SCHOOL OF NURSING AND MIDWIFERY

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

HEALTH SEEKING BEHAVIOUR OF WOMEN WITH INFERTILITY IN SOKOTO STATE, NIGERIA

BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSTITY OF GHANA, LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE IN NURSING DEGREE

JULY, 2019

DECLARATION

I, AHMADU Grace Isiyaku declare that this dissertation is produced by me from a research under the supervision. More so, the research work has not been submitted in candidature for any degree.

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DEDICATION

I dedicate this piece of research work to my late father **Mr. Gweba Kamso** for the proper upbringing and solid foundation he gave me despite all challenges of life.

ACKNOWLEDGEMENT

My profound gratitude goes to God for enabling me to successfully complete this program in good health and sound mind.

With a grateful heart, I sincerely appreciate Dr. Florence Naab and Dr. Mary Ani-Amponsah for devoting time despite their schedules to equip me with necessary knowledge and skills to carry out the research successfully. I cannot thank you enough for the guidance and constructive criticism that impacted positively in my study. I am indebted to the Dean Prof. Lydia Aziato, the entire faculty members and the non-academic staff of School of Nursing and Midwifery, University of Ghana for their shower of love, advice and hospitality during the course of this course. The truth is, your all practically made it happened from admission down to the completion of the course, I appreciate all the efforts.

I sincerely appreciate my lovely husband Dr. Isiyaku Ahmadu and children Abba, Jinkai, Saratu, Suleiman and Cecilia for their patience and support throughout the course of my studies. Thanks to all my in-laws and family members (the Gweba's) for being there for my nuclear family in my absence.

I thank the management of Usmanu Danfodiyo University Teaching Hospital for releasing me to upgrade my educational status. Special thanks to all the women that participated in this study. I sincerely appreciate my colleagues 2018/2019 MSc/Mphil class for being such a wonderful course mates. Your encouragements and critiques have been useful in polishing my person.

CONTENTS

LIST OF ABBREVIATIONS

HSG: Hysterosalphygography

ICMART: International Committee for Monitoring Assisted Reproductive Technologies

IVF: Invitro Fertilisation

SHS: Specialist Hospital Sokoto

TPB: Theory of Plan Behaviour

UDUTH: Usmanu Danfodiyo University Teaching Hospital

WHO: World Health Organisation

LIST OF TABLES

LIST OF FIGURE

ABSTRACT

Children are highly valued in the African culture. As a result, women with infertility experience devastating suffering. Women are often left alone to go through the burden and complex decision making process of health seeking because it is seen as a woman's problem. The main aim of the study is to explore the health seeking behaviour of women with infertility in Sokoto State Nigeria. Explorative descriptive design which is a qualitative approach was employed. Ethical clearance and administrative approval was received. A purposive sampling technique was used to recruit fourteen consented participants who were interviewed using semi structured interview guide. The study findings revealed that the women that sought for help to conceive were married, educated young elderly women. The women were able to identify infertility because they paid attention to their duration of marriage and unproductive sexual intercourse, years of last childbirth and repeated miscarriages. Regardless of the women's financial status and social support (advice, prayer, emotional financial) from significant individuals, the women were committed to seeking for medical help to conceive. The women believed that infertility is caused by biological and supernatural components. As a result, the women sought for help to conceive at both medical and faith-based outlets. The women did early and late medical seeking. They also patronised multiple health institutions starting with the private clinics for privacy. However, the women were psychologically traumatised due to social pressure (neglect by husbands, blame, humiliation and stigma) and the ordeal of infertility. Additionally, the women found infertility treatment to be expensive. It is recommended that government and relevant agencies should assist in ensuring treatment is subsidised and empower women to improve access to fertility related treatment.

KEY WORDS: Infertility, Behaviour, Childless Women, Health Seeking, Help Seeking.

CHAPTER ONE

INTRODUCTION

This chapter presents the background of the study, statement of problem, purpose of the study, objectives of the study, research questions, significance of the study and operational definition of terms

1.1 Background of the Study

Infertility is a worldwide reproductive public health challenge, affecting 48.5million couples with 34million under 60years aged women childless due to prolonged maternal morbidity which is more common in the middle income world and graded the 5th severe worldwide disability (Cui, 2010; Dierickx et al., 2019; Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012; WHO., 2011). Despite the devastating reproductive health challenges of infertility, it is still one of the ignored reproductive health challenge and low in the health priority list in the world especially in the low income world (Cui, 2010).

Infertility is a reproductive system illness characterised by inability to attain a clinical pregnancy after 12months or more of consistent uninterrupted sexual intercourse (World Health Organisation - International Committee for Monitoring Assisted Reproductive Technologies (WHO-ICMART, 2009). Infertility is the inability of childbearing age women (15-49years) at risk of achieving pregnancy to become pregnant after two or more years of productive trial (WHO, 2018). Infertility is the failure of childbearing age women (15-49years) to become or stay pregnant within five years of exposure to pregnancy (Rutstein & Iqbal, 2004). Collectively the above are the respective biomedical, epidemiological and demographic definitions of infertility indicating

minimum waiting time before seeking for medical help to get pregnant. Medically, Primary and secondary infertility are basically the main types of infertility. Primary infertility occurs where there was no history of previous conception in a woman that fail to conceive or bear a child while secondary infertility is failure of a woman to become pregnant after previous ability to conceive or carrying a pregnancy to a live birth (Mascarenhas et al., 2012).

Globally, the prevalence of infertility among women is high with substantially low health seeking behaviour recorded. About 15% of couples within the childbearing age are affected by infertility with women accounting for about 9-10% prevalence globally (Boivin, Bunting, Collins, & Nygren, 2007; Cui, 2010; Mascarenhas et al., 2012; WHO, 2018). Basically, it is reported to be underestimated and there is no significant decrease for the past twenty (20) decades (Mascarenhas et al., 2012; WHO, 2018). Worldwide, 72.4 million women are infertile with lifetime prevalence of 6.6% to 26.4% and 40.5 million seeking for infertility treatment with 32.6million (45%) not seeking for medical help to conceive in all the countries (Boivin et al., 2007). Secondary infertility was found to be more prevalent among women within the age range of 20-44years while primary infertility is more in younger women less than 25years (Cui, 2010; Mascarenhas et al., 2012; WHO, 2018).

In the high income nations, parenting is undeniably sought after (Chin, Howards, Kramer, Mertens, & Spencer, 2015). Prevalence of infertility among women in Britain is about 12.5% and more than half sought for medical help to conceive (Datta et al., 2016). In Portugal, 7% of the women demanded for medical help to conceive out of which 71% were clinically diagnosed of infertility (Correia, Rodrigues, & Barros, 2014). In Canada, 3 in 4 couples with female partners aged 18-44years reported actively trying to get pregnant however, only 15% reported seeking help to become pregnant (Bushnik, Cook, Hughes, & Tough, 2012).

Racial disparity to the prevalence of infertility and health seeking behaviour among women with fertility problem was noted even in the high income countries. In Georgia, childlessness was found to be higher among the white women (84%) than the black women (73%) out of which 67% white and 32% black women show variation in actively trying to get pregnant (Chin et al., 2015). Similarly, Greil, McQuillan, Shreffler, Johnson, and Slauson-Blevins (2011), also report that black and Hispanic women in the U.S. delay in seeking medical help to conceive and are less to demand for medical treatment for infertility.

Despite the significance placed on childbearing, the medical demand for infertility services is still an issue. The global medical help seeking for infertility is about 58% even in nations that provide generous access to medical care; an example is the level of access in Denmark is similar to that of Gambia (Boivin et al., 2007). In USA, 34% of women with infertility do not demand for help to conceive (Slauson-Blevins, McQuillan, & Greil, 2013).The issue of infertility revolved around secrecy and privacy in both the high and middle income society such that it becomes culturally improper to ask why a woman is not pregnant (Petitpierre, 2018).

Infertility in the middle income nations raises distinct and difficult problems beyond those acknowledged by high income countries. Middle income nations have the highest prevalence of infertility in places like Asia, Middle East, North Africa and Sub-Sahara Africa (Mascarenhas et al., 2012). About 8% married women in India are presently infertile (Saha et al., 2015). In most of the middle income regions, fertility is given maximum importance as part of the tradition and/or religion; thus, infertility goes beyond failure to bear a child but is seen as a betrayal or sin (Cui, 2010; Li et al., 2017). Infertility is prevalent and a grave concern to couples specifically to women with the assumption that the affliction is not clearly represented (Petitpierre, 2018).

WHO (2018) reported that male factor contributes to about 50% infertility cases yet women are mostly afflicted with great consequences of the disease. Women from China, India, Nigeria, Ghana suffer both social and psychological trauma ranging from anxiety, stress, depression, social isolation, stigmatisation, marital problems, and being seen as sinners (Bukar, Audu, Usman, & Massa, 2012; Kussiwaah, 2016; Li et al., 2017; Naab, Brown, & Heidrich, 2013; Whitehouse & Hollos, 2014). This implies that the social and psychological consequences in turn adversely affect the health of the infertile women.

In most Sub-Saharan African (SSA) cultures, marriage is normative for childbearing and giving birth is a sign of a blessed marriage (Naab, 2014). However, there is a misconception that infertility is basically the fault of the woman posing a complex gender specific problem (Ola, 2014). Hence, childlessness in SSA signifies misfortune for the couple, frustration for families because emphasis is placed on continuity of lineage (Cui, 2010). The specific distress among women includes serious economic challenge, humiliation, ban from family and community tradition, divorce, depression, murder and suicide (Kussiwaah, 2016; Naab et al., 2013; Petitpierre, 2018). The prevalence of secondary infertility was reported to be more than primary infertility (Bukar et al., 2012; Naab et al., 2013; Oladeji & OlaOlorun, 2018; Panti & Sununu, 2014) and common among 25-49years old women (Cui, 2010). Most of the infertility cases in the middle income countries are due to infections (WHO., 2011). It is therefore, sad to note that little attention is given to the preventive measures of infertility (Hampton, Mazza, & Newton, 2013).

In Africa, medical demand for infertility still remains an issue. In most Africa nations, treatment is mostly directed towards women because infertility is viewed as a disease of women (Tabong & Adongo, 2013a). In Ghana, it is believed that infertility is caused by social and biological factors such as bewitchment, disobeying social norms, use of contraceptive and abortion

(Tabong & Adongo, 2013b). Thus, women with infertility sought for help to conceive based on their perception of the disease from spiritualist, traditional healers and medical treatment (Tabong & Adongo, 2013b). It was also reported that some men are not supportive of medical help, as they feared being diagnosed as infertile or because they have fathered a child elsewhere (Gerrits, 2012). Hence, serving as a discouragement for health seeking to some women and in case of female factor infertility, no medical treatment might be sought (Gerrits, 2012). Generally, there is also the problem of limited information on the availability of biomedical care of infertility to the public especially in the less developed nations (Gerrits, 2012).

In Nigeria, being an African nation, fertility is a vital issue and the situation is not different from those seen in other Sub-Saharan societies. The prevalence is high in some states with more than half (54.8%) of the women in Anambra afflicted with childlessness (Okafor, Joe-Ikechebelu, & Ikechebelu, 2017). Nationwide, offspring are treasured for social, cultural, religious and economic motives as such barrenness frequently leads to psychological, social, and economic burden, especially for women (Whitehouse & Hollos, 2014). The health challenges caused by infertility on women with fertility problem in Nigerian is devastating as the prevalence of psychiatric morbidity is said to be around 39% and 42.9% (Awoyinka & Ohaeri, 2014; Ikeako, Iteke, Ezegwui, & Okeke, 2015; Upkong & Orgi, 2006). It is evident that childbearing does not only have an important influence on the woman's social status in the family and society but her health as well. In Southern Nigeria, infertility is believed to be caused by predestined supernatural problems, problem of women, a threat to man's lineage and spiritual attack by witchcraft (Okafor et al., 2017). The burden of childlessness is confined to the socio-cultural background as it affects the opinions of individuals towards medical help seeking.

Health seeking behaviour is a complex process (activity) characterised by multifaceted factors like age, marital status, parity, literacy level of the individual, family's financial resources, religion, social support and individuals' perception of infertility (Slauson-Blevins et al., 2013; White, McQuillan, Greil, & Johnson, 2006). Women with infertility in Nigeria, attribute the disease to cultural, spiritual and biomedical aetiology (Bukar et al., 2012; Lawali, 2015). This implies that despite the importance attached to fertility and the burden of childlessness, women seek for help from alternative medicine with only few accessing medical care.

The burden of infertility on women and the complexities involved in treatment decision making makes it imperative for the researcher to explore the health seeking behaviour of women in Sokoto state using the theory of help seeking behaviour as an organising framework.

1.2 Statement of Problem

Children are highly valued in Nigeria; the Northern part not an exception and the suffering associated with infertility is overwhelming. Childless women are ill-treated by husbands and in-laws. As a result women go through many traumas both psychologically and socially such as anxiety, depression, stigmatisation, divorce (Lawali, 2015). In addition, high oxidative stress status was found among women with infertility in Sokoto (Panti et al; 2018). More so, the study by Upkong and Orgi (2006), also revealed that women's experience is devastating as lack of support from husband also predicted depression and anxiety for most Nigerian women.This is more evident in a predominately Muslim society where gender disadvantage poses threat to the women's health psychologically (Qadir, Khalid, & Medhin, 2015).

The place of early identification and prompt treatment of the predisposing conditions to infertility cannot be over emphasised. In the Northern Nigeria, infertility health seeking is delayed as 40% of women with infertility seek for medical care after three years of not being able to

conceive out of which 50.4% used traditional medication (Bukar et al., 2012). This shows that delay in seeking care can be attributed to so many factors in the health decision process and the delay might also expose the women to other advance health consequences.

Secondary infertility accounted for the majority of cases 52.7% in Nigeria (Bukar et al., 2012; Oladeji & OlaOlorun, 2018). In Sokoto, studies have reported prevalence of infertility as 15.7% with secondary infertility as the common type with 67.2% (Panti & Sununu, 2014). Secondary infertility as the main indication for hysterosalphingograhy (HSG) in Sokoto with 54.9% with 58.3% abnormalities seen in the cervix, uterus and fallopian tube was also reported (Danfulani, Mohammed, Ahmed, & Haruna, 2014).

More so, Panti and Sununu (2014), revealed that 42.9% of the infertility cases were female related out of which 78.8% had history of preceding genital diseases. According to Panti and Sununu (2014), early health seeking and prompt treatment of the genital infections might reduce the prevalence of infertility in the State. Studies by researchers in the region and beyond have provided a lot of insight on the prevalence, common types, causes and consequences of infertility (Danfulani et al., 2014; Dyer, 2008; Lawali, 2015; Panti & Sununu, 2014; Panti et al; 2018). However, little is known about the health seeking behaviour of the women with infertility. This prompted the researcher to explore the health seeking behaviour of women with infertility in Sokoto state.

1.3 Purpose of the Study

The main aim of this study was to explore the health seeking behaviour of women with infertility in Sokoto State Nigeria.

1.4 Objectives of the Study

The objectives of the study were derived from the constructs of the theory. The specific objectives of the study were to:

1. Determine the symptoms salience among women with infertility.
2. Describe the life course factors of women with infertility
3. Explore the individual and social cues among women with infertility
4. Identify the enabling and predisposing factors leading to health-seeking behaviour among women with infertility
5. Assess the perception of women with infertility towards seeking medical help
6. Explore the health seeking behaviours of women with infertility

1.5 Significance of the Study

The results from this study would provide the picture of the factors influencing the health seeking behaviour of women. This would give an understanding of the complex process involved in health seeking. The information may also help planners and agencies for maternal and reproductive healthcare to strategy how to assist the women seek the appropriate medical care. The information from the study would assist health practitioners appreciate the complexity in health decision making thereby informing them to treat each woman demanding medical services holistically and uniquely as individual. The findings would also sensitise and enlighten the women on the availability and accessibility of medical infertility services in the community and beyond. The study would be an addition to the body of knowledge serving as a reference material for further studies.

1.6 Research Questions

1. What are the symptom saliences of women with infertility in Sokoto?
2. What is the life course factors influencing the health seeking behaviour among women with infertility in Sokoto?
3. What are the individual and social cues influencing the health seeking behaviour among women with infertility in Sokoto?
4. What are the enabling and predisposing factors leading to health-seeking behaviour of women infertility in Sokoto?
5. What are the perceptions of women with infertility towards seeking medical help in Sokoto?
6. What are the health seeking behaviour of women with infertility in Sokoto?

1.7 Operational Definition of Terms

Health seeking behaviour: looking for medical treatment

Help seeking: seeking for treatment

Sought for help: looked for treatment

Infertility: being unable to become pregnant after all trials

Women: a female of childbearing age (18 to 50yers)

CHAPTER TWO

THEORETICAL FRAMEWORK/ LITERATURE REVIEW

This chapter looks at the review of the related literature under the following major headings: the theoretical framework and the review of empirical literature, which were organised based on the specific objectives of the study.

2.1 Justification of Theoretical Framework

Theory gives comprehension that leads to conceptual and operational definition of terms in research thereby improving the consumption of research. The development of nursing science is based on theoretical framework built via vigorous process from practice and replication via scientific inquiry (research) by analysis and development of concept and theories (Bousso, Poles, & Cruz, 2014). Theoretical models help to organise research and the extension of knowledge by providing both direction and impetus; hence make research findings meaningful and generalizable (Fawcett & Desanto-Madeya, 2012). Thus, it becomes imperative to use a theoretical model to guide the entire research process for better understanding of the research problem.

About three different theoretical frameworks on behaviour were reviewed. The first is the Theory of Health Belief Model (HBM) generated by social psychologists Rosenstock, Hochbaum, Kegeles & Levegethal in 1950 in order to better comprehend the reasons behind the failure experienced by the screening programs for tuberculosis (Carpenter, 2010; Rosenstock, 1974). The theory was later amended to include the role of self-efficacy and other emerging evidence in the field of psychology in relation to decision making and actions in 1988 (Glanz & Bishop, 2010; Glanz, Rimer, & Viswanath, 2008). The model has gained a lot of recognition as it is the best and largely used psychological health behavioural theory in health research (Glanz et al., 2008). The

theory is largely used to predict different changes in the health related behaviours (Glanz et al., 2008). The theory postulated that health behaviours are influenced by perceived susceptibility, perceived severity, perceived benefits or barriers to actions and self-efficacy (Rosenstock, 1990). This implies that the perception of the severity of the disease has influence on the individuals' health behaviour. The constructs of the theory focused basically on the effect of perception on health behaviour; of which the researcher was not interested.

The second is the Theory of Planned Behaviour (TPB) that was developed by social psychologist Ajzen in1991. This was derived out of the initial reasoned action (Ajzen, 1991). The theory has largely been use as a model to give understanding of different behaviours in which the individual has ability to exert self-control (Ryan & Carr, 2010). The health belief model postulated that a particular action towards a behaviour in respect to specific question is likely to predict that behaviour (Ajzen, 1991). The TPB beliefs that behavioural change is stimulated by three variables namely individual's attitude, subjective norms and perceive behavioural control (Ajzen, 1991). This indicates that TPB detailed the individual's conscious decision to exert self-control in respect to all kinds of behaviour as explained by the conceptualised constructs. Hence, this theory helps health professionals to appreciate and influence people to promote healthy behaviour. The variables in this theory are also not of interest to the researcher.

The Help Seeking Behaviour Conceptual Framework is the third theory reviewed. The theory was found most suitable to guide this study because it is exclusively meant for infertility looking at the peculiarity of the health challenge.

2.1.1 Theory of Help Seeking Behaviour

The theory of help seeking behaviour was developed in 2006 by sociologists White, McQuillan and Greil (White et al., 2006). The theory drew from the behavioural model of health service utilisation by Andersen 1968 with the view to provide a framework for help seeking and cognition process of symptoms (White et al., 2006). The model also examines the effect of symptoms salience, life course cues, individual and social cues, predisposing and enabling factors on the perception of problem which in turn triggers help seeking. The itemised constructs were conceptualised by the theorists as follows.

Symptom salience is perceived as a significant determinant of perception and it shows how the symptoms affect daily life (White et al., 2006). For infertility, symptom salience can be represented by consciously and actively trying to conceive plus the strength of the individual's intention towards childbirth.

Life course cues are vital variables for assessing not being able to conceive as a fertility challenge and for help seeking behaviour as well. The variables include age, parity and marital status because marriage is a normative for childbearing.

Individual cues have to do with the individual's attitude based on the significance attached to motherhood and religiosity as aim in life. These also impact on perception and help seeking for fertility impairment.

Social cues are other important factors that influenced perception and seeking help. These are perceived approval for medical treatment, partner's perceived fertility intention, perceived stigma of infertility and experience, and support of friends and family.

Enabling conditions are determinants that motivate seeking help like resource (income and health insurance), educational level and social support.

Predisposing conditions are also seen as motivators such as having a trusted personal doctor, knowledge of symptoms and treatment, medical anxiety and belief in the safety and efficacy of biomedical solution.

Perception of the problem is actually influenced and established by some of the above mentioned items like seeing symptom as biomedical, health belief and belief in medical treatment.

2.1.2 Conceptual Framework

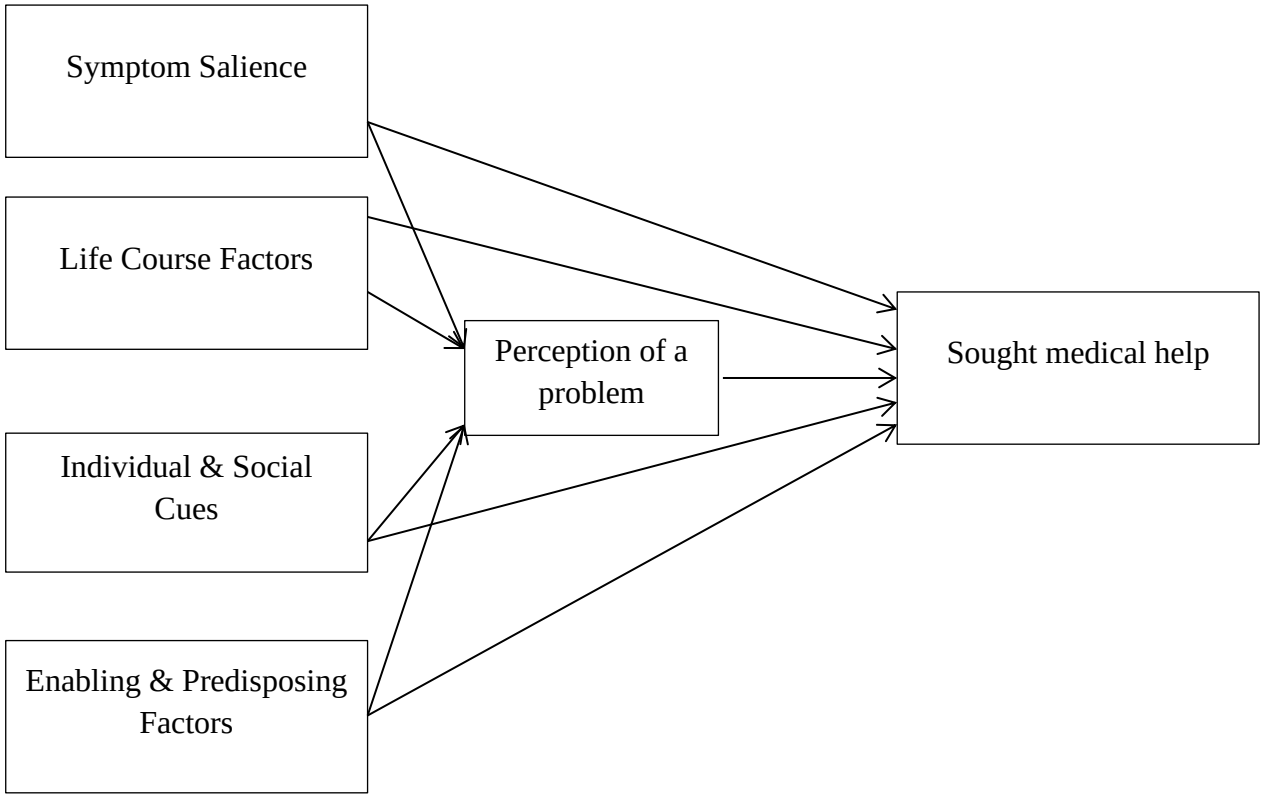

Figure 1: Conceptual Framework of Help Seeking by White et al. (2006).

2.1.3 Application of the Theory of Help Seeking Behaviour

Symptom salience: Women with the desire to give birth might actively put efforts in trying to conceive e.g going online for health information or in-person consultation or both.

Life course cue and enabling condition: Educated aged (>35years) women with good family income without children are more likely to seek for medical help to conceive.

Individual cue: Women who have no children with more conservative value like intention to have children because of the motherhood and religiosity value are most possible to pick and pay attention to signs of fertility problems.

Social cue: women without children and with the desire to conceive, perceived signs of infertility, with positive reasoning about the treatment, good family or friends support and partner's desire for a child are most likely to demand for medical attention immediately (on time).

Predisposing condition: women with positive health attitudes, positive belief in biomedical solutions, and have trusted personal doctor are likely to demand for medical treatment or their doctor might identify and raise the issue of the fertility impairment to those that are reluctant. Likewise, those with treatment anxiety, do not have regular doctor, and do not have knowledge of the medical symptoms are less likely to seek for medical treatment for their fertility problem.

2.2.0 Literature Review

The University of Ghana Legon-Accra database search engine which was complimented with Open Athens database resources were used to carry out the online search. Academic search Elite, Cumulative Index to Nursing and Allied Health Literature, Medical Literature Online, Pubmed, ScienceDirect EBSCOhost, Proquest, JSTOR, Springer Link, Elsevier, Wiley Online Library and Taylor & Francis online databases were explored to retrieve literature because these databases are health and professionally focused. Specific databases associated to field of search and a small scale academic search can be limited to specific professional databases (Coughlan, Cronin, & Ryan, 2013).

The search was guided by the use of measures that includes: basic keywords (infertility, behaviour, women, childless, seeking, and help-seeking); Boolean operators ('AND/OR') to combine words through the advance search. The criteria (English language, year of publications, peer reviewed and source type) were used in order to give focus and ensure timely search. Keywords used in databases consist of words put in the literature by databases compilers and authors which allow keywords to retrieve topics central to the piece of literature than any words that appeared in the articles (Aveyard, 2014; Jesson, Matheson, & Lacey, 2011). Search for relevant specific articles cited and referenced (reference tracing) by other authors was also incorporated into the digital search. The scope of the relevant literature reviewed were from the year 2006 to 2019 because infertility is a peculiar area not often studied thus the classical references.

2.2.1 Symptoms Salience of Infertility among Women

Women desiring to get pregnant are able to identify delay in conceiving and make effort to seek for help to get pregnant. Indicator of symptom salience include delay in conceiving which was identified by the monthly menstrual flow indicating lack of conception, desire to have children and actively trying to conceive (White et al., 2006). In a Gambia study by Dierickx et al. (2019), the finding revealed women were able to perceive infertility after unproductive 1-2 years of unprotected sexual intercourse with their husbands and miscarriages within the same period. The study furthers shows that women took cognisance of the short period (3-6months) living together with their husband without pregnancy (Dierickx et al., 2019).

Similarly, Bunting, Tsibulsky, and Boivin (2012), highlighted that desiring to get pregnant is seen in making some conscious effort to achieve pregnancy (take some actions e.g tracking ovulation) as an indication of the willingness to seek for help. In a study carried out in USA on

N=1352 women, women with infertility trying to conceive were related to higher odds of in-person health seeking (consulting a doctor) (Slauson-Blevins et al., 2013). It was reported that use of allopathic treatment was more among educated women living in the city with 73% compare to 62% of women not educated and living in the rural area (Sarkar & Gupta, 2016). These show that the desire to have children enable women to identify the delay in conceiving and also influences actively trying to conceive.

2.2.2 Life Course Factors of Women with Infertility

Reports have shown that lack of children in marriage predisposes to marital disharmony. In Africa, customarily, married couples are expected to become parents (Dierickx, Rahbari, Longman, Jaiteh, & Coene, 2018). Childbirth cements marriage and children are seen as the chain that bond marriages (Mumtaz, Shahid, & Levay, 2013; Tabong & Adongo, 2013b). The women's role traditionally in Africa is to give birth to children for her husband and in-laws (Mumtaz et al., 2013; Tabong & Adongo, 2013b). Therefore, children are expected after marriage to bring peace, stability in marriage and as prove of womanhood (completeness) (Dhont, 2011; F Naab, 2014; Roomaney & Kagee, 2016). Hence, marriage without children weaken marriage ties, it is viewed as a curse, incomplete without God's blessing, a big problem and couple cannot be viewed as a family by the community (Mumtaz et al., 2013; Naab, 2014; Tabong & Adongo, 2013a). Thus, they push to seek for help to get pregnant in order to have peace and stability in their marriages.

The ultimate dream of marriage is to have children as a result, those women without children are not happy in their marriages since they went into marriage with the hope of becoming mothers (Dhont, 2011; Tabong & Adongo, 2013a). Sadly, some in-laws disrupt the peace in homes of these women, women are denied full membership of husband's family, their role in the family

is unsecured or even divorced (Dhont, 2011; Tabong & Adongo, 2013a). As a result, women with infertility feel life has been unfair to them because of the fear of reaching old age without children.

Equally, in a study carried out in high and low income countries the finding shows that being married, years of marriage and marriage without children are related to high health seeking of consulting a doctor (Dhont et al., 2010; Johnson & Johnson, 2009). The findings in a study conducted in India on 720320 households revealed that older married women (>35years) with fertility problem, living in the city and belonging to Muslim or Hindu religion did more health seeking (Sarkar & Gupta, 2016). There is high help seeking for infertility treatment among older women (Bushnik et al., 2012; Datta et al., 2016; Naab et al., 2013; White et al., 2006). The high level of health seeking might not be unrelated to the value attached to childbirth both customarily and religiously.

In Canada, 77% of couples whose wives were within the age of 18-44years had at a certain time in their relationship tried to conceive (Bushnik et al., 2012). In Britain a study carried out on N = 8315 women and N=5742 men, showed that older married women age 35-44years were more likely to seek for medical care with 58.0% than the younger married women age 16-25years with 32.6% (Datta et al., 2016). It further reveals that women who had their first baby at 35years or above were more at seeking for medical help to conceive with 74.6% than childless women below 35years with 58.7% (Datta et al., 2016). In addition, in Canada, women without any child within the age of 35 to 44years were twice (63%) more likely to sought medical help to get pregnant than younger women with infertility (30%) (Bushnik et al., 2012).

Furthermore, in quantitative and qualitative studies conducted in Ghana. The findings revealed that majority of the women sought for help to conceive were married, within the age of 30-39 years (Kussiwaah, 2016; Florence Naab et al., 2013) and the duration of infertility was 2-

12years and large number (11/14,12/14) had no children at all (Donkor, Naab, & Kussiwaah, 2017; Kussiwaah, 2016). Likewise, in Gombe, Northern Nigeria, religion, educational level and number of children influenced the health seeking behaviour of women and that women with at least a child were more likely to delay in seeking help to conceive (Bukar et al., 2012). However, Sarkar and Gupta (2016), argues that women with secondary infertility did more health seeking with approximately 6% as against women with primary infertility with 2%. The difference in the two studies could be associated with the demographic characteristics of the participants and the diversity in the geographical location. Collectively, it is evident that older women without children and with higher cultural value did more of health seeking to conceive.

2.2.3 Individual and Social cues among Women with Infertility

Attitude of women with infertility about the condition and social support triggers health seeking. Women are usually the first to present in the hospital for treatment of infertility and are willing to be exposed to extensive investigations too (Naab & Kwashie, 2018). Children in the Africa culture are valued for continuation of family name and as gifts from God (Naab, 2014; Tabong & Adongo, 2013a). Hence the belief that God is the giver of children to make women complete. Appears to be a social cue. In addition, significance of parenthood is a motive for high treatment seeking for infertility (Johnson & Johnson, 2009) and support from significant others triggers may health seeking. Women who had advice and encouragement from spouse, family and friends, did more of a consulting doctor for help than online help seeking (Slauson-Blevins et al., 2013). The finding in a qualitative study by Naab (2014), on N=15 African women revealed that family members' support influences medical help seeking. In addition, support from family and friends help to reduce stress in women with infertility (Kussiwaah, 2016).

More so, it was reported that the health seeking behaviour of women with infertility in the Northern Nigeria is motivated by husbands, family, friends, financial empowerment and other medical condition (Bukar et al., 2012; Lawali, 2015). Meanwhile other women were harshly treated by their mother in-laws (Tabong & Adongo, 2013a). Similarly some of the participants reported self-encouragement and true acceptance of fate was a motivator to rely on a support system and focus on the future (Tabong & Adongo, 2013a). Equally, Dierickx et al. (2019), support that despite the secrecy adopted initially by the women, they later realised that social network were significate resources to health seeking. This demonstrates that health seeking was possible because the women received social, emotional, sometimes financial and verbal recommendations from family, friends and the community members. Nevertheless, some studies argue that black women were less supported by family and friends but the white women had more social support (Chin et al., 2015; Greil et al., 2011). Furthermore, report shows that financial support of husbands decreases when treatment is ineffective (pregnancy not achieved) and the women continue with the treatment when husbands no longer pays the hospital bill (Dierickx et al., 2018). Thus, the women are willing to give off all their possession in order to conceive (Dhont, 2011). This describes the importance women place to childbearing and the extend they can go in health seeking for infertility.

In Africa, medical demand for infertility still remains an issue. In most Africa nations, treatment is mostly directed towards women because infertility is viewed as a disease of women as such some men disassociate themselves from the treatment (Dhont et al., 2010; Mumtaz et al., 2013; Naab, 2014; Tabong & Adongo, 2013b). Thus the men always refuse to do any health seeking or even to do the test requested on account of their wives' health seeking for fear of being diagnosed infertile (Mumtaz et al., 2013). Additionally, it was reported by some participants in Naab (2014) study that men exclude themselves from the problem of infertility; as such refusing to follow their

wives to the hospital for medical check-up. Similarly, Dierickx et al. (2019), opined that regardless the diagnosis women were more at high chances of health seeking than men. It is evident that some women are left with the burden of health seeking which further complicates treatment.

Nevertheless, report have it that perceived stigma of infertility was associated with higher online health seeking to avoid the stigma than doing no health seeking (Boivin et al., 2007; Bunting et al., 2012; Slauson-Blevins et al., 2013). Women with infertility carry more of the ordeal of stigmatisation and they are stigmatised by other women that have children (Dhont et al., 2010; Dierickx et al., 2018; Roomaney & Kagee, 2016). Women stated that they are stigmatised more than people living with HIV (Dhont, 2011). In Ghana, women with infertility are not allowed to related with other people's children because they are seen as witches who have finished their unborn children and could harm other children as well (Tabong & Adongo, 2013a). In Tanzania women with infertility are viewed as useless and those with primary infertility suffer more because they are tag 'completely barren' (utasa) and those with secondary are considered may 'yet conceive' (ugumba) (Hollos & Larsen, 2008). Collectively, this further reveals that the impact of infertility is dreadful ranging from personal suffering to community repercussions.

More so, Infertility is seen as exclusively a woman's problem and women were often blamed and abused for the cause of infertility by either by their husbands, neighbours and the community (Dhont et al., 2010; Dierickx et al., 2019; Mumtaz et al., 2013; Naab & Kwashie, 2018; Tabong & Adongo, 2013a). Making coping with infertility difficult (Dhont, 2011). Even where the men were medically informed about their condition (Naab & Kwashie, 2018). This is so in Africa culture because there is no couple infertility as the man is a near perfect being and the woman is always the infertile (Mumtaz et al., 2013; Naab, 2014). In addition, the misconception has penetrated the health system as women are often the first to be tested in medical treatment whenever couples' are finding

it difficult to conceive because infertility is perceived to be associated with women (Naab & Kwashie, 2018).

The complexity involved in health seeking for infertility by women cannot be over emphasized. Sadly, infertility can also be as result of male factor but some women find it difficult to convince their husband to go for test as such spend a lot of money for expensive treatment that might not be necessarily useful (Dierickx et al., 2019). Interestingly, some women in Ghana are found of shielding their husbands by accepting the blames when asked about their delay in conceiving by friends and family members (Naab & Kwashie, 2018).

It appears the social pressure the women suffer exposes them to psychological, social, physical and emotional ill health (Mumtaz et al., 2013; Roomaney & Kagee, 2016). Report revealed that women are often depressed when they are humiliated by friends or colleagues in their home and at their places of work (Donkor et al., 2017). Furthermore, it was reported in Rwanda that women are always depressed and feel hopeless/worthless (Dhont, 2011). In Southern Nigeria, lack of support from husbands, age, not having any child at all and feeling stressed up are predictors of depression (Upkong & Orgi, 2006). This shows that the ordeal of infertility is among the devastating experiences an African woman can encounter in her life.

2.2.4 Enabling and Predisposing Factors Leading to Health Seeking Behaviour among Women with Infertility

Treatment belief, education, resources and support are the determinants that trigger health seeking. Studies reported there is high help seeking for infertility treatment among women with high education and high family income or good paid jobs than women with low education and low family income (Bushnik et al., 2012; Datta et al., 2016; Dhont et al., 2010; White et al., 2006). Similarly, a study has reported that women with high income 63% had modern treatment and 22% had no modern

treatment likewise, among the low income women, 34% had modern treatment and 36% had no modern treatment (Sarkar & Gupta, 2016). Furthermore, Johnson and Johnson (2009), opined that that family income was 11-14% more likely to stimulate consulting a doctor. In addition, studies conducted in Ghana, stated that health seeking was done by educated women who have completed at least one form of formal education (secondary & post-secondary education) and the women were gainfully employed with a monthly earning (Kussiwaah, 2016; Naab et al., 2013). Nonetheless, irrespective of their financial status, couple invest in the treatment of infertility (Dierickx et al., 2018).

Evidently, smaller proportion of women that are between the high and low socioeconomic levels (marked as inequalities) did no health seeking (Datta et al., 2016). However, study by Dierickx et al. (2019), argues that women in both urban and rural areas spend their life savings to achieve pregnancy. The types of medical treatment received depend on what their savings could afford (Dierickx et al., 2019; Tabong & Adongo, 2013a). Due to the huge difference in the financial level of these women, treatment was mostly accessed in the public sector, although expensive too because the test and drugs were bought outside the public health centre (Dierickx et al., 2019). Infertility also adds to the financial burden of the family regardless of the woman's financial status (Dierickx et al., 2018; Tabong & Adongo, 2013a). Collectively, it implies that the negative impact of infertility cannot only affect the psychological and social wellbeing of an individual but economic aspect inclusive.

Likewise, the study of Slauson-Blevins et al. (2013), revealed that positive attitude towards biomedical solution were related to higher likelihood of in-person health seeking only or both (in-person and online) than doing no health seeking. More so, the perception of treatment for safety and efficacy largely trigger health seeking with little above half score (53%) than negative belief for short and long term (physical and mood effect) (Bunting et al., 2012).

The study by Bunting et al. (2012) further revealed that positive treatment belief was seen among younger women with infertility who have been trying to get pregnant for less than 12months and are living in the Urban area. The study further reported negative treatment belief among women with university education, well paid jobs and who have been trying to conceive for more than 12months after consulting a doctor (Bunting et al., 2012). More so, it was argue that black women had less belief in medical solution to infertility but the white women had more faith in the medical solution to infertility (Chin et al., 2015; Greil et al., 2011).

2.2.5 Perceptions of Women with Infertility towards Seeking Medical Help

There seems to be various beliefs on the causes of infertility which influence the type of health seeking women pursue. Few of the women believed medical diagnosis as cause of infertility and others created their diagnosis mentioning witchcraft and God (Dhont et al., 2010). In West Africa (Nigeria and Gambia), infertility is believed to be caused by predestined supernatural factors (spiritual attack by witchcraft, evil spirits and God (Dierickx et al., 2019; Okafor et al., 2017). Similarly, it was reported that some community sees women with infertility as witches who are paying their debt with their unborn children (Dierickx et al., 2019; Tabong & Adongo, 2013b). In addition, infertility is believed to be caused by natural/biological factors from the woman e.g. myoma, unsafe abortions, use of contraceptives, stress which cause miscarriage and infections (Dierickx et al., 2019; Tabong & Adongo, 2013b). This implies that the burden of childlessness is confined within the socio-cultural background which also influences the perception of individuals towards treatment seeking. However, despite the belief and knowledge about the cause of infertility, the perceived cause is altered due to prolonged nature of their infertility, side effects and treatment ineffectiveness (Dierickx et al., 2019).

The perception of a disease is opined to influence the type of centres women patronise for help to conceive. As a result, treatment seeking is mostly based on women's perception of the disease (Okafor et al., 2017). Furthermore, large population of infertile couples sought for help to conceive from traditional and spiritual other than the medical (Johnson & Johnson, 2009). In West Africa for instance, it is believed that infertility is caused by cultural, spiritual and biomedical (natural) components (Bukar et al., 2012; Dierickx et al., 2019; Lawali, 2015). As a result, women with infertility in West Africa sought for help based on their perception by going to faith-based healers, traditional healers and medical treatment and some combined the treatment outlets (Bukar et al., 2012; Dierickx et al., 2019; Lawali, 2015; Naab et al., 2013; Ola, 2014; Tabong & Adongo, 2013a).

2.2.6 Health Seeking Behaviour of Women with Infertility

Infertility and fertility impairment related diagnosis are part of complex interplay predisposing factors impacting on the health of women as observed by fast increasing body of knowledge (Hanson et al., 2017). However, globally, 55% of couples with infertility demand for medical treatment in the high and low income countries (Boivin et al., 2007). In addition, women are usually the first to go for medical help seeking (Dhont et al., 2010; Mumtaz et al., 2013) and to do various testing including the invasive type and treatment which are expensive (Mumtaz et al., 2013). Likewise, it was reported that all urban and rural women in these studies accepted the medical treatment and continue to seek for help to conceive for up to 20years (Dierickx et al., 2019; Mumtaz et al., 2013). However, some participants blamed health professionals for not prioritising on their fertility needs by ignoring their fertility related distresses and not providing them assisted reproductive technology (Roomaney & Kagee, 2016).

There is poor health seeking attitude among women with infertility. In the study of Johnson and Johnson (2009) in USA on 219 women, 56.8% couples sought for medical help to conceive, the couple did investigations and followed treatment but 30.9% did no health seeking. In addition, about 34% of women in USA did not seek for medical help for their infertility problem, 9% went online for health information on infertility, 32% consulted health professional and 25% did both (McQuillan, Greil, Shreffler, & Bedrous, 2015; Slauson-Blevins et al., 2013). Similarly, according to Bunting et al. (2012), demand for medical advice to conceive is similar for both high and low countries with 75% and 70% respectively. The similarity in the health seeking behaviour for both high and low resource countries was also reported by Boivin et al. (2007) but the percentage is higher in the latter study. Collectively, health seeking behaviour for infertility is still a concern in both the high and middle income countries.

Likewise, it appears that women delay before seeking care. Women start seeking for medical health seeking at least 5years or beyond of infertility (Dhont et al., 2010). Studies have reported that African women with fertility problem delay for 2-3 years before consulting a doctor (Bukar et al., 2012; Chin et al., 2015). However, Mumtaz et al. (2013), reported that some women were advised to seek for help for infertility as early as 3months after marriage and that mother in-laws are always the decision makers for medical help seeking, indicating a level of family pressure on the woman. In the middle income nations (India & Nigeria), about 40% of the women with infertility sought for medical treatment to get pregnant, while others opted for alternative options, traditional and faith-based methods (Bukar et al., 2012; Ola, 2014; Sarkar & Gupta, 2016). Similarly, traditional source is the first to be visited (Dhont et al., 2010). These women health seeking behaviour was influenced by lack of awareness, culture and because the medical treatment was expensive.

In a study by Naab et al. (2013), among 203 women with infertility in southern Ghana, the findings revealed that of all the women seeking help to conceive, 76.6% sought for medical treatment, 8.9% went for traditional herbs and 1.6% used both. Collectively, health seeking behaviour is influenced by symptoms salient, life course cues, individual and social cues, enabling and predisposing conditions and perception of the problem. Which in turn influenced the when to seek for help, type of help to sought for, acceptance and adherence to the treatment accessed (Greil, McQuillan, & Sanchez, 2014; Greil et al., 2011; McQuillan et al., 2015; Slauson-Blevins et al., 2013; White et al., 2006).

2.3 Summary of Literature Review

The literature review was able to review relevant studies on the health seeking behaviour of women with infertility. The studies used were retrieved through a focused online search and reference tracing. The health seeking behaviour of women with infertility is said to have no significate difference between countries with high income and good access to medical treatment and those with low or middle income and poor access to medical care (Boivin et al., 2007). In the reviewed studies in Nigeria, Ghana and USA, health seeking behaviour is said to be largely influenced by factors like age, marital status, parity, literacy level of the individual, family's financial resources, religion, social support and individuals' perception of infertility (Bukar et al., 2012; Lawali, 2015; Naab, 2014; Slauson-Blevins et al., 2013; White et al., 2006). Women with high socioeconomic status show good health seeking behaviour (Bukar et al., 2012; Lawali, 2015; Slauson-Blevins et al., 2013; White et al., 2006). The vast number of the studies reviewed used quantitative approach but the study intends to use qualitative study in order to give an in-depth understanding of the level of health seeking behaviour. It was also noticed during the review that some authors did not use theoretical framework to guide the study. The current study however,

plan to use the conceptual model of *Help Seeking Behaviour* by White et al. (2006), to guide the study.

CHAPTER THREE

RESEARCH METHODS

This chapter gives an explanation of the methods used to achieve the objectives of the study. The chapter discussed the research design, research setting, target population, sample and sampling technique, instrument for data collection, method of date collection, method of data analysis, trust worthiness and ethical consideration.

3.1 Research Design

An exploratory descriptive design, which fits within a qualitative approach, was employed to explore the Health Seeking Behaviour of Women with infertility in Sokoto State. The qualitative design allows for discovering of meaning and revealing various realities; however, generalisation is not the main focus (Polit & Beck, 2010). The design further emphasised the need for rigor in choosing a research setting with the high potential of providing rich data that will give an in-depth understanding of the phenomenon at hand (Polit & Beck, 2010). The design also allows for detailed investigation and understanding of the health seeking behaviour of women with infertility.

3.2 Research Setting

Nigeria is located at the Western Coast of Africa. The country currently has 36 states which are subdivided into six Geopolitical Zones with Abuja as the Federal Capital. It is also operating a Democratic government using a federal system of administration (federal, state and local government) and has 3arms of government (the executives, legislative and judiciary).

Sokoto state with the slogan; Seat of the Caliphate is located at the extreme North Western part of Nigerian between longitudes 4Â°8'E and 6Â°54'E and latitudes 12Â°'N and 13Â°58'N. Sokoto

city is the capital of Sokoto State which was created by General Murtala Mohammed on 3rd February 1976. It is an urban town, approximately 25,973 square/kilometres in land mass with a population of 3,696,999 with an estimated population of 4,886,888 projected for 2015 (Commission, 2006). The inhabitants of the state are predominantly Muslim and of Hausa, Fulani. Other minority ethnic groups include the Zabarmawa and Tuareg who also speak Hausa as a common language (Commission, 2006).The state is bordered to the West by Benin Republic, the North by Niger Republic and the East by Zamfara State, Kebbi State to the South-East.

Usmanu Danfodiyo University Teaching Hospital (UDUTH) Sokoto was established on 2nd May 1980 and located along Garba Nadama road, Gawon Nama area, Wammako Local Government Area of Sokoto State. The Specialist Hospital Sokoto (SHS) came to be in 1991 during the regime of General Ibrahim Badamasi Babangida. The choice of these hospitals was made because they are the only main public healthcare facilities serving as a referral centres to primary and secondary health centres in Sokoto, Kebbi, Zamfara states and the neighbouring Niger Republic. The hospitals are made of several departments and units. The Obstetrics and gynaecological department comprises of gynaecological ward, lying ward, antenatal clinic and ward, MVA room, ultra sound unit, labour ward, fertility research unit and gynaecological clinic. The fertility research unit and gynaecological clinic run from Mondays to Thursdays in UDUTH and on Tuesdays in SHS. The hospitals (UDUTH and SHS Sokoto) were used as the site for recruitment of the research participants.

3.3 Target Population

The target population for this study were all women with infertility attending the gynaecological clinic of UDUTH and SHS Sokoto for infertility treatment.

3.4 Inclusion Criteria

Women within the child bearing age of 18-50years married or are in a cohabiting for more than one year. Women who can speak in English or Hausa language diagnosed of either primary or secondary infertility. Women on initial or follow up visit were included in the study.

3.5 Exclusion Criteria

Post-menopausal women, women who had permanent sterilization and whose partners have permanent sterilization were excluded from the study.

3.6 Sampling Techniques and Sample Size

Purposive sampling is a non-probability sampling technique known as judgemental sampling. It is described as a method that allows for the selection of a subset from the entire population based on the researcher's knowledge of the topic under study (Grove, Burns, & Gray, 2012; Polit & Beck, 2010). In addition, it is also based on the researcher's judgement of participants that will provide rich relevant information typical of the population under study (Grove et al., 2012; Polit & Beck, 2010). Similarly, purposive sampling allows the researcher to develop criteria that represent the characteristics of the target population and intentionally select based on the predetermined criteria (Basavanthappa, 2011).Therefore, a non-probability purposive sampling technique was employed to recruit the consent participants to participate in the study. The technique allows and guide in the selection of women with the experience of infertility.

3.7 Sample Size Determination

Qualitative study is not concerned with sample size. However, the sample size is determined when there is saturation of data (redundancy) because qualitative study deals with participants' characteristic that will produce information that will give an in-depth understanding

of the problem at hand (Basavanthappa, 2011; Grove et al., 2012; Polit & Beck, 2010). As such the researcher will recruit participants with the predetermined criteria that will give relevant data until data saturation level is achieved. Consequently, at the fourteenth participants, data saturation was reached given rise to a sample size of fourteen (14) women with infertility.

3.8 Data Collection Tools

Semi structured interview guide was used to give focus and direction to the pattern of the in-depth face to face interview in order to extract relevant information from the participants (Polit & Beck, 2010). More so, the instrument used for data collection was adequate enough to elicit information that will produce answers to the research questions (Burns & Grove, 2010; Parahoo, 2014). The interview guide was developed based on the objectives of the study and literature. The semi structured interview guide was made of open ended questions divided into two sections (section A-participants' socio-demographic data and section B-questions on health seeking behaviour of the women); see appendix C for sample of the interview guide.

3.9 Pretesting of the tool for data collection

Pretesting of a research tool ensures the accurateness of the tool to obtain anticipated responses and also to aid in amending the tool prior to its administration to the recruited participants (Brédart, et al; 2014) the semi structured interview guide was pretested at Women and Children Welfare Hospital Sokoto on two women who came for infertility treatment. The piloting was done to ensure that the questions asked will be comprehensive and to determine practical usage. Questions that were not cleared were reframed. Rectifying the gaps identified helped to improve the instrument and provided assurance for its practical usage. It is important to note that the pilot data was not included in the study.

3.10 Procedure for Data Collection

An introductory letter (appendix A) from School of Nursing and Midwifery University of Ghana and research proposal were used to request for ethical clearance and administrative approval from the Health Research Ethics Committee of UDUTH and SHS Sokoto. Furthermore, an office was requested from the in-charge of the gynaecological clinic in order to ensure privacy and favourable environment for the interview.

Ethical clearance and administrative approval were obtained (appendices E & F) from UDUTH and SHS ethical committee. With the assistance of the midwives working in the gynaecology clinic of the study areas, the clients' files were used to identify suitable participants. Then the consented participants were recruitment for the study based on the predetermined criteria after introduction of self and establishing rapport. The participants' phone numbers and home addresses were taken with their permission for follow up. The participants that gave their consent were interviewed at a scheduled time, venue and day convenient for each of the participant. Eight (8) participants were interviewed in the assigned office at the gynaecology clinic and 6 participants were interviewed at their respective homes. Verbal and written consent (tick consent form) (appendix B) were requested from the participants after explanation of the purpose and benefits of the study. The study participants' permission was also sought to audio record and take notes of observation that cannot be recorded by the tape in order to retain relevant information.

The interview which lasted for about 30-45munites was conducted in English and Hausa (predominate local dialect) language. The data collection was done within two weeks. The researcher personally conducted the interview utilising the guide. The thoroughness that was applied in the data collection process is to help reduce potential bias to the results of the study that

might be introduced by untrained personnel used for data collection (Parahoo, 2014; Polit & Beck, 2012).

3.11 Data Analysis

The researcher used the thematic content analysis style described by (Vaismoradi, Turunen, & Bondas, 2013). In using this style, the researcher assumes a position of an interpreter by reading through the data, making meaning out of segments which are used to develop major and subthemes (Vaismoradi et al., 2013). Data generated was manually and electronically managed. Translation of interview conducted in Hausa language was then followed by transcription of the data by the researcher. Pseudonyms were given to represent each participant conforming to their transcripts. The transcribed notes were prudently and intentionally read through, comparing it with the audio tape recorded over time again and again to ensure consistency.

To ensure integrity of the information, the recorded tape and transcribed documents was vetted the supervisor. Field notes, field journal of dates, time and place of interview sessions were well-kept. Coding was done and the corresponding codes were used to bring out the comprehensive meaning and understanding. Codes were categorised to connect patterns and structures to form major themes and subthemes. Quotes were used to support the main themes and subthemes which were logically organized beneath the six constructs derived from the conceptual framework and study objectives including the two main themes that emerged. The transcripts and field notes were securely kept in files under lock and key under the researcher's guard. The audio files from the interviews were pass-worded in the researcher's laptop. Only the researcher and supervisor have accessible to the data.

3.12 Trust Worthiness

According to Prion and Adamson (2014), rigor is the principle that underpins the being sure of the data collection, analysis and interpretation (methods) as truthful. It was also supported by Tobin and Begley (2004), that methodological rigour in qualitative research underpins the acknowledgement of the method as a systemic scientific process. Collectively, rigour establishes the integrity and fitness of the method used in carrying out the study. Trustworthiness is essential in assessing the value of a qualitative research (Johnson & Rasulova, 2017). However, they also warn that qualitative research should be evaluated on the basis of research ethics and respect for participants. The research used the criteria for evaluating trustworthiness as highlighted by Lincoln and Guba (1985), (pioneers of qualitative research) to ensure the robustness of the study. The four criteria are credibility, transferability, dependability and confirmability.

Credibility: This is concerned with how well the information presented represents the participants' factual data (Lincoln & Guba, 1985). In addition, demonstrating the value of data and the interpretation (Lincoln & Guba, 1985; Prion & Adamson, 2014). In a way of ensuring that the findings and interpretation are valid, the researcher established rapport with the participants before the interview in order to promote trust. Then during the face to face in-depth interview, field notes taking was done to include gestures that cannot be captured by the recorder. This was used for summary and transcription of the interview. The summary was in turn used to seek for clarification from each participant based on the data coded and meaning given to the codes in summary of the interview.

Transferability: Allows for the application of results of the study to another population in a different but similar background or setting (Lincoln & Guba, 1985; Prion & Adamson, 2014). As a result, the comprehensive description of the methods with attention payed to the setting and

participants used was done. This was done to help the reader decide on the possibility of replicating the method on another population with different context but similar characteristics.

Dependability: This is demonstrated through auditing of researcher's record notes of data, procedures, judgement and findings by other inquirers (Lincoln & Guba, 1985; Prion & Adamson, 2014). Thus, member checking was done; a step by step rigour of the methods (data collection, analysis and interpretation) was incorporated in the report to give complete understanding of the process. Then, the findings were subjected to verification through member checking and review of the reports by experts in the field.

Confirmability: Is the objectivity and agreement between two or more individuals in the establishment of the truth that interpretations are derived from the data (Tobin & Begley, 2004). It also demonstrates that the data and interpretation of the findings are from the participants' not the researcher's perspective (Lincoln & Guba, 1985; Prion & Adamson, 2014). Therefore, the data and interpretation of findings were subjected to the study participants and supervisors' review in order to reduce researcher's potential subjectivity. Furthermore, the proposal, field notes, field journal, audio records, coding record and note analysis were kept as audit trail for any independent auditor for verification to help in making decision about the data.

3.13 Ethical Considerations

There are ethical consequences in all the phases involved in nursing research process. It ranges from the decision to research or not, selection of topics, design and dissemination of findings (Burns & Grove, 2010; Parahoo, 2014). In addition, the research ethics committees are there to ensure that the participants rights' are protected (Burns & Grove, 2010; Parahoo, 2014). Thus, researchers are expected to be conscious of this and follow the outlined principles to enhance ethics in research.

The researcher obtained ethical clearance and administrative approval from the Research Ethics Committee of UDUTH and SHS Sokoto on presentation of an introductory letter from School of Nursing and Midwifery University of Ghana and a research proposal. With the assistance of the nurse in charge of the gynaecology clinic, explanation was given to the recruited participants on the purpose and benefit of the study. Emphases were made on voluntary participation and that participant is free to opt out at any level of the research or stop the researcher at any level of the interview. The study participants were also educated that consent covers tape recording of the interview, notes taking of observations that cannot be recorded by the tape, description and reporting of the findings.

The study participants were assured of confidentiality of all the information given during the interview. As such, the tape recorder and notebook were constantly under lock and key when not in use and transcript and computed information were pass-worded. Participants were informed not to use their names or any form of identification. Even on the field note taking, only coding/ pseudonyms was used in order to eschew the real identification of the participants thereby ensuring anonymity. An office in the gynaecological ward was used to ensure privacy for those interviewed conducted in the hospital. The participants were guaranteed of no harmed throughout the study. Then, the participants were requested to indicate their consent by ticking a box on the consent form.

CHAPTER FOUR

STUDY FINDINGS

The chapter presents the research findings. Using the theoretical model adopted, the findings were presented into six thematic areas with subthemes and two other themes with five subthemes that emerged from the data analysis. The demographic characteristics are presented first followed by the themes.

4.1 Participants' Demographics

The study participants were all women within the age range of 22-45years. The participants were married with different years in marriage and 5 participants were in polygamous marriage. A large number (n=8) were Muslims with 6 participants being Christians. Half (7) of the participants were predominantly Hausa Fulani by tribe, 4 from Northcentral and 3 were Igbos from the Southeast, all resident in Sokoto. Among the 14 participants, 10 had no child at all, 2 had 1child each and 2 had 2 children each but still consider themselves as having fertility problems. All the participants completed some form of formal education out of which 10 had tertiary education and 4 had finished secondary school. Eight (8) of these participants were working, 3 were engaged in small trading while the remaining 3 were housewives. The family monthly income also varied among participants from low (< ₦100, 000) to middle income (>₦ 200,000) while 2 participants chose not to speak on the family monthly income. See details in the Table 4.1 below:

Table 4.1 Demographic Characteristics of the Study Participants

Variables	Frequency (N=14)	Percentage (100%)
Age (years)		
20-29	3	22
30-39	9	**64**
40 above years	2	14
Marital status	All married	100
Duration of marriage (years)		
1-5	4	28
6-10	7	**50**
11-15	-	-
16-20	3	22
Duration of infertility (years)		
1-5	6	43
6-10	2	15
11-15	3	21
16-20	3	21
Parity		
None	10	**72**
One	2	14
Two	2	14
Educational status		
Primary school	0	0
Secondary school	4	29
Diploma	4	29
Degree	6	**42**
Religion		
Islam	8	57
Christianity	6	43
Family income		
< ₦100, 000	3	22
>₦ 100,000 – 200, 000	3	22
>₦ 200,000 – 300,000	0	0
> ₦ 300,000 – 400,000	1	7
Do not know spouse income but participants earn <100,000	5	**35**
Refuse to respond on income	2	14
Overall participants	14	100

Source: Transcribed data (2019).

4.2 Organisation of Themes

The findings were organised into Six (6) major themes and seventeen (17) subthemes which were derived from the conceptual framework used for the study and two (2) main themes and five (5) subthemes emerged from the data analysis given a total of eight (8) main themes with twenty-two (22) subthemes. These themes and subthemes are presented below in Table 4.2

Table 4.2 Themes and Subthemes

S/no.	Themes		Subthemes	code
	Theoretical	Emerged		
1	Symptoms Salience	-	• Delay in conceiving • Desire to have children • Trying to conceive	SS
2	Life Course Factors	-	• Childbirth as a norm • Age as a push factor • Lack of children as a push factor	LCF
3	Individual and social cues	-	• Social values/beliefs • Societal support • Social pressure	ISC
4	Enabling and predisposing factors	-	• Resource and support • Treatment beliefs	EPF
5	Perception about infertility	-	• Knowledge of infertility • Treatment outlets • Medical treatment expectations	PAI
6	Health seeking behaviour	-	• Decision making • Seeking for medical help • Seeking other sources of treatment • Acceptance and adherence to treatment	HSB
7		Psychological experience	• Feeling stressed up • Being depressed	PE
8		Women's plea for help	• Advice to women • Men understanding • Government assistance	WP4help

Source: Transcribed data (2019).

4.3 Symptoms Salience

According to the participants' symptom salience refers to the obvious happenings around them that made them take cognisance of their infertility and prompt them to start seeking for help to conceive. This was explicitly expressed by the women as how they were able to detect symptoms by themselves. Some of the women compared themselves with women they got married same time with who have children. Others took cognisance of how long they have been married and having unprotected sexual intercourse. They expressed their desire to have children in various ways. For some, children provide companionship; some want more children because it is not bad to do so and others want to deliver for their husbands. Symptoms salience was described as delay in conceiving, desire to have children and trying to conceive.

4.3.1 Delay in Conceiving

The women accentuated delay in conceiving as an aspect of symptoms salient that initiated their looking for help to conceive. For these women, not being able to be pregnant for the period they have been living together with their husbands and having frequent unprotected sexual intercourse without results were described as delay in conceiving.

Recounting delay in conceiving; Kyauta shared that she patiently waited and observed the year passed by after marriage without pregnancy. But she observed as some other women got pregnant immediately after marriage;

> *Since I married, I have not gotten pregnant o, we waited for one year after marriage. After one year there was nothing you know? But I observed that some people got pregnant immediately, some six months and some even one year after marriage* (**Kyauta, 33years**)

Izatu expressed that she has not used any contraceptives to delay pregnancy and she has been having frequent sexual intercourse with her new husband for two years, still no pregnancy;

> *After the divorce with my ex-husband then I married this present husband, I have never done family planning and we have been together for the past two years but up till now, I have not conceived* (**Izatu, 35years**).

Gomma and Vida (all pseudo names) narrated that they were able to identify their delay in conceiving as they observed the women they got married together with and the ones that even got married after them giving birth;

> *I saw all the ladies we got married the same time, everyone has given birth and even those ones that married after my marriage have all delivered. They have their own children but nothing is happening to me. It makes me think that I have a problem* (**Gomma, 25 years**).

> *Some women that I got married before them, I saw them giving birth to 2-3 children, so I do feel it. I knew something is not normal. What is wrong with me? Is my own different?* (**Vida, 31years**)

Alheri shared how she observed the symptom of delay in conceiving few months into her marriage as she expected immediate conception. She impatiently went to the hospital but was advised to wait longer which she patiently did for 3years yet no pregnancy;

> *I went to hospital after some months myself. So they said we should not worry if there is problem either from my husband or me, they will know after 3years. So we were patient and managing with our lives like that till after the 3years* (voice down) *but still no pregnancy* (**Alheri, 39years**).

Amal expressed that she noticed the symptom of delay in conceiving few years after marriage. Although there were times she used to think she was pregnant but investigations usually reveal no pregnancy;

> *I noticed that when I, let's say I have spent 2-3 years after my first marriage. So, I noticed maybe sometimes I will miss my menses for 2-3months then I was thinking I was pregnant. I went for ultrasound or some test but I was told it was not pregnancy* (**Amal, 45years**)

Tumba a mother of one child expressed that she perceived the signs of delay in conceiving when her child turned three years old plus the two repeated miscarriages;

> *I conceived 3 months after my marriage but the pregnancy got aborted [pause] so I had miscarriage. A month after the miscarriage, I conceived again and that is the living child I have now who is six years old. After that I conceived twice but all the pregnancies got*

> *aborted, I think* [pause] (closed eyes) *and I think am having this issue of not conceiving for more than a year now almost two years. I didn't put it to cognisance until my child reached three years. That was when I started perceiving may be something is wrong, for me not to be able to conceive* (**Tumba, 33years**)

Similarly, expressing delay in conceiving, Vida reported not able to conceive after her first and only delivery of 7years ago which was followed by two miscarriages. She also complained of not knowing the cause of the delay in conceiving;

> *I have a baby quite alright, she is 7years old and I had two miscarriages. Since then* [pause] *I did not take in again. I feel it is not normal but I don't know the cause of it* **(Vida, 31years)**.

Narrating her delay in conceiving, Hannah lamented that she got pregnant but lost the baby in the womb and never conceived again since 5years ago;

> *The first one that I have that one died in 2013. I took in but the child died inside the womb……. since then I never conceived again* (**Hanna, 33years**).

These were the ways the women described their symptoms salient as delay in conceiving which helped them to identify their fertility problems as they could not conceive despite the time living together with their spouses. Their intentions to have children helped them to be able to perceive that they were experiencing infertility.

4.3.2 Desire to have Children

As part of symptoms salient, the women emphasized that their desire to have children or more children motivated their help seeking. The women who had no children at all, desire to get their own children while those with 1 or 2 also desire to have more children. These intentions to give birth were described in various ways.

Alheri narrated that it is good to have companionship in the form of a child. For that reason, she has even adopted children:

> *Yes, I thought of having a child. My sister, it is good to have children as companion at home, one person cannot help herself even right now, I have adopted children with me* (**Alheri, 39years**).

For Igge, desire to have her own children as she shares her happiness when she started normal menstruation because she sees it as a correction of the cause of her infertility:

> *Yes, I am interested, I desire to have my own children* (smile, giggle) *I was very happy when I saw my menses coming regularly because they use to say, it is only when you are menstruating that you will get pregnant. That is why I was so happy* (**Igge, 22years**).

Other participants with at least a child or husband having children with other wives emphatically expressed their desire to have children as below:

> *Every woman would want to have a child of her own. We are not saying other means of having children are not okay. They are but you would want to have a child of your own* (**Tumba, 33years**).

Vida recounted that she desires to have more children because it is not a bad thing and she likes children but she is sad because she did not get the needed support for health seeking from her husband:

> *Yes, I thought of having more children but the only thing that does make me sad is my husband. It is not bad to have more children* [pause] *that is why I like having children.* (**Vida, 31years**).

Izatu shared her yearning to have children for her new husband since her ex-husband took the two kids they had together away and staying without children is disturbing her, as such, she wants to give birth.

> *Yes, since I married this man, it is two years now but I am still not pregnant and I want to have children with this man that I married. And my previous husband took all the kids away and the thing is disturbing me. I want to also have my own children with this my husband* **(Izatu, 35years**).

The women desired to have children is another aspect of the salient symptoms expressed by the women. The women intent to have their own children and for some more children because it is not a bad thing as children are good companions at home. The intention to conceive made the women to try various ways to conceive.

4.3.3 Trying to Conceive

Trying to conceive was described as another feature of salient symptoms by the women. This subtheme shows how the women went about looking for help to conceive. Large number of the women tried to conceive by visiting the hospital to see health professionals for solutions to their infertility when they observed the delay in conception. They did some investigations and some had fertility enhancement drugs while some even had surgeries done.

In trying to conceive, Azume described the several efforts made to sustain all the pregnancies she had to term by seeing doctors and adhering to treatment regimen but all efforts were unsuccessful;

> *Several times, several times I thought and desire to have a child of my own that is why I kept trying to sustain the pregnancies. I went for all the tests and adhered to doctors' instruction but still the pregnancies refused to reach term* (**Azumi, 43years**).

Kyauta narrated that after waiting for one year; she actively tried to conceive by consulting a doctor. She explained that the doctor she consulted was recommended by her husband because he does not have time to wait for her turn in the tertiary hospital:

> *He is the one, he was using that clinic before I came, and he now said we should go to that clinic. You know, I am a new person here and my husband is working here, he now said he will not have time, in (hissed)UDX they use to waste time that is better we go to clinic that he will go and come back so that he will be able to go to his place work (**Kyauta 33years**).*

Another woman describing actively trying to get pregnant reported how she and her husband have been visiting the hospital, doing investigations for some time now. She reported that the result was said to be normal but she is still not pregnant:

> *Sometimes we use to think am pregnant but at the end of the month there is nothing. We have been going to SHX hospital together with him looking for how to conceive. They kept doing tests for me and even him. They said there will say there is no problem but it is two years now but am still not pregnant* (**Izatu 35years**)

Adasa described her hospital experience in actively trying to conceive. She mentioned series of tests conducted revealed normal womb. However, she was placed on some drugs to continue taking until she gets pregnant which she did but later stopped:

> *I have been to the hospital, trying to conceive. Series of [ehh] tests have been carried on me like all these [ehh] scanning, plus other tests after that one shows normal womb. They then placed me on this thing* (close eyes) *some drugs that I should continue taking until am pregnant. I took for some time but no pregnancy, so I stopped the drug because I was afraid the harm of continues taking it* (**Adasa 35years**)

Likewise, Charis shared a parallel experience of how she enthusiastically tried to conceive after marriage by going to the hospital. She had series of investigation done and drugs given but yet with all the interventions she did not conceive up till the time she relocated;

> *So, and since I married that 2016 October I have been trying to conceive with all the intervention still, I even did all the tests, my husband did his test too which was okay. So the first [ehh] test I did show a tube was blocked* (smiles) *and that I also have [ehh] ovarian cyst [ehh] which was extracted by laparoscopy in FXG hospital in January 2018. So since then, I have been taking drugs nothing has* [pause] *happened till I left Gusau to Sokoto* (**Charis 36years**)

Still in trying to conceive, some of the participants shared their trying to conceive hospital experiences where they had some investigations and treatment. Tumba described that she tried to conceive by going to the hospital where she did some investigation, was placed on diet, drugs and even had surgery to remove fibroid;

> *I now say let go to the hospital since I could not find solution online. Let me go for other investigations that may determine abi, show them the whole issue with regards to my reproductive system. So that was why I went for all those unpleasant tests one was very painful* (voice lowered down) *couple with the expensive price. So, possibly they are saying it is the fibroid that is obstructing the lower part of the uterus and so, I had to go for surgery again. They booked me for surgery, few months after the HSG. Thank God the surgery was successful, [aaa] they said I should wait again and see* (**Tumba, 33years)**.

As a health professional, Sonia reported a parallel experience of enthusiastically trying to conceive. She recounted that she had HSG, TVS, surgery and even went a step further to do artificial insemination;

> *I have been coming to the hospital, I have been seeing the doctors, and they sent me for several investigations. I did 2 HSG, the first one before the surgery and after the surgery, they sent me for the second one* (Lowered voice pitch further) *likewise my husband which he did sperm analysis and they didn't identify anything. Even Dr.* XXX [name mentioned] *there was a time she gave me this type of drug, I can't remember the name, she gave me six sachets of the pack of all these drugs. TVS transvaginal for follicular tracking you will do it like* (knock table twice) *3-4 times in a month to know when you are really ovulating. I attempted on one and one with the doctors there they did this collecting of the sperm to inject, I have (hissed) forgotten the procedure here* (looked up, silent, trying to recollect the name of the procedure) *artificial insemination* (**Sonia, 34years**).

In summary, symptom salience for these women is being able to identify their fertility problem based the on common knowledge that having unprotected sexual intercourse over time with spouse should lead to pregnancy. Their desire to have children prompted the women to go for medical treatment. In addition, trying to conceive by consulting with health professionals for treatments of infertility was also done as initial treatment or after failed trying of alternative responses.

4.4 Life Course Factors

The life course factors were associated with cues that trigger these women to actively seek for medical solution to infertility. The women highlighted that it is normally expected that a woman should deliver after marriage. Some were able to point that children are the joy of marriage and they make the woman to be accepted by her in-laws. Others stated that children are gift from God that help in performing some spiritual rites like praying for their parents when they are dead. Other women mentioned their age and lack of children were push factors for seeking treatment for

infertility. The women described their life course factors as childbirth as a norm, their age and lack of children as push factors for trying to have their own children.

4.4.1 Childbirth as a Norm

Childbirth as a norm was emphasized as part of life course factors by these women. The women described that it is customarily expected that every woman should give birth immediately after marriage. Most of the women too expected immediate conception. As such, it became a worry for most of the women when they could not conceive after marriage.

This is how Sonia described childbirth as a norm. She was overwhelmed with her inability to conceive after marriage since conception is customarily after marriage. She expressed the duration of her infertility as a condition she is suffering since childbirth.

> *Okay [tau]* (high pitch voice) *what do I say?* (silent) *after marriage, which is the normal thing,* (lowered voice pitch) *woman after marriage is expected to be pregnant but since after marriage I have not conceive not even saying that I was, maybe there was a miscarriage; even since birth let me just put it like that I have not been pregnant before* (**Sonia, 34years**).

Alheri, in narrating childbirth as a norm recounted that her in-laws expected immediate conception after marriage since she and her husband were faithful to each other before marriage;

> *When we got married his people were expecting that immediately we got married, we will have a child because we did not live a wayward life….. Not knowing that after getting married I started having this, I face the challenge* (**Alheri, 39years**).

In expressing childbirth as a norm, one of the women lamented how she became disappointed after marriage for not conceiving because she never thought that she would be married for up to 3years without getting pregnant;

> *I got married 3years ago, 2016 December, sorry 26th March 2016 by the 26th of this month it will 3years now. Sincerely, since when I was 7 months in marriage, I was not happy because since I got married I desire to have my children. I never thought I will be married for 3years without getting my own child* (**Yar-Buga, 27years**).

In expressing childbirth as a norm, Kyauta recounted the many years she has spent in marriage without having a child;

> *I have been married since 2012, this month is the 7th years now.* (Lowered voice) *I do not have any children despite all my effort* (**Kyauta, 33years**).

Izatu expected immediate conception after marriage because it is customarily expected as she shared her experience of infertility in her second marriage;

> *I got married 2008 had two children before I was divorce… I was in my parent house for one year before I remarried. Since I married this man, it is two years now but am still not pregnant. He has five children with his first wife. You see, I need children of my own with him* (**Izatu, 35years**).

Childbirth as a norm in marriage was expressed by Amal, a 45year old woman who lamented for not conceiving in her first marriage of 17years. She also shared how she had to remarry after her first husband died in anticipation of getting pregnant but no pregnancy came in her two years of marriage;

> *"My first marriage, which was* [pause] *married 17years ago, so my husband died 5 years ago, so I even re-married. Now am married two years ago that is my second marriage but still I did not have any issue"* (**Amal, 45years**).

Charis viewed childbirth as a norm because to her, children are the joy of marriage since a child makes a woman gain acceptance by her in-laws;

> *I married October 2016 and since then am having difficulty in conceiving. Like the first month, the second month that I got married, there was nothing like [ehh] pregnancy, so I went to the clinic….. I want to have my own children because* [pause] (high pitched voice) *children, they are the joy of marriage because any marriage you are into without a child even your in laws, that is your husband's family members, they will not consider you as part of the family till when you have a child* (**Charis, 36years**).

Gomma equally narrated how she is now having problems with her in-laws that once loved her. She related her lack of childbirth after marriage to be responsible for the problem she is experiencing with her in-laws because she was loved by her in-laws before the infertility issue unfolded. This was how childbirth as a norm was described by her;

> *Initially when we got married, my in-laws love me because we are somehow related with my husband by blood; we are from the same family. So they love me and I don't have any problem with them but the problem I am experiencing with them now is related to my inability to give birth. That is what is bringing the misunderstanding between us* (**Gomma, 25years**).

The participants have expressed their concerns on one of the life course factors which is childbirth as a norm. They shared how lack of children in their marriage is affecting their marital relationships.

4.4.2 Age as a Push Factor

Age is another life course factor that prompted some women to seek for medical help to conceive. Only Alheri and Azumi in this study explicitly paid significant attention to their age as a push factor.

Alheri feared that menstruation has a time bound as such it can stop at any time with aging, that was her description of age as a push factor;

> *What motivated me was that [ee] as I am, am going to 40 now. Let's say, give me 2years or 1year, let me 1year because by May I will be 39* [pause] *according to the date given to me right from my childhood. So, am considering my age is going. Tau! Menstruation have limit….. So, it can stop at any time* [pause], *so that is my fear* (**Alheri, 39years**).

Similarly, Azumi seems overwhelmed with her age which is the push factor that makes her to still see the need to seek for conception;

> *I think am aging now at* [pause] *43 to 44years. I cannot remain like this; I am trusting God let me not stay the like this. I am* [pause] *maybe is my destiny* (**Azumi, 43years**)

The women's life course factors was described as their age which serves as the push factor to their seeking for medical treatment because they believe menstruation is limited to time and ceases with aging.

4.4.3. Lack of Children as a Push Factor

Lack of children, expressed as life course factors was a driving force for the women to seek for help to conceive. Some women have never been pregnant; they do not have children at all and their need for at least a child prompts their health seeking.

This was how Charis expressed her lack of children and her eagerness to have a child by relating her infertility to a condition from her childhood;

> *And since my youth, since I started my menstruation since I came to my puberty age, I never got pregnant before talk more to do any abortion. So, that was the first pregnancy I had after 2years of treatment and I lost it* (**Charis, 36years)**

According to Hannah, lack of children has influenced her to still search for children by going to see doctors after losing the first pregnancy;

> *The first one that I have that one died in that 2013, I took in but the child died inside the womb. I went to hospital in 2015 and I went to see doctor at that my clinic side because I did not conceive again* (**Hannah, 33years**).

Lack of children is a serious prompt to health seeking for infertility even among women with at least one child. Tumba, shared her experience about lack of children as a push factor that is making her try all her possible best to conceive;

> *A month after the miscarriage, I conceived again and that is the living child I have, he is 6 years now. I have tried and I am trying all my own possible means to be able to conceive and the thing, the efforts are just being proven abortive* (**Tumba, 33years**).

Likewise, some women shared their experience of lack of children as a reason to seek for treatment. Adasa and Izatu still desire to have more children because of their present husbands as such they went to the hospital for treatment;

> *This is the eight years in marriage. Then I have two kids, although one because I have one before the marriage before the present husband. That is out of this marriage and then I had one and since then I have not gotten another one. I have been to the hospital, done series of [ehh] investigations after which they now placed me on* (close eyes) *clomid which I took not until last December I became, I got pregnant and I lost the pregnancy last month. The pregnancy was almost three months plus (abi) then I lost* (Adasa, **35years**).

> *Now I have two kids alive, one boy and one girl. Since I remarried I have never conceived is two years now but am still not pregnant that was why we kept going to the hospital with my husband* (**Izatu, 35years**).

In a nutshell, life course factors prompted the women to seek for help to conceive. There is a quest for acceptance by in-laws or happy marital life since childbirth is a norm; ages of the women, lack of children were what prompted these women to seek for help to conceive.

4.5 Individual and Social Cues

These cues were defined by the women's beliefs and societal value attached to childbearing such as their partners' need for children, pressures (stigma, mocking and blames) experienced from families and the society due to infertility. To some, encouragement from families, friends and neighbours were their motivating factors to seek for help to conceive. The women described individual and social cues as social values, societal support and social pressures.

4.5.1 Social Values

This subtheme defines childbirth according to the participants as a very important standard for womanhood and the community as a whole. The social value of childbirth as cues to health seeking for infertility was described by the women as a form of continuation of lineage, gifts from God and an act of service to God as children are instruments used to perform some religious rites. They equally reported that their husbands' intention for childbearing was quite helpful in enhancing their health seeking to conceive.

Some of the participants in reporting the social value of childbirth as cue to health seeking; stated without mixing words that childbirth ensures continuation of the family. For Tumba, she confidently recounted that childbearing is a thing of joy because her parent gave birth her and she would also want to give birth to another. She added that she wants her child to represent her when she is dead;

> [silent] (staring the roof) *[mmm]* (She maintained eye contact as she responded) *childbearing to me, it is a thing of joy because [increased voice pitch] I came to the world through somebody and I would also want to bring somebody to the world through me. And you know, I would want somebody to at least, even if I am not there somebody will be there for me; as in having somebody to represent me if I am not alive* (**Tumba 33years**).

Equally, Vida a mother of one naturally likes children and she wants more children because as the first child of her family that has no male child; she has to continue with her father's lineage and to immortalise his name. That was how she expressed her social value of childbirth;

> *I like having children. We are not much in our family. My father doesn't have a male child, am the first born and we are only three. So, I feel like having children so that my father's name will continue. At least if they see my children, they will say, (ha!) this child is a grandchild to Mr XXX* [mentioned father]. *Even me I like having children, I just like children naturally* (**Vida 31years**).

Few the participants of this study both Muslims and Christians in describing their shared value for childbirth viewed it as gift from God, instrument for religious rites and as an act of service to God. These were described this in different forms below. Kyauta stated that the social value of children in Islam is to intercede for their parent after death, so she wants to have her children so that she would not be forgotten and to benefit from that aspect of the religious ritual when she dies;

> *Okay, I am a Muslim, you know, if one has children now, maybe something will happen to me and I know I leave something. And I know that I have someone that will be praying for me when I leave, someone will be praying for me. But now if I leave after one year, no matter, my sister, my mother, [pause] my brother after one year, two years they will forget about me. But my own children can never forget about me* [wave the index finger to demonstrate 'never'] *and they will be praying* (**Kyauta, 33years**).

Alheri recounted the social value of children that motivated her to seek for treatment. She stated that having children and training them well is an act of service to God. That was why she held to the teaching of being faithful and avoiding youthful risky behaviours that might expose her to

infertility before marriage. She also adopted children when she could not conceive to do service for God as she waits on Him to bless her with pregnancy;

> *I was taught that as a lady if you get married if you have ever done anything abortion when you are youth, when you get married, you will not [eeh] you might not have baby. I said God forbid that teaching* (stroke the thumb and middle finger together) *was in me preventing me not to go against it, against whatever that will make me not have babies……. I have adopted children with me instead for me not to do anything for God because even I have my biological child today is still for God. Whosoever I train is for God* (**Alheri, 39years**).

Still expressing their social value as a cue that stimulated health seeking, Tumba a mother of one and a devoted Muslim shared that her religion encourages and cherishes childbirth. According to her, she is not against other means of having children. However, she wants to have more children of her own;

> *It is not that we are saying other means of having children they are not okay, they are but I would want to have more children of my own. Couple with the fact that my own religion Islam, where childbirth is encouraged and cherished* (**Tumba, 33years**)

Some women narrating the shared value of childbirth expressed that it is a gift from God. As such they have accepted their fate and will wait patiently on God but will not challenge God since he is the giver of children. Responses from Hannah, Amal and Yar-Buga have shown that they belief in God's plan and have decided to wait on God even as they seek for medical help to conceive;

> *As a Christian I will not ask God question why that I didn't have a child. He knows everything, God time is the best, when it is God's time, then God will give me a child* (struggled with words all through and started crying again) *(***Hannah 33years**).

> *If God says I will have, I will have and if God says I will not have, no matter what I do, I will not have it* (silent)*. I have a strong belief that whatever God says it will happen, certainly it will happen because is God that gives and takes that is my own* (**Amal 45years**).

> *Am a Muslim and you know, children are; is just that they are gift from God, I love and desire children. So, I am waiting on God's time* (**Yar-Buga 27years**).

Narrating their husbands' social value for childbirth; some of the participants attributed that their zeal to seek for medical help to conceive was borne out of their husbands' intention to have children and the support gave to them. Yar-Buga testified that her husband wants more children and constantly encourages her to go for follow up even when she does not want to go despite the five children he has with her co-wives;

> *Honestly he wants more children even when I was coming for check-ups, if he noticed I have taken a while without visiting the doctor, he encourages me to go see doctor and give more explanation we might be lucky to get another way out. Even yes, last year they asked him to bring his sperm for test and they did and the doctor said there was no problem seen. He has five children already with the other two wives* (**Yar-Buga 27years**).

Izatu recounted that her husband is worried because he values children. She also stated that he is eager to have more children with her and he gets excited when her period delays. But whenever she sees her menstruation and she becomes sad, he always comforts her;

> *The thing is also disturbing him. You know, when a woman is about to menstruate towards the month end; a lady will be having some feelings as if she is pregnant, I use to have such feelings. I then use to tell him that I want to eat some things. That usually makes him excited thinking is pregnancy. But after two days or when the menstruation comes, he is usually not happy and when am crying, he is always worried, and then he will tell me to stop crying because that is the way God wants it* (**Izatu 35years**).

In addition, Amal had a parallel experience as she recounted her husband's social value for children by showing his desire for children. She shared that he has been praying for them to have their own children and supported her all through the treatment they had;

> *His also wants to have children. [tau!] He has been praying; always praying that one day we will have our own children. He has been involved and really helpful; we did all the investigations required of us all* (**Amal 45years**).

The social value story is similar to that of Sonia's whose husband also desires to have his own children and has been supportive in all the treatment seeking. But lately, she is not sure of his intentions because of the pressure they are receiving from his relatives;

> *[tau]* (high pitch of voice) *he desires to have his own child though is not forth coming [hmm] he is doing what he can do. Most of the time he will be doing, let us wait on God, [m] if they say we should come to the hospital, he will follow me. He has been trying and he has been patient with me* (high pitch of voice) *but honestly [gaskiya] I don't know what it is in his mind. [ehh] I don't know what is in his mind for now because of pressure from his people* (**Sonia 34years**).

In a nutshell, the social value for childbirth described as part of individual and social cues were expressed by the women's beliefs on childbirth, their husbands' intention to have children and the support. These were sources of encouragement to the women in seeking for help to conceive.

4.5.2 Societal Support

The societal support is another aspect emphatically described as individual and social cues. This was expressed by the participants as the encouragement received in the form of advice, prayers and companionship from family members, friends and neighbours. Others are colleagues at work place and significant others that motivates medical health seeking.

The women described that the support from their families, friends and neighbours came in the form of advice and prayers. They shared that advices and prayers were reassuring and builds their hopes up as described by Tumbar and Igge;

> *I have friends, I have families and my husband to some extends, he is supporting me. It is just that he refused to go for the tests. They have been supportive and they are praying for me because that is what they have been saying. That they support me* [pause] *as in when we are discussing and talking about not being able to conceive; all they use to say is that I should not lose hope since the doctor says that my womb is now okay. That I am not having any condition that can stop me from conceiving that I should still have hope that I will still have more children. So, they have been supportive and is encouraging"* (**Tumbar 33years**).

> *The truth is, I did not have any problem with anybody. My family and friends, every one of them advised me to go to the hospital that it might be possible the irregular menses is the cause of my inability to conceive. Even my husband doesn't have problem, my friends too said I should go to the hospital, I don't have problem with anyone* (**Igge 22years**).

Another woman expressing the support received, explained how her first husband was very supportive as quoted below;

> *Gaskiya* [low voice pitch] *my first husband supported me very well. He has always supported me well. Especially my first husband, he took me for all that Shiradkor stitches he is the one saying they should do that Shiradkor stitches so that the pregnancy will stay but later [kuma] I will bleed and they will just remove the stitches* (silent) (**Azumi 43years**).

Two of the participants described how their husbands'were patience with them and gave them full support needed to follow up with medical treatment from one health centre to another as narrated by Charis and Kyauta;

> *He has been supportive of me because all the tests he did in FGX hospital; he also did in YBX hospital. When I came to UDX hospital Sokoto they said he will still repeat it because they want to have their own report, he should do it here. So, he came down from Gusau to this place, he did it and all the three results were okay* (**Charis 36yeras**).

> *My husband has been trying in supporting me because anything that they say we should to do, that maybe someone said we should go to do this [pause] to the hospital. [ma] He use to follow me but he said UDX hospital he doesn't have time because UDX hospital they use to waste time but all the first hospital we went from the beginning; we use to go together. He did the test they asked him to do in UDX we are waiting for the result to be out* (**Kyauta 33years**).

Sonia emotionally expressed that the challenges experienced due to infertility is a great lesson for her and she has decided to be strong to support herself because of the lessons learnt. More so, she mentioned that her husband and friends were supportive too. This was how she expressed the social support received;

> *[emm] what keeps me moving [pause]. Life with infertility has taught me many lessons, honestly as a lesson I have learnt from life. Myself number one* (tears fill her eyes). *I have made up my mind to be strong with the help of my husband and my friends were all supportive.* (giggle, smiled) *[ehh naw] this one, what I am going through with infertility is a big lesson abi? [ehmm] [hissed]* (silent) (**Sonia 34years**).

The women also expressed how their families were of immerse encouragement to them in effort to support socially. They made emphasised on the reassurance received from their in-laws on the need to continue waiting on God and the assurance that they believe they will have their children one day. An example was shared of gifts received from an in-law as a way of showing their concern as explicitly described by Charis and Kyauta;

> *My husband family were of help to me although he is not from a big family, they are just three in the family and the father is late. But honestly, the mother* [pause], *sometimes she is the one that will even call me; she kept encouraging me that was the reality. She will call me, she will encourage me that I should not worry that everything will be okay, even his sisters, even the sister two days ago sent me 500-naira airtime. So, his family used to encourage me, they have never done anything that will discourage me. They will call me to say I should not worry, like my mother in law anything she called; she will say that she hopes I am not disturbed? That it is God that gives children, that I should not worry, that she has that believe that I will have, that her son will have his own child. So, in my own family honestly, my mum is disturbed. My dad is late but my mum, she is disturbed because sometimes she even told me that if I want, even though I did not have a child. That my sister's and brother's children that, I can pick one and take care of them. That is even if God said that I will not have a child* (**Charis 36years**).

> *My parent did not give me any problem and my mother in-law too up till now she did not give me any problem. Like my mother in-law now she was good to me, I don't know o maybe she is doing eye service but she has not reacted anything or disturbed me up till now. Anytime that she sees me, she will tell me that we should wait for God's time* (**Kyauta 33years**).

Another woman reported how her family supported her through her ordeal, empathised with her and reassured her that they were praying for her because they were also not happy about the infertility;

> *My family showed me concern, they felt it with me and they were praying along with me. So his people were not happy that upon his service to God, and my people also upon my service to God. We will be like this, what should be the circumstances? (hhh,* (breath out). *So, that is the aspect they care for o verbally* (**Alheri 39years**).

Likewise, Gomma narrated that her family members were supportive too by encouraging her that she will be pregnant someday. They encouraged her to be strong in her faith even if she will be childless for life because God favours women He denies childbirth;

> *My own family are telling me that everything is from God, that even the heart to be patient is from God. If I don't get pregnant now, I will become pregnant one day and if I don't get pregnant at all, God favours the women He denies childbearing* (**Gomma 25years**)

In sharing her experience of social support as a cue to medical help seeking; Yar-Buga recounted how her elder sisters constantly encouraged her to go to the hospital. They even kept checking to be sure she was being attended to by the right clinic in the hospital, seeing a gynaecologist and demanded for feedback;

> *My family they were supportive. We are many in my family, more of females, most of them are married, and we are the small children among them. They show their concern by calling weekly or monthly asking if I have gone to the hospital again and the outcome. Showing their concern and worries based on my inability to conceive up till now. Their advice is always, go to the hospital. And they also ask the specific unit I went if is gynae or another department until I reassure them that I saw the gynaecologist. Even my in-laws are doing their best* (**Yar-Buga 27years**).

Another participant describing her social support experience, whose aunty is also concerned about her situation kept advising her and insisting to know if she has visited the hospital for the fertility problem;

> *My aunt has been advising me because my issue is also disturbing her. She kept asking if I have gone to the hospital concerning my difficulty getting pregnant that is two years now and they have not heard anything. I told her that we are doing our best* (**Izatu 35years**).

Still describing the social support, the women had, in forms of reassurance and help from their neighbours and friends, a woman described how her neighbours rallied around her even when she was sick, caring for her implying that she is pregnant until she told them that she not pregnant as quoted below;

> *My relation with people is okay, I have good neighbours that are elderly, we are the young one around and they have all given births. There was one I met with pregnancy, now she has delivered the second one (bow down her head). They all encourage me. Even when am just sick, they all will come to the house taking care of me thinking I am pregnant until I told them it was not or it is confirmed in the hospital that am not pregnant. I have told you about my neighbours they are also the friends I have around* (**Yar-Buga 27years**).

Similarly, Amal expressed that her social support came from friends who always call or come around for update on her treatment seeking and suggesting that she should continue with following up hospital treatment;

> *Friends will come or call to ask me if I gone to the hospital again and ask for the feedback. That is the only thing and since I know I have done whatever is necessary (knocked the table) what will I say? Prayers that is my only thing my faith in God is my only strong hold (silent)* (**Amal 45year**).

Contrary, not all the women had the full support needed from their husbands, family and friends. Gomma, Hannah and Tumba reported ordeal of lack of full support from their husbands because their husbands refused to do the tests requested which makes things difficult for them and makes them feel neglected;

> *He sometimes shows his worries because I am yet to give birth but often he neglects me. It was only once when I told him that the doctor insisted he should come, that he was forced to come along with me to the hospital. Since then whenever I want to go to the hospital, he does not support in anyway and he refused to be tested. He does not want me to talk about the test or even tell him that the doctor wants to see him again. He does not want to hear all those things, Am the only one that is seeking for treatment for the problem and I am not happy* (**Gomma 25years**).

> *My Oga tried after the second surgery; they gave my husband a test to go and do but my Oga [Lowered her voice] refused to go and do the test. He said he will not do the test (eyes full with tears) (silent)* (**Hannah 33years**).

> *Though he was supportive morally and financially as I earlier mentioned but he refused to be tested. You know, on seeing the doctors, may be the gynaecologists, the series of investigations given to you. For you to be able to do them because some investigations are not just for you alone; they will ask your partner to do it. So, in most cases you will be the only person going for the investigations and the doctor will be looking for, asking for your partner's own because your partner is not ready to cooperate to go for same investigations in order to help the issue. Then you will have some difficulty that may possibly expose you to more extensive tests because during my own, they gave me some tests all that high vagina whatever, all those cervical whatever, all those tests that are somehow not [em] comfortable on taking the samples. But just for my partner to go for only one test (shows the index finger), he refused to do it [shows sad face]. Still am the only person going for the treatment (emphasised with hand gesture) my husband is not going for anything* (**Tumba 33years**)

Equally, Vida lamented on how her husband completely neglected her without any form of support in her suffering and looking for solution to the infertility. She recounted that she finds the treatment path a lonely one but however, she is bent on seeking medical help for the infertility;

> *…That is why I come to the hospital to see if there is problem, I believe they will solve it for me by God's grace because I feel am alone, I'm the only one looking for treatment [pause] because there is no support from my husband. He did not support me in anyway. So, I am here, he did not even support me because when I told him am going to the hospital, he said, he doesn't care if I like I should go. (Silence, head down then crying, crying, crying, crying)* (**Vida 31years**).

In summary, societal support as a cue received by these women came in the forms of advice, prayers, continuous checking for updates on the progress of treatment and partner's companionship. Not all the women got supported or had the full support needed by their husbands, families, friends and neighbours. However, almost all the women had experienced one form of social pressure or the other.

4.5.3 Social Pressure

Social pressure was expressed by the participants as a feature of individual and social cues. The women experienced pressures in the form of lack of support from the husband, stigmatisation, ridicule from other women and the women being accused for infertility both from the family and the public. Some of the women described that the ordeal of the pressure forced them to go seeking for treatment in order to prove a point because of the way they were being blamed for the cause of the infertility by their husbands, in-laws and some people in the community. Vida, narrating her ordeal mention that her husband explicitly blamed her for the infertility. She lamented how it hurts her badly. According to her, the husband further challenged her to allow him try getting other women pregnant. That was what prompted her to seek for help in the hospital in order to get treated if at all she is truly the one with the problem;

> *Whenever I bring that issue* [pause] *he will not say anything again. To the extent* [pause] *there was a day, he told me that the problem is from me* [pause]. *So, it pains me* [pause] *he said the problem is from me* (pointed self) [silent for long but struggle to continue] *that the problem is from me and I really feel the pain.* [pause] *that [ehh] if I think that he has a problem, let him go and test with another woman outside to show me that he doesn't have a problem; that I am the one that has problem. All what he knows, he doesn't have problem that am the one that has the problem. Like for me, anytime I travel home, they are expecting to see me with another baby but they will see me with same baby that I have before. Even though if they did not tell you, they say action speaks louder than voice but sometimes I don't care. There was a day that my sister in-law told me that I have to give them another baby not only this one that they want. So, I feel pain. (hissed) So, I am here on my own, to try to see how [pause] the result is. If the problem is from me, then I will treat it, and if it is from him, then I will go and clear myself that the problem is not from me* (**Vida 31years**).

Tumba a mother of one child, also bitterly shared her ordeal of the social pressure experienced. She narrated that being in a polygamous marriage where the other woman gives birth coupled with her religion that values children, people were insinuating that she deliberately caused the infertility by using contraceptives. She shared that her husband also blamed the infertility on her and refused to do his test; hence her health seeking in order to prove them wrong;

> *Being married in a polygamous setting and my own religion, some people will be thinking that it is you that is not interested in having children. Yes, because somebody even told me [aa] that possibly we are doing one kind of family planning that is the reason I was not able to give birth to another child again, which is not true.* [Pause] *I am trying all my own possible means to be able to conceive and the thing the efforts are just being proven abortive. So you know, even with the way maybe among your family or your husband's, you know, outsiders are blaming you,* (lowered voice pitch) *you would want to prove them wrong. Now, had it been he went for the test even if it is once, at least I will know that the problem is with me alone, he is not having any issue. But he is still claiming that since he can have two kids with my co-wife, that he doesn't have any problem, am the one having the problem* (voice lowered down) (**Tumba 33years**).

Gomma shared the pressure she was experiencing in her two years of marriage where her in-laws refused to give her any support but blamed her for the infertility by comparing her with other women that gave birth. She reported that the pressure is worrisome as if they do not belief that children are gifts from God;

> *I did not get any help from my husband's family but they were only complaining of my inability to conceive. That since I came for marriage up till now they have not heard of anything in respect to getting pregnant and delivery. And other people that got married before and after her have all have children but nothing from her. While His people often talk to him but few of them met me face to face to talk to me about the issue. Saying what is the problem, that up till now you have not given birth? I use to feel bad and I use to feel as if they don't belief in God that is why they are disturbing me like that. Don't they know that God is the giver of everything? I use to feel bad and it use to worry me a lot* (**Gomma 25years**).

The story was not different for Amal and Igge who lamented their experience of the social pressure. They reported that they were accused for the cause of infertility by in-laws and society. However, they were encouraged by the support of their husbands;

> *My in-laws before the diagnosis, my in-laws were saying since I am a working class woman that maybe I have done something to prevent the pregnancy before the diagnosis. So, later on after the diagnosis again, they said maybe I am the one that has the problem* [pause] *since I cannot bear a child and my husband refuse to marry again. That is where the problem started I was having some issues with them. But am not always worried because my husband is supporting me in the treatment* (**Amal 45years**)

> *Honestly, sometimes I don't feel anything because I know God is the giver. I hardly feel anything but when any woman deliberately does things to show me that I didn't give birth then it used to hurt me. Yes, and also insinuating that I took drugs because I don't want to give birth now, thinking I planned it and that is what people use to think, yes* (silence). *Everybody, especially my in-laws and it also hurts me when some of the people were disturbing me, insinuating that I did not conceive since I got married thinking I did family planning because I don't want deliver on time. Sometimes, am not bordered because my husband is not disturbing me but supporting to go to the hospital* (**Igge 22years**).

Kyauta a primary school teacher lamented how some of her colleagues humiliated her when it comes to issue related to children. With an example she narrated pressure at the work place where her behaviour is being scrutinised as being cruel because she is childless anytime she disciplines children that misbehaved. Her contributions to issues of children are regarded as invalid because she is inexperienced in that area such that she should not be accepted;

> *You know, sometimes maybe if you talk, they will say maybe because you don't have children. One day, maybe all these small, small children, some maybe they offend you or they did something bad and you beat them. Even if they do not talk, you will see some parents' reaction maybe because you do not have a child that is why you are being hard on their children. Or something happen you talk; like one of my colleague, the other day they were talking about "ela-ela"* [skin infection on children]. *I now told her that there is one medicine that they can to use. She said that I don't have the experience; I did not know*

> *the medicine. And that thing* [high voice pitch] *pained me. When I came to my class I shaded tears* (**Kyauta 33years**).

Hannah reported societal pressure experienced in the form of stigmatization. She explains further that some of the mothers do not want women with childlessness to touch their children or even their children's items. Insinuating that they are cursed or might harm their children;

> *From my experience, you know, we that are women with infertility; those women that born children, some of them, they don't like women like us that have never given birth and* [pause] *that we are praying that God should give us a child. Some of those mothers do not like us to carry their children or to touch their anything. This is because they think that we have problem or will do anything harmful to their children but for inside my mind or inside our mind we don't have such plan* (**Hannah 33years**).

Vida recounted her experience of the societal pressure; that it sometimes makes her depressed and feels that God does not recognise her spirituality like He does for others. This she expressed with an example of how her neighbour mocked her as quoted below;

> *Sometime, I think that [hmmm] God doesn't answer my prayer like others because there is one of my neighbours that said if she wants to get pregnant this month she must get it. Sometimes I feel as if I should not go out to mingle with people like that. I feel I should stay at home; it is like my own is different. So [hissed]* [lowered voice pitch] *I pray to God, I fast but nothing* (silent, put head down) (**Vida 31years**).

Charis narrated a parallel experience of societal pressure that even strained her good relationship with her neighbour because of the way her neighbour mocked her. She stated that her neighbour comes out in the compound to play with her child by making it an obvious exhibition to spite her;

> *I use to have good relationship with people before the diagnosis. But after the diagnosis, I still have the good relationship but sometimes, maybe some people they will be doing somethings to me deliberately maybe is because am not pregnant that is why they are doing that so that I will get angry. [ehh] Like sometimes, because there was an issue that [en] one of my neighbour like that used to stay inside her room. So when she gave birth, so, I noticed anytime am around, so she will be playing with her baby outside* [very high voice pitch] *I don't know if she does it when am not around. But if am around she will just carry the baby, she will be shouting, she be saying my baby, my baby playing with her child that is if she noticed am outside. So, because it was after the diagnosis if I saw her doing that, I will feel maybe she is doing it because of me. So because of that my relationship with her was not* [lowered her voice] *was not good honestly* (**Charis 36years**).

By way of summary, individual and social cues (social value and social support) identified by these women were sources of encouragement while the societal pressure caused them

psychological trauma. In addition, individual attitude towards childbirth, their husbands need for children, husbands' support and the support of significant others (families and friends) were the strong positive cues for some of the participants. Even where these women were faced with social pressure of all kinds, the challenge pushed the women to seek treatment for infertility. However, both the encouragement and trauma prompted them to seek for medical solution to the infertility issue.

4.6 Enabling and Predisposing Factors

This is defined by the participants as the financial resources and educational literacy levels of the women that empowered them to seek for medical treatment of infertility. Aside affordability, others prompting factors were awareness and beliefs on the importance, safety and effectiveness of medical treatment as against any alternative options. However, the women acknowledged that their access to treatment is limited to what they can afford. Yet they still choose the hospital because they believed in its safety and effectiveness. The enabling and predisposing factors described by these women were resources and support, and treatment beliefs.

4.6.1 Resource and Support

Resource and support were emphatically expressed as enabling and predisposing factors for the women. This defines financial capability to afford treatment and the literacy level of the woman to help discern the choice of treatment in health seeking. More than half of the women had tertiary education and are working class women. Although some of them had NHIS, they reported that it only covered few less expensive investigations and treatment (drugs and surgery) was not inclusive which made them to seek for financial support from their husbands because infertility treatment is expensive. Fortunately for some that are not working, they testify that their husbands were supportive but it is not easy on the family finances. However, the experience was different

with some women that had no financial support from their husbands, government but are paying for the treatment from their life savings.

Describing resource and support as enabling factors; Tumba a working class woman reported that her family income is not very bad because they can afford to pay their bills without much stress. As such she paid for majority of the expensive treatment that the NHIS did not cover;

> *Family income [pause] I think to say is okay to some extent as in we can provide almost all we need without too much difficulty. Although I have NHIS I paid for some of the tests because the NHIS only covers I think, high vaginal whatever and all those minor investigations that are not expensive they accept NHIS. But with all those imaging test NHIS does not cover it. In fact, because where they asked me to do the tests are not accepting NHIS and where they accept NHIS, the machines are not functional, so I had to pay myself* (**Tumba 33years**).

Regardless of one's financial status, infertility treatment puts pressure on the family economic resources. Sonia who works in the very hospital she is accessing care, recounted that she did not use her NHIS because most of the investigations were done outside the hospital. She explained that it was easy for her to access some treatment because she could afford it but she was not able to afford invitro fertilisation that was later suggested to her;

> *No, I did not use NHIS because most of the investigations I went for were not here that you can say let me use the NHIS. And with the NHIS they will just be toasting you up and down. While the HSG, follicular tracking all of those was done in private hospital. But the doctors here, you know all of them are hocked up in different hospitals so after here we schedule how to go there and do the investigations with TVS all of them, was outside. TVS transvaginal for follicular tracking you will do it like* (knock table twice) *3-4 times in a month to know when you are really ovulating. Me, it was easy for me because I am working but I know some people they cannot afford it even the HSG, they cannot afford it and other investigations. Some will even say I should go for that invitro fertilization but it is expensive and not everybody that can afford it* (**Sonia, 33years**).

The experience related to the challenges of the enabling factor of using NHIS and personal payment of hospital bills for infertility treatment was not different in other state. Charis expressed that she started the treatment in a neighbouring state before relocating to Sokoto. But her NHIS

could only cover for less expensive investigation and could not even used the NHIS to access treatment in Sokoto as quoted below;

> *I have NHIS but I did not use it here. I only used it in Gusau, even the Gusau [ma] like all that hormonal profile is not among the NHIS this thing; because all those expensive tests and some of the drugs are not among the NHIS. So I bought them outside. When I did the hormonal profile I paid almost ten thousand naira plus because they said is not among the NHIS this thing. Then when I came here Sokoto, they said that my NHIS can only access care in Gusau hospital* (voice down) *they cannot use it so all the service here I paid for them. My husband use to support me and even because is only the two of us. There is no any support from any other place. Is only if I collect salary, I will do my test and even him if I sees that I cannot maybe be able to pay some tests; he will then assist that is it* (**Charis, 36years**).

Describing resource and support as enabling factor to treatment seeking; some women described how they struggled to pay for treatment with their family income without assistance from anywhere (social or government). Although, the burden is huge for the family income, they still manage to access treatment. Amal, Izatu and Hannah recounted that they are doing their best to access the treatment they can afford;

> *If you look at it in that perspective, no matter how much we earn since we have other people that are still under us that we have to take care like our parents, our junior brothers and so on, with such burden I don't think we have much to go for* [clap hands] *so much medical expenses. Though we have tried many times and it was only me and my husband that were paying for the treatment. In short we have done all my medical check-ups (low voice pitch) is just that, it is not yet time* (**Amal, 45years**).

> *We went to use his NHIS but they didn't allow me that he needs to get us registered. That he should produce our passport photograph for registration and that it takes time before it is out. And now, we are doing these investigations, we cannot wait for the NHIS card. We are just using what God gave us but we are not getting any support from anybody. When I stopped business, the money I gathered I starting selling things at home. Honestly, initially when we started attending the SHX hospital, we have spent money. I kept going for imaging, they kept writing for me drugs and I was taking. They wrote for me some test which I usually do outside SHX hospital. We've been doing test, ₦10,000, ₦ 11,000, ₦ 7,000 but up till now nothing happened that was why he said we should change to UDX and see. So that was where my trading money went, he brings and I bring. And now, you see, he is the only one paying because I don't have the money now. And he can't use his NHIS card for me; he is the only one that can use it* (**Izatu, 35years**).

> *Even the first operation that I did, none of them helped me. They didn't support me with anything. It was only me and my husband that looked for the money and did everything. [ehh] My Oga is trying but he does not have that plenty amount of money because the last surgery, that I did, it was with my money that I used to do everything. That was why I went for this second one I didn't tell anybody* (**Hannah, 33years**).

Vida lamented lack of financial support from anywhere even from her husband and that makes her unhappy. Nonetheless, she was committed to using her life savings from her trading to commence treatment to the extent she can afford;

> *I am not working, yes am not working, am a trader, I sell iris potatoes. Is the like money I have that am using for the treatment because my husband did not help me with anything. Where the money finish, I will stop there. I am not happy, I feel am alone* (silent, tearing then nodded her head). *I don't have anybody to support me, because like the money that I have, that is the one that I am using whenever it finishes* [pause] [lowered voice pitch] *I will stop anywhere the money finish, I will stop* (**Vida, 31years**).

Alheri reported that though the church (social agent) is trying and paying their bills because they are church workers. They are still limited to the access of treatment for infertility because of funds and the treatment is expensive. That was how she described resource and support as quoted;

> *Though previously in some hospitals when we were at Kaduna, they wrote drugs for my husband after tests but the drugs were costly. He bought and took for some time then he said he will not take again; he cannot continue there is nothing wrong with him. We are people for the public, [ehh] church workers, so they care for us. People care for me most especially, people care for me and they have been trying to pay our bills. [mm] And now, they gave me tests that I am supposed to might have done it last week and the drugs they wrote, we were unable to get it. But we don't have enough money (giggle) we don't have enough money that is the challenge we have. That is what is holding it, if not I would have done that one now* (**Alheri, 39years**).

Yar-Buga narrated that it is only her husband who is paying her hospital bills because her take home at the end of the month is nothing to ride home about. Her expression of resource and support is shared in this way;

> *For all the investigations and medications, me and my husband have received so far; nobody supported us. It was only my husband that was paying the bills because my part time work does not pay much* (**Yar-Buga, 27years**).

For Gomma, her husband has stopped paying her bills. However, her parents want her to continue with the treatment. As such they offered to continue paying her hospital bills because she is not working. She obliges because of her awareness of the importance of hospital treatment. That was how she shared experience of resource and support;

> *Even when my husband stopped paying the hospital bills, my father starting paying since I am not working. They are always encouraging me never to get tired of going to the hospital. Another thing that motivated me to continue visiting the hospital is that; you know when one is ill; it is good to visit the hospital to lay your complaint and take treatment. Thank God we have this awareness that if one is sick, it is good to visit the hospital see doctor and take the prescribed treatment. We are not hinder from going to the hospital* (**Gomma 25years**).

Sonia a medical professional, delayed treatment but had no choice than to visit the hospital when lack of pregnancy and symptoms of comorbidity persisted. Her description of resource and support were her literacy level that prompted her health seeking;

> *From knowledge I have,* [pause] *pregnancy did not come, and with the initial problem I told you. Because then I used to hear people that with fibroid one can still conceive but the bleeding, pregnancy was not coming and the bleeding did not stop. So, I had no option than to come to the hospital* (**Sonia 36years**).

In summary, financially it was not easy for these women even with those that had social support, government support to some extent and a family income to back up. Nevertheless, even those that are single handily paying their hospital bills for infertility were committed to continue with treatment as long as they can afford because of the awareness that hospital treatment is better. Their treatment beliefs were another motivator that made them continue to strive to access treatment for infertility.

4.6.2 Treatment Beliefs

Treatment belief was another way the participants described enabling and predisposing factors. The women's treatment beliefs were defined basically as the reasons behind the confidence

and trust the participants have in medical treatment that made them do the health seeking. The women believed in the safety and effectiveness of medical treatment that was why they choose the hospital for solutions to their infertility problems. They also emphasised that they will continue with the medical treatment because that is the only place they can trust and go for solutions. Conversely, other women stopped a particular treatment, refused a certain treatment suggested by the doctor for some reasons nonetheless; they still preferred to continue with medical treatment than do otherwise.

Reporting on treatment belief; Tumba and Izatu narrated that they cannot vouch for traditional medicine because it can be harmful. Since they do not know the content, mode of action and the information were not online for them to check. They recounted that they strongly believe in the safety of the medical treatment because investigations were always carried to identify the problem which is good. They mentioned being comfortable with the medical treatment they had so far because even when they checked online they found that those were the right treatments for infertility and they did not experience any side effect as described by Tumba and Izatu;

> *I have never used any treatment channels because I belief hospital is the only place that I can seek remedy to my being unable to conceive. I don't know the content of all the traditional concoctions and I cannot say how they work. And there is no means for me to google and see how they work, so I just feel like the only remedy is for me to go and see doctor. The hospital treatment is okay, because whatsoever they place you on with this global whatever they are having, if you google to look at it, you will see that they are the remedies to the inability to conceive. And I am not having any side effect or any problem to any of the treatment, so, is okay. And that is the only reason am sticking to their instructions because I believe this is the place that I can seek remedy to my being able to conceive* (**Tumba 33years**).
>
> *I went to the hospital because visiting the hospital is the proper thing to do. When I went they requested for some tests. They first did those tests to check if there is anything wrong with my system that is preventing me from conceiving and to also check if he has any problem that is preventing him from impregnating me. You see, that means going to the hospital is good because they were able to identify the issue since his result was normal maybe the problem is from me though the first result was normal and now is the second tests that they want me to do. Which means going to hospital is relevant. Instead of staying*

> *at home and be doing self-medication or taking native medicine* [pause] *one is just killing oneself because you don't know what will happen to you* (**Izatu 35years**).

Vida having tried self-medication and faith base; she then realised that she cannot treat what she does not know since she did not test herself before the self-medication and even faith requires a genuine action. She reported going to the hospital because she beliefs the health professionals in the hospital were trained to identify and treat disorders. That was Vida's narration of treatment belief;

> *[tau!] God said, if we stand up, He is going to help us. That is one thing that I hold. I said, as far as they prayed for me and there is no problem, I believe every problem have solution. Because you cannot just treat what you don't know like the one I did for toilet infection. Is not that I tested it to know that I have the toilet infection, I just said let me try it, so that is why I come to the hospital. Yeah, like this toilet infection tablet I bought it with the one that they put in the vagina too. So, I bought all these things. I was thinking maybe by using public toilet may be* [pause] *I just try to do one or two thing is a friend that advise me to come to the hospital and* [pause] *I know they were taught about it and they have learnt many things about health, that is their area of work. So, I said, as far as they know more about it, let me come, I believe they will help me. So, if they will give some medicine here for treatment, maybe, if it is a problem, they will figure out the problem then I will know yes, this is the cause of it* (**Vida 31years**).

Likewise, Charis reporting treatment belief shared that she chose the hospital because she believes health professionals have the ability to identify and treat health issues but staying at home will not help one to identify the problem or solution. More so, she has seen people that had similar problem of infertility treated in the hospital and they now have their children. She also testifies of the improvement she now feels in her system that were not there before;

> *I chose the hospital because, if they do any, maybe through them, they will discover some problem. Maybe there is some problem that within me I have. Maybe I have problem in my womb that I am not aware but by attending the clinic, going to the hospital, they will identify the problem. Maybe sometimes is just a minor something that they will just give a drug everything before you know, you will conceive. But if you do not go to the hospital, you are staying at home, you will not know. Where the problem is coming from but by visiting the hospital you will know where the problem is from. I was really encouraged to visit the hospital because I have seen some people that have some similar issue with me; that through the hospital intervention they conceive, they achieve their pregnancy. And also, like as am visiting the hospital, am noticing some, there is some improvement that I am seeing in my body which is not there when am, when I have not started the clinic* (**Charis 36years**).

Similarly, Igge and Alheri shared how they were also encouraged by the testimonies of other people with similar issues of infertility that was rectified in the hospital and that was why they visited the hospital too. This was how they described their treatment belief;

> *I went to hospital because I have seen a lot of people that were not able to deliver for many years and when they went to the hospital it worked out for them and I expect to also be pregnant like others. So, presently we are only doing some tests. He started giving me some drugs then later he started giving me some tests for me and my husband to do (***Igge, 22years**).

> *[mm] I think [ehh] I have testimony of some people that have gone to the hospital, through check-up like that and other treatment [ehe] they were able to get pregnant and delivered children. Like [ee] I don't know that somebody if the problem is on the man, that if maybe where the cell that can [pause] produce child cannot drop, it means there is a blockage. And if they can be able to get the sperm [pause] this thing, the living cell and inject to woman's womb, she will be pregnant. Tau! I think that is good too because I heard that in the hospital* (**Alheri, 39years**).

Reporting contrary experience, Amal who has been experiencing infertility for the past 17years, in expressing her treatment belief narrated that she has tried all the recommended treatment. She mentioned stopping clomid because she had side effects and she also refused the treatment of invitro-fertilisation as it requires her to get a donor plus the cost which she cannot afford. Amal thinks it is just not yet time, as described below;

> *Most of the drugs even gave me side effect like that clomid when I was taking it, it gave me side effect, my menstruation ceased. Then when I stopped, the menstruation came back normal. So, the consultant it was Dr. XXX* [name mentioned] *she removed the clomid from my drugs then she stared giving me some injections. In short, I have tried all that she can give me to the extent there was nothing much she can do* (silent). *The last treatment alternative was IVF which I have not tried because of the donor they told me that I have to get a donor. You know, initially they said that there is no much egg; that the egg is not growing [pause] as required. So doing the IVF is better but they now said that I have to get another egg donor* (lowered her voice) *which I don't like* (shake her head). *Even if I want to try, how I am sure it will work and you know, it is expensive* (**Amal, 45years**).

Sonia a medical professional with 6years infertility, sharing her treatment belief has a parallel experience; which she stated that she has adhered to all the recommended treatment and the medical personnel empathized and did their best for her. She reported going extra miles to even

do artificial insemination which did not yield results. Now she has some doubt about the effectiveness of invitro fertilizer that was recommended to her;

> *(Giggle) [tau!] They have tried o, the treatment,* [pause] *surgery, they have been following me up and they have been showing me care and love. They put themselves in my shoes. Even Dr. XXX* [name mentioned] *there was a time she gave me this types of drugs, I can't remember the name, she gave me six sachets of the pack of all these drugs. So, I will say they have tried. Yes, she gave me some of the India supplements which I took but nothing, because she is among the people that I use to see. She gave me some, they have been trying* [pause] *I can say is not their fault [m] and I have done my best [mm]* (smiled). *The Doctors even suggested IVF but [pause] when I thought over it, I was like, if now they say there is no problem* [pause] *the tube are potent, menstruation comes when due, you ovulate and still is not working, my husband is okay. So, invitro is it the one that will work? That is the question I use to ask myself, I have not even thought of going for it, so I don't know because if these ones have not, I doubt if I go; it will work. The truth of the matter, me I have not made up my mind or think of going there since this one that there is no problem nothing is working, I don't know if it is that one that will work and it is very costly. Though, I attempted on one and one with the doctors there they did this collection of the sperms to inject, I have (hissed) forgotten the procedure here* [pause] *[ehe!] artificial insemination* (**Sonia, 36years**).

By way of summary, the enabling and predisposing factors prompted the health seeking by these women. The women had various treatment beliefs that predisposed them to health seeking. Resources and support enabled the access of medical treatment they believed in and the ones they can afford. Nevertheless, few women having tried medical treatment over time now doubt the effectiveness of some treatment options.

4.7. Perception about Infertility

The participants' defined the perception of infertility as what the women and the society belief causes infertility which was highlighted as natural/ biological, spiritual and social factors. The knowledge of infertility was associated with the treatment outlets utilised by the women which also impacted the women's expectations of treatment. Perception of infertility was expressed by the women as knowledge of infertility, treatment outlets and medical treatment expectations.

4.7.1 Knowledge of Infertility

The knowledge of infertility was expressed by the participants as the beliefs on the causes of infertility which is also an aspect of the perception of infertility that prompted help seeking for infertility as described by the women.

Few of the participants believed that infertility occurs naturally from God since He is the one that gives children and can also be as a result of a biological dysfunction of the system. They held to the outcomes of the investigations in the hospital and their beliefs despite other people's suggestion that their fertility problem might be spiritually related. As such they ignored their advice on traditional medicine or sacrifice which they believed is harmful and against their religion as recounted by Azumi, Kyauta and Adasa;

> *Some people are saying it is spiritual, some are saying it is this and that, you know how people are? Some are saying is spiritual and some are saying maybe someone did something to me that is why but I don't belief in such things. So, what I believe is hormonal as the doctor explained because I went for hormonal test, they said I have oestrogen related problem. You see, I don't belief in that spiritual thing* (**Azumi, 43years**).

> *Some of my colleagues in the office because I don't have many friends, I do not know anyone. In my working place, they will just call me and advise me that; like one lady [ma], she stayed for 5years before given birth. One day, she said that I should go to one man that is herbalist that gives all these herbs. I now told her no, I won't go and that it was her own time to give birth that was why* [pause] *that when my times reach, [me ma] I will have my own. I said, I'm very grateful but I will not go to that man. You know, I did not belief in the native doctor because some of their medicines use to damage something in someone's body so, I do not want it and my religion again is against it. I don't know, is before I use to think about the condition, I use to even cry [ma] cry but now, since I realise everything is from God. I just put faith in God, if God say I will have it, then I will have it. But you know, if God did not allow, nobody can give [pause] so, I belief in God, if God say I will have then I will have it* (**Kyauta, 33years**).

> *I and my family were worried, so disturbed that* [pause], *some of them were even saying that I should go and collect native medicine. Then I said no,* [pause] *so they were saying all sort of things, I said no. Some said go and do sacrifice but I refused since my faith is against it, the result of the test show that I don't have problem and I have delivered before* (**Adasa, 35 years**).

Gomma expressing her perception of infertility narrated that it is from God because God allows illness at the same provide cure. Same as He gives children at His own time;

> *You know, all illness comes from God and before God brought down illness, He first of all brought down the solutions. So, childlessness is also from Him because He is the one that allows a woman to give birth* **(Gomma, 25years)**.

Another woman described the knowledge on the cause of infertility as generally held in her community especially against the educated women. She narrated that her community believed that infertility can be caused by a distortion in the natural functioning system of an individual. That is influenced by the effect of some social factors such as, unsafe abortion at youthful age and use of contraceptives. The woman also shared her own perception too which she said can be natural as a result of a disorder. She recounted her ordeal that she believed the cause was fibroid then after she had surgery and all the hormonal test reading normal then her focus on the cause of the infertility shifted to her husband that refused to be tested as expressed by Tumba;

> *You know, some have the perception that when a lady was not married and she had committed illegal abortion maybe once or twice that it can cause infertility. So, they have that kind of perception. Since you are a learned person, maybe you pass level of secondary school, tertiary institution. They attach all those [eeh] negative perceptions of abortion and use of family planning as cause of infertility with this class of women that are having difficulty to conceive. However, I cannot say the only thing after they diagnosed me of that fibroid, I now felt maybe is because of that fibroid then after the surgery not happened. But my own thing is, had it been because am still telling myself, that had it been my husband went for the test that they asked him to do, may be it would have helped us. Because for them now, I don't have any issue because fibroid is not there, all the hormonal test I did everything is reading normal* (**Tumba, 33years**).

Recounting her community knowledge of infertility, Alheri narrated that she was taught that abortion resulting from a risky health behaviour can cause infertility and she held to that teaching initially but now she finds it difficult to believe it;

> *I was taught that as a lady if you done abortion in your youthful age, when you get married, you will not give birth. I said God forbid that teaching. Even people that live a wayward life, they started telling us, some will say I have aborted for how many times [pause] and see me I have children. I started thinking again, for a lady to keep herself till she gets married, can it bring problem of infertility? (hissed) I was confused* (**Alheri, 39years**).

One of the participants Charis a bachelor's degree holder, explicitly recounted her knowledge on the cause of her infertility as being caused by witchcraft as she believed someone has bewitched her that was why she was infertile since the follicular tracking indicates the presence of a mature ova severally but she is still not pregnant after all the attempts;

> *My perception [ehh] about difficulty conceiving is that, I feel maybe there is somebody behind it so, because that is my perception because even all the vagina scan I did, I did this [emm] follicular tracking, so they will even tell me [aa] there is matured egg, this egg will be release at a certain time but still nothing will click. So I feel, my perception was that maybe there was somebody behind it* (**Charis, 36years**).

Alheri expressed her belief on the cause of infertility as a spiritual one that comes in the form of a dream but with physical implication. She described her experience as she relates it to the meanings attached to dreams in her culture and Christendom. She recounted that she has experienced the manifestation of her dreams associated with her difficulty getting pregnant as interpreted. Quotation below;

> *If I dream about children and pregnancy, the interpretation God gave me is that I will be faced with challenge in real life. Initially, I used to be happy that I was pregnant in the dream as such expecting to be pregnant in the physical. Not knowing that it is challenge that might come my way. I have dreamt it so many times and I have seen the interpretations. When I even shared with some mature Christians too, they told me that if one dreams of fruits, then it is a sign of child. Like in my culture, if you dream snake moving or one stepped on it, then it is a sign of child coming to you. If you dream of [ehh] yam or cassava, it is a sign of child too. If you dream that you are pregnant or deliver, that it is not good, it is going to be challenges that will come. And if you come to Christendom, if narrate these dreams, some people will have their different meaning. They will tell you that snake is an evil spirit* [giggle] (**Alheri, 39years**).

In a nutshell, the participants believed that infertility may be caused by biomedical, natural/biological, and social factors. These women's and significant others (their social network) beliefs are basically associated with the type of treatment outlets they patronized for solutions to infertility.

4.7.2 Treatment Outlets

The treatment outlets of the participants were described as where they went looking for solution for their infertility. The treatment outlets is said to be influenced by the perception of infertility as believed by the women and that of significant social network of the women. Majority of the women went for medical treatment and used prayers houses (faith-based) since they believe it is like any other illness God allows to befall human beings but it can also be as a result biomedical factors. While those who thought that social factors were the causes of infertility, there were others who utilised medical treatment outlets for solution to their infertility.

Some women even with their perception of infertility being caused by biomedical factors; were out of desperation influenced to utilize other treatment outlets by significant people. As such, they used the medical treatment outlet in combination with spiritual outlet (prayer houses) seeking for help to conceive when all investigations revealed no abnormality in the reproductive system. Adasa narrated that she decided to use the faith-based outlet by going for prayers when the results of the investigations carried out on her in two different hospitals she patronised were normal and she does not know the cause of her infertility;

> *I don't know the cause of this delay in conceiving, so I was told that I should go for investigations so that I will know whether there is (*silence*) if there is any problem with my [ehh] womb. The first hospital that I went, they did for tests and placed me on clomid, it was UDX here and nothing happened. Later [ehh] somebody then directed me to doctor XXX (*name mentioned*) hospital he too did [ehh] some series of investigations, everything was normal then he placed me on clomid again. Then we even decided to start going for prayers because the results were normal. I started going for prayers because after the test showed normal [ehh] womb and tubes they didn't do anything again but said I should continue on clomid till something happened* **(Adasa, 36years**).

Similarly, sharing her experience on treatment outlets; Charis stated that she concurrently used both medical and faith-based treatment outlets. She did the concurrent treatment seeking because she was desperate and her husband wanted them to avoid the surgery. As such, they decided to

patronize faith-based healers even when she doesn't believe in it coupled with her perception that her infertility was caused by somebody that is bewitching her;

> *I did not stop the hospital treatment even when I was going for prayers because they diagnosed me of ovarian cyst. It was when I was even booked for the surgery; I was booked for the surgery, so that was when my husband said I will not do the surgery. So that was why we now went to that Mercy land for prayer because I was pushed. So, I do use prayer, and I use to pray that anybody behind my infertility that God should expose the person.* [Voice lowered down] *and the person should leave me* (pause, wave hands again) *to have my own children* (silent) (**Charis, 36years**).

Alheri describing her 17years of treatment outlet experience shared that she utilised two treatment outlets. She recounted that as she was told that it was too early to detect infertility at few months of marriage, her husband encouraged them on using faith-based since he is a pastor. But as the years passed by, people advised them not to limit themselves to only faith-based but to try the medical treatment too as described below;

> *Okay, after I discover that I was not getting pregnant few months after marriage, I went to hospital but was told to wait a bit. As I married a man of God, he doesn't what anything sorrow. He said we should leave everything to God and the bible tells me that we should be happy always. [ehh] That was why we are fighting it through prayer (giggles), we have been praying. But when we started opening up to some of the people that we know, that we do not have children; they all advised us not to stop. That we should not leave things like this that was why we started coming to the hospital again* (**Alheri, 39years**).

Another woman believes infertility can be naturally caused because it is only God that gives pregnancy that was why she chose the hospital as she is praying and trusting God to conceive. She recounted that the investigations she did were normal and she was also placed on medication;

> *So, I belief in God, if God say I will have then I will have it. That is why am going to the hospital and they told me that there is no problem; there is no problem with my womb. They just gave me one drug that I should be taking it, after one month that I should come back to the hospital. So everything is from God* (**Kyauta, 33years**).

Gomma sharing her treatment for help seeking said she patronised medical treatment and even visited more than one hospital. She expressed further that tried the traditional medicine and supplements because she believes achieving something in life is about trying one's luck;

> *And you can't say because you were not success with the initial treatment that does not mean you will never be healthy or you can't be successful with other subsequent treatments. That is why I changed hospital when the drugs I was given affected my menses because everything about life has to do with luck. I also used tradition medicine my mother's friend gave and MACA supplements* (**Gomma, 25years**).

Sharing similar experience of treatment outlet, Sonia, a health professional lamented that her eagerness to get pregnant made her to combine three treatment outlets (medical, faith-based and traditional) because she was under pressure and she wanted to avoid blames that might come when she rejects their cultural practice. She narrating a weariness ordeal that she has tried all suggested medical treatment except invitro fertilization and they also went for prayers and has used traditional herbs given to her by her in-laws based on their culture;

> *[Tau]* (High pitch of voice) *We desired to have our own children but none was forth coming [hmm]. We have waited on God, met men of God prayer [m] we went to places. The hospital did all tests and tried several treatments except invitro fertilization. [Tau] Like you know, this [ehh] relative something the immediate family put pressure that we should go and let do this things traditional medicine then me I am from Igbo, Igbo land there are some herbs that they will to give you, all the stuffs and I still did* (knocked on the table) *as requested to avoid blame. [Tau]* (Lowered pitch of voice) *all these we tried but nothing, no pregnancy, I am honestly tired* (**Sonia, 34years**).

The majority of the women utilized only the hospital for treatment seeking for infertility while the rest used as their initial treatment outlet before venturing into other outlets over time. Among the few that used the more than one outlet; they apparently maximised the medical treatment and faith-based. This is because they believe infertility is naturally caused, can occur as a result of distortion in one's system and even where they think it is spiritual, they believed God has the solution. Some patronised more than one treatment centres while others were forced to do incredible things against their wish due to eagerness to get pregnant and avoiding social pressure.

4.7.3 Medical Treatment Expectation

Medical treatment expectation is another aspect of perception of infertility that contributes to health seeking which the participants were able to express as the women's anticipation of the

outcome of treatment. In describing this, some of the women shared that they anticipate conception soon, while others are not sure of what to expect. However, they were motivated and hopeful that the result of the investigations done will reveal what the cause of the infertility is. Some of the women were highly optimistic as they were expecting conception very soon based on the treatment they have received so far.

Tumba narrated that she was hopeful because the possible cause of her infertility (Myoma) has been resolved since she had surgery and she was not on any contraceptives as she has read could delay pregnancy. She expressed her anxiousness to conceive as she kept counting the duration of treatments and months gone after surgery but then she prayerfully and enthusiastically emphasized that she expects to conceive very soon as she trusts in God;

> *I have been going through this treatment for* [pause] *more than a year now. I still have hope, am expecting to conceive very soon. Am just hoping and trusting in God with the treatment and the doctor said I should just continue* (clap hands twice) *and I should be praying may be possibly because of the operation I had I will be able to conceive if at all is the fibroid that is not allowing me to conceive again. So, now am just waiting for God's time. I* [pause] *am even praying before this month ends. I am praying that God should help me so that I will conceive. This is the third or almost the fourth month after the fibroid operation and ideally, the way I read it, immediately after the operation if at all one is not using any family planning method, one will conceive immediately but still* (few seconds loss of voice, force the words out) *I am still not pregnant* [accompanied by hand gesture to show nothing happen]. *I don't know the thing, but doctor said that I should wait there is still time, I cannot say that we are not having hope of conceiving that we still have the chance* (**Tumba, 33years**).

Equally, Kyauta has high expectations that she is going to conceive with the medical intervention she is currently getting in this present health institution. She expressed that the previous health institutions she visited, none tested her husband. Nonetheless, here she and her husband had several investigations carried. Hoping that when the results are out, the problem will be identified and treated;

> *You know all the hospital that we went initially, it was only me that they were investigating they did not talk about my husband, do you understand? Is when we went to ZFX, ZFX asked us to do one test, from that time we did not go again. But now when I started UDX many tests I did not do in those two hospitals were written for me and I did all. Many tests that my husband was not asked to in those hospitals before, he has done them. So, when the results are out that is the time that we will come, and they will know the person that have problem and treat that person. So, I am expecting that in sha Allah [smiled, ha] I will get pregnant with this treatment* (**Kyauta, 33years**).

The experience is not different for Charis as she was also optimistic in her expectations of conceiving very soon based on the medical treatment she is getting here. She reported that she keeps to her follow up appointments because she likes their drugs and encouraging attitude. More so, she stated that she is certain she will conceive again because the few months' treatment in this hospital made her conceived but she lost it unlike the previous hospital that she has attended for two years without pregnancy;

> *Honestly, my expectation is pregnancy, [ehh] my expectation is that am sure that I will conceive because it was even when I started here in this hospital that I got pregnant but loss it. I have been going there for almost two years nothing. But honestly, just the few months, I started here with their drugs and the way they were even encouraging me. Honestly, to even made me happy and gave me that zeal to be even attending the clinic till I finally got pregnant that [ehh] November and unfortunately* (lowered pitch of voice very down) *I had miscarriage* (became quiet and put head down) (**Charis, 36years**).

Alheri sharing her medical treatment expectation; she relates her anticipation in relation to her perception of infertility as she reported that based on the dreams she is currently experiencing of somebody giving her sweet fruits and corn (seed) in the dream. She believes that with the medical treatment she is receiving presently that she was going to conceive by God's intervention because God is the one that gives children and even gives people the knowledge to help;

> *What I want to say, since we came to Sokoto here, I have been dreaming about fruits, I have been dreaming about seed [masara] that they are giving me. Even not quite long, somebody gave me one fruit like that I know the fruit in our local place, white, whitish in it, if you remove it is whitish and very sweet. Somebody gave me too that I should link it and (low voice) I was linking it. So, I have belief that with the medical help we are getting, God is going to bless me. I belief in God because even if man wants to do anything for you, to help get solution, he is not the one, is God that put that knowledge there. So, is to believe*

> *in God that God can do anything, everything that He wishes me to have. I trust that God is going to bless us with this hospital treatment* (**Alheri, 39years**).

Furthermore, some of the participants that started medical treatment not quite long had high expectations of getting pregnant soon. As they were encouraged with the outcome of some of the investigations, results were normal which indicates a positive sign that there is nothing that can prevent conception as expressed by Yar-Buga;

> *Why am motivated and hopeful is because they all the other tests I did were normal. There was no problem with the result of the investigations I have done so far. If that God wishes because there nothing anybody can do when it is not yet time. I hope to conceive but supposing they identify a problem; I would have said maybe the problem caused my delay in conceiving. Anywhere I will go is just advice and prayers. Even the hospital does not have the final solution to the difficulty getting pregnant but they can guide, advice and they can treat since they have the knowledge and things will work out well God's willing. Since there was no any ailment that is preventing me from conception; I know is all about time, I am patient and will continue to solicit for prayers from parents, family and friends which will never go in vain by God's grace I will also conceive* (**Yar-Buga, 27years**).

Even some of the participants that had been medical treatment for more than fifteen years despite their diagnosis were still hopeful. As they wait and depend on God for conception because they see their case as a difficult situation based the report they had from doctors from different hospitals. This was how Azumi and Amal described their medical expectations;

> *I went to ZFX and I went to UDX Hospital, all the doctors told me the same thing that the problem is hormonal. Hormonal [pause] problem is not easy to treat, it is not like somebody that have incompetent cervix or somebody that has this thing, what do they call it, like all those that have ovarian cyst or fibroid; that can be removed and the woman may get pregnant but me, hormonal problem is very difficult to correct. Have accepted my fate and am trusting God, that is the only thing because am not having any difficulty in getting pregnancy but the only thing is that am having difficulty sustaining the pregnancy to reach 9months for delivery* (**Azumi, 43years**).

> *It is just that it is not the right time [pause] because I have tried all the treatment at SHX, ZFX and UDX except one even the consultant said that it is not yet time because the egg that is not maturing. For is me, it is not God's time yet. I am just praying and waiting for God's time. if God says I will have, I will have and if God says I will not have, no matter what I do, I will not have it (silent)* (**Amal, 45years**).

In summary, the women expressed their perception of infertility. They were able to describe that infertility could be caused naturally as God wishes, due to a disorder like fibroid (biological) and socially due to abortion or use of family planning. Others believed that it could be spiritual referring to bewitchment or diabolical. Despite the women's knowledge of infertility and the influence of significant others, the women mostly utilised the medical and faith-based treatment outlets which they did concurrently. This is because they believed that it is only God that gives children. Nonetheless, few of the women used herbal medicine to fulfil cultural practices and avoid blames. Regardless of the duration of treatment and years of infertility, the women reported high expectation of conceiving with the current medical treatment.

4.8. Health Seeking Behaviour

The health seeking behaviour of these participants was defined as the complex process involved and the experiences attached to choosing treatment for infertility. They mentioned some consultation and negotiation with relevant individuals on advice about treatment seeking. They also highlighted medical seeking and changing medical treatment institutions when they could not get results (pregnancy). The health seeking behaviour of these participants was described as decision making, seeking for medical help, acceptance and adherence to treatment.

4.8.1 Decision Making

Decision making was one of the health's seeking behaviour steps the women went through. The process involved advising oneself, sought and got advice from people and negotiated with their husbands before using the medical treatment outlet.

Some of the women recounted that when the idea of seeking for medical treatment came to mind, they consulted their husbands for consent but were undecided to consent because of various reasons as described below.

Sharing her experience of decision making, Izatu narrated that when she told her husband about the need to seek for medical help to conceive, he was reluctant because he does not have money. She stated that she made efforts to convince him that the initial visit might just require investigations which they can do later when he gets paid;

> *We were just discussing with him in the room then I brought the issue of the need to go to the hospital for solution to my difficulty getting pregnant. He said he doesn't have the money. I encouraged him that we should just go for the first visit, because I belief they will just request for tests which we can do later when you get your salary [pause] you see the hospital is better honestly. We were just sitting down when I suggested that* (**Izatu, 35years**).

Likewise, Tumba reported how difficult it was for her to gain approval to seek for medical attention. She narrated consulting her sister about her delay in conceiving who advised her to go for medical treatment. That gave her the courage to inform her husband and seek for consent but he was hesitant and told her just to wait patiently. She recounted that since he did not give her any genuine reason and she could not find any reason why she should not seek for medical treatment, she then started visiting the hospital without further delay. This was how Tumba described her decision making step;

> *[mmm] It was not easy sha, to say the truth because even, before your family will accept you to go to the clinic for seeking health services, it was a thug of war. Because some will say that is just that you are not patient, you are not trusting God, you cannot wait for God's time for you to conceive. You see [pause] [mmm] initially when I discussed with my elder sister she said I should go and see doctor. That was the first thing she told me. I then discussed with my husband,* (lowered voice pitch) *and he said we can wait on God for some time to see if the thing didn't work then. And [hissed] from there now, as I observed for few months and there is nothing to say that [hissed] is really genuine that is stopping me from seeing doctor, I just started seeing doctor on that without wasting time* (**Tumba, 33years**).

Hanna narrating her experience of self-decision making process. She described her ordeal where she went to the hospital 2015 two years after losing her first pregnancy but was not able to see the doctor because her file was missing. She further explained that it took another year, 2016 for her to revisit the decision for medical treatment through the prompting, advice and assistance of a

church member (nurse) that was working in the same hospital that was aware of her problem. Her quotation below;

> *I decided own my own to go to the hospital in 2015 because since after the baby died in side my womb I did not go to the hospital check about myself or anything. [ehh] In 2016 there was one nurse that helped me, I went to UDX hospital because the woman works in UDX and* (looking absent minded) *we attend the same church. Then she asked me what happened because she noticed that after the first pregnancy I lost she did not see me with pregnancy again. She asked me, what happened? I told her how I went to hospital in 2015 but could not see doctor due to missing file. I told the nurse, and then the nurse said she will help me and find the file. So, she gave me a date because she wanted me to see Dr. XXX [name mentioned] and I went* (**Hanna, 33yrs**).

Still on the decision making step of treatment seeking, Adasa and Vida narrated that they were advised to seek for medical treatment by people close to them on consultation with them about their problems of infertility. So, they chose the medical treatment as expressed by Vida and Adasa;

> *I was advised to come to the hospital by that my friend. I went to my friend and complained to her that this is what is going on. So, she now said okay she knows someone in here in UDX that [ehh] that I should come so that we can go and meet the doctor and then do some tests maybe the problem will be identified from the result. That is why I come to the hospital. It was a friend that advise me to come to the hospital and I chose to come* [silent] (**Vida, 31 years**)

> *My superior where I was working before and others advised me that to go for test. Even from my husband side* [pause] *advised to me seek for help. I thought of [ehh]*[pause] *visiting the hospital before (*knock the table twice) *my superior advised me. She said that I should go and visit the* (knock the table twice) *hospital to check if there was problem so that urgent action will be taken before it gets worst. So, when I went and they did the tests but they couldn't find anything* [pause] *because everything was just normal* (**Adasa, 35years**).

Even some women that have tried and stopped the medical treatment recounted their decision making process that they were advised to recommence medical treatment because it is effective. Alheri and Gomma shared that they have decided to try the hospital treatment again based on people's advice and recommendation;

> *We have stopped going to the hospital for quite sometimes now and we have been praying. But since we came here (Sokoto) some of our church workers that are doctors, you know how they do their work, so some of them now stood for us. So they stood for us and someone told me also that it can be done medically. So, it is this medical aspect that I am processing now. So, since we came in here now that they are giving us assurance that medically we*

> *can get child. We now said [tau] let's see what God can do to that. It is not us that choose the hospital now, like some of them people I told you today, they are the ones that are processing it. Like they joined me with them, then another woman also took me to a private clinic because they asked me to do a test* (**Alheri, 39years**).

> *I am back to the hospital because my parents advised me. That is why am in the hospital to get the treatments and they said they have the solution because there are treatments to the conditions. Thank God I am in my parents' house now for treatment and they said they must summon him to come and be tested too* (**Gomma, 25years**).

The women's decision making aspect of health seeking behaviour was influenced by relevant individuals. Even those that initially got tired of pursuing medical treatment without result have decided to give it another try. However, some women were persistent and decided to seek for medical treatment even when their husbands were reluctant.

4.8.2 Seeking Medical Help

The health seeking behaviour of these women was furthermore described as seeking medical help. They expressed seeking for medical help to conceive early while others delayed in their medical help seeking late. Visiting multiple health institutions was a health seeking behaviour reported by these participants.

Some of the participants sharing their experience on seeking medical help to conceived narrated that they eagerly went to the hospital few months after marriage and trying to conceive without result. However, they were told to go back home and keep trying and to come back after a year when nothing happens because it was too early to detect any fertility problem which they obeyed as expressed by Yar-Buga and Alheri;

> *…As such 7 months into the marriage I went to see the doctor and she advised me to be patient till after one year of marriage because she cannot be able to identified if I have problem or not till after one year. When I completed the one year, I went back to the hospital* (**Yar-Buga, 27years**).

> *I went to hospital after some months', so they said we should not worry if their problem either from my husband or me, they will know after 3years. So we were patient and managing with our lives like that till after few years* (voice down) *but still no pregnancy* (**Alheri, 39years**).

The early medical help seeking experience was not different for Charis. She went to the hospital earlier than expected too but was asked to come back after a year. However, she was too eager and could not wait for a year. So, she decided to visit another clinic, started the treatment which she later stopped before returning back to the hospital after a year.

> *I went to the gynae clinic in FMX hospital after like 3 months of marriage when I saw that there was nothing like pregnancy, I went there. They now told me that I should go till after 1 year [pause] before they will know what they will do. So I went to another health centre, the doctor said that my husband should do sperm analysis and he gave me clomid when the result of the test came out. I took the drug for sometimes but later stopped and then I went back to FMX hospital after 1year* (**Charis, 36years**).

Nonetheless, on the contrary, few of the women described delayed in medical help seeking to conceive as expressed by Azumi and Adasa;

> *I didn't rectify it early, because by that time maybe there is immaturity in me or something, if I get abortion, then later just after 2months I will get pregnant again then it will be aborted, I did not border [give dam] about such. I said maybe time will come and the pregnancy will stay. That is the only thing [mm]. But later when I realise the thing is becoming habitual, it refused to stop. That was why I started going other clinics to some doctors there* (**Azumi, 43years**).

> *I started going to the hospital after like two years of marriage and there was delay in pregnancy. My husband's relative became worried and I too was disturbed. That was how I went to the hospital where they did some tests and started giving me drugs* (**Adasa, 35years**).

Majority of the participants regardless of their years of infertility and duration of their help seeking to conceive visited multiple health institutions. The women usually started from the private clinic and secondary health institution before changing to the tertiary health institution for better care as described by Kyauta, Yar-Buga and Charis;

> *I now started clinic in SCX hospital Dr XXX* (mentioned name) *said he will wash my womb or what? He did it for me first time then the second time he said he want to do it, I said I will not do it. I now left that hospital from that clinic SCX someone told that I should go to clinic ZCX, they did many test for me and you know that ZCX is very expensive. Why I stopped is that when she did that many tests, she used to give me drugs then she used to do that TVS or what are they calling it? So, when she told me that we should be praying, I now said [tau!]. Why should I be wasting my money again? But now when I started UDX hospital many tests I did not do in those two hospitals, is what they wrote it for me now*

and am are doing it and many test that my husband did not do, we are doing it now too (**Kyauta, 33years**)

The first time I went to SHX hospital. They did many tests for me and I was told that they have not identified anything that will prevent me from giving birth. So, last year I changed hospital and came here to UDX hospital and did all investigations too and they also told me that they didn't see any problem too (**Yar-Buga, 27years**)

I have been trying to conceive without result with all the intervention still nothing happened. I even did all the investigations; my husband did sperm analysis at a private clinic at Gusau where I started treatment before changing to FMX hospital Gusau. I even had laparoscopy in FMX that is January 2018. So since then, I have been taking drugs, they placed me on clomid 50mg, 100 to 150mg nothing [pause] happened still. When I came to [ehh] Sokoto State for studies, I started attending clinic at UDX hospital. So, when I attend the clinic here, they repeated the tests I had at Gusau again. So, after the tests, I was placed on clomid. I did this [emm] follicular tracking, so they will even tell me [aa] there is matured egg, this egg will be release at a particular time (**Charis, 36years**).

In seeking for medical help to conceive, majority of the women were anxious to be pregnant. As such they went to the hospital earlier than medically expected for diagnosis that is before twelve months of frequent unprotected sexual intercourse. Few women however, did a late help seeking after at least two years of waiting for pregnancy. It was interesting to note that vast majority of the women visited more than one hospital for medical treatment regardless of their years of infertility.

4.8.3 Seeking Other Treatment Sources

This is defined as other options the women patronised in order to achieve pregnancy. The participants tried to conceive by doing self-medication, others patronised traditional medicine outlets and spiritual outlets prior to or along with medical treatment to conceive.

Few of the women tried to conceive by seeking other possible treatment options such as online consultation, self-medications and visiting prayer houses. Others use of alternative medicines to solve fertility problem prior to actively trying to conceive.

Tumba narrated her seeking for other treatment options to conceive experience by frequent googling of the internet for solution online based on symptoms she perceives;

> *I google internet every now and then to be able to say if, okay let me see, if I'm perceiving this, could it be because of this? If am feeling this? Could it be because of this? I pull, I think in so many dimensions to be able to fish out the reason why I was not able to conceive and I couldn't lay my hands on one reason* (**Tumba, 33years**).

In seeking other treatment options to conceive; Vida shared doing a self-medication for infection and also patronised the prayer houses prior medical treatment;

> *....So, I went and did self-treatment of infection and other things to see may be I will get pregnant again and there is no any sign of anything. I went for prayers, I met the pastor and told him my problem and he prayed for me but* (giggle, smile) *the funniest thing is that any pastor I met and prayed for me, he will tell me that there is no problem with me that my children are on the way, that is it. But later I started going to hospital when I did not get pregnant* (**Vida, 31years**).

Another woman reported seeking other treatment options to conceive by prayers and even used oral contraceptives as advised by a friend without checking with her husband or even reading the instructions for use:

> *I have adopted children with me, my uncle's child, sister in-law's child and my younger sister's child. [Tau!]* (Pointing to a girl in the room) *this one was 3years before they gave her to me. My belief is that [emm] as am waiting on God and we have been trying to conceive through prayer* (giggles) *through prayers. And based on friend's advice I even went and requested for oral pill and they gave me, as they gave me, when I came I didn't ask my husband, I didn't even check the small paper for me to read and know the procedure of taking as am anxious getting pregnant. I started taking it, I don't even follow the procedure, I it daily for up to a month still nothing no pregnancy* **(Alheri, 39years)**.

Gomma shared her experience of seeking other treatment sources to conceive by using various alternative options; like vitamin supplements and traditional medicine which even affected her regular menstruation:

> *I have used a traditional medicine that is mixed with honey which was brought to me by my mother's friend. And I also took 'MACA' because of the problem of infertility and menstruation. Even when I took that one, it only corrected my menses but up till now I did not get pregnant. The traditional medicine I took now spoilt my menses again, that is why I then went to the hospital* (Gomma, 25years)

In narrating her experience of using alternative treatment sources, Sonia a health professional lamented that she went out of her way to visit prayer houses, use local herbs all in effort to conceive and avoid blames:

> *…We went and met the man of God to pray for us. Then me, I am from Igbo. In Igbo land, there were some herbs they gave me to* [pause] *put in water and boil. All these stuffs, I went ahead* (knocked the table) *to attempt in order to avoid blame, [tau]* (lowered pitch of voice) *which we have tried severally but still. [hmm] that time* (hissed) *[hey] I have forgot the name of this, all the Edmark company, they have all these supplements, I took that one before finally settling for hospital treatment* (**Sonia, 34years**).

Some women sought for alternative options prior to medical treatment seeking to conceive. However, others combined the alternative options of going to prayer houses with medical treatment seeking.

4.8.4 Acceptance and Adherence to Treatment

The women in defining acceptance and adherence to treatment as part of their health seeking behaviour expressed persistence in follow up care and sticking to medically recommended treatments/instructions. Some of the women in adhering to treatment have done virtually all that they were instructed to do. They were so determined that they accepted all the recommended treatment even where there were some medical difficulties. They explicitly mentioned that they are sticking to medical treatment and doctor's instruction because they desperately need to conceive as described by Hanna and Tumba

> *[ehh]when I went for tests, (*lowered her voice*) they said the mouth of the womb is close. So, I was told to meet my doctor to open the mouth of the womb for the test. I met Dr. XXX* [name mentioned] *who tried with other doctors but could not see the mouth of the womb. So, [ee] November in 2017 I had the first this operation and immediately I was sent to do the test. When I went for the test, I was sent back to my doctor that the womb is closed again. Dr. XXX* [name mentioned] *took me to the theatre in December 2018 and I had the second operation. After the operation, the doctor confirmed that the place was opened. I confirmed it too because my period before* (shake her head) *but now, the thing is flowing well more than the way it used to be* (Crying but still talking) *my period even comes with thick clot. My next clinic day will be next month and I am preparing to go because I have not started taking medicine. They said if I start seeing my period, I will start taking the medicine so that will help me* **(Hanna, 33years)**.

> *When my husband refused to do his tests, I then decided to follow the doctor instructions to do more tests that may determine [abi] tell them the whole issue with regards to my reproductive system. So, that was why I went for that HSG* (voice lowered down) *which was very painful and expensive. I did test twice because they could not see the first result*

> *in my file. So, the result showed that the fibroid was bigger because of the drugs I took and the fibroid was removed. The doctor said we should just increase the frequency of meeting,* (clap hand), *we should take high something diet, I am doing all the doctor have instructed. So I just feel like the only remedy is for me to continue seeing doctor. And that is the only reason am sticking to their instructions* (**Tumba, 33years**).

Charis narrated her treatment acceptance and adherence experience. She stated that the previous hospital protocol and attitude of the healthcare providers made her loose her initial zeal for medical treatment. She also recounted regaining her zeal by adhering to treatment in this present hospital she was now accessing treatment. Quotation from Charis below;

> *Honestly in my hospital FGX, sometimes I feel discouraged to go for my clinic days because of the time wasted in waiting. You see, [tau!] when go early say at12noon, nobody will attend to you until around 1pm or 2pm before they will start. The doctors usually come to the gynae clinic exhausted after finishing with those women in ANC. So, attention is no paid to your concerns. A doctor once said I go for IVF after asking for my age. That it was the only solution [pause] I should just go for IVF. Honestly it is difference [pause] in UDX [sha] I don't know maybe because of their manpower here than the FGX hospital. So, here I don't know whether it is also the same doctors that still run ANC and Gynae clinic same day. But here they are faster that was why I have never missed any of my clinic days. But honestly when I was attending FGX hospital, sometimes (hissed) I don't go since I will only go and suffer without good attention to my concerns* (waves the right hand) (**Charis, 36years**).

Adasa experience of acceptance and adherence to medical treatment was different. She reported that she stopped taking the pregnancy enhancing drugs the doctors prescribed to her because there was no follow up investigation while she was taking the drugs and no time limit. When she read the side effects of the drugs, it made her stop but even when she changed treatment institution, same treatment principle was applied as expressed below;

> *There was no monitoring; they just placed me on the drugs after the tests that I should continue taking it till when something happen. I said [ha] how long will I continue to be taking this thing and there is no check-up? So they did not check me, as in to do even ultrasound to see what is going on, nothing like that. I say no I can't continue that was how I stopped the drugs after one month of taking it. I then changed to Dr XXX hospital. He also placed me on the same drugs clomid, folic acid and all these haematinics. I read you need to be checking when taking all these things [pause] to see if anything is going wrong but there was nothing like that. He just said I should continue taking it [pause] till I am*

pregnant. So, I said no, this thing is not done like that. So, I stopped taking the drug because I was afraid of the side effects I read and since the results showed normal womb, I decided to go for prayers (**Adasa, 35years**)

In summary, the women had good health seeking behaviour because majority did an early medical seeking and were able to return to the hospital the appropriate time. Though few did late medical help seeking and small number patronised other treatment options too prior to medical treatment or in combination. What was worthy of note was that the women accepted and adhered to medical treatment against all odds from decision making process to challenges encountered during the medical treatment.

4.9. Emerging Theme

The two themes psychological experiences and women's plea for help emerged during the data analysis but could not be categorised under the theoretical framework.

4.9.1 Psychological Experiences

The psychological experiences as explained by the participants were their emotional feelings in respect to the infertility. The women emphasized that the condition is disturbing, they feel overwhelm and feel inner sadness deep within them. The psychological experiences were described as feeling stressed up and being depressed.

4.9.1.1 Feeling stressed up

Feeling of being stressed up was an aspect of the psychological experiences these women went through due to their ordeal of infertility. The women expressed that the symptoms were manifested in the form of crying, feeling bad and sad over birth related events.

Some women said since they were diagnosed of infertility, whenever they are discussing about the condition, they cannot help but cry. Hanna emotionally recounted that all she does was cry when she talks about her condition even when she is discussing with the doctors. She further stated that

she was not like this before but crying has become part of her system because it was the only way she could express the burden of what she is going through as quoted below;

> *I don't know* (silent) *I can't control the tears that is how it use to do me to show the weighted of how I feel.* [pause] *That is how, the thing is even Dr.* XXX [name mentioned*] now knows me with the cry* (silent). *For this thing, for this cry, the thing is, in my body. When I am talking to somebody like this, I will even just start crying sometimes. That is why any time I went to hospital if they talk like this issue, that you are asking me about, [ehe]* (still crying and talking) *tears will come out of my eyes but I was not like this before* (**Hanna, 33years**).

Kyauta, narrating how her feeling of being stressed up, she recounted that she feels bad when her menstruation comes and also cries over any event associated with childbirth for the past 3-4 years.

> *Most time or anytime I see my menses, I use to feel bad or like if I get the news that someone has delivered, all these things, makes me feel bad and cry* (smile and was silent). *For 3years to 4years now all I do was I cry but the cry is reducing* (**Kyauta, 33years**).

Tumba, expressing her feeling of being stressed up, emphatically and explicitly lamented that she feels overwhelmed with so many pressures and she has to tolerate them all as described quoted;

> *The things on you are huge and too much. You bear the cost, you bear the pain of treatment, and you bear the side talks from people. The issue that people are discussing that you are not able to conceive, you are wasting your husband's money, you are wasting your husband's time? You know because maybe some people believe that you are the reason why you are not able to conceive which is not true* (**Tumba, 33years**).

Feeling stressed up was a psychological experience the women went through which was described as feeling bad and crying to show the gravity of how they are suffering.

4.9.1.2 Being depressed

The women described being depressed as a psychological experience. Majority of the women expressed that they were not happy and they feel this sadness within them.

Narrating being depressed, Charis lamented that she feels depressed to the extent that even the encouragement she has around does not help. She described signs of insomnia as she finds it difficult to sleep at night. As such she is generally not happy because she feels she ought to have her own children even with her late marriage as quoted below;

> *Honestly am not feeling happy because sometimes even with all those encouragements and sometimes I will feel depressed, sometime I will still feel* (pause, close eyes) *am depressed. Sometimes even in the night I will just wake up, if I start thinking, I will just be depressed. So, honestly, generally* (lowered pitch of voice down) *I'm not happy about my situation* (squeeze the forehead) *because am feeling by now, I should have my kids. And even though I have late marriage but at least since 2016 by now I should have had even one child on my laps but no child. The issue of this fibroid* (smiling weirdly) *is even what is bordering most (**Charis, 36years**).*

Adasa and Sonia emotionally reported that it is not a good experience at all because it was emotional. It makes them think and sometimes they lack words explain how they feel because they feel unhappy deep within them. This was how they expressed their feelings of being depressed;

> *It was not easy because it was an* [pause] (closed eyes) *emotional* [pause] (closed eyes) *[ehh] thing, how will I put it? It wasn't easy because I was not feeling well, I was not happy within me. Especially when I am alone, maybe you know, the kind of thoughts that will come to a person's mind, I thought of all sort of things. That was just the thing but it wasn't easy* [shake head and made a sound with the mouth]. *It was not a good experience* (**Adasa, 35years**).

> *[hmm] I can't explain o,* (shake head) *I least expected this, I don't know how to* [pause] *gaskiya I don't know how to explain because the situation* [tears in the eye] *[tau] [hh] I don't know the word to use but is not a palatable one* (silent) [fighting tears] (**Sonia, 36years**).

Izatu shared her psychological experience of being depressed. She stated that she was not happy because of her polygamous setting because the co-wife has children. Although, nobody was pressuring her but she was just not happy with her inability to give birth as described below;

> *Honestly, I am not happy, look at the way I am. You know we are two wives; she has her own children though I know they are also my own children since he is my husband and he loves me. We have never had issue on children, all his children whatever I do to them, it never disturbed him. I discipline them the way I want if they do anything wrong, it is not as if there is any problem but my fertility problem is disturbing I want to also have my own children. I am sad, am not happy honestly* (**Izatu, 35years**).

Tumba narrated that she is not happy with her condition of delay in conceiving. She also recounted that she is the only person that knows how she feels because it is right inside her. Despite her family support she feels sad. Her description of being depressed is below;

> *Am not happy* (frowns face, look sad, became quiet and bow the face down). *Even with the support from my family, I feel sad inside. In fact, psychologically you will be passing*

> *through* (lowered voice pitch) *something that you are the only person that will say it out. Nobody can just look at you face and say this is what she is feeling or she is comfortable because she is not having a child. Or she is living a comfortable life, or she is free that nobody is disturbing her or this and that, is not true, every woman wants to have a child of her own* (**Tumba,33years**).

In summary, the women expressed their psychological experience which they described as feeling stressed up characterised by feeling bad and crying due to pressure of the whole situation. While the feeling of being depressed was characterised by lack of sleep at night, thinking, being unhappy and sad, all these resides within them.

4.9.2 Women's Plea for Help

The women defined this as their concerns about infertility and how to help women ease the suffering that comes with infertility. The participants describing their plea for help made emphasis on advice to women, men understanding and government assistance.

4.9.2.1 Advice to women

The participants in expressing their plea for help emphatically advised women with infertility issues to seek for medical help and that it should be done on time. Large number of the women admonished women with infertility to visit the hospital in order to get a proper and timely intervention on their infertility problem. Kyauta and Igge encouraged women to go to the hospital with their husbands as couples for treatment, even when they are praying and waiting patiently on God. This was how they expressed their advised to women;

> *I want advise them to go to the hospital, they should continue praying, I do not have anything to give out. They should go to the hospital; they should check the husband and the wife. They should pray and if it did not come; they should continue praying and going to the hospital* (**Kyauta, 33years**).

> *[tau] what I want to add here is to advice anybody that has spent up to 2years without getting pregnant to go to the hospital for check-up. Since some delay can be due to some problems while sometimes is from God because is not yet time until when it is time then God will allow you to conceive* (**Igge, 22years**).

Amal with duration of 17years of infertility confidently advised women with infertility to go for proper medical investigation because they might be lucky to get pregnant after treatment if their problem is resolvable. She narrated that because she is still expectant, she does not mean others might not conceive too. Her expression of advice to women;

> *I want women with infertility to always visit the hospital, I want them to go to the hospital and have a proper check-up. Some may have minor problem which can be easily corrected. If they go, they might become pregnant because I have not gotten does not mean that somebody would not get. So, I advise them to go for total check-up* (**Amal, 45years**).

Azumi using herself as an example advised women to look for solution of their infertility from the hospital on time. She stated that she did not try to rectify her infertility problem on time. So, she wants others to correct that aspect and do the right thing;

> *The only thing, I want to advise women to rectify their problem of infertility as early as possible. For me, I didn't rectify the problem earlier,* [pause] *it was late when I started treatment [mm]. Try as early as 16, 17 to 20 years let them identify any female problem that may affect pregnancy and delivery [mm] so that maybe it can be easily treated [mm]* (**Azumi, 43years**).

The women's pleas were expressed by advising other women experiencing infertility and were presently not treatment to go for medical treatment. Some of the women also shared their personal experiences to solidify the enlightenment as they wouldn't want any woman to go through similar experience.

4.9.2.2 Men understanding

An aspect of these women's plea for help was drawing men's' attention to their plight. Some of the women shared their experience and advised that men should be involved and be supportive of their wives in seeking treatment for infertility.

Vida a mother of one child stated that it is better for a couple to reach a consensus if the husband does not need more children and that treatment should be done as a couple rather than apportioning blames. This was her expression about women's plea for men's understanding on infertility issues as narrated below;

> *I think if a woman is going through all these things, the husband is supposed to support her. It is not only the mother that will enjoy the child when the child becomes somebody life. Like for me, my husband doesn't care, is not good like that. Everybody like children, if you don't like children, you tell your wife. That you only need one child then everything will be okay, and then your wife will know that yes, this is what you want not to push blame on [pause] each other. Even if it is the husband that has the problem, you stay together and make sure you treat it together not to push blame to one another. I think that is the only thing I have to say* (**Vida, 31years**).

Similarly, Gomma in expressing her plea for men's understanding recounted that issue of infertility requires treatment as couple not as a lonely or private thing for women. Identification of the problem is clearer when they are examined as a couple;

> *I just have one thing to say. It is very important for men to make effort to encourage their wives by following them to the hospital. All the investigations that will be carried out, they would also want to test the man in order to identify where the problem is. If they don't know where the problem is, they won't be able to know who has the problem between the husband and wife* (**Gomma, 25years**).

The participants pleaded for men's understanding in supporting couple's treatment and the need for negotiation and agreement in respect to childbirth rather than allocating blames.

4.9.2.3 Government assistance

Government assistance is another aspect of the women's plea which they defined as the need for the government to intervene in the plight of the women with infertility because the treatment is extremely expensive. The women requested for assistance in the form of subsidising the cost of treatment and empowering women with infertility to enable them access the treatment they have accepted.

Vast number of the participants' based on their treatment experience wish to expressed their heart felt plea to the government to assist women with infertility by reducing the cost of investigations and drugs because they are expensive. These women narrated that they have met with many women that cannot afford some treatment though they were able to afford some form of the investigations. They reported that subsidising the cost of treatment will encourage women to do more health seeking for infertility as described by Sonia, Charis and Tumba;

[emm] most of the investigations I did, like this TVS to know when you are really ovulating, you will do it like 3-4 times in a month. So it is not easy, we need government or some people that can come and help the women. This is because most of the women there is minor, had it been they came for medical check-up or there was medical assistance they would have been pregnant. Maybe it was minor problem but due to economy but if we will have the government that will come in to assist financially or with all these drugs, all this hormonal, these supplements it will be a good one, it will help us. [emm] Some people if they do it for them, it may work for them. But majority can't afford it but if we have government or organisations that can help us, I think it will be better (**Sonia, 36years**).

Honestly anything patterning [ehh] infertility, like to seek help for infertility, the way I am seeing it all over because of all the hospitals I have gone to so far, honestly is expensive even the drugs compare to other [pause] illness. If the government lessen things or give support especially to women with infertility, it will help them. Maybe in times of all this infertility drugs and tests because if you look at it, most of the infertility drugs that will help women are expensive. They cannot even afford it; some of the tests are very expensive too. Some women can benefit from it but because of it is expensive, they will be discouraged (**Charis, 36years**).

If you look at the treatment of not being able to conceive, they are very expensive [pause] and they are extensive in nature. So, women with infertility cannot avoid all the tests. I think, if the government are not helping, the issue of not being able to conceive will still be something, a topic of discussion. When you come to see doctor, you have decided that you will seek medical advice or medical help for your issue of not being able to conceive. First consultation, you are being given investigations alone, ordinary tests worth ₦30,000 naira just first consultation, it is not everybody that can afford it. And the tests they are going to give you are not going to be the last or are not going to be just the final tests that you are going to do. So, I think if the government can come in and help with these tests some, even if not all. If they cannot remove all the expenses, they should reduce them to some extent that at least the person coming for the tests will be able to pay for it. Because those tests are not easy, is it the pain of the procedure you will bear with or the money that you are going to look for that you don't have? So, I think maybe government, possibly the government should have a way to help if they can. They should help in one way or the other to reduce the suffering women are passing with regards to not being able to conceive (**Tumba, 33years**).

Another participant pleaded with the government and relevant individuals to assist in empowering women with infertility with skills, so that they can access the treatment of infertility. This, she asserts it is necessary because some men are not supportive of their wives and the women are suffering without help. This was how Izatu expressed her plea for government assistance;

> *Of a truth, there are a lot of women that need to be helped because some women want to have their babies but their husbands don't care it and the women cannot afford treatment. There are a lot of them like that, some their husbands have the money but don't want to be identified with infertility and they will refuse to support or assist their wives. So, am pleading on the government, the women and their families to help establish them with skills or a trade that will empower them to take care of their hospital bills in respect to difficulty getting pregnant. Some women their husbands don't care, some men don't care if their wives give birth or not it doesn't disturb them but the thing keeps disturbing the women. As such am advising women to look for a trade and if the government can empower them, that will be fine. That is my advice* (**Izatu, 35years**).

In a nutshell, the women's plea was described as a request for women with infertility to embrace timely medical treatment, men to get involved in the issues of infertility and government to reduce the cost of treatment. The participants were passionate in their plea as some used their situations as an example to give awareness for things to be done better.

4. 10 Summary of the Findings

This empirical study has revealed that the women with infertility in Sokoto state had good health seeking behaviour and their attitudes were modified by complex processes. A total of eight (8) main themes and twenty-two (22) subthemes were reported that shows the complex experiences of women with infertility in health seeking. The participants' experiences were grouped into 8 main themes as follows: symptoms salient, life course factors, individual and social cues, enabling and predisposing factors. Others are perception about infertility, health seeking behaviour, and psychological experiences and women's plea for help.

All the women and some of their husbands too indicated their intention and eagerness to have their own children or more children. This made it possible for some of the women to easily identify the symptoms based on the delay in conception despite frequent unprotected sexual intercourse over a period of time. It also became apparent for the women to seek for help to conceive in order to be happy in their marriage, play their womanhood role in marriage and to be able to perform their service to God.

The participants had the support of their husbands, family, friends and significant others. The supports were financial, advice and companionship which they reported was useful in encouraging them to do more health seeking. However, some women were not fortunate enough to benefit from such support but that challenged them to seek for help for their predicaments by using their life savings. The societal pressure was also another challenge that made the women to do more health seeking in order to erase the wrong perception the society has about their condition. However, few were pressured to the extent of going out of their ways to fulfil cultural practice by using herbs given to them to avoid blames.

The participants had this awareness about the causes of infertility and their belief in the effectiveness of medical treatment prompted their health seeking behaviour. This was evident because large numbers of the participants accepted and adhered to the treatment. The women reported that they have done all their prescribed investigations and were currently on treatment and expect conception very soon. Conversely, two of the participants who were on treatment for quite long though were hopeful but doubted the effectiveness of the IVF that was suggested to them and were reluctant to try.

Finally, the women expressed that infertility affects the women psychologically causing stress and depression that makes them unhappy and emotionally unstable. As such, they urged husbands to be responsive to issues of infertility. They also stated that the medical treatment for infertility needed to be commenced as soon as possible for it to be effective. They advised women with delay in conceiving to look for timely medical help and that government should subsidise the treatment because it is expensive and not all women can afford the treatment.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter presents the detailed discussion of the major findings of this study in association with the existing relevant literature pertinent to the Health Seeking Behaviour of Women with Infertility. The discussion is presented according to the major themes and subthemes which were based on the objectives of the study. The women detailed demographic characteristics preceded before the discussion on the themes.

5.1 Participants' Demographics

The demographic characteristics of these women were essential findings of this study which reveal that all the 14 participants were married out of which 5 were in a polygamous marriage and the duration of infertility was 2-20years. The women were within the ages of 22-45years out of which majority (9) were within 30-39years. All the women were formally educated; 10 had tertiary education and 4 had secondary education. The women were empowered financially since 8 of the participants were gainfully employed and 3 were small scale traders. This study is in agreement with the characteristics of the women in Ghana that sought for help to conceive where majority of the women were within the ages of 30-39years, married, formally educated and gainfully empowered as established (Kussiwaah, 2016; Naab et al., 2013). This implies that educational level, economic status and age of women are life cues that prompt health seeking behaviour.

In this study, majority (10/14) of the women were diagnosed of primary infertility while 4 had secondary infertility as also seen in (Kussiwaah, 2016) where primary infertility had 12/14. The congruency in the studies might not be unrelated to the similarities in the setting (West Africa)

of the study. Similarly, the participants were predominantly Muslims 8/14 and 6/14 were Christians. This finding is in agreement with the study of Sarkar and Gupta (2016) in India where majority of the participants belong to the Muslim faith. The corroboration in the two studies might not be unrelated to the belief found in the predominant religion in the area.

5.2 The Symptoms Salience of Women with Infertility

Symptoms salient were the events around the women that made them recognise their infertility problem and stimulated them to seek for help to conceive. This study indicates that the women took cognisance of their delay in conceiving; desired to have their own children which in turn initiated the trying to conceive. In consistent with this finding, is the study by White et al. (2006), where pointer of symptoms salient were delay in conceiving, desire to have children and actively trying to conceive. This indicates that the women were able to identify the delay in conceiving because of their desire to conceive.

This study finding reveals that the women desired to have their own children, thus were able to recognise the delay in conceiving due to the duration of frequent unprotected sex with their husbands without getting pregnant over the period of 1-2years. This finding is in similar lines with some of the results obtained in Gambia where women were able to identify infertility by failure to achieve pregnancy after regular unprotected coitus over a period of 1-2years (Dierickx et al., 2019). More so, the similarity found in the studies could be associated with the value placed on childbirth in Africa. The women in this study also took note of the short time delay (as early as 3-7months) that turned into years of marriage without pregnancy which they compared with other women who had children. For mothers with at least one child, the delay to conceive was identified based on the age of their last child and repeated miscarriages. This findings concurs that short period (3-6months), long period (1-2years) unproductive coitus and miscarriages were viewed as

infertility by the participants in Dierickx et al. (2019). This finding is however, contrary to the study conducted in USA by White et al. (2006), which noted that the women recognised delay in conceiving by monthly menstrual flow showing lack of conception. The difference in the events used by the women to identify delay in conceiving might be due to the disparity in the study context and level of reproductive awareness.

This current study shows that all the women desired to have their own children because they like children and see children as source of companionship. As such large number of the women consulted with the doctors where they had some tests, ovulation tracking, drugs and invasive surgical procedures with conscious effort to conceive. This conforms with the study of Bunting et al. (2012) where women were said to have tracked ovulation, used drugs and had artificial insemination as conscious efforts made to conceive. Consequently, it does also agree with the study of Slauson-Blevins et al. (2013), that women trying to achieve pregnancy were associated with high likelihoods of consulting a doctor.

5.3 Life Course Factors of Women with Infertility

Life course factors in this study were those indicators that stimulated health seeking behaviour in these women. This study finding shows that in the Nigerian tradition, immediate conception is customarily expected after marriage as a symbol of womanhood (blessing of marriage), joy of marriage, and reward of faithful premarital life and license for acceptance by in-laws. As a result, lack of immediate conception after marriage provoked concerns in these women that prompted help seeking to conceive. This study finding concurs with some part of the study by F Naab (2014) which reported that in Africa children are normally expected in marriage to ensure completeness (womanhood) and stability of marriage. Furthermore, as a norm in Africa, women were expected to fulfil the fundamental role of procreation or risk loss of benevolence from

husband's family (Dhont, 2011; Tabong & Adongo, 2013b). This explains why some of the women in this study were overwhelmed and disappointed with advancing years of marriage without children as the norm entails.

The women in the current study felt life was unfair because they were denied blesses of marriage which led to rejection from in-laws (Mumtaz et al., 2013; Naab, 2014; Tabong & Adongo, 2013a) studies also established similar findings that women are unhappy in marriage. The finding of this study further reveals that majority of the women that sought for medical treatment to conceive were married for some years without children. Thus, agreeing with many studies that marriage, years of marriage without children is a concern that motivates high likelihood of treatment seeking to conceive (Bushnik et al., 2012; Dhont et al., 2010; Johnson & Johnson, 2009). This shows that years of marriage without children have similar effects on the health seeking behaviour of women in middle and high income nations.

In terms of age as push factor, the result obtained from this present study gave an explicit expression of age as an indicator to treatment seeking to conceive. Few (2/14) of the women in this study revealed that they were in apprehension because of their advanced age since they knew that menstrual cycle ceases with aging hence, the help seeking to conceive. This finding corroborates with several studies which noted that older married women do more help seeking to conceive (Bushnik et al., 2012; Datta et al., 2016; Naab et al., 2013; White et al., 2006).

Similarly, part of the current study was consistent with studies that observed that women with primary infertility did more help seeking to conceive (Bukar et al., 2012; Kussiwaah, 2016). This was however, inconsistent with the study of Sarkar and Gupta (2016) which established that majority of the women that sought for medical help to conceive in India had secondary infertility. This difference might be related to lack of awareness as infertility was higher among women who have not attended formal school (Sarkar & Gupta, 2016). It is also possible that the incongruities

might be as a result of the definitions of primary and secondary infertility used in the two studies. Sarkar and Gupta (2016), definition of primary infertility refers to individuals who have never been pregnant but this study also included inability to carry a pregnancy to live birth as defined by (Mascarenhas et al., 2012). Likewise, secondary infertility for this study is failure to conceive after previous live birth (Mascarenhas et al., 2012).

5.4 Individual and Social Cues among Women with Infertility

Societal support is very essential in prompting health seeking for infertility because of the value the society places on childbearing. Children are highly treasured in the African culture as they are considered as gifts from God, instrument for continuation of lineage and religious ritual. This is because children are also required to continue praying for their parents after their demise in the Muslim religion. This finding relates with (Naab, 2014; Tabong & Adongo, 2013a) that reported that children are God's gift as symbol of blessing of marriage, seen as instrument for spiritual rites and for continuation of the family name.

The place of societal value for children and the husband support in childbearing cannot be over emphasized and encourages help seeking to conceive. The result of this study reports that the support women received from their husbands, family and significant others in form of advice, prayers and sometimes financial were encouraging and promoted help seeking to conceive. In similar lines, findings about the encouragement on help seeking as a result of societal support was also established in many studies (Bukar et al., 2012; Dierickx et al., 2019; Lawali, 2015; Naab, 2014; Tabong & Adongo, 2013a). The notion that women who had encouragement from family, husband and others have high odds of consulting a doctor in person than doing an online health seeking was also found in (Slauson-Blevins et al., 2013).

More so, another finding in this current study reveals that self-motivation and the acceptance of fate were essential in keeping the women hopeful and trusting their support in help seeking to conceive. Self-encouragement and acceptance of fate prompted relying on support and focus to their future was reported in Ghana (Tabong & Adongo, 2013a).Worth noting was the support committed by the women's family (parents) to continue payment of treatment where husbands have stopped due to prolonged treatment without pregnancy. In similar lines, husbands were likely to stop financial support where treatment takes longer duration but the women often continued with the treatment (Dierickx, 2018). This shows that the women are determine and derive inner strength to continue health seeking alone where need be. In addition, the similarities noticed in the above studies were not surprising because of the shared Africa cultural belief where men are considered sacred and complete. As a result, women are often blamed for infertility(incomplete) and the male factor ignored. It was also obvious that childbirth as a norm identified in this study was among the reasons that stimulate health seeking by these women regardless of all odds. Thus, it becomes imperative to intensify public enlightenment on couple infertility, especially male factor in order to promote male involvement in treatment seeking for infertility.

However, not all the women were fortunate to have been completely supported through their ordeal. The result of this study revealed that some women had financial and emotional support from their husbands however their husbands refused to be tested.Women were hardly able to persuade their husbands to go for investigations (Dhont et al., 2010; Dierickx et al., 2019; Mumtaz et al., 2013). Thus exposing thewomen to further expensive and extensive clinical investigations. Smilarly,this report supports that women spent heavily on treatment that might be unnecessary as also seen in this present study (Dierickx et al., 2019). In addition, this present study revealed that treatment for seeking for infertility was a lonely path for some women as as they continue treatment

even when their husband and other relevant individuals completely disengaged themselves from issues related to infertility. In consistent with this present finding, studies (Naab, 2014; Tabong & Adongo, 2013b) have reported that men disassociate self from infertility and allow women to go through the ordeal of infertility alone.

Another major finding of this study was that women suffer the social consequences of infertility as they were humiliated, stigmatized and blamed for infertility in diverse ways by their husbands, family and the community; this is congruent with several studies (Dhont et al., 2010; Dierickx et al., 2018; Hollos & Larsen, 2008; Roomaney & Kagee, 2016). The finding of this study also reveals that the women in their places of work were being ridiculed as inexperienced with issues of children as such their advice were shun and ignored. Furthermore, some mothers do not allow the women to touch their children insinuating that the women were evil and might harm their children. Similar to the study in Ghana where the women were accused of being witches thus, prevented from relating with people's children for fear of the children being bewitched (Tabong & Adongo, 2013a). Some husbands in this current study accused their wives of being infertile and the society also accused the women of voluntarily causing their infertility by using contraceptiveswhich is congruent with the studies in (Dhont et al., 2010; Dierickx et al., 2019; Mumtaz et al., 2013). Fortunately, the social consequences though traumatising, became a driving force that trigger health seeking by some of the women in order to put an end to the suffering.

This study discovers that the strong trauma caused by the humiliation, stigmatization and accusations prompted the treatment seeking to conceive as a defense by the women to unblemished themselves. In similar lines, stigma motivates women to do more health care seeking to conceive irrespective of the judgement (Dierickx et al., 2019). Nevertheless, this is incongruent with the report that women go online than doing health seeking for infertility due to stigma (Boivin et al., 2007; Bunting et al., 2012; Slauson-Blevins et al., 2013). The disparity observed in the studies

might be related to the geographical location, orientation and access to informational technology facility.

5.5 Enabling and Predisposing Factors Leading to Health Seeking Behaviour among Women with Infertility

Treatment seeking for infertility is driven by multiple factors, resource and treatment beliefs inclusive. In this present study, vast numbers (8/14) of the women were working class women who had tertiary education and others (3/14) were gainfully empowered (trading). The findings of this study explicitly revealed that the literacy level of the women helped them to identify that they have fertility problem and prompted health seeking to conceive. In congruency with these current findings, several studies established that educated women with good earnings/family income do high medical seeking for infertility than those with low education and income (Bushnik et al., 2012; Datta et al., 2016; Naab et al., 2013; White et al., 2006). However, the findings further revealed that women acknowledged that the treatment of infertility is expensive.

More so, some investigations and drugs were accessed outside the government hospitals. Sometimes the women were limited to complete access of some treatment (HSG, IVF, drugs) because of their income (Dierickx et al., 2019; Tabong & Adongo, 2013a). Meanwhile the NHIS was not very useful since most of the investigations and drugs were accessed outside the public hospitals. In line with the present finding, it was reported that women complained of the expensive nature of the treatment and that certain test and drugs were not accessed in the public hospitals (Dierickx et al., 2019; Tabong & Adongo, 2013a). There is the need for the healthcare system to consider subsidising and integrating consistently basic infertility investigations in the public health facility.

It was interesting to note that the women with meagre earnings were also committed to accessing medical treatment using their life savings base on their affordability. Sadly, accessing certain treatment was delayed due to shortage of funds. Similar finding was reported, where women used their life savings for treatment of infertility (Dierickx et al., 2019) and sometimes even experienced delay in treatment because they were limited by funds (Dierickx et al., 2019). This shows that despite the economic challenges, women are ready to go the extra miles to seek for help to conceive. Therefore, the commitment of the women with meagre earnings to use their savings to seek for treatment that is considered expensive even to women with sound financial status is quite commendable.

The safety and effectiveness of medical treatment is motivator to health seeking for infertility. The result of this present finding point that majority of the women opted for orthodox medical treatment because they believe that the medical professionals were adequately trained to identify and treat diseases. Others chose medical treatment because it was the only place that has solution to their infertility since they cannot vouch for traditional concoctions. The women believed traditional concoctions can be toxic to the body. More so, the women reported that there was no information on the constitutions and mode of action even in the internet. Some of the women have experiences of other women with infertility that had their fertility restored through medical treatment. These findings concur with the studies that established that safety and the effectiveness of orthodox medical treatment largely prompt health seeking (Bunting et al., 2012). Likewise, this present findings concur with Slauson-Blevins et al. (2013) that positive treatment behaviour was associated with high possibility of consulting a doctor than going online health seeking or doing both than doing no health seeking. This implies that the women in the studies mentioned above demonstrated positive treatment belief for medical treatment because of its

efficacy and safety. However, this finding disagrees with the aspect that medical treatment seeking is more among younger women accessing treatment for less than 12months (Bunting et al., 2012).

Conversely, some women claimed that they rejected IVF treatment because of various reasons such as doubt for its effectiveness since they have tried all the treatments suggested to them. Failed previous artificial insemination and the use of donor egg were other reasons for the rejection. In similar lines, educated women who have been on treatment for more than 1year were more likely to develop negative treatment belief (Bunting et al., 2012). It is evident therefore that treatment belief can be influenced by the non-effectiveness of previous treatments as reported by Dierickx et al., (2019).

5. 6 Perceptions of Women with Infertility towards Seeking Medical Help

Socio-cultural background of the individuals' often influences their perceptions on the causes of infertility. This current study discovered that infertility is believed in the community to be caused by natural/biological and supernatural (spiritual) components. Natural/biological factors where there are problems (disorder) within the women that prevent conception e.g myoma. Or where there is a distortion in the normal functioning of the reproductive system as caused by abortion and use of modern contraceptives methods. In consistent to this findings, studies reported that the belief that risky health behaviour (unsafe abortion) and the use of modern contraceptives were responsible for creating issue in the womb and causing infertility (Dierickx et al., 2019; Tabong & Adongo, 2013b).

Equally, some of these women believed infertility is caused by supernatural component. By God because He is the provider of children and others believed it is caused as a result of manipulation of evil people/spirits (e.g witches) in the spirit realm in order to inflict pain to the women. Studies in Africa established that socially, infertility is believed to be caused by

supernatural (spiritual) factors e.g bewitchment to destroy peoples lineage or the women are paying debt using their children in the womb (Bukar et al., 2012; Dierickx et al., 2019; Lawali, 2015; Okafor et al., 2017; Tabong & Adongo, 2013b). Only the participants in Dhont et al. (2010) believed the part that infertility is caused by God since He is that giver. The disparity in the spiritual belief might be related to the study areas because in Northern Nigerian the residents are predominately Muslim who strongly believe that everything in life is destined from God. However, (Dierickx et al., 2019), argued that prolonged state of infertility, ineffectiveness and side effect of treatment can modify the perception of the condition. This was explicitely expressed by few of the participants. The interesting part was that the cause of infertility was reported from being biological to being an attacked by evil spirits and this was reported by participants who were medical personnel. This is of medical concern as it goes to show that there are barriers to health seeking that needs eradication.

The belief on the cause of infertility and the significant social network of the women were highly related to the treatment seeking behaviour of the women. The finding of this current study shows that majority (9/14) of the women patronised the medical treatement centres and faith-based healers for solution to their infertility. This was possible because the women believed that biomedical component causes infertility, also that God is the provider of everything. Thus, the promptness to use those two treatment outlets. In Africa, women seeking treatment for infertility frequently use either of the three treatemnt oulets (medical, faith-based and traditional) and some use the outlets simultaneosly (Bukar et al., 2012; Dierickx et al., 2019; Lawali, 2015; Naab et al., 2013; Ola, 2014; Tabong & Adongo, 2013b). This similarity might be due to the similarities in the soci-cultural background of the settings.

There are little diversities in the women's treatment expectations. Majority of the women in this current study expected conception since they have done all the required investigations and

adhered to the suggested treatment. Those who were at the early stage of treatment were hopeful that the outcome of the tests done might be helpful in the identification of the cause of the infertity for prompt treatment. Other women in this study expected divine visitation from God to conceive since they believed they have exhauted all recommended treatment they can afford. The women also believed that except God intervenes, there is nothing anyone can do because everything happens according to God's timing, and that even medical treatment cannot alter that.

6. 7 Health Seeking Behaviour of Women with Infertility

Health seeking to conceive is a complex process that entails consulting and negotiating with husbands, family and friends before internalising advice to take action. In this present study, majority of women were advised to go for medical treatment by husbands, close family, friends and intimate medical professionals who noticed the delay in conceiving. Even where some husbands were reluctant to consent to medical treatment but want to wait patiently on God, the women still took the decision to access medical treatment. Contrary to the study that demonstrated that mother in-laws often make the decision for medical treatment seeking (Mumtaz et al., 2013). The difference in the findings might be related to the demographic characteristics of the respondents. This shows that women with social support were always the first to seek for medical treatment for infertility.

The participants in this present study were educated and empowered to make self-decision even where their husbands were reluctant to consent. However, few had contrary counsel from siblings, friends and in-laws to use alternative treatments like supplements, traditional herbs, faith-based, fetish sacrifice and even self-medication (infection treatment & contraceptives). Consequently, the women heed to the advice and used mainly medical and faith-based treatment.

This is not surprising because the belief of significant others on the causes of infertility also influenced the choice of place where these women sought help to get pregnant. Few (3/14) women however, combined medical, faith-based and traditional herbs treatment methods similar to the report in (Bukar et al., 2012; Naab et al., 2013; Ola, 2014; Sarkar & Gupta, 2016) with the exception of fetish sacrifice. In addition, some of the women used medical treatment as initial treatment and did early health seeking. On the contrary, it was demonstrated that women accessed medical treatment after failed efforts from alternative sources typically traditional source is the first to be visited (Dhont et al., 2010). The demographic characteristics and beliefs of the participants might be the reasons for the disparity.

Utilisation of medical treatment by the participants regardless of educational level in this study was done earlier than medically necessary. This was because of the customarily expectation of immediate conception after marriage and the women's desire to have children. Some women did medical treatment seeking at 3-7 months after marriage without pregnancy. But they were medically advised to continue trying until at least 1year without pregnancy. Keeping to this current finding, (Mumtaz et al., 2013) reported that 3months after marriage women were pushed to sought for medical treatment to conceive. Some women waited patiently and returned to the hospital after 1year of trying without pregnancy.

However, some were too anxious to wait for a year as such, accessed the private clinic and faith-based healer before returning to the public hospitals after some years. The study also discovered that few of the women did late medical seeking after at least 2years without pregnancy; the finding is similar to that of some studies (Bukar et al., 2012; Chin et al., 2015). Though, this finding disagrees with the years of delay as seen in the study of Dhont et al. (2010) which reported that women delayed for at 5years of infertility before seeking for medical treatment to conceive. This disparity in the years of delay might be related to the time taken by the women to access

alternative sources as reported in the contrary study. More so, it was also reported that lack of awareness and cost of treatment influences health seeking (Naab et al., 2013).

In terms of using other treatment sources, it was observed that few (5/14) of the women initially sought for help to conceive through alternative treatments by doing self-medication and online health seeking. This is in agreement with the report by Slauson-Blevins et al. (2013) that some women avoided consulting with a doctor in person but did online health seeking. Other forms of alternative treatment used were supplements, faith-base and traditional medicine. However, few women combined both medical and faith-based treatment. This information corroborates with that in several studies (Bukar et al., 2012; Naab et al., 2013; Ola, 2014; Sarkar & Gupta, 2016) that reported that women trying to conceive utilise either only medical or in combination with alternative treatment. The similarity in the studies might possibly be because of the value attached to alternative medicine in both Africa and Asia culture.

Further interesting findings of this study was that more than half of the participants accessed at least two healthcare facilities for treatment with the initial centre being a private clinic. Reasons include husband's choice, verbal referral by friends, avoiding the cumbersome protocols in the public hospitals. Other reasons for those that patronised other public hospitals as initial centre were; bad attitude of health professionals and lack of treatment satisfaction since there was no pregnancy. Treatment of infertility might possibly take a long period (20-25years) before conception is achieved (Dierickx et al., 2019).

This present study reveals that the women were committed to accepting and adhering to treatment because of treatment satisfaction and also has confirmed online that treatment was appropriate. Other reasons were that the women have not experienced any side effects and were satisfied with the attitude of the health professionals. However, few (3/14) stopped certain drugs

because they experienced side effects. Studies have reported participants' acceptance and continuation of medical seeking for up to 20 years (Dierickx et al., 2019; Mumtaz et al., 2013).

5.8. Emerging Themes

Two important themes emerged during the analysis which is psychological experiences and women's plea for help.

5.8.1 Psychological Experiences

Infertility is a complex condition that affects the mental health of women. This study records that women are overwhelmed as a result of the ordeal of infertility causing them to be stressed up, as established in Dhont et al. (2010). Lack of concentration, feeling bad and crying over almost everything especially issue related to childbirth were the symptoms the women used to describe being stressed up.

Further findings of this study was the psychological effect of infertility which was explicitly expressed as depression, similar to the findings on the population of several studies (Dhont, 2011; Donkor & Sandall, 2007; Kussiwaah, 2016; Lawali, 2015; Mumtaz et al., 2013; Roomaney & Kagee, 2016). The women mentioned having sleepless nights, always thinking, unhappy within them and sad. Some of the women claimed that they social support from their husbands, friends and close family, they are still worried. This indicates that infertility is a bad experience that affects women's psychological wellbeing and requires more than social support to improve the women's mental health. Hence, medical counselling for these women is of paramount importance.

5.8.2 Women's Plea for Help

The plight of infertility is a complicated issue that has diverse aspect to it. The women in this study found it very necessary to add their voices on how the suffering can be reduced in order

to prevent traumatic psychological experiences for women with infertility. Even the participants who have been on treatment for more than fifteen years passionately admonished other women with infertility to make haste and visit the hospital for early diagnosis and speedy treatment. This shows that these women were able to recognize that treatment for infertility might take longer period than expected.

Additionally, some of the women were zealous in drawing the attention of men to their ordeal. As they plead with the men to view infertility as a couple problem that required men's understanding and participation in treatment. They further assert that negotiation and reaching consensus on family size is better than apportioning blames. This also demonstrates that financial and emotional support of spouses are not enough because the treatment of infertility requires the couple to be fully involved for easy diagnosis and effective treatment.

Finally, the women also plead with the government to assist in subsidising the cost of infertility treatment because infertility treatment is extremely expensive and not all the women can afford it, and some men are not supportive of their wives. More so, the women expressed that they have met with several women that cannot afford some investigations and drugs. They further employ the government and agencies and meaningful individuals to help in empowering these women.

5.9 Summary of Discussion of Findings

The women desired to have their own children which made it easy for them to recognise the symptoms of delay in conceiving (unproductive frequent unprotected coitus, last child's age with repeated miscarriages). The symptoms were identified by some women earlier than the medically justified period to qualify for infertility and some after 2years. Thus, the women tried to achieve pregnancy by going to the hospital where they were tested, given fertility enhancing drugs;

some had surgeries and even artificial insemination. Majority of the participants were married young adults (30-39years) with no children at all. Meanwhile, customarily children are viewed as the binding chain to happy marriage, complete acceptance by in-laws, sign of blessed marriage and womanhood. Hence marriage as a normative for childbirth and the aging caused the women without children to seek for medical treatment to conceive.

Advised from husbands, close family and friends encouraged the women to seek for treatment. Social pressure (blame, stigma, ridicule) also prompted health seeking by the women in order to clear self (flawless). Majority of the women were educated and gainfully employed as a result, their awareness of the importance of health seeking to conceive prompted the medical seeking. It was also noticed in this studies that regardless of the women's financial status, they were committed to investing and using all their possession for medical treatment. The women believed that infertility is caused by natural/biological and supernatural components. As such, the women basically accessed the medical treatment and faith-based centres for help to conceived. Health seeking by these women was done after consulting and negotiating with husbands, close family members and friends. Few women however, did medical help seeking with the agreement and support of their husbands. Further, some of the women consulted with the doctor earlier (3-7months) than the medically expected time and few did late medical treatment seeking after 2years of infertility.

These women have accepted and were committed to adhering to treatment except for few that stopped some medications due to side effect. Interestingly, some of the women patronised more than two medical treatment centres. Others were advised by loved ones to use other alternative treatment source (faith-based and traditional) which some did simultaneously with the medical treatment.

CHAPTER SIX

SUMMARY, IMPLICATION, LIMITATION, RECOMMENDATION AND CONCLUSION

The chapter presents the summary of the study, implications of the study, limitations of the study, recommendations and conclusion.

6.1 Summary of the Study

Worldwide the prevalence and burden of infertility is significantly huge with medical help seeking reported from different countries however, little health seeking was recorded in Nigeria. What was worse is, none was reported in Sokoto State. Thus, the Help Seeking Conceptual Framework was used to guide to the health seeking behaviour of women with infertility in Sokoto State.

The literature review revealed large number of quantitative studies with a considerable number of qualitative too. The studies were on the prevalence and causes of infertility, psychosocial health of the women and medical seeking experiences of women with infertility. Hence, the qualitative explorative descriptive approach was used to give an in-depth understanding of the complexity involved in health seeking to conceive.

Ethical clearance and administrative approval was gotten from UDUTH and SHS hospitals (Appendices E & F) upon the presentation of an introduction letter from the University of Ghana (Appendix A) and a research proposal. Fourteen women were recruited purposively and face to face in-depth interview was employed for data collection with the help of semi structured interview guide (Appendix C). Methodological Rigor was ensured during data collection and analysis which was done concurrently. Thematic and content analysis were used for data analysis giving rise to a

total of eight main themes and twenty-two subthemes. The major themes were; symptoms Salient, Life Course Factors, Individual and social cues, Enabling and predisposing factors, Perception about infertility, Health seeking behaviour, Psychological experience and Women's plea for help.

The findings revealed that the women have good health seeking behaviour. The women in Sokoto desired to have their own children because they like children and culturally children cement marriage and are considered important for religious rites. As a result, the women did medical and faith-based help seeking because they believe infertility is caused by either biological (health in the woman, abortion and contraceptives) supernatural and components (God or evil spirits). Majority of the women strongly believe that it is only God that provides children and that medical treatment can only be effective by God's wish. Thus, the simultaneous medical and faith-based (praying and going to prayer houses and waiting on God) treatment. The women sought for help to conceive earlier than medically required (3-7months), some late (after 2years) and some visited multiple health centres. This was possible because of their eagerness to have children and the expectation of childbirth after marriage made them to identify their infertility.

The women sought for medical treatment even where partners did not consent but partners were insistent on waiting on God to conceive. The social support (advice, prayer, emotional financial) from husbands, families and friends also motivated the help seeking to conceive though, some husbands refused to be tested for infertility. Even women who had no form of social support from anywhere were committed to investing in medical treatment to get pregnant because they are aware of the significance of medical treatment. Further findings revealed that stigma, humiliation and blame prompted medical seeking in order to prove self as not the source of the fertility problem. Regardless of the women's years of treatment, the women have accepted and are committed to adhering to treatment until pregnancy is achieved. However, some women accessed treatment (tests and drugs) late due lack funds. Few stopped certain treatments due to side effects.

Others rejected IVF due to the cost and doubted its effectiveness since they had tried all the suggested treatments without getting pregnant.

Finally, the findings also show that infertility causes psychological trauma (stress and depression) due to the burden it bears on the woman. More so, it is quite obvious that the women find medical treatment expensive regardless of family income. As such plead with government to subsidise the cost of treatment and empower women to be independent in affording treatment.

6.2 Implication of Findings

The results of this study have the following implications to nursing practice, policy makers and research.

6.2.1 Nursing Practice

The findings revealed that majority of the women sought medical treatment irrespective of the husbands' refusal to consent. This is an indication of a strong attitude towards health seeking that can be further sustained through continuous health education of woman at the health facilities. The combination of medical and faith-based treatment outlets was because they believe that God is the giver of children and He does that as it pleases Him. That even medical treatment cannot be productive (pregnancy) except God wishes. Therefore, it is necessary for medical professionals to appreciate the place of spirituality (praying and fasting) in treatment of infertility in order to enhance acceptance and compliance to treatment. Prompt medical seeking can enhance early identification of health problems and prompt treatment of women.

Similarly, the use of multiple medical treatment centres for infertility, commencing with the private clinics that do not offer specialised infertility treatment can predispose women to harmful effects on the reproductive system. Other possible consequences are waste of resource

and time, delay in health care access, better treatment and prolonged years of treatment can cause a change in the belief of medical treatment.

Further findings show that women continue paying for their treatment with the help of their parents where their husbands have stopped paying for the treatment. Some women stated that the burden of treatment is placed only on them because the husband disassociated self from the infertility, refused to be tested or give financial support and even blamed the women for the infertility. This goes to show the gender lack of awareness of the possible causes of infertility; which makes the identification of problem and treatment difficult. Additionally, this ignorance on the part of the men complicates the health of the women because they feel alone and rejected by such actions which consequently affects their mental health (stress and depression).

The acceptance and adherence to medical treatment by these women is a positive sign that health professionals can adequately maximise through education to enhance sustainable compliance to treatment instruction to the end. Consequently, it becomes imperative for health workers to prepare women's mind for prolonged waiting since infertility treatment duration sometimes takes time up to about twenty years.

6.2.2 Policy Formulation

Women have called on government to review the high cost of infertility treatment in order to subsidise the charges since affordability limits the access to available treatment. It was adduced from the findings that NHIS does not cover for main treatment of infertility and the public hospitals do not carry out some of the investigation requested. It is very important for stakeholders and agencies concerned to develop policy that will incorporate the treatment of infertility in the NHIS policy, medicine list and treatment access list. Policy by the state and federal government should be created that will make all public hospitals capable of providing treatment at a subsidised rate for infertility management.

6.2.3 Future Research

The findings revealed that seeking for medical treatment is a lonely and private issue for some women and husbands blame women for infertility and refuse to be tested although the women pleaded for men's understanding. There is a need for future studies on the perception of infertility among men and the health seeking behaviour of men with infertility in order to assess the men's level of health seeking and create awareness on male factor infertility. One of the emerging themes is the psychological experiences of the women. Thus, there is a need to conduct a research on the psychosocial effect of infertility to obtain detailed consequences of the burden to the women's mental and social wellbeing. Further study on the psychosocial health or coping mechanism of infertility is important too.

6.3 Limitations of the Study

Transferability of findings to a similar setting with same characteristics should be done with thoughtfulness since the findings of the study are from fourteen participants sampled from two major public health institutions in Sokoto State. Secondly, few (4/14) of the interview were carried out in Hausa language (local dialect) which were transcribed into English language. The researcher being a native of the north and speaks the Hausa dialect fluently was able to translate and transcribe the audio tapes to English language. However, some words that were found to be challenging to translate were substituted with words nearest in meaning which was checked with participants during member checking.

6.4 Recommendations

Recommendations were made to UDUTH, SHS, Sokoto State ministry of Health, Non-governmental agencies and for nurse researcher based on the findings of the study.

6.4. 1 Ministry of Health

The Ministry of Health should:

- Incorporate infertility treatment into its health agenda and special attention paid to the access of medical treatment by subsidising cost of treatment or make it free since it is a public health condition.
- Stock facilities with infertility treatment resources such as fertility enhancement drugs, equipment for investigations (transvaginal scan and HSG machines).
- Improve on infertility enlightenment (male factor infertility inclusive) through the use of information education and communication system, mass media campaign and public seminars.
- Enact policy that will mandate all hospitals in Sokoto to give women infertility pre-treatment (counselling) for women that usually present for care in less than 12months

6.4.2 UDUTH and SHS

The hospitals should:

- Equip nurses and midwives through training on infertility management which will guide the professionals in educating the women and the provision of quality care.
- Ensure health professionals to give the women adequate orientation and education on the pattern of infertility treatment.
- Upgrade their infertility treatment resources (drugs, testing kits and equipment) to enable quality treatment.
- Incorporate counselling session to care for women's psychological health.

6.4.3 Non-governmental Agencies

Agencies providing reproductive health services should:

- Include strengthening public hospitals in the area of improving treatment infertility at a subsidised cost noting that infertility has been classified the 5th severe worldwide disability by WHO.
- (Plan International, Integrated Health Program, JHPIEGO/USAID and Women for Health) join in educating the populace on infertility as done for other public health conditions.
- Create programs that will empower women to boost their financial capabilities.

6.4.4 Nurses Researchers

Nurse researcher should:

- Utilise a quantitative approach to measure the health seeking behaviour of women with infertility
- Study the psychosocial experiences of women with infertility in Sokoto State
- Explore the perception of infertility among men
- Examine the health seeking behaviour of men in relation to infertility

6.4.5 Religions Bodies/Groups

The religious organisations should:

- Create a psychotherapy unit that would support the psychologically needs of these women through counselling
- Create a society/fellowship group where the women would gather to encourage one another
- Also explore providing financial support for treatment or empowering the women.

6.5 Conclusion

The women irrespective of educational level, religion, financial and social support system sought for medical help to conceive because they believe in medical treatment. The women had the perception that infertility is caused by natural and supernatural factors. As a result,the women

sought for help to conceive simultaneously from both medical and faith-based sources. This is because in the northern Nigeria people believed that everything (good or bad) is destined by God. Thus, it becomes essential for health professionals to pay attention to the reasons for the combination of treatment centres and give consideration to spirituality during infertility treatment.

It was evident that some women did medical seeking earlier (less than one 12months) than medically expected for infertility health seeking. When they were sent back home to return after a year, some patronised private clinics, visited prayer houses and used close people's advice for self-medications. These avenues have the potential of providing ineffective and harmful treatment to women. Therefore, it is imperative to create infertility pre-treatment (counselling) sessions in health institutions and at the community level to avoid missed opportunities, late treatment seeking and prevent possible harm to women's reproductive systems. The women were committed to accepting and adhering to treatment instructions. This intervention can be enhanced through sound education and orientation during the preliminary session of the treatment.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

Aveyard, H. (2014). *Doing a literature review in health and social care: A practical guide*: McGraw-Hill Education (UK).

Awoyinka, M. F., & Ohaeri, B. M. (2014). Depression and coping strategies among women with infertility, attending three gynaecological clinics in Ibadan. *Journal of Medicine and Biomedical Research, 13*(2), 48-60.

Basavanthappa, B. (2011). *Essentials of nursing research*: Jaypee Brothers Medical Publishers.

Boivin, J., Bunting, L., Collins, J. A., & Nygren, K. G. (2007). International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. *Human Reproduction, 22*(6), 1506-1512.

Bousso, R. S., Poles, K., & Cruz, D. d. A. L. M. (2014). Nursing concepts and theories. *Revista da Escola de Enfermagem da USP, 48*(1), 141-145.

Bredart, A., Marrel, A., Abeztz-Webb, Lasch, K., & Acquardo, C. (2014). Interviewing to develop patient-reported outcome (PRO) measures for clinical research eliciting patirnt's experience. *Health and Qualit of Life Outcome* 12(1),15.

Bukar, M., Audu, B., Usman, H., & Massa, A. (2012). Health seeking behaviour of infertile women in Gombe, north eastern Nigeria. *Tropical Journal of Obstetrics and Gynaecology, 29*(1), 83-87.

Bunting, L., Tsibulsky, I., & Boivin, J. (2012). Fertility knowledge and beliefs about fertility treatment: findings from the International Fertility Decision-making Study. *Human Reproduction, 28*(2), 385-397.

Burns, N., & Grove, S. K. (2010). *Understanding Nursing Research-eBook: Building an Evidence-Based Practice*: Elsevier Health Sciences.

Bushnik, T., Cook, J., Hughes, E., & Tough, S. (2012). Seeking medical help to conceive. *Health reports, 23*(4), 1A.

Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health communication, 25*(8), 661-669.

Chin, H. B., Howards, P. P., Kramer, M. R., Mertens, A. C., & Spencer, J. B. (2015). Racial disparities in seeking care for help getting pregnant. *Paediatric and perinatal epidemiology, 29*(5), 416-425.

Commission, N. P. (2006). Population and housing census of the Federal Republic of Nigeria. *Priority tables, 1*.

Correia, S., Rodrigues, T., & Barros, H. (2014). Socioeconomic variations in female fertility impairment: a study in a cohort of Portuguese mothers. *BMJ open, 4*(1), e003985-e003985. doi:10.1136/bmjopen-2013-003985

Coughlan, M., Cronin, P., & Ryan, F. (2013). *Doing a Literature Review in Nursing, Health and Social Care: SAGE Publications*: Sage.

Cui, W. (2010). Mother or nothing: the agony of infertility. In: SciELO Public Health.

Danfulani, M., Mohammed, M. S., Ahmed, S. S., & Haruna, Y. G. (2014). Hysterosalphingographic findings in women with infertility in Sokoto North Western Nigeria. *African Journal of Medical and Health Sciences, 13*(1), 19.

Datta, J., Palmer, M. J., Tanton, C., Gibson, L. J., Jones, K. G., Macdowall, W., . . . Wellings, K. (2016). Prevalence of infertility and help seeking among 15 000 women and men. *Hum Reprod, 31*(9), 2108-2118. doi:10.1093/humrep/dew123

Dhont, N. (2011). Clinical, epidemiological and socio-cultural aspects of infertility in resource-poor settings. Evidence from Rwanda. *Facts, views & vision in ObGyn, 3*(2), 77.

Dhont, N., Luchters, S., Ombelet, W., Vyankandondera, J., Gasarabwe, A., Van de Wijgert, J., & Temmerman, M. (2010). Gender differences and factors associated with treatment-seeking behaviour for infertility in Rwanda. *Human Reproduction, 25*(8), 2024-2030.

Dictionary, E. (2018). Thesaurus. Grammar Help. In: Oxford Dictionaries.

Dierickx, S., Balen, J., Longman, C., Rahbari, L., Clarke, E., Jarju, B., & Coene, G. (2019). 'We are always desperate and will try anything to conceive': The convoluted and dynamic process of health seeking among women with infertility in the West Coast Region of The Gambia. *PLoS One, 14*(1), e0211634.

Dierickx, S., Rahbari, L., Longman, C., Jaiteh, F., & Coene, G. (2018). 'I am always crying on the inside': a qualitative study on the implications of infertility on women's lives in urban Gambia. *Reproductive Health, 15*(1), 151. doi:10.1186/s12978-018-0596-2

Donkor, E. S., Naab, F., & Kussiwaah, D. Y. (2017). "I am anxious and desperate": psychological experiences of women with infertility in The Greater Accra Region, Ghana. *Fertility research and practice, 3*(1), 6.

Donkor, E. S., & Sandall, J. (2007). *Soc Sci Med, 65*(null), 1683.

Dyer, S. J. (2008). Infertility-related reproductive health knowledge and help-seeking behaviour in African countries. *ESHRE Monographs, 2008*(1), 29-33. doi:10.1093/humrep/den148

Fawcett, J., & Desanto-Madeya, S. (2012). *Contemporary nursing knowledge: Analysis and evaluation of nursing models and theories*: FA Davis.

Gerrits, T. (2012). Biomedical infertility care in low resource countries: barriers and access. *Facts Views Vis Obgyn Monog, 2*, 1-6.

Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual review of public health, 31*, 399-418.

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education: theory, research, and practice*: John Wiley & Sons.

Greil, A. L., McQuillan, J., & Sanchez, D. (2014). *J Health Psychol, 24*(null), 1.

Greil, A. L., McQuillan, J., Shreffler, K. M., Johnson, K. M., & Slauson-Blevins, K. S. (2011). Race-ethnicity and medical services for infertility: stratified reproduction in a population-based sample of US women. *Journal of Health and Social Behavior, 52*(4), 493-509.

Grove, S. K., Burns, N., & Gray, J. (2012). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*: Elsevier Health Sciences.

Hampton, K. D., Mazza, D., & Newton, J. M. (2013). Fertility-awareness knowledge, attitudes, and practices of women seeking fertility assistance. *Journal of Advanced Nursing, 69*(5), 1076-1084.

Hanson, B., Johnstone, E., Dorais, J., Silver, B., Peterson, C. M., & Hotaling, J. (2017). Female infertility, infertility-associated diagnoses, and comorbidities: a review. *Journal of assisted reproduction and genetics, 34*(2), 167-177.

Hollos, M., & Larsen, U. (2008). Motherhood in sub-Saharan Africa: The social consequences of infertility in an urban population in northern Tanzania. *Culture, Health & Sexuality, 10*(2), 159-173.

Ikeako, L., Iteke, O., Ezegwui, H., & Okeke, T. (2015). Clinico-demographic indicators of depression among infertile women in a tertiary health institution in Awka, South East Nigeria. *Br J Med Medi Res, 7*(11), 921-931.

Jesson, J., Matheson, L., & Lacey, F. M. (2011). *Doing your literature review: Traditional and systematic techniques*: Sage.

Johnson, K. M., & Johnson, D. R. (2009). Partnered decisions? US couples and medical help-seeking for infertility. *Family relations, 58*(4), 431-444.

Johnson, S., & Rasulova, S. (2017). Qualitative research and the evaluation of development impact: incorporating authenticity into the assessment of rigour. *Journal of Development Effectiveness, 9*(2), 263-276.

kr Saha, S., Barman, M., Gupta, A., Chowdhury, P. D., Sarker, G., & Pal, R. (2015). Gender preference among married women in Kolkata metropolitan slum of India. *American Journal of Public Health, 3*(4A), 6-11.

Kussiwaah, D. (2016). *Experiences Of Women With Infertility And Their Bio-Psychosocial Management: A Study At The Korle-Bu Teaching Hospital.* University of Ghana,

Lawali, Y. (2015). *Psychosocial Experiences of Women with Infertility and their Coping Strategies in Zamfara State, Nigeria.* University of Ghana,

Li, H., Lei, J., Xu, F., Yan, C., Guimerans, M., Xing, H., . . . Zhang, D. (2017). A study of sociocultural factors on depression in Chinese infertile women from Hunan Province. *Journal of Psychosomatic Obstetrics & Gynecology, 38*(1), 12-20. doi:10.1080/0167482X.2016.1265500

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75): sage.

Mascarenhas, M. N., Flaxman, S. R., Boerma, T., Vanderpoel, S., & Stevens, G. A. (2012). National, regional, and global trends in infertility prevalence since 1990: a systematic analysis of 277 health surveys. *PLoS medicine, 9*(12), e1001356.

McQuillan, J., Greil, A. L., Shreffler, K. M., & Bedrous, A. V. (2015). The importance of motherhood and fertility intentions among US women. *Sociological Perspectives, 58*(1), 20-35.

Mumtaz, Z., Shahid, U., & Levay, A. (2013). Understanding the impact of gendered roles on the experiences of infertility amongst men and women in Punjab. *Reproductive Health, 10*(1), 3.

Naab, F. (2014). Every month becomes a funeral when they menstruate: African women's beliefs about couple infertility. *J Infertility Reprod Biol, 2*(3), 92-100.

Naab, F., Brown, R., & Heidrich, S. (2013). Psychosocial health of infertile Ghanaian women and their infertility beliefs. *Journal of Nursing Scholarship, 45*(2), 132-140.

Naab, F., & Kwashie, A. (2018). 'I don't experience any insults, but my wife does': The concerns of men with infertility in Ghana. *South African Journal of Obstetrics and Gynaecology, 24*(2), 45-48.

Okafor, N. I., Joe-Ikechebelu, N. N., & Ikechebelu, J. I. (2017). Perceptions of Infertility and In Vitro Fertilization Treatment among Married Couples in Anambra State, Nigeria. *African journal of reproductive health, 21*(4), 55-66.

Ola, T. M. (2014). Gender Dimensions of Seeking Treatment for Infertility in Nigeria. *Journal of Research in Gender Studies, 4*(2).

Oladeji, S., & OlaOlorun, A. (2018). Depression among infertile women in Ogbomosoland. *South African Family Practice, 60*(2), 41-45.

Panti, A., & Sununu, Y. (2014). The profile of infertility in a teaching Hospital in North West Nigeria. *Sahel Medical Journal, 17*(1), 7-7.

Panti, A. A., Umar, A. B., Rabiu, U. A., Saidu, Y., Bilbis, L. S., Shehu, C. E., . . . Hassan, M. Evaluation Of Oxidative Stress, Gonadotrophins and Prolactin in Infertile Women. *European Journal of Pharmaceutical and Medical Research, 5(3),505-511.*

Parahoo, K. (2014). *Nursing research: principles, process and issues*: Macmillan International Higher Education.

Petitpierre, E. (2018). Challenges – Addressing subfertility/infertility in developing countries (bulletin). Retrieved 3dr November 2018, from World Health Organization http://www.who.int/reproductivehealth/topics/infertility/countryperspective/en/

Polit, D., & Beck, C. (2012). Designing and conducting quantitative studies to generate evidence for nursing. *Nursing research, 226*.

Polit D.F., B., C.T. (2010). *essentials of nursing research: appraising evidence for nursing practice* (7th ed.). piladelphia: lippinctt willians & wilkins

Polit, D. F., & Beck, C. T. (2010). *Essentials of nursing research: Appraising evidence for nursing practice*: Lippincott Williams & Wilkins.

Prion, S., & Adamson, K. A. (2014). Making sense of methods and measurement: Rigor in qualitative research. *Clinical Simulation in Nursing, 10*(2), e107-e108.

Qadir, F., Khalid, A., & Medhin, G. (2015). Social support, marital adjustment, and psychological distress among women with primary infertility in Pakistan. *Women & health, 55*(4), 432-446.

Roomaney, R., & Kagee, A. (2016). Salient aspects of quality of life among women diagnosed with endometriosis: A qualitative study. *Journal of Health Psychology, 23*(7), 905-916. doi:10.1177/1359105316643069

Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs, 2*(4), 328-335.

Rosenstock, I. M. (1990). The health belief model: explaining health behavior through expectancies.

Rutstein, O., & Iqbal, H. S. (2004). Infecundity, infertility, and childlessness in developing countries. Demographic and Health Surveys (DHS) Comparative reports No. 9. Retrieved from http://www.who.int/reproductivehealth/topics/infertility/DHS-CR9.pdf

Ryan, S., & Carr, A. (2010). Applying the biopsychosocial model to the management of rheumatic disease. In *Rheumatology* (pp. 63-75): Elsevier.

Sarkar, S., & Gupta, P. (2016). Socio-Demographic Correlates of Women's Infertility and Treatment Seeking Behavior in India. *Journal of reproduction & infertility, 17*(2), 123.

Slauson-Blevins, K. S., McQuillan, J., & Greil, A. L. (2013). Supplementary file for Social Science and Medicine article:" Online and In-Person Health Seeking for Infertility"--Table 2. Descriptive Statistics of Type of Health-Seeking and Independent Variables.

Tabong, P. T.-N., & Adongo, P. B. (2013a). Infertility and childlessness: a qualitative study of the experiences of infertile couples in Northern Ghana. *BMC pregnancy and childbirth, 13*(1), 72.

Tabong, P. T.-N., & Adongo, P. B. (2013b). Understanding the social meaning of infertility and childbearing: a qualitative study of the perception of childbearing and childlessness in Northern Ghana. *PLoS One, 8*(1), e54429.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing, 48*(4), 388-396.

Upkong, D., & Orgi, E. (2006). Mental health of infertile women in Nigeria.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences, 15*(3), 398-405.

White, L., McQuillan, J., Greil, A. L., & Johnson, D. R. (2006). Infertility: testing a helpseeking model. *Social Science & Medicine, 62*(4), 1031-1041.

Whitehouse, B., & Hollos, M. (2014). Definitions and the Experience of Fertility Problems: Infertile and Sub-fertile Women, Childless Mothers, and Honorary Mothers in Two Southern Nigerian Communities. *Medical anthropology quarterly, 28*(1), 122-139.

WHO-ICMART. (2009). WHO-ICMART Definition Glossary (Glossay). Retrieved from http://www.who.int/reproductivehealth/publications/infertility/art_terminology2.pdf

WHO. (2018). Sexual and reproductive health. Retrieved from http://www.who.int/reproductivehealth/topics/infertility/definitions/en/

WHO. (2011). Sexual and reproductive health: disability global picture. Retrieved from http://www.who.int/reproductivehealth/topics/infertility/definitions/en/

APPENDICES

Appendix A: Introduction Letters

UNIVERSITY OF GHANA
DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING

SONM/F.11 December 3, 2018

Ref. No.:.....

The Head
Usmanu Dan Fodiyo University Teaching Hospital
Sokoto

Dear Sir/Madam,

INTRODUCTORY LETTER

I write to introduce to you Grace Isiyaku Ahmadu, MSc. Year I student of the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the MSc. programme, she is conducting a research on **"Health Seeking Behaviour of Women with Infertility in Sokoto State".**

I would be grateful if you could kindly offer her the necessary assistance.

Thank you.

Yours faithfully,

Dr. Florence Naab
Head, Department of Maternal and Child Health

COLLEGE OF HEALTH SCIENCES
• P. O. Box LG 43, Legon, Accra, Ghana. • Telephone: +233 (0) 302 513 250 / 0289 531 213
• Email: mch.son@chs.ug.edu.gh • Website: www.nursing.ug.edu.gh

UNIVERSITY OF GHANA
DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING

SONM/F.11 December 3, 2018

Ref. No.:.....

The Head
Specialist Hospital
Sokoto

Dear Sir/Madam,

INTRODUCTORY LETTER

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Appendix B: Consent Form
Title: Health Seeking Behaviour of Women with Infertility in Sokoto State, Nigeria

Principal investigator: Grace Isiyaku Ahmadu
Address: School of Nursing University of Ghana Legon, Email: graceahmadu75@gmail.com
General Information on the Research
Little is known on the Health Seeking Behaviour of Women with Infertility in Sokoto State. The investigation is to discover the experience of women with difficulty getting pregnant in Sokoto in respect to the complexity in the decision making process about health seeking. You got the request to participate in this study based on your experience of infertility and decision making on health seeking. If you are willing to take part in the investigation, there is a need for you to show your acceptance verbally and by ticking the box on the consent form before going through an interview that will be recorded and observation documented by field note taking. You are free to withdraw from the study at any level or stop an interview session when you are not comfortable because some questions might bring back unpleasant memories. The interview will be conducted in an office at the gynaecological clinic to ensure privacy or at your agreed time, venue and date which is expected to last for about 40minutes. The study is strictly for academic purpose, confidentiality will be ensured on all the information given by you and your name or any form of identity is not required. You will not be harmed in any way.

Indicate your consent by ticking the box
If you have any questions, you can contact the individuals below
Grace Isiyaku Ahmadu (Mrs.)
MSc. Nursing student
Department of Maternal and Child Health
School of Nursing and Midwifery
P.O.Box LG 43
University of Ghana, Legon.
Tel no: +2348035049330
Email: graceahmadu75@gmail.com

Supervisors: Dr.Florence Naab PhD, M'phil. BA, RM, SRN, Policy Fellow
Head of Department of Maternal and Child Health
School of Nursing and Midwifery
P.O.Box LG 43
University of Ghana, Legon.
Tel no: 0263741717
Email: florencenaab@yahoo.com or fnaab@ug.edu.gh

Co-Supervisor: Dr. Mary Ani-Amponsah PhD, M'phil,
Department of Maternal and Child Health
School of Nursing and Midwifery
P.O.Box LG 43
University of Ghana, Legon.
Tel no: 02443368205 **Email:** mary.aniamponsah@gmail.com

Appendix C: Interview Guide

Health Seeking Behaviour of Women with Infertility

Introduction:

- Welcome the interviewee and thank them for sparing their time for the session
- Tell them about the study (background, objectives, benefits)
- Tell them what is involved in the interview plus the topic to be discussed
- Make emphasis on confidentiality
- Tell the interviewee about recording of the interview, field note taking and state reasons
- State that the interview might bring back unpleasant memories
- Discuss on voluntary participation and the right to stop at any time without penalties
- Give interviewee time to ask question or concerns
- Ticking of informed consent form by participant
- Switch on the audio recorder

Section A: Socio-demographic Characteristics (life course factors)

Tell me about yourself

Probes:

1. How old are you
2. What is your level of education?
3. What is you religion
4. For how long have you been married?
5. How many children do you have?
6. What is the range of the family income like?

Section B: Symptoms Salience

Tell me how you got to know that you have difficulty getting pregnant

Probes:

1. How do you know that you have fertility problem?
2. Have you thought of having a child?
3. What have you done to achieve conception?

Section C: Individual and Social cues

Please share some of your personal experiences and interaction with people with me

Probes:

1. What are your beliefs on childbearing?
2. What is your partner's intention on childbearing?

3. Can you tell me why you chose to visit the hospital for treatment? (perception for medical treatment, friends & family support/pressure, failed traditional or spiritual treatment)
4. How do you think the society look at you from your experience?
5. Can you describe how you relate with people before and after the diagnosis

Section D: Enabling and predisposing factors

What are some of your support systems in this experience of difficulty getting pregnant?

Probe:

1. What are some of the support system you benefit from? (government/social)

Section E: perception towards seeking medical treatment

What is your experience with looking for treatment?

Probe:

1. Who advised you to seek for help in the hospital
2. What makes you think the hospital has solution to the fertility problem?
3. How do you feel about the fertility problem?
4. How do you feel about the medical treatment? (expectation- effectiveness, safety and efficiency)

Section F: Health seeking behaviour

At what time did you decide to look for help and what prompted this decision?

Probes:

1. What is the general situation around your health seeking for infertility?
2. What were your decision making experience on health seeking to infertility like?
3. What motivated you to visit the hospital for treatment?
4. Can you tell me other treatment channels you have used before coming to the hospital?
5. Is there anything you what to advice on medical health seeking?

Appendix D: Acknowledgement of Application for Ethical Clearance

USMANU DANFODIYO UNIVERSITY TEACHING HOSPITAL, SOKOTO.

PRIVATE MAIL BAG 2370, SOKOTO - NIGERIA.

Chairman Board
Chief Osaro Idah *(Obazelu of Benin)*

Director of Administration
Salim Ibrahim Jafar, *B.Sc (Sociology)PGDPA, AIHAN*

Chief Medical Director
Dr. Anas A. Sabir *MBBS, FMCP*

Chairman M.A.C
Dr. Nasir Muhammad *MBBS, DO, PGDA, PHEC, FMCOph*

Our Ref: UDUTH/HREC/2019/No. 765 *Your Ref:* _____ *Date:* February 1, 2019

Grace Isiyaku Ahmadu
School of Post Basic Midwifery
Usmanu Danfodiyo University Teaching Hospital, Sokoto.

RE: APPLICATION FOR ETHICAL CLEARANCE AND ADMINISTRATIVE APPROVAL

With reference to your application on the above subject dated 9th January, 2019 on a research topic titled ***"Health Seeking Behaviour of Women with Infertility in Sokoto"***, I am directed to acknowledge its receipt and to inform you to effect the corrections within the manuscript and resubmit for vetting, please.

Thank you.

Ismail Muhammad
Admin Officer, (C/S)
For: Secretary Ethical Committee

UDUTH, Sokoto Tel: 08065100313, 08098548232, 07052752768.email:uduth.org.ng

Appendix E: Ethical Clearance and Administrative Approval from UDUTH

USMANU DANFODIYO UNIVERSITY TEACHING HOSPITAL, SOKOTO.

PRIVATE MAIL BAG 2370, SOKOTO - NIGERIA.

Chairman Board
***Chief Osaro Idah** (Obazelu of Benin)*
Director of Administration
***Salim Ibrahim Jafar,** B.Sc (Sociology)PGDPA, AIHAN*

Chief Medical Director
***Dr. Anas A. Sabir** MBBS, FMCP*
Chairman M.A.C
***Dr. Nasir Muhammad** MBBS, DO, PGDA, PHEC, FMCOph*

Our Ref: UDUTH/HREC/2019/No. 765 *Your Ref:* _____ *Date:* February 6, 2019

Grace Isiyaku Ahmadu
School of Post Basic Midwifery
Usmanu Danfodiyo University Teaching Hospital, Sokoto.

RE: APPLICATION FOR ETHICAL CLEARANCE AND ADMINISTRATIVE APPROVAL

With reference to your application on the above subject dated 9th January, 2019 on a research topic titled ***"Health Seeking Behaviour of Women with Infertility in Sokoto State, Nigeria"***, I hereby acknowledge its receipt and convey Ethical Committee's approval to you.

The approval is given with the understanding that the data obtained would be used to substantiate the above topic.

Please ensure that the study is guided by the methodology presented in the proposal.

You should submit a copy of your research to the Ethics Committee after the study might have been completed

Thank you.

Dr. Karima A. Tunau, MBBS, FWACS, MPH, FMAS
Chairperson, HREC

UDUTH, Sokoto Tel: 08065100313, 08098548232, 07052752768.email:uduth.org.ng

Appendix F: Ethical Clearance and Administrative Approval from SHS

SPECIALIST HOSPITAL SOKOTO

SULTAN ABUBAKAR ROAD
P.M.B 2133, Sokoto, Nigeria

HOSPITAL ETHICS AND RESEARCH COMMITTEE

CHAIRMAN
DR. BELLO U. TAMBUWAL
Chairman Medical Advisory Committee

MEMBER
DR. NASIRU ABDULLAHI
HOD Obs & Gyn.

MEMBER
DR. ALI A. YAROKO
Deputy CMAC/HOD ENT.

MEMBER
BELLO I. LADAN
HOD Health Record

MEMBER
BALA SAIDU
HOD Operating Theater

SECRETARY
USMAN M. MUH'D
Secretary Clinical Services

SHS/SUB/133/VOL.I

25th February, 2019

AMADU GRACE ISIYAKU,
University of Ghana,
Legon.

Re: Ethical Clearance

I am directed to refer to your topic proposal dated 16th February 2019 and to inform you that, the Hospital Ethics Committee has approved your request to carry out a research on **"HEALTH SEEKING BEHAVIOUR OF WOMEN WITH INFERTILITY IN SPECIALIST HOSPITAL, SOKOTO".**

2. All research programs should be carried out in line with the Hospital regulations.

3. The Hospital should have the copy of the research work upon completion.

4. Thanks.

SPECIALIST HOSPITAL SOKOTO
DATE
SIGN

USMAN M. MUH'D
Secretary Hospital Ethics Committee
For: Chairman Hospital Ethics Committee
Specialist Hospital, Sokoto.