment decisions foster resilience and marital cohesion, even in the absence of conception (Yilmaz & Çalışkan, 2020).

In Ghana, however, women frequently report mixed experiences. While some husbands are supportive and accompany their wives through medical and spiritual care-seeking, others may distance themselves emotionally or shift blame entirely to the woman (Donkor & Sandall, 2007). Moreover, cultural expectations of male virility discourage men from acknowledging their own infertility, thereby reinforcing the narrative that women alone are responsible (Dyer, 2009). This dynamic often leaves women vulnerable to marital strain, domestic violence, or abandonment. Thus, the extent of spousal support is a critical determinant of women's psychological wellbeing and marital stability.

2.2.8.4 Community and peer support groups as coping resources.

Beyond the family, broader community and peer support structures play a significant role in women's coping with infertility. Community attitudes are often ambivalent; while some individuals may offer encouragement, others reinforce stigma and exclusion (Greil et al., 2011). In Ghana, women experiencing infertility may be excluded from certain cultural rituals or face gossip and social ridicule, further exacerbating feelings of isolation (Naab et al., 2019).

At the same time, structured peer support groups and advocacy networks have emerged as valuable coping resources. For example, infertility support groups create safe spaces where women can share experiences, learn coping strategies, and foster mutual understanding (Martins et al., 2014). These groups not only reduce psychological distress but also empower

women by challenging stigma and raising awareness within the community. In contexts where biomedical treatment is inaccessible or prohibitively expensive, such peer networks provide a vital source of resilience, solidarity, and hope (Osei et al., 2024).

2.3 Summary of Literature Reviewed

The literature reviewed provided evidence on the key domains guiding this study, highlighting how infertility affects the daily lives and overall well-being of women. Studies showed that infertility influences women's health and functioning through stress, emotional strain, and reduced physical vitality, which shape their ability to carry out routine activities. Socio-economic factors also emerged as important, as limited access to treatment, financial constraints, and unequal resource distribution influence women's care pathways and their broader quality-of-life outcomes. Evidence further revealed that infertility affects psycho-spiritual well-being, often producing feelings of loss, worry, and disrupted personal identity, with many women turning to faith-based coping in the absence of formal support. Family support was identified as a central component of women's experiences, yet many face blame, stigma, or strained relationships, which weaken emotional resilience. While these findings offer valuable insights, existing studies in Ghana remain few, with limited use of structured quality-of-life frameworks. The review therefore underscores the need to examine the health, socio-economic, psycho-spiritual, and family-related dimensions of quality of life among women living with infertility in the Tamale Metropolis.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the methodology used to investigate the quality of life of women living with infertility in the Tamale Metropolis. The study aims to understand the lived experiences of women with infertility in relation to their health, socio-economic conditions, psycho-spiritual well-being, and family support. A qualitative research approach was chosen, as it allows for in-depth exploration of subjective experiences and contextual realities. The philosophical stance of the research is situated within the interpretivist paradigm, which recognizes that reality is socially constructed, and meaning is best understood through the perspectives of those who experience it. The study design, target population, inclusion and exclusion criteria, and sampling approach are detailed. Data collection procedures are discussed, including the development of a semi-structured interview guide informed by the Holistic Quality of Life Model, study objectives, and existing literature. The collected data are managed, transcribed, stored, and analyzed using thematic analysis within NVivo software. To ensure rigor and trustworthiness, strategies such as reflexivity, peer debriefing, and triangulation of data sources were employed. The ethical principles guiding the research include informed consent, confidentiality, and respect for participants' rights.

3.1 Philosophical underpinning

There are three main types of research paradigms including positivism, interpretivism, and pragmatism. This study aligns to the interpretivist research philosophy since it is a qualitative study of reproductive women with infertility. The research project aimed to explore and describe the perceived quality of life of women living with infertility in the Tamale Metropolis. The researcher adopted an exploratory descriptive approach in conducting the study.

3.2 Study Design

An exploratory descriptive qualitative design was used for this study because, it provides a more in-depth exploration of the participants lived experiences and focuses on participant narratives (Hunter et al., 2018). The goal of qualitative research is to gain a thorough understanding of human behaviour and the factors that influence it. This design also looks for the root cause of a certain issue. According to Hunter et al. (2018) the design identifies new information, expose the phenomenon under study and provide insights as well as fresh perspectives on an issue. It involves exploring the subjective reality of an event or phenomenon as perceived by the study population or participants (Hek & Moule, 2006). This study aimed to understand the subjective Quality of Life of women with infertility and for which reason, therefore an exploratory descriptive approach was deemed most appropriate for the study as discovers the lived experience of people and helped get deeper understanding of the issue that was being investigated into. Also, the researcher preferred this design to others because almost all the literatures reviewed under infertility (QOL) used a phenomenological quantitative approach which sought to find out what, when, and how of an existing problem.

3.3 Research Setting

Majid (2018) states that, the study setting encompasses the nature, context, surroundings, and logistical considerations, all of which may have an impact on how the study is conducted. A good knowledge of the geospatial dynamics of the study setting can help the researcher anticipate any practical difficulties posed by the location, layout, or structure of the setting, and take steps to address any challenges that may affect data collection processes and/or procedures.

The study was conducted in the Tamale metropolis, the largest city in the northern part of Ghana which serves as the administrative capital of the Northern Region of Ghana. Tamale is

Ghana's fourth largest city, and it is one of the fastest growing cities in West Africa. The metropolis is located in the central part of the Region and shares boundaries with the Sagnarigu Municipal to the west and north, Mion District to the east, East Gonja to the south and Central Gonja to the south-west. The metropolis has a total population of 398,914, out of which 276,967 are females and 672,881 males, giving a male to female ratio of approximately 1:1. The population of the metropolis is considerably a youthful one, with 36.4% being children below 15 years. The average household size in the metropolis is 5.2 persons. The Tamale Metropolitan area (TAMA) is the second fastest growing metropolis in Ghana after Kumasi. There are a few healthcare facilities in the metropolis (both public and private). The Tamale Teaching Hospital which is the only tertiary/teaching facility in the northern belt of the country is located at the southern part of the metropolis. The metropolis also houses a number of prominent hospitals such as the Tamale Central Hospital, the Tamale West Hospital, SDA Hospital, and KABSAD Hospital (Ghana Statistical Service, 2021).

3.4 Target Population

In research, the target population refers to the total group of people who share specific traits and from whom a study seeks to draw conclusions. Although data is often collected from a smaller sample of this group, it reflects the larger community to whom the study's findings can be applied. Determining a specified target group ensures that the study stays on track and that the data acquired accurately represents the topic under investigation.

The study's target group consisted of women aged 18 to 45 who visited the Tamale Teaching Hospital's prenatal outpatient clinics on a regular basis and had been clinically diagnosed with infertility for at least a year. This age range was chosen because it corresponds to the reproductive years when infertility is most prevalent and has the largest societal consequences. Infertility is defined by the World Health Organisation as the failure to obtain a clinical

pregnancy following at least 12 months of regular, unprotected sexual activity. This definition is congruent with the WHO's one-year diagnostic criteria.

Three considerations justify the study's emphasis on female infertility. First, regardless of the biological cause, infertility is socially framed as a female problem in many African contexts, including the Tamale Metropolis (Dierickx et al., 2019). Women are more vulnerable to negative psychological and cultural consequences because women often carry the brunt of blame and stigma. Second, infertility has a significant influence on women's quality of life, including their family life, social relationships, psychological and physical health, and financial stability. As a result, it is critical to explore these features from the perspective of women to completely understand the scope of the problem. Third, women in Tamale are an accessible and appropriate group to recruit since they commonly obtain care at hospital-based outpatient clinics. Their presence at the Tamale Teaching Hospital reveals that they are aware of their disease and actively seek medical assistance, which contributes to the study by providing insights on their lived experiences and interactions with healthcare systems.

3.5 Inclusion Criteria

In the context of research, inclusion criteria are the qualities that study participants must have to qualify as participants. These standards guarantee that the participants chosen are typical of the intended audience and that the information gathered effectively contributes to the goals of the study (Polit & Beck, 2021). This study aimed to accurately represent the experiences of infertile women in the Tamale Metropolis by using specific inclusion criteria. Participants had to have received a clinical diagnosis of infertility after engaging in regular, unprotected sexual activity for at least a year without becoming pregnant. This ensured consistency in identifying participants experiencing infertility, aligning with the World Health Organization's definition. The study was restricted to women with an infertility diagnosis aged 18-45, as it falls within

the reproductive years when infertility is most significant from a social, cultural, and biological standpoint. This age range is likely actively seeking childbearing, allowing the study to document experiences during the most crucial stage of reproductive life. The research included only participants who could speak and understand the English language.

3.6 Exclusion Criteria

Exclusion criteria in research are the traits or circumstances that preclude possible study participants from participating. By avoiding data that might not accurately reflect the research objectives, these criteria are crucial for participant protection, ethical standards, and improving the validity of the findings (Polit & Beck, 2021). To guarantee that only women who fulfilled the necessary requirements were included in this study, the following exclusion criteria were used.

Initially, women without a medical diagnosis of infertility were not included. Instead of participants who might only suspect fertility issues, this choice guaranteed that they had a confirmed clinical condition. Because their experiences might not have fully aligned with the study's focus on women living with medically defined infertility, including undiagnosed individuals could have introduced inconsistencies and weakened the reliability of the findings.

Third, the study did not include women who chose not to participate voluntarily. This criterion was based on ethical research practices, which prioritise informed consent and autonomy (Creswell & Creswell, 2018). Women's rights were protected, and data collection was conducted in an ethically sound manner by only including those who voluntarily consented to participate after being informed of the study's goals and methods.

Fourth, women who did not visit or receive care from Tamale Metropolis gynaecological clinics were not included. Because the study concentrated on women receiving care in this institutional and geographic setting, this criterion was crucial. Including women outside of this

context might have introduced differences in healthcare experiences and access that are outside the purview of this study.

3.7 Sample Size and Sampling

Sample size in qualitative research involves collecting sufficient data for the research objectives while assuring the depth and richness of the data and determining how many participants should be included in the study (Morse, 2015). The sample size for the study was fifteen (15) participants and this was subjected to data saturation. Crewell (2014) defined data saturation as a point whereby no new responses come out from the respondents as they all virtually begin to say the same thing. Participants who qualified for the study were purposively sampled.

Snowball sampling was applied by first identifying initial participants who met the study criteria and then asking them to refer other women living with infertility who were willing to share their experiences. This approach allowed the sample to expand through participant referrals, which supported access to eligible women who might have been difficult to reach through conventional recruitment methods.

3.7 Data Collection Tool

Data collection is the systematic gathering of information that is pertinent to the study's aims, specific objectives, questions, or hypothesis (Sutton & Austin, 2015). To gather data for the study, a series of interviews were conducted. The interview guide comprised questions developed based on the constructs of the study.

3.7.1 Development and testing of interview guide

The study utilized an interview guide as the primary instrument for data collection, informed by the Holistic Quality of Life Model, the study objectives, and a comprehensive review of existing literature on women living with infertility. The guide was designed to ensure

conceptual depth, cultural sensitivity, and alignment with the research focus. The guide was pretested among five women with similar characteristics at the Tamale Metro Hospital, providing valuable feedback and revisions to improve the sequencing of questions, clarify ambiguous phrasing, and enhance the researcher's interviewing skills.

The interview guide was organized into six sections, each aligned with one or more study objectives and mapped onto the four domains of the Holistic Quality of Life Model: health and functioning, socioeconomic well-being, psychological and spiritual well-being, and family support. The first section focused on demographic information, gathering essential background data such as age, marital status, occupation, educational level, and duration of infertility. Questions in this section examined the physical and mental health consequences of infertility, their effects on daily responsibilities, sleep patterns, energy levels, hormonal balance, self-image, and body perception.

The third section focused on the socioeconomic dimension of quality of life, exploring the economic burdens of medical treatment, disruptions to employment or career advancement, and broader societal attitudes towards women struggling with infertility. The fourth section devoted to the psychological and spiritual dimension of quality of life, examining the emotional and spiritual impact of infertility on participants' lives.

The fifth section reflected the family domain of the Holistic Quality of Life Model, exploring how spouses, in-laws, and extended family members responded to women's infertility and whether participants felt supported, accepted, or rejected by their families. Probes encouraged participants to discuss cultural pressures related to childbearing, the role of in-laws, and the influence of gender roles within the family. The final section of the guide addressed coping strategies and recommendations, exploring ways women managed the challenges of infertility and the resources they found most helpful.

3.8 Data Collection Procedure

Participants were interviewed using a semi-structured interview guide to retrieve data for the study. To request permission to use their department as a point of contact for participant recruitment, the researcher sent the ethics letter and an introductory letter from the School of Nursing and Midwifery to the Gynaecology Clinic of the Tamale Teaching Hospital. The letter described the scope and objectives of the study. The midwife in charge of the antenatal clinic was made aware of the goal of the research and the target population required for the study when authorization was granted by the departmental heads of the unit. The participants' consent was required for the recruitment of individuals who meet the inclusion requirements.

The day and venue for the study was discussed with the participants making sure that the interview was scheduled at their convenience. They were informed about the voluntary nature of the study and their right to withdraw before, during and after the interview. Participants were informed that; the interview section was to take a minimum of forty (40) minutes and a maximum of an hour. The purpose of the research was also made known to the participant's whiles they were also informed that any information they give will be audio recorded using audio recorder to make transcribing easier. Participants who agreed to partake in the study were given consent form and the necessary information about the research was explained in detail. The languages that were used for the study were English. The reason for choosing these languages was because these was the most common spoken languages in the area where the study was conducted, the researcher is also fluent in these languages. The interview section covered issues relating to the quality of life of women with infertility using a semi-structured interview guide.

3.9 Data management

With nine years of clinical experience in maternal and reproductive health in the Tamale Metropolis, the researcher, a male registered midwife, brought a profound contextual

understanding to the data management process. This expertise, along with oversight from two seasoned qualitative researchers and guidance from a nursing professor who specialises in women's health and infertility, guaranteed participant narratives were handled with tact and rigour. Audio recordings were thoroughly examined for completeness and clarity right after each interview. To maintain the participants' genuine voices and make sure that no meaning was lost in translation, the researcher then meticulously transcribed each interview. Repeatedly listening to the recordings and meticulously recording the participants' facial expressions, pauses, and tones were necessary for the transcription process. While maintaining accuracy and reliability, this immersion helped the researcher become even more familiar with the data (Chan, 2013). All transcripts were entered into the NVivo program to improve data organisation and security. NVivo, which provides a safe platform for data storage, retrieval, and methodical organisation, was the main tool used to manage the qualitative data. Large amounts of textual data were easier to code and analyse thanks to this digital management system, which also reduced the chance of data loss (Bitencourt & Santos, 2016). To supplement the interview data, field notes and reflective memos were also kept with the transcripts. These documents recorded contextual observations, nonverbal clues, and the researcher's thoughts. Every step of the data management process was guided by ethical considerations. Transcripts were anonymised, personal identifiers were eliminated, and electronic files were password-protected to ensure participant confidentiality. The researcher took extra care to ensure participant trust by managing sensitive information with discretion and professional integrity, especially considering his clinical background in the study setting.

3.10 Data analysis

As the researcher began reflecting on participant narratives during and immediately following interviews, data analysis began concurrently with data collection. Thematic analysis was the analytical approach utilised, following Byrne's (2022) six-phase framework. Thematic analysis

was chosen as the best technique due to its flexibility and ability to examine the patterns and meanings contained in participants lived experiences in depth. The initial step was to become acquainted with the data. The researcher engaged themselves in the narratives as both an interviewer and a transcriber, listening to audio recordings, reading transcripts, and reviewing field notes on a frequent basis. This reflexive participation enabled a more sophisticated understanding of the emotional, social, and cultural complexity of infertility in the research environment. The NVivo program was then utilised for coding. Because descriptive codes were derived directly from participant speech, the original codes were assured to be correct and consistent with the study's objectives. Clinical experience, supervision, and mentorship increased the researcher's ability to comprehend complicated health-related and sociocultural aspects of infertility. The codes were then organised systematically into themes and subthemes that indicated the dataset's more general patterns.

During the theme creation stage, a thematic code frame was constructed to aggregate similar codes into larger conceptual categories. To guarantee analytical rigour and consistency, themes were repeatedly examined and developed in collaboration with the mentor and supervisors. This method led to the identification of the four key components of the Holistic Quality of Life Model: health and functioning, socioeconomic well-being, psycho-spiritual well-being, and family and social support (Ferrans & Powers, 1992). Finally, the themes were interpreted by contextualising the findings within the greater body of research on women's health and infertility. The researcher-maintained transparency between raw data and analysis by consistently comparing participants' personal stories to emergent themes. The collaborative and reflective method, which relied on the researcher's clinical insights, supervision from qualitative specialists, and mentorship from an infertile professor, contributed to the analysis's credibility, contextual relevance, and theoretical grounding.

3.11 Methodological Rigour

Rigor in qualitative research refers to the establishment of trustworthiness of the research findings. Carpenter & Speziale (2007) suggested four criteria for establishing trustworthiness of a study and these are Credibility, Transferability, Dependability and Confirmability.

3.11.1 Credibility

In ensuring credibility, the researcher ensured that there was a review of initial interview to assess the quality of the interview and competence of the researcher's questioning skills. Secondly, credibility was ensured by making sure that, participants were given the opportunity to authenticate, verify and re-read the findings to make sure that, their views were the exact things transcribed. Finally, the verbatim transcribed interview written data, and the research findings were taken back to the participants and explained in their local dialect for their comments after which all documents, field notes, personal journals and dairies were kept safe.

3.11.2 Transferability

This is defined as the degree to which themes or research protocols can be transferred or generalized to other settings, contexts, or populations (Malterud, 2001). To achieve this, the researcher provided an in-depth information to allow any reader to determine whether the findings were applicable (or can be transferred to) another specific environment.

3.11.3 Dependability

This refers to the degree at which the researchers account for, and or describe the changing contexts and circumstances during the study. It is again defined as stability of a study over a period (Polit et al., 2001). In ensuring dependability in this research, all participants were interviewed with the same interview guide. Every material including audiotapes and transcripts were also carefully maintained to ensure that they were not misplaced to make it available any time the need arises.

3.11.4 Confirmability

This is when documentary evidence of the study is made available to a neutral professional or research supervisor to have a review of it and verify the path that the researcher followed from the beginning of raw data to results. This was ensured by having an audit trail of all the interviews and the transcripts as well as a draft of the final study.

3.12 Ethical Considerations

Ethical approval for the study was obtained from the Committee on Human Research, Publications, and Ethics of the Kwame Nkrumah University of Science and Technology in Kumasi. Informed consent was obtained from all the participants after the purpose of the study was explained to them. Participants were made aware of confidentiality, the benefits of the study as well as their freedom to withdraw at any point in time during the data collection. The participants were given an informed consent form that contained all the information concerning the study. The informed consent served as a written form to protect both the researcher and the participants. Participants were also informed that, taking part in the study or not would not have any direct or indirect effect on the services that are being rendered to them.

Tape recordings and interview materials were kept in the researcher's custody and only the researcher and his supervisors had access to it. Personal information including demographic data was separated from the interviewed data so that, participants were not linked to the interview's codes. A soft copy of the audio and other information was also stored on a pen drive, and a hard copy of transcripts and other documents had been kept safe with a password with only the researcher and supervisor having access to. The interviews were also listened to, with the aid of earphones to prevent it from being heard by a third party.

Informed consent: Clear and understanding language was used to explain the consent to the participants. The purpose, Risk and benefits and duration of the interview were stated in the consent form and explained to participants.

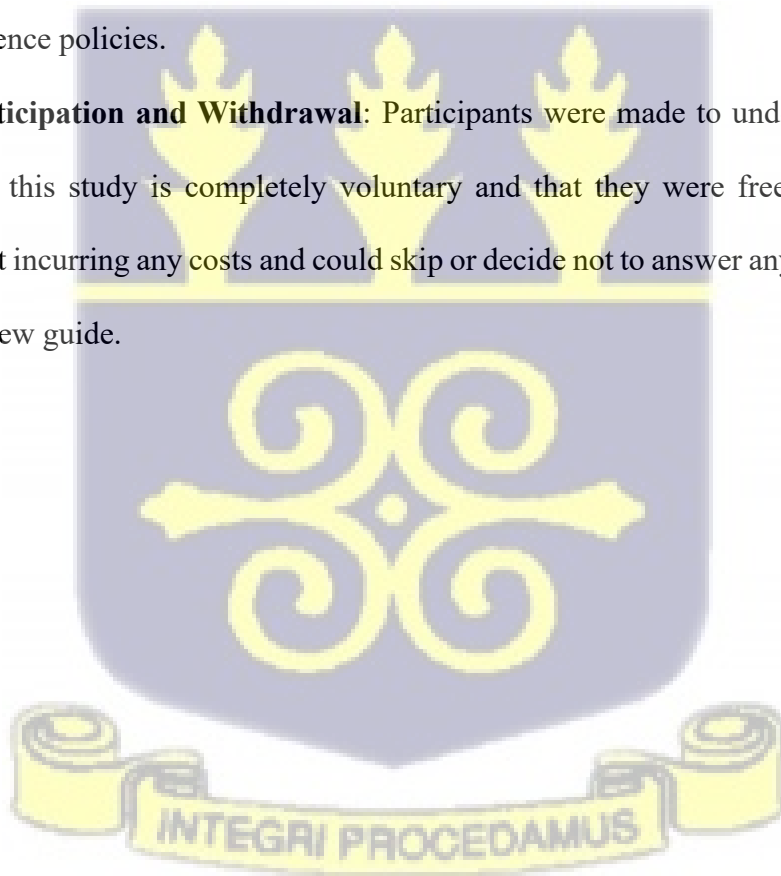
Confidentiality: Participants were assured that all information gathered for the study, including their private medical information and interview answers, would be kept private. To safeguard this data, access controls and secure data storage were used.

Privacy: Personal information shared during the interview was kept private. Participant's names were made anonymous so that data could not be traced, to enable participants to speak freely without fear of discrimination or judgment, the researcher made sure that interviews or data collecting take place in private settings.

Risk and Benefits: Participants were fully aware of the potential risks and advantages of this study as there were no physical risks however some of the questions invaded privacy.

Benefits: Participants were compensated with a token for their time, also findings from this study will influence policies.

Voluntary Participation and Withdrawal: Participants were made to understand that their participation in this study is completely voluntary and that they were free to leave at any moment without incurring any costs and could skip or decide not to answer any of the questions from the interview guide.



CHAPTER FOUR

FINDINGS

4.0 Introduction

This chapter presents the findings of the study. Although the study was designed to include 15 participants, the findings emerged from 12 individual interview transcripts based on saturation. The findings are presented in a narrative format using the themes, subthemes, and verbatim quotes from the transcripts. The next section presents the demographic characteristics of the participants.

4.1 Demographic characteristics of Participants

Twelve women, most in their late 20s to late 30s, with ages ranging from 26 to 41, participated in the study. Eight out of 12 participants had completed tertiary education, and one had only finished secondary school. All the participants were married, which reflects the cultural setting where infertility is frequently assessed within a marriage. The Tamale Metropolis's religious diversity was highlighted by the sample's equal distribution of Christian (four participants) and Islamic (six participants). The most common occupation among participants was teaching, followed by nursing, business, fashion design, and other professions that were mainly professional or skilled. Refer to Table 4.1 for details.

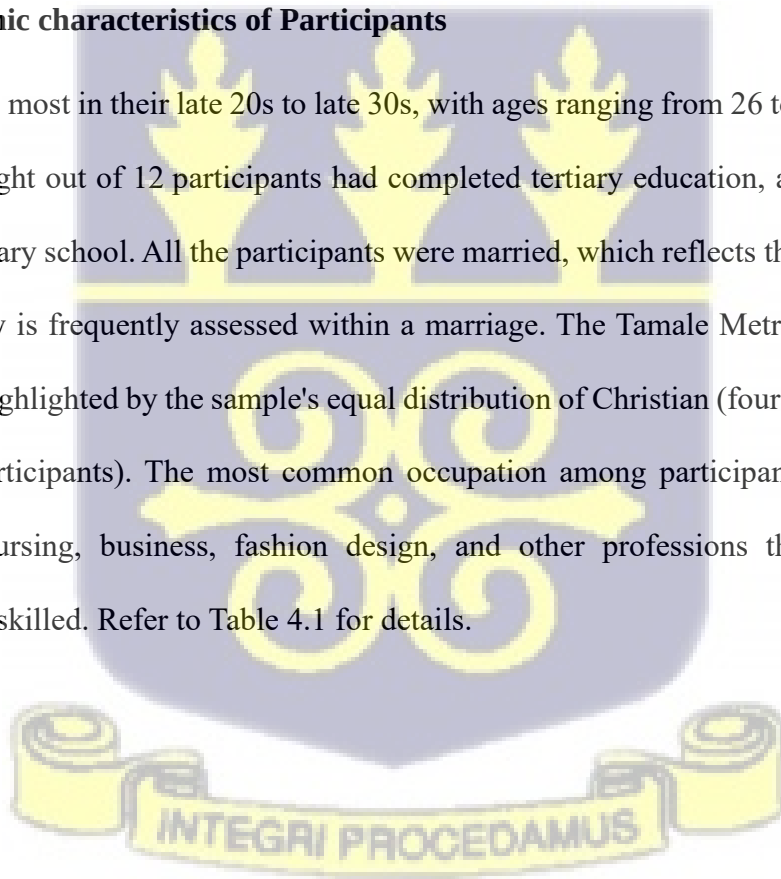


Table 4.1: Participants demographics

Code	Age	Education	Marital status	Religion	Occupation
P1	30	Tertiary	Married	Islam	Teacher
P2	38	Tertiary	Married	Islam	Teacher
P3	41	Tertiary	Married	Christian	Teacher
P4	35	Tertiary	Married	Islam	Teacher
P5	28	Tertiary	Married	Christian	Nurse
P6	27	Tertiary	Married	Islam	Buss Woman
P7	34	Tertiary	Married	Islam	-----
P8	26	Tertiary	Married	Christian	Buss Woman
P10	32	Tertiary	Married	Christian	Fashion Desig
P12	37	Tertiary	Married	Islam	Teacher

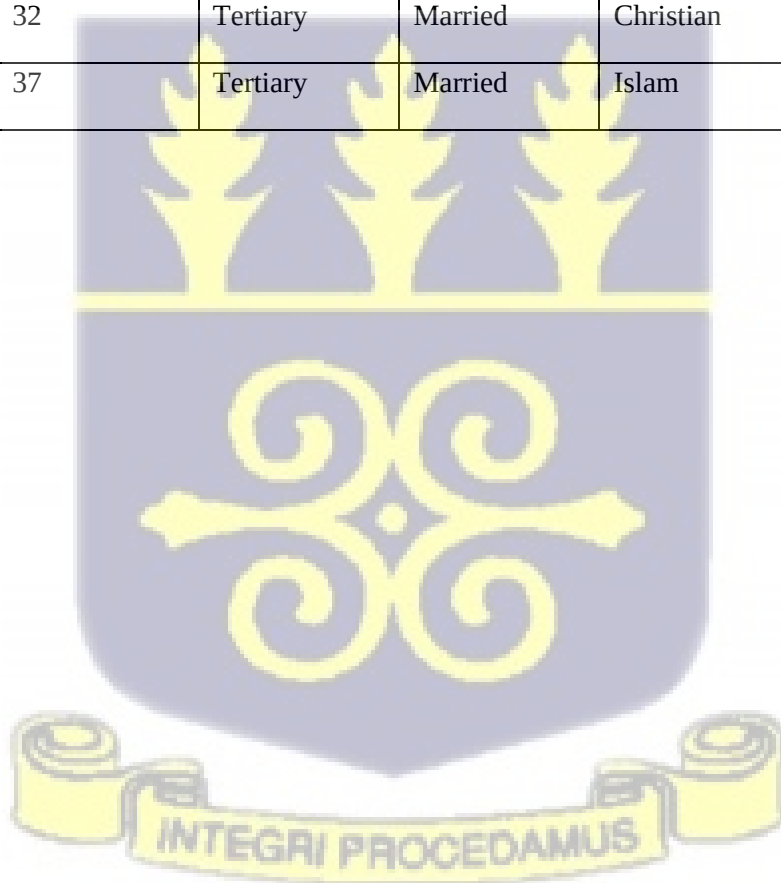
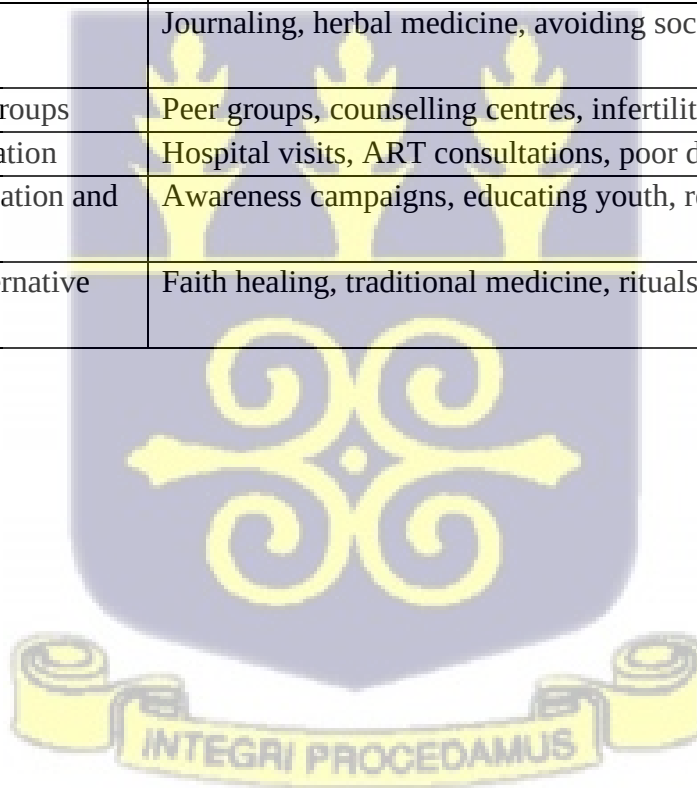


Table 4.2: Themes, subthemes, and codes based on the thematic analysis

Theme	Sub-Themes	Supporting codes
1. Health and Functioning	1.1 Physical Health Challenges	Fatigue, headaches, hormonal imbalance, menstrual irregularities, sleep disturbances
	1.2 Mental and Emotional Distress	Stress, anxiety, depression, crying, hopelessness, emotional breakdown
	1.3 Impact on Daily Functioning	Inability to work, reduced productivity, difficulty with chores, avoiding social activities
	1.4 Self-perception and Body Image	Feeling of inadequacy, shame, loss of femininity, negative body image
2. Socioeconomic Impact	2.1 Financial Burden	Cost of fertility treatments, traditional healer fees, travel for care, selling property for treatment
	2.2 Employment and Career Impact	Absenteeism, poor performance, job loss, fear of workplace stigma
	2.3 Social Isolation and Discrimination	Stigma, exclusion from ceremonies/events, community gossip, name-calling
	2.4 Cultural and Marital Pressures	Marital strain, fear of divorce, pressure for polygamy, in-law expectations
	2.5 Economic Vulnerability	Dependency on partner/family, inability to invest/save, long-term insecurity
3. Psycho-Spiritual Impact	3.1 Emotional Responses	Grief, guilt, fear, shame, sadness, envy towards other mothers
	3.2 Religious and Spiritual Beliefs	Infertility as test from God, punishment, divine timing, destiny
	3.3 Faith-based Coping Practices	Prayer, fasting, attending vigils, spiritual consultations
	3.4 Role of Religious Community	Support from pastors/imams, church/mosque stigma, spiritual counseling

Theme	Sub-Themes	Supporting codes
	3.5 Traditional and Spiritual Healing	Visiting shrines, herbal remedies, sacrifices, spiritual baths
4. Family and Social Support	4.1 Spousal Support	Understanding husband, emotional support, partner neglect or blame
	4.2 Extended Family Response	Mixed reactions: empathy vs. blame, comparison with fertile relatives
	4.3 Family Pressures and Expectations	Urging to seek solutions, pushing for second wife, shaming
	4.4 Gendered Support Patterns	Favouritism toward male infertility, unfair burden on women
	4.5 Social Comparison	Jealousy toward pregnant relatives, avoidance of family gatherings
5. Coping Strategies	5.1 Personal Coping Mechanisms	Journaling, herbal medicine, avoiding social media, emotional withdrawal
	5.2 Use of Support Groups	Peer groups, counselling centres, infertility advocacy groups
	5.3 Healthcare Utilization	Hospital visits, ART consultations, poor doctor-patient communication
	5.4 Community Education and Support	Awareness campaigns, educating youth, reducing stigma
	5.5 Spiritual and Alternative Therapies	Faith healing, traditional medicine, rituals, lifestyle changes



4.2 Themes and Sub-themes

4.2.1 Theme 1: Health and Functioning

This theme captures the multifaceted ways in which infertility impacts the overall health and functioning of women in the Tamale Metropolis. The findings revealed four interconnected subthemes: physical health challenges, mental and emotional distress, impact on daily functioning, and changes in self-perception and body image. Together, these experiences reflect how infertility disrupts not only reproductive goals but also a woman's holistic well-being physically, emotionally, and socially.

4.2.1.1 Physical Health Challenges

Women living with infertility reported various physical health issues which they attributed to both the condition itself and the psychological toll it imposed. These included frequent headaches, chronic fatigue, hormonal imbalances, appetite loss, body pain, and menstrual irregularities. Many participants also had trouble sleeping, which further exacerbated physical exhaustion and diminished their ability to function during the day. These symptoms interfered significantly with their work, household duties, and social engagements, leaving them drained and demotivated.

“Yes. Well, if I'm not able to sleep, most of the time I get headaches, and I'm not able to concentrate at work. So, it's bringing a whole lot of problems to my life. Sometimes you get a headache so much that you can't even view well, you can't even look at things straight. You end up sleeping the whole day at work. And then sometimes you even miss out going to class to teach.” (Participant 3)

“Okay, I'll say anxiety. I've been nervous. Sometimes I feel like I'm very weak. I'm down due to the condition.” (Participant 10)

“You lose appetite, you are not able to eat, you feel this body weakness, body pain, you get headache...” (Participant 2).

4.2.1.2 Mental and Emotional Distress

The psychological burden of infertility was found to be overwhelming for many participants. Common emotional responses included anxiety, persistent sadness, hopelessness, and emotional breakdowns. Women spoke of being unable to sleep, crying frequently, and feeling incomplete or inadequate. Emotional stress was intensified by societal perceptions and expectations, particularly the assumption that infertility is solely a woman's fault. In social gatherings, conversations about children served as painful reminders of their condition, contributing to feelings of alienation and psychological distress.

“Yes. Like I said, you know, psychologically, people always talk about it, because they know you are the woman who carries the pregnancy to term. So they think that the problem is always from you. And then when you even go to visit your friends, those who have children, they always talk about their children. Any gathering you go to, they always talk about their children. So that alone, psychologically, you are not fine.” (Participant 3)

“Okay, infertility has affected my overall health psychologically, emotionally, everything. Because being infertile or being unable to produce, it entails a whole lot. Sometimes I even feel like I'm incomplete, like I'm not myself. I don't sleep a whole lot.” (Participant 10)

“There's a lot of anxiety... depression sets in... the feeling of not being capable or not being a woman enough.” (Participant 2)

4.2.1.3 Impact on Daily Functioning

Infertility has a significant negative effect on women's ability to carry out their daily activities. Participants reported withdrawal from social life, lack of interest in work, low motivation, and inability to complete household chores. This was often compounded by emotional exhaustion, making it difficult for them to concentrate or engage in productive routines. In some cases,

their occupational responsibilities, such as teaching, were affected due to absenteeism and lack of focus.

“You get up, you don’t feel like doing anything... I want to stay alone. I don’t want to mingle with people.” (Participant 4)

“When you are stressed, you don't even feel like doing anything at work... you lose interest in everything. ...you even miss out going to class to teach.” (Participant 3)

“I can't engage myself in my daily activities... I can't even concentrate when I go to work.” (Participant 7)

4.2.1.4 Self-Perception and Body Image

A recurring theme in participants' narratives was a sense of loss of womanhood and identity. Many women described themselves as feeling "incomplete" or "less of a woman" due to their infertility. These feelings often led to shame, especially in social situations or when interacting with in-laws and community members. Negative body image, internalized stigma, and diminished self-worth were common, despite efforts to appear strong or unaffected in public.

“I don't see myself to be a woman anymore... I'm ashamed to even face my in-laws.” (Participant 11)

“I become worried because I'm infertile, which makes me sometimes ashamed when I'm walking around.” (Participant 5)

“Sometimes I even feel like I'm incomplete... Even though people see me to be a strong woman, but inside me, I know how it is.” (Participant 10)

4.2.2 Theme 2: Socioeconomic Impact

This theme explores the multifaceted economic and social burdens experienced by women living with infertility in the Tamale Metropolis. Infertility was not only a biological or emotional struggle, but also one that significantly disrupted women’s financial stability,

careers, social standing, and marital relationships. Five subthemes emerged: financial burden, employment and career impact, social isolation and discrimination, cultural and marital pressures, and economic vulnerability. Together, these subthemes demonstrate how infertility creates sustained hardship and insecurity in both personal and communal spheres.

4.2.2.1 Financial Burden

The cost of managing infertility, especially when seeking biomedical or traditional treatments, was a recurring source of distress for participants. Many women reported spending vast sums of money on hospital visits, laboratory tests, traditional medicine, and procedures like IVF, often with no positive outcome. In some cases, this financial strain led to selling personal belongings, diverting funds meant for education or investments, and accumulating debt. The burden was even more pronounced for women whose partners were either financially unstable or unwilling to share the cost of care.

“But unfortunately, my husband didn't have sperm, so they were still waiting for him. So the financial situation has ruined me a lot, because you, the woman, must always be coming for them to prepare you, because you're the one that they're going to put the IVF for. So I spent a lot, but unfortunately, it didn't work for us.” (Participant 3)

“When you go to the hospital... you must pay something... all about money. With the treatments and the follow-ups... I have really suffered.” (Participant 12)

“We spend almost all our earnings in getting at least one child. My salary.” (Participant 4)

4.2.2.2 Employment and Career Impact

Participants revealed that infertility also interfered with their employment and long-term career aspirations. Some women missed work frequently due to medical appointments or emotional distress, while others reported poor work performance and reduced productivity. A few had to

abandon educational or business goals entirely to focus on conceiving. In certain cases, the drive to get pregnant overshadowed all other ambitions, including work and professional development, leaving participants trapped in a cycle of hope and sacrifice.

“Of course, it has. The money that I even saved to go to school; I couldn't go again, because we had to virtually use everything for this infertility treatment. And up to now, we have only used this money for infertility treatment. We didn't get a child; I didn't go to school.” (Participant 3)

“Sometimes... it makes me skip my work, being a trader.” (Participant 5)

“Because you want to conceive... you just want to leave everything behind... I want to conceive first.” (Participant 2)

4.2.2.3 Social Isolation and Discrimination

Infertility often led to stigma and social rejection, with women being excluded from events, mocked, or gossiped about in their communities. Participants described avoiding social gatherings out of fear or shame, noting that peers and relatives treated them as outsiders due to their childlessness. Some women were not even allowed to offer advice to others about children, reflecting deeply rooted societal beliefs about motherhood as a measure of womanhood. These experiences led to emotional withdrawal and a strong sense of social isolation.

“Now I don't want to see my colleagues that I married with. I feel shy attending gatherings.” (Participant 4)

“They always isolate me... I don't normally engage myself in those things. They don't allow you to even give advice to children... because you don't have it.” (Participant 12)

“In my community... they don't accord you the needed respect. I'm being discriminated because of that.” (Participant 5)

4.2.2.4 Cultural and Marital Pressures

In a sociocultural context where motherhood is seen as a woman's ultimate responsibility, infertility put severe strain on marriages and exposed women to pressure from spouses and in-laws. Some participants reported emotional abuse, neglect, or threats of divorce and polygamy, even in cases where the cause of infertility was not attributed to them. These pressures created a hostile domestic environment and heightened women's fears of abandonment or marital failure, often leading to emotional exhaustion and helplessness.

“This man knows very well that the problem is not coming from me. But any time that he gets up and realizes that we don't have a child, he'll just investigate my face and start misbehaving. Sometimes he even goes out, drinks, comes back home late. He comes home very late, and you cannot talk.” (Participant 3)

“...they always say, give birth for our brother... makes me sad and worried.” (Participant 5)

“They almost drive me away... they even proposed marrying by force.” (Participant 2)

4.2.2.5 Economic Vulnerability

The financial and social pressures associated with infertility also led to broader economic insecurity among participants. Some became financially dependent on their spouses or families, while others depleted their savings or were unable to invest in the future. As long as infertility persisted, women continued to spend money on treatments, often driven by the hope that a breakthrough would come. The need to pursue every opportunity for conception no matter the cost left many in a perpetual state of financial instability and dependency.

“Yes, yes, yes, yes. It will definitely because once the infertility persists, I'll keep spending money because that is what I also want. The doctor told me that I will soon

enter my menopause. But I'm not so scared because I know very well that maybe if God says I will have a child, even when I'm 50 years, I will still have a child.” (Participant 3)

“It makes me financially unstable.” (Participant 5)

“Anywhere that I'm going to hear people talking about infertility, I have to just go in for, to see how it goes.” (Participant 7)

4.2.2 Theme 3: Psycho-Spiritual Impact

This theme reflects the profound psychological and spiritual consequences of infertility on women living in the Tamale Metropolis. Their experiences reveal deep emotional suffering intertwined with spiritual beliefs, religious practices, and cultural understandings of childbearing. Five subthemes emerged: emotional responses, religious and spiritual beliefs, faith-based coping practices, the role of religious communities, and the use of traditional and spiritual healing. Together, these subthemes demonstrate how women draw meaning, hope, and resilience or face further distress through psychological and spiritual lenses.

4.2.2.1 Emotional Responses

Infertility was a significant source of emotional turmoil for participants. They described a range of intense and distressing feelings, including grief, guilt, shame, sadness, and fear. Some women internalized blame for their condition, questioning their identity and worth as women. These feelings often intensified in the face of negative treatment from spouses or societal comparisons with other mothers. Several participants shared that they stayed awake at night ruminating over their situation and feeling emotionally broken.

“A lot. Yeah, a lot. I don't sleep early. Sometimes I end up wasting my whole time awake late in the night. Just thinking of my infertility and also thinking of the way my husband is treating me badly and all that.” (Participant 3)

“You are ashamed... What kind of a woman are you... The guilt is, why me... I have a womb, but it's not fruitful.” (Participant 4)

“Sometimes, I feel like because I'm not having a baby, so I'm lost. Yes, please, sometimes I feel guilt.” (Participant 5)

4.2.2.2 Religious and Spiritual Beliefs

Many participants interpreted their infertility through religious or spiritual frameworks. Some believed it was a test or timing from God, while others viewed it as punishment or divine intervention. These beliefs often brought a sense of hope and surrender, reinforcing the idea that the outcome was ultimately in God's hands. However, a few participants experienced spiritual confusion, questioning whether their religion or faith practices were aligned with divine favor.

“I know at the right time; God will make things beautiful. God is the giver of life... mine is just to pray, sit back, and hope.” (Participant 2)

“They believe it's the doing of the Lord.” (Participant 4)

“I think God will surely help me in the future. Sometimes think... maybe I'm not in the right religion.” (Participant 5)

4.2.2.3 Faith-based Coping Practices

Faced with the distress of infertility, participants turned to various faith-based practices as coping mechanisms. Prayer, fasting, listening to religious messages, and attending spiritual vigils were commonly used to seek divine intervention and maintain hope. Some women also sought individual prayers or joined faith communities that emphasized spiritual support and healing. These practices provided emotional comfort and strengthened their resolve, even in the absence of medical solutions.

“I believe that when I put more efforts in fasting and prayers, God is going to help me. Sometimes, they tell me that God's own time, He is going to give me a baby.” (Participant 5)

“I pray a lot... I believe God will make a way. I listen to motivational speakers... this keeps me going.” (Participant 2)

“With continuous prayer, fasting, God will provide a way for me. I sneaked and visited this church... this pastor had been praying for me.” (Participant 11)

4.2.2.4 Role of Religious Community

The religious community pastors, imams, and congregants played a significant role in the women’s experiences. For some, these communities provided emotional support, spiritual counseling, and reassurance. Religious leaders were often turned to in moments of despair, offering prayers and words of encouragement. However, others hinted at the potential for spiritual stigma or unrealistic expectations from these communities, especially when infertility was framed as a spiritual failing or test.

“...only my pastor that sometimes I do call to get that comfort from. I just talk to him then. He just pray and counsel me.” (Participant 7)

“They believe it’s the doing of the Lord.” (Participant 4)

“...they always tell me that no matter the years... God will surely give me...” (Participant 5)

4.2.2.5 Traditional and Spiritual Healing

Beyond formal religious practice, many participants sought help from traditional and spiritual healers. This included visits to shrines, the use of herbal remedies, spiritual baths, and performing sacrifices. While some reported these efforts as hopeful or necessary, others acknowledged the lack of results despite trying multiple traditional avenues. Such practices reflect cultural beliefs about infertility as a possible result of witchcraft or spiritual interference.

“Sometimes I even go in for the traditional one. I’ve tried the herbal medicine... I haven't seen any change.” (Participant 7)

“They think that maybe it is someone that is bewitching you. With the alternative medicine... yes, I’ll take it.” (Participant 12)

“Yes, please. Tried alternative medicine; They give me some medications which can help me to conceive.” (Participant 5)

4.2.3 Theme 4: Family and Social Support

This theme highlights the complex social and familial dynamics surrounding women living with infertility in the Tamale Metropolis. While some women received empathy and support, others encountered blame, pressure, and social comparison that further deepened their distress. Five subthemes emerged: spousal support, extended family responses, family pressures and expectations, gendered support patterns, and social comparison. These findings reflect both the positive and negative influences of close relationships on women’s experiences of infertility.

4.2.3.1 Spousal Support

The quality of support received from male partners varied widely among participants. Some women described their husbands as emotionally available, understanding, and actively involved in seeking solutions. These supportive partnerships helped ease the psychological burden of infertility. However, others reported inconsistency in their partner’s behavior, including emotional detachment and relational tension. In some cases, the infertility journey created distance or blame between spouses, complicating what could have been a source of comfort and resilience.

“My husband is there for me. We are in this together... he’s been understanding, loving.” (Participant 10)

“My partner is doing everything possible to help.” (Participant 12)

“My husband do advise me on it. Sometimes we grow cold toward each other.”

(Participant 11)

4.2.3.2 Extended Family Response

Participants recounted mixed reactions from their extended families. While some received encouragement, particularly from their own parents’ many were met with blame or indifference, especially from in-laws. In some households, women were ostracized, ignored, or subjected to unfair assumptions that the infertility was entirely their fault. These responses often led to emotional withdrawal and avoidance of family members, particularly those perceived as critical or unsupportive.

“She won’t even respond when I greet her. They think the fault is from me.” (Participant 12)

“They don’t even want to see me... they think I’m the problem.” (Participant 2)

“My mom and dad have been encouraging me... but my husband's side is not. They frown at me... I know it’s all because of this infertility issue.” (Participant 11)

4.2.3.3 Family Pressures and Expectations

Participants reported facing overt and subtle forms of pressure from family members. These included frequent demands to “do something,” encouragement to seek spiritual or medical help, or suggestions that their husband should take a second wife. In-laws, in particular, often served as a source of ongoing reminders and judgment, reinforcing cultural expectations that motherhood is central to a woman’s value and role in marriage.

“...they always say, give birth for our brother...” (Participant 5)

“They are even planning on marrying someone to my husband.” (Participant 11)

“There’s a lot of pressure on me... but I can’t blame myself entirely.” (Participant 2)

4.2.3.4 Gendered Support Patterns

Across multiple accounts, participants expressed frustration at how infertility was socially framed as a woman's problem. Families and communities rarely questioned male fertility, even in cases where medical findings showed otherwise. This gender bias placed an unfair burden on women, reinforcing shame and societal exclusion, while absolving men of equal responsibility in the fertility journey.

“They think infertility has to do with a woman... no one is talking about the man.”
(Participant 2)

“Now that I'm unable to do it... they think then I am a man.” (Participant 12)

“They think that dealing with infertility only counts for the female.” (Participant 7)

4.2.3.5 Social Comparison

Social comparison emerged as a painful and persistent experience. Women shared how they were often compared to their siblings or peers who had successfully conceived. These comparisons, whether verbal or implied led to feelings of envy, shame, and inadequacy. Many participants reported avoiding family functions and gatherings to escape these reminders of what they lacked.

“It makes me feel like I'm not a woman... my fellow woman gives birth to four, five... I'm struggling.” (Participant 11)

“They always compare us... comparing me to my elder sisters... I feel really down.”
(Participant 10)

“...your younger sister just got married, right now she has conceived...” (Participant 5)

4.2.4 Theme 5: Coping Strategies

This theme captures the diverse ways in which women living with infertility in the Tamale Metropolis manage their emotional distress, navigate support systems, and offer suggestions for improving their experiences. Their coping responses reflect a combination of personal

resilience, spiritual practices, and attempts to access health and social resources. Six subthemes were identified: personal coping mechanisms, use of support groups, healthcare utilization, community education and support, spiritual and alternative therapies. Together, these strategies illuminate how women construct meaning, sustain hope, and seek healing amid persistent challenges.

4.2.4.1 Personal Coping Mechanisms

Participants adopted a range of personal strategies to cope with the psychological and social strain of infertility. These included engaging in activities that brought joy, such as listening to music, journaling, or spending time alone, as well as avoiding social media and gatherings that triggered comparisons. Others found strength through emotional withdrawal, self-reflection, or actively seeking information and inspiration from others who had experienced infertility. These coping efforts helped preserve emotional stability in the absence of external support.

“Mostly, I listen to music so that I become okay. I just do things that make me happy.”
(Participant 5)

“I keep myself engaged... listen to people who have gone through infertility... this keeps me going.” (Participant 2)

“Through prayers, counselling, emotional support from my family...” (Participant 11)

4.2.4.2 Use of Support Groups

While not all participants were involved in formal support groups, many valued the idea of peer connection and solidarity. Some engaged with virtual or informal communities, such as prayer circles, online forums, or advocacy groups that offered encouragement and understanding. Others received guidance from spiritual leaders or personal networks rather than structured organizations. These groups played a crucial role in validating participants' emotions and providing shared experiences.

“With the support groups, I haven't joined any, but... my pastors, I have received counselling from them. Online forums or infertility advocacy groups... sometimes they really speak for us.” (Participant 7)

“There was this prayer group on TikTok... we've been encouraging each other.”
(Participant 11)

“I have one or two groups that I do join... battling for infertility.” (Participant 12)

4.2.4.3 Healthcare Utilization

Most participants had accessed medical care, including consultations with gynecologists, fertility specialists, and counselors. They described hospitals as important sources of both diagnosis and psychological support. Some women appreciated the hope and education they received from professionals about modern fertility options such as assisted reproductive technologies (ART). However, others noted barriers such as poor doctor-patient communication or the high cost of sustained treatment.

“...they help me emotionally and they always link me to gynecologist...” (Participant 5)

“Obstetricians, gynecologists, counselors... Healthcare providers... give hope.” (Participant 2)

“Apart from the tests and medication... they give advice on modern options.” (Participant 12)

4.2.4.4 Community Education and Support

Several participants emphasized the need for wider community education to reduce stigma and misconceptions surrounding infertility. They advocated public health campaigns, early screenings, and school-based education to promote understanding. Reducing treatment costs and eliminating gendered blame were also key suggestions. Participants believed that normalizing infertility as a health condition could ease societal judgment and foster empathy.

“...they should reduce the cost... they should be screening at the facilities...” (Participant 5)

“People need to be educated... infertility can happen to anyone.” (Participant 2)

“They should just take away the stigmatization and also the gender-based difference.” (Participant 7)

4.2.4.5 Spiritual and Alternative Therapies

Faith-based approaches were deeply embedded in many women’s coping strategies. Participants spoke about prayer, fasting, and trusting in divine timing as essential sources of strength. Others, however, described spiritual disillusionment, questioning their faith due to

unanswered prayers. Some turned to traditional or alternative healing methods including herbal medicine and rituals seeking help from both spiritual and physical realms.

“Why have you left me in this situation?... I don’t go for early morning mass... I’m always in the house crying. I even feel that there is no God... I don’t even want to waste my time to go to church again.” (Participant 3)

“I do believe in prayer and fasting... with God all things are possible. I know as time goes on... that alone can even help me cope.” (Participant 12)

“I do that... I pray a lot... I’ve done a bit of everything within my possible capacity.” (Participant 2)

4.3 Summary of Findings

The study examines the impact of infertility on women's health and functioning in the Tamale Metropolis. It identifies four sub-themes: physical health challenges, mental and emotional distress, impact on daily functioning, and changes in self-perception and body image. Physical health challenges include headaches, chronic fatigue, hormonal imbalances, appetite loss, body pain, and menstrual irregularities, which interfere with work, household duties, and social engagements. Mental and emotional distress is overwhelming, leading to anxiety, persistent sadness, hopelessness, and emotional breakdowns. Social perceptions and expectations, particularly the assumption that infertility is solely a woman's fault, intensify this stress.

Infertility negatively affects women's ability to carry out their daily activities, leading to withdrawal from social life, lack of interest in work, low motivation, and difficulty completing household chores. Emotional exhaustion makes it difficult for women to concentrate or engage in productive routines. In some cases, occupational responsibilities, such as teaching, are affected due to absenteeism and lack of focus.

The socioeconomic impact of infertility is also explored, with five sub-themes emerging: financial burden, employment and career impact, social isolation and discrimination, cultural and marital pressures, and economic vulnerability. Financial burden refers to the cost of

managing infertility, while employment and career impact involve missed work, poor work performance, reduced productivity, and abandonment of educational or business goals. Social isolation and discrimination are common, leading to emotional withdrawal and a strong sense of social isolation.

The study explores the psycho-spiritual impact of infertility on women in the Tamale Metropolis, focusing on five subthemes: emotional responses, religious and spiritual beliefs, faith-based coping practices, the role of religious communities, and the use of traditional and spiritual healing. Emotional responses include grief, guilt, shame, sadness, and fear, while religious and spiritual beliefs interpret infertility as a test or timing from God, punishment, or divine intervention. Faith-based coping practices include prayer, fasting, listening to religious messages, and attending spiritual vigils.

The role of religious communities, such as pastors, imams, and congregants, plays a significant role in the women's experiences, providing emotional support, spiritual counseling, and reassurance. However, some women may face spiritual stigma or unrealistic expectations from these communities. The study also highlights the complex social and familial dynamics surrounding women living with infertility, with some receiving empathy and support from their male partners, while others experience blame, pressure, and social comparison that deepen their distress. Five subthemes emerged: spousal support, extended family responses, family pressures and expectations, gendered support patterns, and social comparison.

The study explores coping strategies for women living with infertility, including personal coping mechanisms, support groups, healthcare utilization, community education, and spiritual and alternative therapies. Support groups provide peer connection and solidarity, while healthcare utilization includes consultations with gynecologists, fertility specialists, and counselors. Community education and support are emphasized, with suggestions for public

health campaigns, early screenings, school-based education, reducing treatment costs, and eliminating gender-based blame. Faith-based approaches, such as prayer, fasting, and trusting in divine timing, are deeply embedded in many women's coping strategies.



CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter is focused on the discussion of the key findings of the research in the light of existing research and practice. The researcher explained the main findings, provided plausible explanations, highlighted the practice implications while comparing the findings with extant literature.

This research was designed to explore the quality of life of women living with infertility which met its aim. The study reveals that infertile women in the Tamale Metropolis face numerous challenges, including physical health issues, emotional distress, socioeconomic vulnerability, and psychological distress. These issues limit social engagement, productivity, and self-perception. The socioeconomic effects include the cost of seeking care, unemployment, and fear of stigma. Women also face discrimination, social isolation, and cultural pressures. The psycho-spiritual aspect is crucial, with women using religious and spiritual frameworks to understand infertility. Social and familial ties are complex, with some receiving spousal support while others are neglected or blamed. Infertility is often viewed as a female problem, putting a disproportionate burden on women due to gendered expectations. Despite these challenges, women use various coping mechanisms, such as healthcare services, peer support groups, and personal mechanisms. Education campaigns and community-level interventions aim to lessen stigma and promote understanding. The discussion is presented in line with the major findings as presented in chapter four.

5.1 The perceived health and functioning of women with infertility

The participants narrated some changes in their health because of infertility. These perceived impacts include physical health challenges, mental and emotional distress, daily functioning, and changes in self-perception and body image. Physical health issues include headaches, fatigue, hormonal imbalances, and menstrual irregularities, which affect work, household duties, and social engagements. Moreover, the psychological burden among these women is overwhelming, leading to anxiety, hopelessness, and emotional breakdowns. Indeed, their daily functioning is significantly affected, with women feeling "incomplete" and losing their identity. Both international and local evidence on the diverse effects of infertility supports the finding that infertility significantly changes women's perceived health and functioning, as evidenced by physical health issues, psychological distress, impaired daily functioning, and disrupted self-perception.

From a biomedical standpoint, the underlying gynaecological conditions frequently linked to infertility can plausibly explain the physical health issues that participants described, such as headaches, exhaustion, hormonal imbalances, and irregular menstruation. For example, endometriosis, irregular ovulation, and polycystic ovarian syndrome (PCOS) are known to cause physical discomfort as well as hormonal disruptions, which may account for the participants' reports of menstrual irregularities and fatigue (Boivin et al., 2007; World Health Organisation, 2021). A vicious cycle in which psychological stress feeds physical illness can also be created by the stress and anxiety associated with protracted infertility, which can worsen physical symptoms like headaches and sleep issues (Peng et al., 2024). The participants' overwhelming psychological burden, which included anxiety, despair, and emotional breakdowns, is consistent with findings from previous Ghanaian and international studies. Similar findings were made by Donkor and Sandall (2007) and Naab et al. (2019), who noted that the stigmatisation of childlessness and societal expectations of motherhood cause

great psychological distress for Ghanaian women who are infertile. Meta-analyses conducted worldwide have confirmed that infertile women experience higher levels of anxiety and depression than fertile women (Szkodziak et al., 2022; Aimagambetova et al., 2023). The current research supports the idea that infertility is a serious psychological and social crisis in addition to a biological issue.

The literature demonstrating that infertility impairs social participation and productivity is consistent with the accounts of disturbed everyday functioning and disengagement from social and professional obligations. Both the emotional toll of infertility and the physical demands of treatment (e.g., medication side effects, frequent hospital visits) interfere with many women's ability to fulfil their professional and household responsibilities (Dyer & Patel, 2012). In Ghanaian society, womanhood and motherhood are closely intertwined, as evidenced by the participants' sense of being "incomplete" and their loss of identity. Motherhood is a significant indicator of social worth, and infertility frequently lowers women's self-esteem and social status, according to Donkor and Sandall (2007). This is in line with Culley et al. (2013)'s finding that infertility is perceived as a threat to one's identity and social standing in highly pronatalist cultures, rather than just a medical condition.

These results have significant implications. These findings demonstrate how urgent it is to incorporate psychosocial support into infertility treatment. In Ghana, infertility services are currently mostly biomedical and concentrate on technologies like in vitro fertilisation (IVF), with little emphasis on mental health support and counselling (Hörbst, 2021). Including social and psychological support services could lessen the emotional toll that participants reported. Second, the results indicate that to lessen the functional impairments that women experience, workplace and community-level interventions are required. Women who are struggling with infertility may find a more supportive environment if policies that allow for flexible work schedules and community awareness campaigns are implemented.

The study suggests integrating mental health and counselling services into Ghanaian infertility clinics to alleviate psychological burdens, enhancing public health messaging to reduce stigma, and advocating for holistic reproductive health interventions that focus on women's physical and emotional well-being. Future research should explore the connection between psychological distress and physical health symptoms, especially in low-resource environments. Longitudinal studies could document changes in women's health over time and comparing rural and urban areas could provide insights into cultural norms and healthcare accessibility. Addressing infertility requires psychosocial, cultural, and policy interventions that uphold women's dignity and well-being, in addition to medical remedies.

5.2 Perceived socioeconomic impact of infertility among women

Infertility impacts women's financial stability, careers, social standing, and marital relationships. It disrupts employment and career aspirations, leading to financial burden, social isolation and discrimination, cultural and marital pressures, and economic vulnerability. Traditional treatments like IVF can lead to distress, accumulating debt and affecting work performance. Women with infertility may face exclusion from events, mockery, or gossip, while cultural and marital pressures can lead to financial dependency and depletion of savings.

According to the study's findings, infertility has a substantial socioeconomic impact on women, which can show up as vulnerability in married relationships, financial strain, social isolation, and interrupted employment and career goals. In Ghana and other low-resource settings, these results illustrate the intricate relationship between sociocultural norms surrounding motherhood, economics, and health.

The high expense of infertility treatments like in vitro fertilisation (IVF) and hormonal therapies is one likely reason for the participants' reported financial instability. Women are frequently forced to pay out of pocket for infertility treatment in Ghana, where it is mainly not

covered by national health insurance. This can result in the depletion of savings, debt, or financial dependence on partners and extended families (Hörbst, 2021; Dyer & Patel, 2012). Similar findings have been reported in other low- and middle-income nations, where women who seek assisted reproductive technologies (ARTs) must deal with crippling costs that threaten the financial stability of their households (Dyer, 2009). This result is consistent with that of Osei et al. (2024), who found that financial distress has a detrimental impact on long-term economic security and work performance for Ghanaian couples receiving infertility treatment.

Participants' accounts of career disruptions and decreased productivity at work are also in line with international data. Treatment for infertility necessitates regular checkups, medication schedules, and emotional adjustment, all of which can conflict with goals and obligations in the workplace (Greil et al., 2011). The need to balance work and treatment frequently results in job insecurity, lower income, and less opportunity for career advancement for women, especially those in precarious employment. This is made worse in patriarchal cultures where women are expected to put their family responsibilities ahead of their career goals, making them more vulnerable financially if infertility continues (Donkor & Sandall, 2007).

Infertility is highly stigmatised in Ghanaian society, and the results of social isolation, discrimination, and exclusion from community activities reflect these sociocultural realities. Women's marginalisation is reinforced by the frequent teasing, gossip, and covert or overt exclusion from social and familial events (Naab et al., 2019; Kissiwaa et al., 2024). Because socially excluded women may no longer have access to support networks and informal economic networks, these experiences not only jeopardise women's social capital but also prolong cycles of emotional distress and financial dependence. Infertility poses a threat to a woman's economic and cultural worth in addition to the stability of her family in societies

where motherhood is seen as a crucial factor in determining a woman's status and social standing (Culley et al., 2013).

The study's focus on marital instability reflects the gendered aspects of infertility. Increased financial reliance on husbands or families is frequently the result of cultural and marital pressures, particularly when women make significant investments in conventional or biomedical treatments. Financial strains brought on by infertility-related expenses can occasionally intensify marital discord and increase women's susceptibility to emotional abuse, neglect, or even divorce (Donkor & Sandall, 2007; Dyer & Patel, 2012). This research emphasises how women's lived experiences of infertility are shaped by the intersection of gender, culture, and economics.

These results have significant practice implications. At the policy level, they emphasise how urgently Ghanaian reproductive health programs must include infertility in their purview to guarantee more equitable access to care and financial security. The crippling expenses that women and their families must bear could be reduced by subsidising infertility treatments or incorporating them into the National Health Insurance Program. Policies that offer women receiving infertility treatment flexibility at the workplace, like leave benefits or private support networks, would lessen the impact on their careers. In order to promote more inclusive community support systems and combat the stigma and discrimination related to infertility, public health campaigns are required.

The study recommends creating affordable infertility services, promoting community education to dispel stigma, and implementing legal safeguards against abandonment and discrimination in childless marriages. Future research should explore the long-term socioeconomic paths of infertile women, the impact of social stigma and financial strain on poverty and vulnerability and compare biomedical treatments with conventional therapies.

Additionally, examining men's socioeconomic experiences of infertility could provide a more balanced understanding of its effects at the household level.

The results show that infertility in Ghana is ingrained in women's socioeconomic lives and goes well beyond a simple medical diagnosis. The confluence of marital stress, social exclusion, career disruption, and financial burden highlights the pressing need for integrated strategies that address the cultural and economic aspects of infertility. The disproportionate financial and social costs of infertility will continue to fall on women in the absence of such interventions.

5.3 Perceived psychological and spiritual impact of infertility among women

Regarding psychological and spiritual impact of infertility, the participants experienced intense emotional turmoil, including grief, guilt, shame, sadness, and fear. They internalized blame and questioned their identity and worth. Religious and spiritual beliefs played a significant role in their experiences, with some viewing infertility as a divine intervention or a test. Faith-based coping practices, such as prayer, fasting, and spiritual vigils, were used to seek divine intervention. Religious communities provided emotional support, but some participants feared spiritual stigma or unrealistic expectations. Traditional and spiritual healing practices, such as shrine visits, herbal remedies, spiritual baths, and sacrifices, were also sought by some participants.

The results show that infertility has a significant impact on women's spiritual and psychological well-being, showing up as feelings of fear, sadness, guilt, shame, grief, and identity and self-worth issues. Additionally, traditional healing methods were sought to address infertility, and religion and spirituality emerged as sources of pressure as well as coping mechanisms. The multifaceted nature of infertility, which goes beyond a biological diagnosis

to profoundly intersect with cultural, psychological, and spiritual dimensions, is consistent with these narratives.

The cultural importance of motherhood in Ghana provides a plausible explanation for the participants' intense emotional turmoil. Infertility frequently leads to identity crises, low self-esteem, and self-blame in societies where fertility and childbearing are socially defined as characteristics of womanhood (Donkor & Sandall, 2007; Naab et al., 2019). Internalising shame and guilt is a reflection of the stigma women experience, which is frequently made worse by gendered stereotypes that blame women for infertility regardless of its biological cause (Greil et al., 2011). Similar results have been documented worldwide, with women in pronatalist cultures like Egypt, Nigeria, and India reporting comparable experiences with low self-esteem and feelings of "incompleteness" brought on by childlessness (Inhorn & Patrizio, 2015; Aimagambetova et al., 2023).

The dual role of spirituality as a coping mechanism and a possible cause of distress is demonstrated by religious and spiritual interpretations of infertility as divine punishment, a test of faith, or God's will. In line with past research demonstrating that faith-based coping is a prevalent tactic among African women facing infertility, prayer, fasting, and spiritual vigils, on the one hand, offered hope, resilience, and emotional relief (Okonofua et al., 2022). However, the fear of spiritual stigma, like being called possessed or cursed, puts more psychological strain on people and makes them feel even more ashamed and alone in society. The complexity of religion in the context of infertility is highlighted by this ambivalence: although faith can promote hope and meaning-making, it can also reinforce stigma and unrealistic expectations when infertility continues in spite of spiritual interventions (Naab et al., 2019).

Ghana's cultural diversity in health-seeking behaviors is reflected in the use of traditional and spiritual healing methods, including herbal remedies, shrine visits, spiritual baths, and sacrifices. These behaviors might result from the belief that witchcraft, spiritual forces, or ancestral disapproval are to blame for infertility. This belief system still affects health-seeking in many African contexts (Dyer, 2009; Hörbst, 2021). Such practices may delay biomedical interventions, increase financial strain, and cause emotional distress when results are ineffective, even though they can also foster a sense of agency and community support.

These findings have important clinical implications. In terms of psychology, they emphasize how infertility services in Ghana must incorporate mental health counselling, paying special attention to issues of identity, grief, and guilt. In terms of spirituality, the results imply that educating religious leaders and faith communities about infertility could lessen stigma while utilizing spirituality's beneficial ability to offer support and hope. In order to prevent care fragmentation, policymakers and practitioners should acknowledge the cultural significance of traditional healing methods and work to promote civil communication between biomedical professionals and traditional healers.

The study suggests involving religious leaders in destigmatization initiatives that reframe infertility as a social and medical condition, integrating culturally appropriate counselling and psychosocial support into infertility services, and encouraging cooperation between traditional healers and biomedical practitioners to promote holistic and non-conflicting care pathways. Longitudinal studies that look at how women's spiritual and psychological coping change as they receive traditional, religious, and biomedical care should be part of future research. Qualitative research on interfaith differences across Christian, Muslim, and traditional practices, could inform faith-specific interventions to improve coping and lessen stigma, while comparative studies on men's experiences are also necessary to balance gendered narratives.

Women who experience infertility bear heavy psychological and spiritual costs, with cultural and religious conceptions of childlessness entwined with feelings of loss, guilt, shame, and grief. Traditional customs and religion offer valuable coping mechanisms, but they can also prolong stigmas and postpone getting help. Integrated psychosocial, cultural, and spiritual support networks that uphold women's dignity, encourage resiliency, and dispel damaging stigmatising stereotypes are necessary to address these dynamics.

5.4 Family and Social Support for women with infertility

We explored the dynamics of family and social support for women living with infertility in the Tamale Metropolis. Some women receive empathy from their male partners, while others face blame, pressure, and social comparison. Additional support included spousal support, extended family responses, family pressures and expectations, gendered support patterns, and social comparison. Spousal support varied among participants, with some experiencing emotional availability and understanding, while others reported inconsistency in their partner's behavior. Extended family responses often met mixed reactions, with some receiving encouragement and others receiving blame or indifference. Family pressures and expectations reinforced cultural expectations of motherhood's value in marriage. Gendered support patterns were expressed as frustration at the social framing of infertility as a woman's problem.

The results of this study demonstrate how social and familial support for infertile women in the Tamale Metropolis is complicated and frequently contradictory. Some participants encountered blame, pressure, indifference, and social comparison, while others encountered empathy and encouragement, particularly from supportive partners. These results highlight the ambivalence of social relationships in situations involving infertility, where stigma and support frequently coexist.

Particularly noteworthy is the variation in spousal support. Studies have shown that strong marital support can act as a buffer against the psychological distress associated with infertility (Martins et al., 2014). For some women, their partners offered emotional availability, understanding, and shared coping. Other participants, however, noted that their partner's actions varied from empathy to blame, indifference, or withdrawal. This discrepancy is indicative of larger gendered dynamics in the discourse surrounding infertility, where men may emotionally distance themselves to shield their identities from the stigma associated with infertility, while women are frequently held responsible (Greil et al., 2011; Naab et al., 2019). These results are in line with those of Donkor and Sandall (2007), who discovered that Ghanaian men tend to minimise women's participation in coping mechanisms by externalising infertility as a female problem.

Responses from extended families also surfaced as a double-edged sword. The communal ethos of Ghanaian families was reflected in the encouragement and material or emotional support that some women received from family members. However, many reported feeling blamed, suspicious, or uninterested by their in-laws. This is consistent with previous studies that highlight how family structures can increase the stigma associated with infertility, especially when having children is viewed as the ultimate validation of marriage (Aimagambetova et al., 2023). In these situations, women are criticised and watched over as a result of family expectations and pressures that support the cultural narrative that motherhood determines a woman's value (Dyer, 2009). Families may encourage husbands to look for other wives or partners in order to ensure lineage continuity, which can worsen psychological distress and lead to marital instability.

Participants' annoyance with the gendered portrayal of infertility as a female issue is another example of how deeply ingrained societal norms are. Regardless of the medical cause, infertility is frequently attributed to women in Ghana and throughout sub-Saharan Africa,

resulting in a disproportionate amount of stigma and burden (Culley et al., 2013; Naab et al., 2019). In addition to denying women access to common coping mechanisms, this framing absolves men of responsibility and maintains unequal power dynamics within marriage. Other cultural contexts, like South Asia and the Middle East, where patriarchal norms similarly portray infertility as a failure of womanhood, also exhibit this gendered blame (Inhorn & Patrizio, 2015).

These results have significant implications. First, they emphasise the need to treat infertility as a relational and social problem in addition to a biological one. It is crucial to implement interventions that promote shared responsibility between men and women and reinforce couple-based coping strategies. The gendered burden on women may be lessened by initiatives that encourage men to participate in reproductive health and infertility treatment. Second, to lessen the stigma and pressure that women face at the family level, community education is required to counter cultural narratives that equate womanhood exclusively with motherhood. Third, family support groups and counselling could offer couples and extended families a safe environment to deal with infertility in a more positive way.

Infertility services should incorporate couple-based counselling to promote empathy and shared coping; public health campaigns should involve traditional leaders, elders, and family networks to lessen stigma and blame; and community-based peer support groups should be strengthened to combat social isolation and comparison. For a more comprehensive understanding of support dynamics, future studies should look at the viewpoints of husbands, in-laws, and other family members. Furthermore, comparative research conducted in Ghana's various regions may shed light on how regional cultural norms influence how families react to infertility. To investigate how spousal and family support changes over time, especially as women's experiences with infertility and treatment advance, longitudinal research would be helpful.

The results highlight how social networks, and family can either be protective or harmful for infertile women. Reproduction-related cultural and gendered norms are reflected in the dichotomy of empathy and blame, encouragement and pressure. Interventions that actively involve spouses, families, and communities in creating more just, encouraging, and caring responses to infertility are necessary to address these dynamics.

5.5 Perceived coping strategies adopted by women with infertility

The participants demonstrated several coping strategies they adopted to navigate living with infertility. These coping strategies include personal coping mechanisms, use of support groups, healthcare utilization, community education and support, spiritual and alternative therapies, and advice to others. Personal coping mechanisms include engaging in joy-inducing activities, avoiding comparisons, self-reflection, and seeking inspiration from others. Healthcare utilization involves accessing medical care, including consultations with fertility specialists. Community education and support are crucial, advocating for public health campaigns, early screenings, school-based education, and reducing treatment costs. Spiritual and alternative therapies are deeply embedded in many women's coping strategies. Advice to others is offered, encouraging patience, seeking medical attention early, and strengthening faith.

According to the study's findings, women in the Tamale Metropolis who are infertile use a variety of coping mechanisms, including social, medical, spiritual, personal, and community-focused ones. These tactics show how resourceful women can be in coping with the complex challenges of infertility, while also emphasising how structural, religious, and cultural factors impact coping mechanisms.

Women's attempts to control emotional distress and maintain psychological stability are reflected in their personal coping strategies, which include seeking inspiration from others, avoiding social comparisons, participating in joyful activities, and self-reflection. Similar

results have been documented in sub-Saharan Africa, where infertile women use self-isolation, positive reframing, or distraction strategies to lessen their emotional pain and stigma (Donkor & Sandall, 2007; Naab et al., 2019). These tactics might offer short-term respite, but they don't always deal with the underlying causes, which may be why women frequently combine them with other strategies like using medical care and engaging in spiritual activities.

Women's proactive use of biomedical interventions is reflected in their healthcare utilisation, which includes consultations with fertility specialists. However, as has been widely documented in Ghana and other low-resource settings, the use of such services is frequently limited by high costs, limited availability, and inconsistent outcomes (Okonofua et al., 2022). The fact that many participants also resort to spiritual and alternative therapies may be explained by their dependence on but restricted access to medical solutions. Research on infertility in Africa has extensively documented the coexistence of traditional and biomedical health-seeking, with women frequently pursuing several approaches at the same time to conceive (Dyer, 2009; Hörbst, 2021). The significance of culturally sensitive approaches to infertility care that consider both biological and spiritual beliefs is highlighted by this pluralistic health-seeking.

The narratives of the participants also made clear the importance of community education and support in the coping process. To lessen stigma and raise awareness, women underlined the importance of early screenings, public health campaigns, and school-based instruction. This is consistent with recent research's recommendations (Aimagambetova et al., 2023), which emphasise the importance of community-level interventions in debunking infertility myths, reorienting gendered blame, and promoting supportive behaviours. By supporting these policies, participants tried to make social settings more welcoming and knowledgeable for others in addition to seeking relief for themselves.

Many women's coping mechanisms still heavily rely on spiritual and alternative therapies. The spiritual understanding of infertility and the cultural expectation to try every method of conception are reflected in practices like prayer, fasting, seeing traditional healers, and using herbal remedies. It has been demonstrated that among African women experiencing infertility, faith-based coping improves meaning-making, resilience, and hope (Naab et al., 2019). However, when prayers go unanswered or infertility is presented as divine punishment, reliance on spiritual interventions can reinforce stigma (Greil et al., 2011). This dichotomy emphasises how crucial it is to approach religious and spiritual practices with nuance in both research and intervention design.

Last but not least, the participants' counsel to others, which emphasises patience, early medical consultation, and bolstering faith demonstrates their sense of shared accountability and camaraderie. The results of research on infertility support groups, where shared narratives lessen isolation, empower individuals, and encourage adaptive coping, are consistent with this peer-to-peer advice (Martins et al., 2014). Participants positioned themselves as advocates and educators in addition to being victims by giving advice, demonstrating the transformative power of coping through shared experience.

These findings have significant practice implications. First, they stress how crucial it is to create comprehensive infertility treatments that incorporate community education, medical treatment, and psychological counselling. Second, they propose that community networks and peer support groups could be crucial in promoting truthful information and thwarting damaging cultural narratives. Third, they highlight the need for legislative changes to lower the cost of infertility care by making fertility treatments more widely available and affordable.

The implementation of public health campaigns to normalise infertility and promote early healthcare use, the strengthening of community-based support groups for emotional and

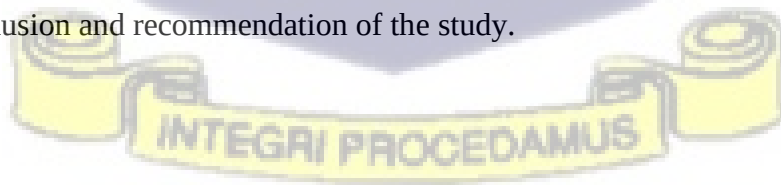
informational support, the integration of mental health counselling into infertility care to promote adaptive coping, and the development of partnerships between faith leaders and biomedical providers to ensure spiritual coping stays supportive rather than stigmatising are crucial recommendations.

The long-term efficacy of various coping mechanisms, in particular their influence on psychological health and treatment-seeking behaviour, requires more investigation. Comparative studies between urban and rural populations, as well as longitudinal and intervention-based studies, may provide insight into protective strategies and how structural disparities influence coping mechanisms.

Coping mechanisms used by infertile women in the Tamale Metropolis are varied and overlap, reflecting systemic barriers, cultural norms, and resilience. These techniques aid women in overcoming the psychological and spiritual difficulties associated with infertility, but they also draw attention to deficiencies in policy frameworks, community support, and healthcare access. Women's quality of life could be improved and the burden of infertility lessened by addressing these gaps with integrated, culturally sensitive interventions.

5.6 Chapter summary

The discussion of main findings has been presented and compared with literature. Appropriate recommendations for practice, and research have been proposed. The next chapter presents the summary, conclusion and recommendation of the study.



CHAPTER SIX

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

6.0 Introduction

This is the final chapter of the thesis that outlines the summary of the entire research as well as the conclusion and recommendations arising from the thesis.

6.1 Summary of the study

With an emphasis on their health and functioning, socioeconomic experiences, psychosocial and spiritual aspects, and family and social support networks, this qualitative study investigated the quality of life (QoL) of infertile women in the Tamale Metropolis. To give voice to women's perceptions, challenges, and coping mechanisms within the sociocultural context of northern Ghana, the study used an exploratory descriptive design.

The results showed that infertility has a significant effect on women's general functioning and health. Physical difficulties that impacted their capacity to work, take care of the home, and interact with others included headaches, exhaustion, irregular menstruation, and hormonal imbalances. The women suffered from severe psychological problems in addition to physical ones, including anxiety, despair, low self-esteem, and emotional collapses. Together, these health issues affected how they perceived themselves and how they operated daily; many of them expressed feelings of identity loss and incompleteness.

Infertility's socioeconomic effects were equally noticeable. Due to the high expense of fertility treatments, including assisted reproductive technologies (ART) like in vitro fertilisation (IVF), many participants reported experiencing financial instability. Women frequently experienced workplace stigma or decreased productivity because of stress, which disrupted their employment and career goals. Financial vulnerability was made worse by cultural pressures

that forced women to spend down their savings, rely on their husbands, or put up with marital strife. While marital instability and societal expectations increased the pressure to conceive, social stigma and discrimination within the community reinforced feelings of exclusion, gossip, and mockery.

Women's experiences were also influenced by psychological and spiritual factors. Grief, guilt, shame, and sadness were linked to infertility; participants internalised blame and began to doubt their own value. Since many saw infertility as a test of faith or as a sign from God, religion and spirituality were important coping mechanisms. To find answers, women resorted to spiritual vigils, prayer, fasting, herbal remedies, and conventional healing methods. Religious communities did offer some emotional support, but these advantages were frequently offset by stigma fears and irrational expectations.

Social and familial support has become both a source of help and a cause of worry. While some participants experienced blame, indifference, or pressure to have children, others spoke of empathy and support from spouses and family members. The burden placed on women was exacerbated by gendered expectations that supported the idea that infertility was their fault. Although access was still restricted, peer and community support groups were mentioned as possible coping mechanisms.

Women showed resilience by using a variety of coping mechanisms in spite of these obstacles. These included advocacy for community education, reliance on healthcare services, spiritual and alternative therapies, and personal mechanisms (self-reflection, joyful activities, and avoiding comparisons). Many participants also gave advice to others, stressing the importance of patience, seeking medical help early, and having a stronger faith. This highlighted their roles as community advocates and educators in addition to being sufferers.

The study's overall findings demonstrate that infertility in Tamale is a complex phenomenon that impacts women's physical and mental health as well as their social standing, financial security, and spiritual lives. The results highlight the necessity of culturally aware interventions that combine medical treatment with community education, psychosocial support, and legislative changes. Improving the quality of life for women who are infertile requires lowering the cost of fertility treatments, encouraging male participation, and tackling stigma in families and communities.

This study adds significant context-specific insights to the scant literature on infertility and quality of life in Ghana by elevating the voices of women. It offers a starting point for creating policies and interventions that consider the particular social, cultural, and spiritual realities faced by infertile women in northern Ghana and other comparable contexts.

6.2 Implications of the Study

This study emphasises how infertility affects women in the Tamale Metropolis in a variety of ways, including their physical and mental health, socioeconomic status, spiritual beliefs, and familial relationships. The results have significant implications for research, education, health policy, nursing and midwifery practice.

6.4.1 Nursing and Midwifery Practice

The results emphasise the necessity of comprehensive infertility care that extends beyond biological interventions. Psychosocial assessment, emotional support, and culturally sensitive counselling should all be incorporated into routine care by nurses and midwives. In order to lessen stigma and enhance quality of life, they must also treat physical symptoms, mentor women in safe coping mechanisms, and encourage encouraging family participation.

6.4.2 Nursing and Midwifery Education

In addition to the biological aspects of infertility, curricula should address its psychosocial, cultural, and spiritual dimensions. Counsellors who receive training in cultural competence, family-centered care, and counselling will be prepared to provide all-encompassing support. Students' ability to handle the intricate realities of infertility can be improved through case studies and simulations.

6.4.3 Health Policy

The study emphasises the necessity of laws that lower the cost of infertility treatment. Programs for community education, insurance coverage, and subsidised treatment are essential. Multidisciplinary infertility services that acknowledge their roles as frontline carers, educators, and advocates should be promoted by nursing and midwifery associations.

6.4.4 Nursing and Midwifery Research

Future studies should examine the long-term effects of infertility and test interventions like peer support groups and counselling. Research on the experiences of men and the distinctions between rural and urban areas would enhance knowledge of contextual and gendered factors. Research in these areas led by nurses and midwives will produce evidence to enhance policy, education, and care.

6.3 Conclusions

The study examines the quality of life of women with infertility in the Tamale Metropolis, using qualitative approach. It found that infertility has a perceived impact on women's daily functioning, psychological and emotional health, physical health, and self-esteem. These perceived effects are often exacerbated by shame, cultural expectations, and lack of affordable treatment. Despite this, the women showed resilience through coping strategies like peer support and adopting faith-based activities. However, there are gaps in access to

comprehensive infertility knowledge, support services, and equitable health policy. The study recommends increasing infertility education, implementing supportive health policies, and conducting further research in multiple settings to improve women's lives.

6.4 Recommendations

To raise the standard of living for Ghanaian women who are infertile, an integrated approach is needed. Community-level interventions to lessen stigma and strengthen support networks, practice innovations to incorporate holistic and culturally sensitive care, policy reforms to improve affordability and access to treatment, and additional research to expand knowledge and guide evidence-based responses are all included in this. When taken as a whole, these recommendations highlight the critical need for an equitable, compassionate, and inclusive approach to infertility that considers not only its biological aspects but also its psychosocial, spiritual, and cultural realities. The specific recommendations are illuminated below.

6.4.1 Policy-Level Recommendations

The study highlights the urgent need for infertility to be formally included in Ghana's reproductive health agenda at the policy level. Despite its significant negative effects on women's quality of life, Ghana's current reproductive health policy often overlooks infertility. Acknowledging infertility as a public health priority would allow for resource allocation, monitoring, and targeted interventions. Subsidies for infertility treatment expenses are also suggested, as many families find assisted reproductive technologies (ARTs) unaffordable, especially in areas with limited resources. Policy changes such as insurance coverage, subsidies, or government-backed financial aid could make infertility treatment more accessible and equitable. Enhancing the health system's ability to provide fertility clinics, qualified professionals, and affordable diagnostic services is also crucial. Policy frameworks should encourage men to participate in infertility treatment, as women are often framed as a woman's

problem in Ghana. This gendered stigma could help transfer accountability to a shared reproductive health issue, improving couple communication, increasing treatment adherence, and lowering stigma.

6.4.2 Practice-Level Recommendations

In Ghana, a shift from a biomedical approach to a multidisciplinary model is needed for infertility care. Healthcare professionals should consider psychological, spiritual, and social aspects of care, considering the impact of infertility on women's mental health, social identity, cultural standing, and spiritual wellbeing. Psychological support services, such as counselling and mental health interventions, are crucial for women dealing with emotional issues often overlooked in medical consultations. Couples can also benefit from these services.

Professional development for healthcare providers is essential to improve the quality of care. Sensitivity training should be provided to nurses, midwives, and physicians working with infertile women to promote empathy and reduce stigma. This will improve the overall healthcare experience and patient-provider relationship. Bridging the gap between biomedical care and culturally rooted practices requires cooperation with traditional and religious leaders. Medical professionals should collaborate with faith and traditional healers to develop culturally aware educational programs, supporting accurate information about infertility, dispelling myths, and motivating women to seek evidence-based treatment while honouring their spiritual and cultural beliefs.

6.4.3 Community-Level Recommendations

Community-level initiatives are crucial in reducing stigma and fostering supportive environments for infertile women in Ghana. Despite male factors playing a significant role in infertility, infertility is often stigmatized, with women often subjected to blame and discrimination. Community education campaigns should dispel myths, alter cultural

perceptions, and emphasize that infertility affects all women, not just women. Peer and community support groups can provide emotional support, education about reproductive health issues, and empower women to speak up for their rights. Family structures, which often pressure women to have children, should be a priority in raising awareness and creating supportive environments. Lastly, extensive educational programs, such as media advocacy, school-based reproductive health education, and public health campaigns, can help dispel myths, promote early screening, and facilitate prompt medical consultation. Involving local media outlets, religious organizations, and traditional leaders in these campaigns ensures cultural relevance and appeal to a wide range of audiences.

6.4.4 Research Recommendations

In Ghana, the complex issue of infertility requires further research, policy, practice, and community interventions. Men's experiences, including their psychological, social, and cultural difficulties, are often understudied, despite being a common reproductive health issue. A more comprehensive understanding of infertility would result from examining men's experiences, dispelling gendered presumptions that solely blame women. Longitudinal research is also needed to understand the long-term effects of infertility on women's lives over time. Monitoring the psychological, social, and economic effects of infertility at different stages of life would guide the development of sustainable interventions. Interventional research is also crucial for evaluating the efficacy of culturally specific tactics, such as peer support groups and stigma reduction campaigns. Cross-cultural and cross-regional comparative studies could provide a wider body of evidence supporting regionally sensitive policy and practice, highlighting common issues and distinctive cultural dynamics. These comparative viewpoints would ensure interventions are flexible enough to be implemented in various sociocultural contexts.

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APPENDIX A: PERMISSION LETTER

**DEPARTMENT OF RESEARCH & DEVELOPMENT
TAMALE TEACHING HOSPITAL**

In case of reply the number and date of this letter should be quoted

Tamale Teaching Hospital
P. O. Box 16
Tamale
E-mail: info@tth.gov.gh
Digital Address: NT-0101-5331
Website: www.tth.gov.gh



Te: 03720-00180
Our Ref: TTH/R&D/SR/25/329
Your Ref:

10th July, 2025.

THE SUB-BMC/UNIT HEAD

**PERMISSION TO CONDUCT RESEARCH IN
TAMALE TEACHING HOSPITAL**

I hereby introduce to you **Mr Iddrisu Aliu Hadrat**, an MPhil Midwifery student of the Department of Maternal and Child Health, School of Nursing and Midwifery, University of Ghana.

Mr Hadrat has been granted permission to conduct a study title **"Quality of Life of Women Living with Infertility in the Tamale Metropolis: A Phenomenological Study"**.

Please provide him the necessary assistance to enable him to complete the study. If you have any doubts or concerns, kindly contact the Research Unit on the second floor of the administration block or on Telephone 0209281020. Additionally, please report any misconduct of the Researcher(s) promptly to the Research department for appropriate action.

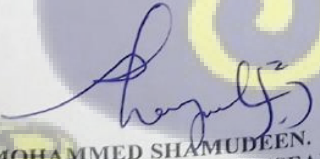
As part of this authorization, PI(s) is/are required to adhere to the following guidelines and conditions during the research process.

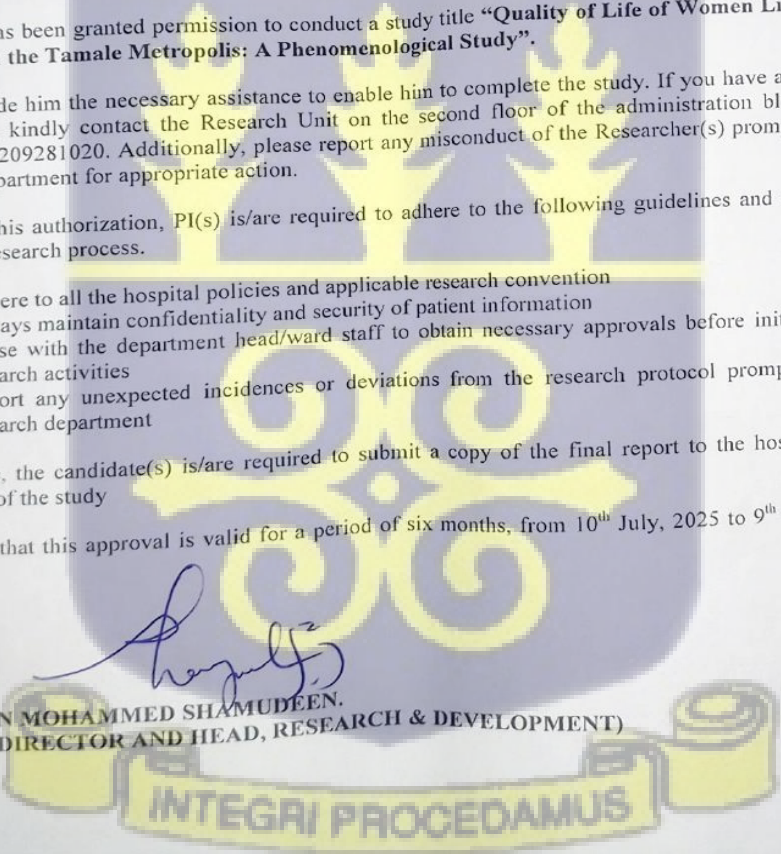
1. Adhere to all the hospital policies and applicable research convention
2. Always maintain confidentiality and security of patient information
3. Liaise with the department head/ward staff to obtain necessary approvals before initiating any research activities
4. Report any unexpected incidences or deviations from the research protocol promptly to the research department

Furthermore, the candidate(s) is/are required to submit a copy of the final report to the hospital upon completion of the study

Please note that this approval is valid for a period of six months, from 10th July, 2025 to 9th December, 2025.

Thank you.


ALHASSAN MOHAMMED SHAMUDEEN.
(DEPUTY DIRECTOR AND HEAD, RESEARCH & DEVELOPMENT)



APPENDIX B: INTRODUCTORY LETTER

 **UNIVERSITY OF GHANA**

DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref 10935246

11th September, 2023

The Chairperson
Committee on Human Research
Publication and Ethics
KNUST.

Dear Sir/ Madam,

LETTER OF INTRODUCTION – ETHICAL CLEARANCE

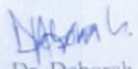
I write to introduce to you **Mr. Aliu Hadhrat Iddrisu**, an MPhil Midwifery student in the Department of Maternal and Child Health at the School of Nursing and Midwifery, University of Ghana, Legon.

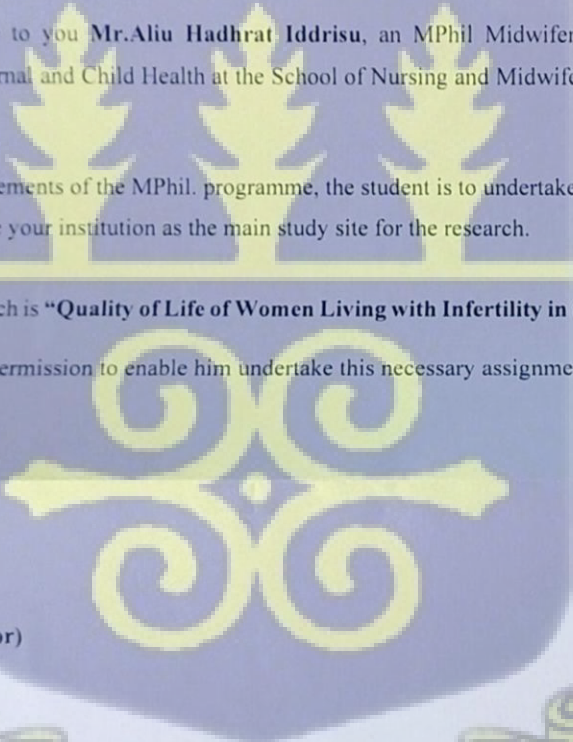
As part of the requirements of the MPhil. programme, the student is to undertake a research study and he intends to use your institution as the main study site for the research.

The title of his research is “Quality of Life of Women Living with Infertility in the Metropolis.”

I write to seek your permission to enable him undertake this necessary assignment.

Thank you.

Yours faithfully,

Dr. Deborah Armah
(Research Supervisor)


INTEGRI PROCEDAMUS

P. O. Box LG 43, Legon, Accra, Ghana | Tel: +233 (0) 30 251 3250
Email: mchsonmi@ug.edu.gh | Website: www.nursing.ug.edu.gh

 **UG**

APPENDIX C: ETHICS LETTER



Kwame Nkrumah
University of Science
and Technology, Kumasi

College of Health Sciences
SCHOOL OF MEDICINE AND DENTISTRY

COMMITTEE ON HUMAN RESEARCH, PUBLICATION AND ETHICS

Our Ref: CHRPE/AP/1334/24

27th October 2024.

Mr. Aliu Hadhrat Iddrisu
School of Nursing and Midwifery
University of Ghana
LEGON.

Dear Sir

LETTER OF APPROVAL FOR RENEWAL

Protocol Title: "Quality of Life of Women Living with Infertility in the Tamale Metropolis."

Proposed Site: Tamale Metropolis.

Sponsor: Self-Sponsored.

Your submission to the Committee on Human Research, Publication and Ethics (CHRPE) on the renewal to the protocol No. CHRPE/AP/954/23 dated 18th October 2023 refers.

The Committee reviewed the following documents:

- A Completed CHRPE Application Form.
- Participant Information Leaflet and Consent Form.
- Research Protocol.
- Interview Guide.

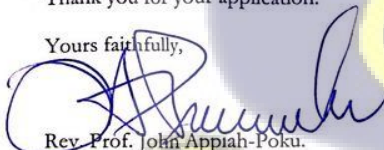
The Committee has considered the ethical merit of your proposed renewal and approved it. The approval is for a fixed period of one year, beginning 18th October 2024 to 17th October 2025 renewable thereafter. The Committee may, however, suspend or withdraw ethical approval at any time if your study is found to contravene the approved protocol.

Data gathered for the study should be used for the approved purposes only. Permission should be sought from the Committee if any amendment to the protocol or use, other than that submitted, is made to your research data.

The Committee expects a report on your study annually or at the close of the project, whichever one comes first. It should also be informed of any publication arising from the study.

Thank you for your application.

Yours faithfully,


Rev. Prof. John Appiah-Poku.
Honorary Secretary
FOR: CHAIRMAN



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APPENDIX D: PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Title of Study: Quality of life of women living with infertility in the Tamale metropolis

Principal Investigator: Mr. Aliu Hadhrat Iddrisu

Institution: University of Ghana

Contact Information: 0246733080

PARTICIPANT INFORMATION SHEET

Introduction

You are invited to participate in a research study on the “**Quality of life of women living with infertility in the Tamale metropolis**”. Before you decide whether to participate, please read this information carefully to understand the purpose of the study, what your participation involves, and any potential risks and benefits.

Purpose of the Study

The study aims to explore the experiences of women living with infertility and how it affects their health, well-being, socio-economic status, psychological state, and social support systems.

What Will Happen if You Take Part?

If you agree to participate, you will be asked to take part in an interview lasting approximately 45-60 minutes. The interview will be audio-recorded with your permission and will take place at a location convenient to you. You may decline to answer any question or stop the interview at any time without any consequences.

Possible Risks and Benefits

- **Risks:** The study may involve discussions of sensitive and emotional topics related to infertility, which might cause distress. If you feel uncomfortable at any time, you may stop the interview or seek professional counseling services.
- **Benefits:** While there is no direct benefit to you, your participation will contribute to understanding the challenges faced by women living with infertility, which may help inform policies and support services.

Confidentiality

Your responses will be kept strictly confidential. Your identity will not be disclosed in any report or publication. Audio recordings will be stored securely and will only be accessible to the research team. All data will be anonymized.

Voluntary Participation and Right to Withdraw

Your participation is completely voluntary. You may withdraw at any point without giving a reason, and this will not affect any services or support you may be receiving.

Further Information

If you have any questions about the study, you can contact Aliu Hadhrat Iddrisu

email: aliuhadhrat@gmail.com

Telephone: 0246733080

If you have concerns about your rights as a participant, you may contact: The Chairman or CHRPE, KNUST, Kumasi Ghana.



APPENDIX E: CONSENT FORM

Title of Study: Quality of life of women living with infertility in the Tamale metropolis

Principal Investigator,

I have read and understood the information provided in the Participant Information Sheet. I understand that:

1. My participation is voluntary, and I may withdraw at any time without consequences.
2. The interview will be audio-recorded with my permission.
3. My responses will remain confidential, and my identity will not be revealed.
4. I may refuse to answer any question that makes me uncomfortable.
5. I have the opportunity to ask questions about the study.
6. I have been informed of any potential risks involved.

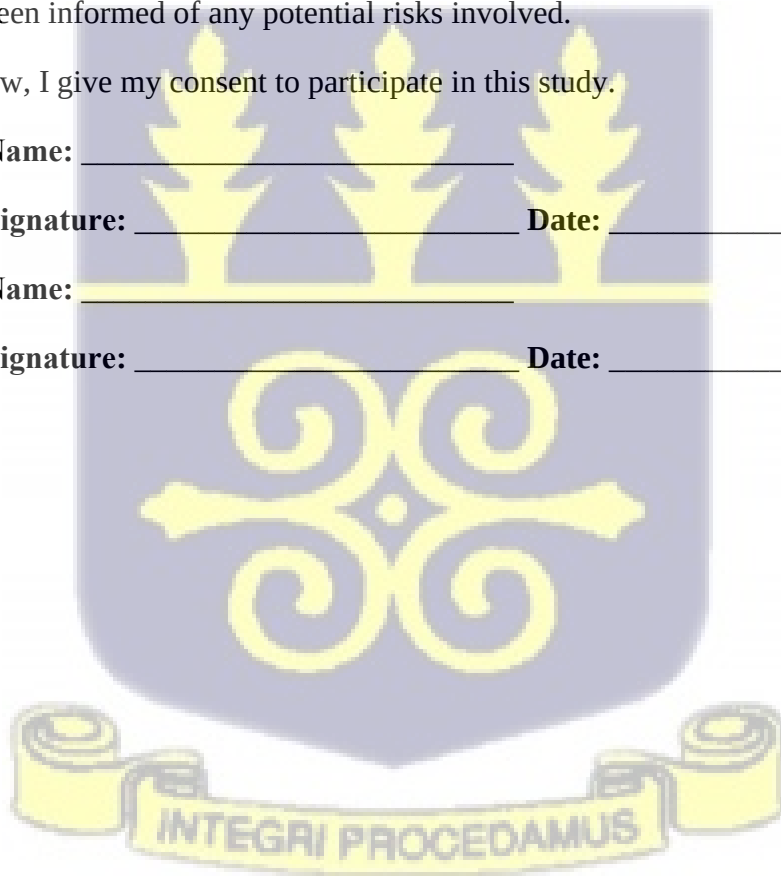
By signing below, I give my consent to participate in this study.

Participant's Name: _____

Participant's Signature: _____ **Date:** _____

Researcher's Name: _____

Researcher's Signature: _____ **Date:** _____



APPENDIX F: INTERVIEW GUIDE

TITLE: QUALITY OF LIFE OF WOMEN LIVING WITH INFERTILITY IN THE TAMALE METROPOLIS

Introduction

Welcome the participant and introduce yourself.

Explain the purpose of the study and the importance of their perspectives.

Assure confidentiality and anonymity.

Obtain informed consent.

Allow the participant to ask any questions before beginning.

SECTION A: DEMOGRAPHIC INFORMATION

- Can you tell me a little about yourself?
- Age, marital status, occupation, educational background.
- How long have you been trying to conceive?
- Have you sought any medical consultation or treatment for infertility?

SECTION B: HEALTH AND FUNCTIONING (Objective 1: Explore the health and functioning of women living with infertility)

1. How has infertility affected your overall health and well-being?
2. What physical health issues have you experienced as a result of infertility?
3. Have you faced any mental or emotional health challenges?

Probes:

- How does infertility affect your daily activities, including work and household responsibilities?
- Have you experienced any stress, anxiety, or depression? If so, how do you manage them?
- Have you encountered physical symptoms such as headaches, fatigue, or sleep disturbances?
- Have you noticed any hormonal imbalances related to infertility?
- How does infertility impact your self-perception and body image?

SECTION C: SOCIOECONOMIC IMPACT (Objective 2: Describe the socioeconomic factors affecting women with infertility)

1. How has infertility affected your financial and social life?
2. Have you encountered any financial burdens due to infertility treatments?
3. Has infertility influenced your employment or career progression?
4. What are the societal attitudes towards women experiencing infertility in your community?

Probes:

- Have you felt any discrimination or stigma due to infertility? If so, in what ways?
- How have financial constraints influenced your ability to seek treatment, including traditional and modern options?
- Have you experienced social isolation or exclusion from community events and gatherings?
- How does infertility impact marriage and intimate relationships in your cultural setting?
- Do you think infertility affects your economic stability in the long term?

SECTION D: PSYCHO-SPIRITUAL IMPACT (Objective 3: Assess the psycho-spiritual factors affecting women with infertility)

1. How has infertility affected your psychological and spiritual well-being?
2. What emotions have you experienced regarding infertility?
3. Has infertility influenced your religious or spiritual beliefs?
4. Have you sought comfort in any religious or spiritual practices?

Probes:

- Do you experience feelings of guilt, shame, or loss? If so, how do you cope with them?
- How do religious or spiritual leaders and communities view infertility in your setting?
- What coping strategies have you adopted, including faith-based or traditional healing methods?
- Have you received religious or spiritual counseling from clergy or religious groups?
- Do you believe prayer, fasting, or other spiritual rituals play a role in overcoming infertility?
- How do your faith and spiritual beliefs shape your perception of infertility and your ability to cope?

SECTION E: FAMILY AND SOCIAL SUPPORT (Objective 4: Describe the perceived emotional support from family of women with infertility)

1. How has your family supported you during this experience?
2. How do your spouse/partner and extended family members respond to your infertility?
3. Have you received emotional, financial, or informational support from family?
4. Do you feel accepted and supported by your family?

Probes:

- Are there any cultural expectations or pressures from family members regarding infertility?
- Have family relationships changed since your infertility diagnosis? If so, how?
- What kind of support do you wish to receive from family and friends?
- How do in-laws or extended family members contribute to your experience with infertility?
- Do you feel a difference in support based on gender roles in your family?
- How does social comparison with other women in your family or community affect you?

SECTION F: COPING STRATEGIES AND RECOMMENDATIONS

1. How do you cope with the challenges of infertility?
2. Have you joined any support groups or sought professional counseling?
3. What advice would you give to other women experiencing infertility?
4. What do you think can be done to improve the well-being of women living with infertility in Ghana?

Probes:

- What resources or services have been most helpful to you in coping with infertility?
- What role do healthcare providers play in your journey with infertility?
- How can societal attitudes towards infertility be improved in your community?
- Have you tried alternative medicine, herbal remedies, or traditional healing methods?
- What lifestyle modifications (e.g., diet, exercise, stress management) have you adopted to improve your well-being?
- Do you find emotional support from online forums or infertility advocacy groups helpful? If so, in what ways?

Conclusion

Thank you for your time and insights.

Please do you have any final thoughts or anything else they would like to share.

Reiterate confidentiality and how their contributions will help improve understanding of infertility experiences.

Provide contact information in case they have any concerns or questions later.

