

**SCHOOL OF NURSING  
COLLEGE OF HEALTH SCIENCES  
UNIVERSITY OF GHANA, LEGON**

**EXPERIENCES OF WOMEN WITH INFERTILITY AND THEIR BIO-  
PSYCHOSOCIAL MANAGEMENT: A STUDY AT THE KORLE-BU  
TEACHING HOSPITAL**

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**DECLARATION**

I, Deborah Yaa Kussiwaah, certify that this thesis is the result of a research undertaken towards the award of the Master of Philosophy in Nursing Degree in the School of Nursing, University Ghana, Legon. This thesis has been undertaken with the guidance and supervision of Professor Ernestina Donkor, the Dean of School of Nursing University of Ghana, Legon and Dr. Florence Naab, School of Nursing, Legon. The undersigned supervisors certify that they have read the thesis and have recommended it for the School of Nursing for acceptance.

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## **ABSTRACT**

Research has shown that infertility affects millions of people worldwide and it is considered as one of the most difficult life experiences and a bio-psychosocial crisis encountered by most couples. It is also known to have serious consequences on both the psychological and the social safety of women in Africa and the world at large. However, literature about the bio-psychosocial management of women with infertility is scanty in Ghana, especially the aspect of psychosocial management of these women. The purpose of this study was to explore the experiences of these women psychologically, socially, the sort of biological management given to them, and finally the psychosocial management that are being rendered to them at the Korle-Bu Teaching Hospital. The bio-psychosocial model was used as a guiding framework to understand the experiences of these women and whether they were managed bio-psychosocially. This study utilized a qualitative exploratory descriptive approach to conduct a semi-structured interview on fourteen (14) women who were purposively selected. Interviews were audio taped, transcribed verbatim and analysed using thematic content analysis. Five (5) themes and twenty two (22) sub-themes were identified. Out of these, one (1) other theme which was not related to the model used, emerged out from thematic content analysis. The findings from the study indicated that, women with fertility problems experienced difficulties in all aspects of their lives and were emotionally burdened with loneliness, anxiety, depression, lack of concentration, worrying and thinking, less sexual satisfaction, stigmatization, intentional isolation, inability to attend social functions and marital instability. Meanwhile, their management was solely biological or medical whereas their psychosocial needs, of which they rather yearn for, were neglected in their care. The findings of this study have implications for nursing practice, nursing education, nursing research and policy formation.

## **DEDICATION**

Firstly, this thesis is dedicated to the Holy Spirit for His support, guidance, protection, strength and above all for being my spiritual teacher without whom I could not have come this far. To my dearest husband, Mr George Ayi Armah, my children Yannis and Carniella, this work is also dedicated to you for your understanding, sacrifice, support and love throughout the period of my course. I also dedicate this work to my mother who took care of my children throughout the entire period. God bless you.



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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

Infertility is considered as a bio-psychosocial crisis and a heartbreaking situation that is experienced by individuals and couples all over the world (Mohammad, Sima, Zohreh, Kourosh, Haleh, & Behzad, 2013). It is also seen as a life frightening events that usually have serious impact on both the psychological well-being and the social status of most women. Its related issues have always caused a considerable suffering among these women (Cwikel, Gidron, & Sheiner, 2004).

The definition of infertility as used by most researchers, is the inability or failure to achieve a successful pregnancy after one (1) or more years of unprotected, regular sexual relations without the use of contraceptives (Malik & Coulson, 2008; Zegers-Hochschild, Mansour, Ishihara, & Adamson, 2009).

Globally, infertility affects approximately 15% of couples worldwide and usually influenced by a woman's age (Ray, Shah, Gudi, & Homburg, 2012). Researchers have shown that, despite the great success in improving maternal and child health in the past decades, issues of infertility are often neglected and paid less attention. It is believed that, this therefore had led to a larger number of couples and individuals to have suffered from this problem. It is also estimated by researchers that, 48.5 million couples are infertile, of which 19.2 million are primarily infertile while 29.3 million of them are also known to be suffering from secondary infertility (Cousens et al., 2011; Direkvand-Moghadam, Sayehmiri, & Delpisheh, 2014; Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012; Weiyuan, 2010).

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Infertility may be primary or secondary; Primary infertility is considered as having never conceived after one (1) or two (2) years or more of unprotected regular sex (Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012). Secondary infertility is also referred as having conceived before regardless of the final outcome but now have difficulty in conceiving again (Mascarenhas et al., 2012). Other forms of infertility identified by the Advanced Fertility Center, Chicago (2015) were the combined and unexplained infertility. Combined infertility was described as instances whereby both partners are either infertile or sub-fertile with the cause of their problem resulting from genetic or immunological condition. It is also believed that sometimes, each partner would be without a problem but they cannot conceive without any assistance. Unexplained infertility is also defined as a type of infertility where the cause is unknown (Advanced Fertility Center, Chicago, 2015).

Studies have shown that, recent rise in infertility is partly due to factors such as late marriage of couples, unwillingness to have a child on time, badly treated systemic diseases like diabetes; under or overweight, excessive smoking and alcohol consumption, exposure to hazardous occupational substances, with the most common cause being ovulation dysfunction, tubal disorders, premature ovarian failure, poor oocytes production and maintenance, menstrual disorders, and sometimes abnormalities in the reproductive system of both men and women (Callahan & Caughey, 2007; Gibbs, Karlan, Haney, & Nygaard, 2008).

Although issues pertaining to infertility were solely blamed on women as a result of their activeness in seeking solutions, researchers have reported that issues pertaining to infertility should not always be shifted on women. The reason being that, 40% of all infertility cases were due to the female partner, another 40% related to male partner, and 20% related to unexplained factors (Nurcan, 2014). Similarly, a study at the Department of Health UK (2009) also

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emphasized that, reason behind infertility can be found in both male and female with 30% of all infertile cases resulting in male factor, 30% resulting in female factor, 25% unexplained, 10% combined and lastly 5% relating to other factors.

In Turkish society, having a child is one of the basic building blocks of marriage. Children are seen as a necessity to continue the bloodline. Due to this, a man who is unable to have a child by his wife may divorce her or marry a second woman (Tabong & Adongo, 2013). Also in the African culture, observations are that the true meaning of marriage is only fulfilled when couples conceive and bring forth children due to the hallmark and high premium placed on womanhood by both the extended families and society at large. Again in Africa, childbearing is often seen as a source of power, pride and an important aspect of life since it gives the family the hope and assurance of continuity in lineage (Tabong & Adongo, 2013).

In Ghana and some parts of Africa, motherhood or parenthood is often the only way men and women enhanced their status within their family and community. Hence, issues pertaining to infertility have always caused a considerable suffering among women. In some parts of the world, infertile women are paying a very high price. These includes public ridicule, adding of nick names to their original names, ostracism and serious economic deprivation while it also has severe consequences on both the psychological and social wellbeing of these women (Minucci, 2013). Childbearing is also one of the major transition periods in adult life for both men and women; therefore women or couples struggling with infertility were prone to chronic stress. They often report a great number of negative emotions and experiences that affected several aspects of their lives including one's religious faith, self esteem, occupation, relationship with their partners and that of her family and friends (Minucci, 2013).

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In addition to the above mentioned stressful experiences, they may suffer some form of psychosocial trauma including depression, frustration, high levels of anxiety, social isolation, perceived stigma, physical violence, suicidal ideations, threats from husbands and husbands' family, rejection, abandonment, divorce and mockery to the extent of calling women without children in their old age witches (Donkor & Sandall, 2007; Minucci, 2013; Naab, Brown, & Heidrich, 2013; Tabong & Adongo, 2013). A study conducted on the implications of infertility revealed that, some respondents expressed their grievances to the fact that they were not treated fairly in their societies as compared to their other counterparts. They were referred to as witches in most cases, excluded from conversations pertaining to child rearing and discouraged from disciplining or even interacting with other children let alone sending them on errand (Fledderjohann, 2012).

Intimacy in the lives of couples may change with a diagnosis of infertility and this marks a difference in the way couples organize their relationship, particularly their sexual life. It is believed that, independently of the causes of infertility, after the diagnosis nothing becomes the same among them leading to an alteration in their communication and letting the problem take over their daily conversations. There is also an alteration in the way they initially show affection towards each other, decrease libido and changes in moods (Drosdzol & Skyrzpulec, 2009; Peterson, Newton, & Feingold, 2007).

Childlessness is also seen as a major life problem in most homes and sometimes leads to psychological factors like marital instability, marital dissatisfaction, sexual disfunctioning with decrease quality of life, less stable marital relationship and lowest sexual satisfaction as compared to other fertile females (Millheiser, Helmer, Quintero, Westphal, Milki, & Lathi, 2010; Tao, Coates, & Maycock, 2012).

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The present researcher observed that, as long as women's fertility continues to decline with age, the problems associated with it would also keep worsening and therefore the need to explore into the experiences of women with infertility and their bio-psychosocial management would be of much importance. Despite the above reason given, the present researcher again is of the view that since infertility is considered as a bio-psychosocial crisis, it therefore means that, in the management of it, one should not only consider the biological or medical management of the problem only but also, the need to consider the psychosocial management of it is also recommendable in order to improve the birth rate among these women. This was also evident in a study conducted by (Mohammad et al., 2013; Cwikel, Gidron, & Sheiner, 2004).

Studies have shown that, women who cannot conceive are often burdened with not only their own disappointment but the reactions of those around them. In order to fulfill their personal and societal ideal of having children, In vitro fertilization (IVF) is considered as one of the most welcomed assisted reproductive technologies available for these women (Cabrya et al., 2014; Centers for Disease Control and Prevention, 2014; Kamath & Bhattacharya, 2012). Other forms of biological managements for these women as identified by a number of researchers, ranges from medical monitoring, hormonal remedies, intra uterine insemination, embryo donation and stimulation of ovaries (Cabrya et al., 2014).

In their seminal work, Cwikel et al. (2004) stated that, although fertility treatment are somehow available, it carries physical, economical, psychological and social burdens on women. Their reasons were that, any couple or woman trying to conceive will undoubtedly experience some form of psychosocial trauma in case pregnancy is not easily achieved. Hence psychosocial intervention or management of infertility are strongly advisable. The researchers concluded that, cognitive behavioral therapy and psychological counseling helps lessen weak thoughts.

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Similarly to the above, Domar et al. (2000) in their seminal work also identified, cognitive behavioral therapy and group psychological interventions to be the best management in preventing psychological distress among women with fertility problems. They also emphasized on the fact that, women in the early stages of infertility treatment should be advised that, group interventions may lead to both improved psychological state and increase pregnancy rates.

Although Engel (1977) proposed that health should be examined and managed due to its importance of biological, psychological, and social factors, it is not so when it comes to issues pertaining to infertility. This is because, despite the fact that various studies have been done on infertility, the bio-psychosocial management has not been adequately addressed in the clinical practice and not much work has been done in relation to that especially, with the social management. Therefore, by clarifying the causes and outcomes through the creation of diagnostic and therapeutic measures, there is the need to explore into the experiences of women with infertility and their bio-psychosocial management.

In view of this, the bio-psychosocial framework by Engel (1977) was adapted as an organizing framework to understand the bio-psychosocial management of infertility among women attending the gynecological clinic at Korle-Bu Teaching Hospital.

## **1.2 Problem Statement**

In view of the importance attached to parenthood in Africa, observations are that infertility may be considered as the major cause of divorce and marital instability. Issues of infertility are now becoming a growing problem across virtually all cultures and societies and globally affecting approximately a tenth of couples of reproductive age. Although there had been great success in improving maternal and child health in the past decades, partly through a focus on reproductive

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health; issues of infertility as at now are still neglected and paid less attention to (Weiyuan, 2010; Cousens et al., 2011).

In the African culture, motherhood is seen as an important social role for women. It is believed that, a vast part of stigma associated with infertility depends on cultural aspect and social norms. These two factors play an important role in determining behaviours and have special relevance to issues of parenthood, infertility and sexuality. In relation to these, the African culture only believes in true marriage when couples have been able to conceive and bring forth a child. Aside this, Africans consider childbearing as a source of power, pride and as well, an important aspect of life and therefore failure to bring forth a child means no recognition for such a person in the society (Tabong & Adongo, 2013).

In the present researcher's few years of service as a nurse, almost all patients who reported at the gynecological clinic with a case of infertility complained bitterly about the psychosocial trauma they go through in their homes, work places, society and even at their churches and yet still had nowhere to go for comfort or even an advise.

A study on infertility reaffirms the statements of my clients that, indeed the problems they have found themselves in, have truly brought them some psychosocial problems like marital dissatisfaction, decrease libidos, sexual disfunctioning, decrease quality of life and stigmatization (Donkor & Sandall, 2007).

Although in recent times it is observed that there had been an improvement in the number of health facilities that provided fertility services, there is however no corresponding increase in the patronage of these services since reasons for this are many and varied with the prominent being the problem of cost (Shahin, 2007).

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It is observed that, the cost of treatments and the provision of these services are above the income bracket of majority of those who needed these services. These further worsen the psychosocial problems of these women and therefore the need for bio-psychosocial managements is very much needed.

As far as infertility still remains an important health problem, and considering the fact that its psychosocial consequences could be detrimental to health and as well plays a role in the pathogenesis of the problem. There is the need to explore into the experiences of women with fertility problems and their bio-psychosocial management since relatively, only few studies have evaluated the effectiveness of the psychosocial management in the field of infertility.

### **1.3 Purpose of the Study**

The purpose of this study is to explore the experiences of women with infertility and their bio-psychosocial management at the Korle-Bu Teaching Hospital.

### **1.4 Objectives**

The specific objectives for this study are:

1. Identify the psychological experiences of infertility among women.
2. Identify the social experiences of infertility among women.
3. Explore the biological / medical management of women with infertility.
4. Ascertain the psychosocial management of infertility among women.

### **1.5 Research Questions**

The study seeks to find answers to the following:

1. What psychological experiences do women with infertility go through?

2. What social experiences do women with infertility go through?
3. How are women with infertility managed biologically?
4. How are women with fertility problems managed psychosocially?

### **1.6 Significance of the Study**

1. The findings of this study will provide nursing knowledge which will improve nursing practice in the management of women with infertility.
2. It will also contribute to knowledge on the bio-psychosocial management of women with infertility.
3. To pave the way for future research on bio-psychosocial management of women with infertility.

### **1.7 Operational Definitions**

1. Infertility - failure to achieve pregnancy after one (1) or more years of regular and unprotected sexual intercourse.
2. Psychological experience - refers to thoughts, feelings and other cognitive characteristics that affect the attitude, behavior and functions of the human mind.
3. Social experience - refers to the negative experiences that influence individuals' personality, attitudes and lifestyle within a society.
4. Biological management - involves the medical control / treatments of disease or sickness.
5. Management - the process of controlling or effective handling of psychosocial experiences.

## CHAPTER TWO

### THEORETICAL FRAMEWORK / LITERATURE REVIEW

This chapter is a review of a series of studies that utilize both empirical and theoretical data in providing deeper understanding of the background of the study and the research questions. The theoretical framework for the study is described first, followed by the literature review.

The bio-psychosocial model (BPS) of health as conceptualized by Engel (1977) provides a useful framework for examining and managing diseases or illness due to its importance of biological, psychological, and social factors (see figure 2.1). Engel's main emphasis on the patients' experience was a key to the bio-psychosocial model. The theory was born out of the idea that, every human being was made of biological, psychological and social components. The BPS model is also an interdisciplinary model that assumes that health and wellness are caused by a complex interaction of biological, psychological, and social factors while it also provides the basis for understanding the determinants and experiences of diseases.

Engel therefore proposed that, in the management or treatment of disease conditions, there was the need to address all these three (3) components of health. He emphasized also that, a medical model also takes into account the patient, the social context and the psychological context in which he / she lives and the complementary system devised by society to deal with the disruptive effects of illness, that is, the physician's role and the health care system (Engel, 1977).

He recognized that illnesses and ill-health are influenced by a person's biological, psychological and social attributes since health was best understood as an integrated combination of all these components (Engel, 1977; Nacassio & Smith, 1995; Sperry, 2006).

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The proposed bio-psychosocial model provides a blue print for research, a framework for teaching, and a design for action in the real world of healthcare (Engel 1977). The model attempts to incorporate the psychosocial in the medical practice and medical education since emphasis on the bio-psychosocial model as proposed by Engel was on the patient's experiences of his / her disease condition and ensuring that, medical practice incorporates the appropriate listening and clinical communication skills to fully hear and relates to patients' experiences of their disease condition and give proper management to it.

The bio-psychosocial model implies that management or treatment of disease should address the biological, psychological, and social components of the problem and not only the biological aspects. The bio-psychosocial model is both a philosophy of clinical care and a practical clinical guide. Philosophically, it is a way of understanding how suffering, disease and illness are affected by multiple levels of the organization, from the societal to the molecular.

According to Engel, the practical understanding of the bio-psychosocial model is to understand the patients' subjective experiences as an essential contributor to accurate diagnosis, health outcomes, and human care.

### **2.0.1 Biological Component**

The biological component is made up of individual's physiological processes including biological causes of diseases and its treatments. It also involves what a disease does to a person's body and the various medical diagnoses as well as medical interventions that are used to combat that disease.

## **2.0.2 Psychological Component**

Engel (1977) addresses the psychological component of the theory as human behavior and mental processes. It also viewed the individual in relation to his or her cognition, feelings or emotions as these were usually observable in how sick individuals deal with grief and loss issues, or how they adjust and adapt to their problems.

He emphasized that, although diseases were mainly viewed from a biomedical perspective, its consequences or outcomes go beyond the physiological components as it has broader impact on all aspects of one's personality and life, making the affected person feel anxious, sad, guilty, shameful, hopeless, empty, feeling of loss, and depressed.

## **2.0.3 Social Component**

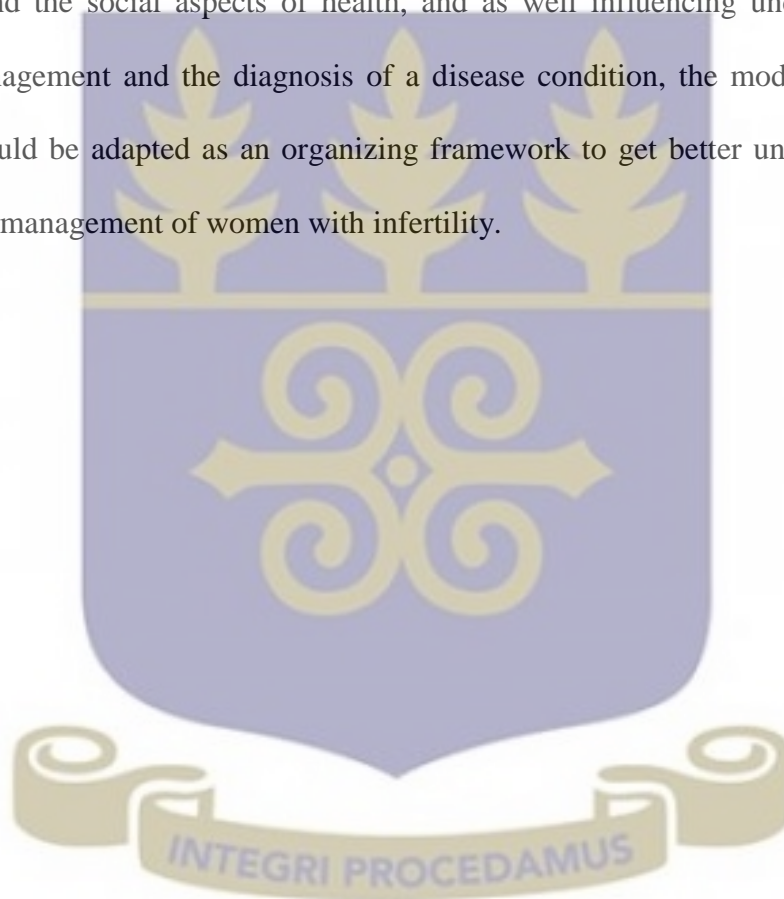
The social component of the bio-psychosocial model explains how different social factors influence and affect health. It also addresses the fact that every individual interacts and relates to friends and love ones within the society. Engel (1977) demonstrated that a diagnosis in one person has a social consequence on the part of the person and the family, potentially manifesting disruption and extra burdens and or deprivations depending on the disease progression and how the family responds to the initial infection. He discussed specifically some of the social consequences of experiencing disease, which necessitate people making social adjustment of life with, or after illness.

Engel emphatically stated that, narrowing our scope on only the biological management of health limits our understanding of wellbeing, thwarts our treatments efforts, and perhaps more importantly, suppresses preventive measures. He also made it known that, the traditional medical attitudes whereby the concept and management of disease was restricted only to what can be

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recognized or understood by the physician is misguided, as disease cannot be defined on the basis of the function of physicians but also on the basis of patients' experiences due to the disease. Finally the model presumes that, it is important to handle these three factors together when managing health problems.

Although the model was developed to address the dynamic relationship between the biological, psychological, and the social aspects of health, and as well influencing understanding in the treatment or management and the diagnosis of a disease condition, the model as proposed by Engel (1977) would be adapted as an organizing framework to get better understanding of the bio-psychosocial management of women with infertility.



## The Theoretical framework of the study

**Figure 2.1: An adaptation of a bio-psychosocial model (Engel, 1977)**

**(Theoretical framework)**



## LITERATURE REVIEW

The literature review of this study was sought from healthcare databases such as Science Direct, Wiley Online Library, Medical Literature Analysis and Retrieval System Online (MEDLINE), Pub med, Taylor & Francis Online, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Google Scholar and Biomed Central as well as relevant journals. The key words that were used in the search strategies included a combination of words such as infertility, childlessness, bio-psychosocial, experiences, and management. The literature is organized according to the constructs of the bio-psychosocial model and the objectives of the study.

## **2.1 Psychological Experiences of Infertility**

In a quite recent study, Begum & Hasan (2014) researched into the psychological problems among women with infertility in Karachi-Pakistan. The researchers' main focus was to explore the difference between anxiety and depression among infertile and fertile women. One hundred and twelve (112) participants were chosen from Liaquat National Hospital, Patel Hospital, and Zainub Hospital. The sample size comprised infertile women who had suffered for one (1) to five (5) years of primary infertility and fell under the medical definition of infertility, and fertile women whose duration of marriage was from one (1) to five (5) years.

The study was quantitative in nature and was analyzed using statistical package of social sciences (SPSS). The findings of the study on psychological problems among women with fertility problems revealed that, infertile women scored significantly high on the variable of depression and anxiety compared to the fertile women. It was further identified that, women with children were well accepted both in their homes and societies as compared to the infertile women who were always blamed thereby, resulting in terrible psychological problems.

Concluding their study, the researchers stated categorically that, there was a clinically significant difference between depression and anxiety among women with infertility problem and those without fertility problems. The use of these two (2) groups thus the targeted population as well as the control group for the study was of much importance since it gave a clear variation of which of the groups suffered depression and anxiety more. The study was also well concluded according to its objectives. However, the finding on anxiety is inconsistent with the findings of a study conducted in Ghana by Naab, Brown, & Heidrich (2013) on the psychosocial health of infertile Ghanaian women and their infertility beliefs. The study showed that, although women

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with fertility problems encountered higher levels of infertility-related stress, they experienced lower levels of anxiety.

Similarly, Alhassan, Ziblim, & Muntaka (2014) also conducted a study in Ghana on depression among infertile women. The study aimed at examining the prevalence and severity of depression in relation to age, type of infertility, and duration of infertility among Ghanaian infertile women.

The study was done quantitatively and involved a sample size of hundred (100) participants who were purposively recruited based on the inclusion criteria. Findings of the study showed that depression among infertile women was extensively higher representing 62.0%. It was also identified that, depression scored higher among women aged twenty six (26) years and above, while it keeps getting higher as they advanced in age. Again it was revealed that, the fertility rate of these women may decline as they age, hence the likelihood of these women going through psychological pressures could also contribute to a higher form of depression among them.

In the researchers' concluding remarks, they acknowledged that, prevalence of depression among infertile women was high, especially among those diagnosed for the past three (3) years. Finally the researchers recommended that, interventions to decrease and prevent severe depression among these patients should be considered. The researchers' concluding remarks reflected the aim, finding, and the recommendation of the study. However, the sample size was too small for such a quantitative study in Ghana. This finding supported a study also in Ghana by Gengxiang et al. (2014) whereby women with fertility problems suffered depression especially those with longer duration of infertility leading to overwhelming mental stress and stronger desire for fertility. Additionally, Naab, Brown, & Heidrich (2013) found out that women with fertility problems reported with high levels of infertility-related stress including higher levels of depressive symptoms. The stressors which were related to the condition of these women and

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their psychosocial health outcomes were attributed to a belief in negative consequences and the fact that, one has a poor understanding of infertility. The researchers did a detailed study on the psychosocial health of infertile Ghanaian women and their infertility beliefs since the finding and the concluding remarks of the study reflected its aim and purpose.

Ali, Shams, Kessani, & Ali (2015) conducted a similar study on depression, its prevalence and predictors among infertile women in Pakistan. The objective of the study was to determine the frequency of depression among infertile females and to determine the risk factors associated with infertility and depression. The study was quantitative and cross-sectional in nature. It was carried out at the department of obstetrics and gynecology of Ziauddin University Karachi over a period of six month. The sample size for the study consisted of three hundred and forty two (342) women suffering from fertility problem. The findings on depression among infertile women revealed that, depression was considered as one of the psychological disorders affecting women with fertility problems. Depression rated one hundred and ninety nine (199) representing (58%) of the total sample size. Again, it was further revealed that, some risk factors and predictors associated with this included female age, repeated failed treatment cycles and longer duration of infertility. The researchers concluded that, depression was indeed common among females who were suffering from the fruit of the womb. Although the researchers did well by quantifying the percentage of women who suffered depression from the entire sample size, a qualitative component would have brought out a greater number of these women suffering from depression since the qualitative approach would give these women the chance to express themselves better.

However, the above findings on depression among infertile women corroborate previous studies in Arabia, Iran and Abbottabad a town in Paskitan (Homaidan Turki, 2011; Masoumi, Poorolajal, Keramat, & Moosavi, 2013; Qayyum et al., 2014).

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Gokler, Unsal, & Arslantas (2014) researched into the prevalence of infertility and loneliness among women aged eighteen (18) to forty nine (49) years in Western Turkey. The study was quantitative in nature and aimed at examining some possible factors associated with infertility and to assess the level of loneliness among married women. A total number of five hundred and seventy (570) participants were recruited for the study. With respect to infertility and loneliness, the study revealed that, there was a higher level of loneliness among women diagnosed of primary infertility, while prevalence of infertility was also found to be higher among women with menstrual disorders and those with a history of gynecological disease or gynecological surgery.

Considering the research topic and the aim of the study, qualitative research design would have been most appropriate for the study instead of the quantitative research design. However, the findings of the study suited its aim or objectives.

Tao, Coates, & Maycock (2012) studied on the issue of marital relationship in infertility. The study was conducted in Australia with the aim of assessing marital relationship in the context of infertility. Participants comprised infertile subjects and their partners who were not in any marital separation. The findings of the study showed that, infertile females had considerably less stable marital relationship as compared to fertile females and this was solely associated with how they were treated by their partners. That aside, couples with infertile problems were either affected by each other's problems thereby predisposing them to a lesser amount of marital satisfaction.

In another study, Tao & Coates (2011) conducted a study on the impact of infertility on sexuality in Australia. The study aimed at answering how sexual self concept impacted infertile

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individuals and their partners; and finally, to find out if infertility had negative impact on sexual relationship and whether sexual functions are affected by infertility. Based on the purpose of the study, the researchers used research articles for the literature review via a range of databases. The results of the study reported that, infertility and its associated problems as well as its treatments may lead to changes in ones sexual relations and also interacts with couple's sexual function which may further affect their quality of life and well being. In concluding the study, the researchers further revealed that, sexuality could be greatly affected by infertility and its associated problems as well as its treatments. The approach used in gathering the literature for the study was appropriate. Again, it was also known that, these problems associated with infertility and the treatments of it, could also bring about difficult experiences in different aspects of sexuality. This finding was also supported by a study on marital stress where it revealed that, women with fertility problems had the highest relationship instability and the lowest sexual satisfaction (Chachamovich et al., 2010; Drosdzol & Skyrzpulec 2009).

Again, Chachamovich et al. (2010) researched into quality of life (QOL) and health-related quality of life (HRQOL) in infertility. The study was conducted in Canada with the aim of finding out the quality of life (QOL) and health-related quality of life (HRQOL) among infertile women, men and couples. In reporting their findings, the researchers revealed that, women with fertility problems had lower scores in several QOL or HRQOL domains in comparison to their counterparts who were not having any problems. The researchers did a detailed study on the quality of life in relation to infertility.

In a related study, Volkan et al. (2014) conducted a quantitative study in Izmir, a port city in Western Turkey on sexual dysfunction among infertile women with the aim of evaluating the prevalence and risk factors for sexual dysfunction in infertile Turkish females. A total sample

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size of three hundred and fifty two (352) infertile women and three hundred and one (301) fertile women were recruited in the department of obstetrics and gynecology. The study on sexual dysfunction among infertile women revealed that, sexual dysfunction among females with fertility problems was high as compared to their counterpart females who did not have such problems. They also found that, women who were at risk for sexual dysfunction were those who had suffered infertility for not less than three (3) years and have a history of previous infertility treatment. In their concluding remarks, they submitted that the prevalence of sexual dysfunction was higher in infertile women than the fertile women, and that infertility consultants must have knowledge about sexual problems caused by infertility and the methods used to treat these problems. The researchers finally added in their conclusion that, women with such problems needed to be referred to sex therapist for education on normal sexual function and activity. Aggarwal, Mishra, & Jasani (2013) also conducted a study in Ahmedabad, Gujarat (India) which also focused on the incidence and prevalence of sexual dysfunction in infertile females with the aim of finding out the incidence and prevalence of female sexual dysfunction in infertile females and its correlation with infertility. Five hundred (500) patients within the age group of twenty four (24) to forty two (42) years were used for the research, and sample was obtained through the answering of questionnaires. The researchers reported that, 63.67% of the patients in the infertile group suffered sexual dysfunction as compared to 46.35% in the fertile group. They also added that, female sexual dysfunctions were also noted to be significantly higher in infertile females between the ages of thirty one (31) to thirty seven (37) years while female sexual dysfunction was also observed to be higher in illiterate infertile females.

The sample size was quite large and therefore, certain variables that were not necessary would become pronounced in the study. However in considering the research topic, a qualitative

approach would have been appropriate since that would have given an in depth results or findings. In these previous studies, it was evident that women with fertility problems suffered a lot of sexual dysfunction. This result also corroborates previous studies on sexual dysfunction among women with fertility problems (Heng, Sidi, Jaafar, Razali, & Ram, 2013; Volkan et al., 2014).

## **2.2 Social Experiences of Infertility**

A quantitative study was conducted in Turkish by Aygul, Sahiner, Seven, & Bakır (2014) on effects of marital violence on infertility distress among women. The aim of the study was to determine the relationship between marital violence and distress level among women diagnosed of infertility. The study was carried out at the infertility center in Gulhane Military Medical Academy (GMMA) in Ankara Turkey. Out of two hundred and ten (210) married women receiving treatment for primary infertility, only one hundred and fifty two (152) of them met the inclusion criteria and as a result were involved in the study based on convenience sampling method. The findings of the study revealed that, infertile women and that of other women receiving infertility for a particular period of time were all at risk of domestic violence. The researchers in their conclusion stated that, marital violence is a factor increasing the pain of infertile women. They therefore suggested that, healthcare workers serving infertile couples should consider the possibility of domestic violence against women as a factor affecting the psychological well being of these women. The sampling method employed by the researchers was good since the chance was given to everyone who was readily available to participate in the study.

Similarly, Aygul, Memnun, Gonul, & Bilal (2013) also investigated on the effects of infertility on marital violence with their aim of evaluating the level of marital violence among Turkish

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women, and finally determining whether infertility was a risk factor for marital violence. The study was descriptive in nature and comprised two hundred and four (204) fertile women and two hundred and twenty eight (228) infertile women. A descriptive information questionnaire and a scale for marital violence against women (SDVW) were used to obtain data. The researchers found that, there was a significant difference between the infertile and fertile women in terms of emotional, economic and sexual violence.

In their seminal work, Ameh et al. (2009) also conducted a quantitative study in Nigeria with the purpose of looking into the burden of domestic violence amongst infertile women attending infertility clinics. The study comprised two hundred and thirty three (233) infertile women who usually attend infertility clinic. The findings were that, 41.6% of the total number of two hundred and thirty three (233) infertile women who participated in the study experienced domestic violence because of the state they found themselves. The researchers outlined some forms of these violence women go through as psychological torture 51.5%, verbal abuse 39.2%, ridicule 27.8%, physical abuse 17.5% and deprivation representing the lowest form of violence 6.2%. In their conclusion, the researchers emphasized on the fact that infertile women were prone to domestic violence and therefore the need for prompt evaluation, counseling of the couples, and as well as early treatment and prevention of infertility was necessary to avoid the suffering and domestic violence these women had to go through.

Additionally, Sheikhan, Ozgoli, Azar & Alavimajd (2014) also found out in Iran that, out of over four hundred (400) participants who participated in a study on domestic violence among women with fertility problems, 34.7% of them experienced domestic violence, 5.3% physical violence, 74.3% emotional violence and 47.3% sexual violence indicating that, women with fertility problems truly suffer proper domestic violence irrespective of their status in life. The researchers

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in their concluding remark also made mention of the fact that, domestic violence against infertile women was really a problem that should not be ignored. They added also that, clinicians should identify abused women and provide them with the necessary counseling services needed, while they also suggested to those involved in abusing these women to stop domestic violence against infertile women. Using a mixed method for the study would have been appropriate instead of using only quantitative method to analyze the study, since qualitative study would probe further into the issue of domestic violence and bring out more detailed information to enrich the study. These results also corroborate previous studies on domestic violence against women with fertility problems (Ardabili, Moghadam, Salsali, Ramezanzadeh, & Nedjat, 2011; Behboodi-Moghadam et al., 2013; Yildizhan et al., 2009).

In a quite recent study in two Nigeria communities, a research was conducted on definitions and the experiences of fertility problems: infertile and sub-fertile women, childless mothers, and honorary mothers. The study was both qualitative and quantitative in nature and comprised a total number of two hundred and forty six (246) women who were surveyed in Amakiri, and two hundred and eighty (280) in Lopon respectively. An in-depth interview with a sub sample of approximately twenty five (25) infertile and twenty five (25) fertile women were used in each community base on their problems. The findings of the research showed that, infertile women were deprived from certain womanhood rites, discouraged from witnessing any womanhood rite being performed on others, prevented from attending women's association meetings and finally, were not permitted in playing certain vital roles. They were also buried outside towns in order not to bring calamity to the land when they die (Whitehouse & Hollos, 2014; Behboodi-Moghadam et al., 2013). The adoption of both quantitative and qualitative approaches by the

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researchers was in order. This is because, the qualitative method gave in-depth explanations to the figures in the quantitative approach.

In addition to the aforementioned experiences associated with infertility, issues of stigma have been reported as one of the key social experiences that hinder the health outcomes of women with infertility. For instance in a study conducted by Donkor & Sandall (2007) in Southern Ghana on the impact of perceived stigma and mediating social factors on infertility-related stress among women seeking infertility treatment with the aim of investigating the extent to which women in Southern Ghana seek infertility treatment and perceived themselves as stigmatized. The study was conducted using face-to-face interviews in three different languages. Six hundred and fifteen (615) women receiving infertility treatment in three health sites in Southern Ghana were used for the study. The result of the study indicated that, majority of the women representing (64%) that were used for the study felt stigmatized as a result of their inability to have a child of their own. The adoption of three (3) different languages by the researchers in conducting the interview was a very good approach since participants will have an equal chance in understanding what is expected of them and therefore give various responses that would enrich the study thereby broaden the sample composition.

A qualitative study was also conducted by Fledderjohann (2012) in Ghana on the implications of infertility with the aim of studying to explore the implications of infertility among women in Ghana and West Africa. Data were collected using a semi-structured interview. The study comprised one hundred and seven (107) women aged twenty one (21) to forty eight (48) years seeking treatment in gynecological and obstetric clinics in Accra, Ghana. The results revealed that, infertile women reported facing severe social stigma, marital strain and a range of mental health difficulties including worrying. It was known also that, aside the social stigma they have

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been experiencing, women with fertility problems also faced greater social consequences than their male partners while they were also mostly ridiculed, insulted and to the extent of pointing fingers at them when friends and relatives gossiped to others about their difficulties.

In concluding their study, the researcher stated that, infertility in Ghana has important consequences for social interactions, marital stability and mental health while these consequences were not perceived to be shared equally by Ghanaian men.

The research is very relevant, appropriate and useful since the researcher looked into patients' experiences of living with infertility and the social problems they had to go through.

Similarly, Tabong & Baba Adongo (2013) also researched into the experiences of infertile couples in Northern Ghana with the aim of exploring the experiences of infertile couples. The study was qualitative in nature and comprised fifteen (15) childless couples, forty-five (45) couples with children, eight (8) key informants and three (3) focus group discussions. The participants were interviewed using a semi-structured interview guide. The data were transcribed, coded, arranged and analyzed for categories and themes. The findings of the study were that, women without children in their old age were often branded as witches and abandoned by their relatives and friends. They were not allowed to interact or take care of other people's children as they were often accused of having "eaten up" all the children in their womb and could bewitch or cause the death of other people's children. They were also seen as being dangerous to society in their old age since it was assumed that, they will become more envious of other people's children and will stand at nothing but cause the death of other people's children. Aside being stigmatized, they were also excluded from leadership roles in their communities and were denied membership in the ancestral world thereby losing the opportunity to live again.

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In their concluding remarks, the researchers made it known that, both men and women suffer from the social effects of childlessness and that sometimes, the desire to have biological children may result in unhealthy practices so therefore health policy makers and gender advocates should be more concerned about infertility. The data collection procedures for the research were made explicit allowing the reader to appreciate the social consequences of infertility among women. Secondly, the fact that the researchers interviewed different categories of people in order to know about their experiences was a good thing since that would make every reader realize the intensity or the magnitude of the problem.

In another recent study conducted in Iran by Hasanpoor-Azghdy, Simbar, & Vedadhir (2015) on the social consequences of infertility among Iranian women. The study was aimed at explaining the social consequence of infertility among Iranian women seeking treatment. A qualitative design was employed and a semi-structured interview guide was used on twenty five (25) women who were affected by primary and secondary infertility with no surviving children. Data were further analysed using the conventional content analysis method. The findings of the study reported that, Iranian women with fertility issues seeking treatment faced several social problems that could have devastating effects on the quality of their lives. The researchers mentioned that, some of these problems included marital instability, social isolation including avoiding certain people or certain social events, social exclusion and partial deprivation. The sample size of twenty five (25) participants was too small for such a study to be generalized in the whole of Iranian community. However, the qualitative approach adopted by the researchers was appropriate since it gave an in-depth understanding of the study.

Similarly, a study was conducted by Kamau (2011) on the experiences of infertility among married Kenyan women in Nairobi. The study was aimed at exploring the experiences of

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infertility among Kenyan women with respect to how they describe, react, make and understand their infertility experiences. The researcher adopted a qualitative design in gaining an understanding of the experiences of infertility among married Kenyan women in Nairobi. Ten (10) participants were engaged in face to face in-depth semi-structured interviews to elicit their experiences with infertility. The results of the study revealed that, infertility has negative social, emotional, and psychological impact on the lives of these women. The study further reported on how the problem of these women negatively influenced how people related to them in the society they found themselves in including their husbands, family members, friends, and in-laws just to a mention few. It was also revealed that, these women tried as much as they can to isolate themselves so as to avoid embarrassments and maltreatments. The qualitative approach used by the researcher was appropriate since the engagement of these women in an in-depth interview gave further explanations to how they felt. However, the sample size of only ten (10) participants was too small for such a study in Nairobi.

A study was conducted on definitions and the experience of fertility problems among infertile and sub-fertile women, childless mothers, and honorary mothers in two southern Nigerian Communities. The study revealed that, divorce and tension in relationship was one of the common problems among couples battling with infertility. It was known by the researchers that, the relationship between wife, husband and husband's relatives turns to be sour as time passes by if there was not any sign of pregnancy leading to difficult marital relations, permanent separation, husband remarrying or even divorce (Behboodi-Moghadam et al., 2013; Whitehouse & Hollos 2014 ). The adoption of both the qualitative and quantitative research approach made the study easier to be understood since the qualitative approach gave in-depth reasons for the quantitative findings.

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Kjaer et al. (2014) also conducted a similar research on divorce or end of cohabitation among Danish women. The study aimed at investigating the likelihood of ending a relationship among women who did not have a child after a fertility evaluation. The researchers findings showed that, women evaluated for fertility problems had greater chance for being divorced or end of cohabitation. In the researchers concluding remark they stated that, not having a child after a fertility evaluation seems to be an important factor in the length of relationships of couples with fertility problems. They also suggested that more studies with detailed information on marital quality and relational well-being of couples with fertility problems are needed.

The researchers only had their information on divorce or end of cohabitation registered only once a year, so therefore any inaccuracy in time intervals was going to affect the calculation.

### **2.3 Biological Management of Infertility**

Menuba, Ugwu, Obi, Lawani, & Onwuka (2014) studied on clinical management and therapeutic outcome of infertile couples in Southern Nigeria with the aim of determining the prevalence of infertility, outcomes of infertility investigation, and treatment outcome of infertile couples following therapeutic interventions in Southern Nigeria over a twelve (12) month period. The study was quantitative in nature and comprised two hundred and eighteen (218) infertile couples presenting for infertility management at two different tertiary health institutions in Southern Nigeria. The findings of the study revealed that, most couples cannot be treated without assisted reproductive therapy and that, majority will need an in-vitro fertilization (IVF). In concluding the study, they added that there was a need to improve facilities for managing infertility and the cost for artificial reproductive techniques should be at an affordable price. It is worthy of note that the researchers followed up to check on the women after commencement of treatment in order to

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find out if any positive result has yielded. However, the period for the follow up was inadequate since some other women may achieve pregnancy following longer follow up.

In a related study, Cabry et al. (2014) conducted a study in Egypt on the management of infertility in women over forty (40). The study was qualitative in nature and involved the researchers own experiences in the management and preservation of fertility among women older than forty (40). The researchers' findings were that, the alternative treatment for women until forty three (43) years of age is in-vitro fertilization (IVF). They also added that, oocyte and embryo donation remains good option for patients over forty (40) years with a bad prognosis. Concluding their study, the researchers stated that women over forty (40) years with issues of fertility problems need both financial and ethical support in order to minimize complication risks during the clinical management and to improve the clinical outcome. Lastly, they asserted that people should not abuse assisted reproductive therapy programmes after a number of in-vitro fertilization failures and also have patients oriented to other options like oocyte or embryo donation or adoption. The information given by the researchers is seen as an important one even though the research did not directly focus on the patients but rather, the researchers own experiences in the management and preservation of infertility among women. The reason is that during their conclusion remark, they emphasized on the need to have these women supported both financially and ethically. Thus the researchers believe that, the cost of assisted reproductive therapies are quite expensive and therefore without assistance, these women are likely to go through more psychological trauma.

Kamath & Bhattacharya (2012) investigated into the demographics of infertility and management of unexplained infertility. The study was quantitative in nature and involved women with fertility problems. The researchers in their findings revealed some form of

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traditional treatment options in the treatments of infertility as clomifene citrate, intrauterine insemination with (super ovulation plus intrauterine insemination) or without (intrauterine insemination) super ovulation and in vitro fertilization.

In concluding their study, the researchers made it known that, in-vitro fertilization remains the treatment of choice in long standing unresolved infertility. In reporting their findings, the researchers dealt more on management of women with infertility although their topic had something to do with demographics of infertility. This is seen as a limitation to their study. However, their findings pertaining to management of women with fertility problems are very relevant in studying the medical management of infertility.

Similarly, Marinakis & Nikolaou (2012) conducted a national survey to identify the variation in the management of infertility in women aged forty (40) years and over among the assisted conception in the UK. A total of forty four (44) out of sixty nine (69) in-vitro fertilization (IVF) units answered a questionnaire. The findings of the study revealed that, as first-line management, 71.1% would offer conventional in-vitro fertilization (IVF) and 17.9% intra-uterine insemination (IU), while 33.3% would consider blastocyst transfer, 5.9% pre-implantation genetic screening (PGS) and 3.9% assisted zona hatching (AZA). The findings of the study is said to be relevant in the current study. This is because the researchers gave out the various percentages in the patronage of various assisted reproductive therapies.

The Harvard Mental Health Letter (2013) gave out a contrary view to the fact that, in-vitro fertilization (IVF) was an option for the treatments of infertility. According to the mental health

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letter, medical interventions to infertility may aggravate to some form of psychological problems. It also identifies that some medication side effects, money worries and uncertain outcomes of in-vitro fertilization especially in the case of the California woman who gave birth to octuplets and for which reason brought in the attention of media coverage and so many public discussions about infertility treatments. The report also revealed that, despite the fact that medical management offer much needed help and hope, it may also add to the stress, anxiety and grief that patients are already experiencing from infertility itself. It was known again that, about eighty five (85%) to ninety percent (90%) of patients are treated with conventional methods such as advised on timing of intercourse, drug therapy to promote ovulation or prevent miscarriages, and surgery to repair reproductive organs whereas only three (3%) of patients made use of more advanced assisted reproductive technology such as in-vitro fertilization.

Similar to the above, Kulkarni et al. (2013) also supported to the fact that fertility treatment poses health risks for women, men, and their children since the use of drugs to induce ovulation can lead to ovarian hyper stimulation syndrome (OHSS), which can be life threatening. The researchers also revealed in their study that, assisted reproductive technologies (ART) and non-ART procedures in which medications are used to stimulate ovulation are associated with an increased risk of multiple-order births, which carry health risks for women and infants while it also increases cost.

A report from the contemporary obstetrics and gynecology e-News indicated that, Clomiphene citrate is considered as the first-line treatment of infertility since it is low cost, relative ease of use, and also has minimal side effect. The e-News also reported that, Clomiphene citrate for the past fifty (50) years after the first clinical trial, has demonstrated that, administration of

Clomiphene citrate induces ovulation in more than 75% of women with amenorrhea (Myo & Ekpo, 2011).

A quantitative study was conducted by Murto et al. (2014) on Folic Acid supplementation and IVF pregnancy outcome in women with unexplained infertility. In their study, the researchers identified that, Folic Acid supplements effect on pregnancy outcome in women with unexplained infertility has not been well investigated. They added that, Folic Acid supplementation or folate status was not related to pregnancy outcome in women with unexplained infertility. As a concluding remark of the study, the researchers emphasized that, Folic Acid supplementation or good folate status did not have a positive effect on pregnancy outcome following infertility treatment. Additionally, the researchers also included that intake of Folic Acid did not increase the possibility of a birth of a healthy baby after infertility treatment in women with unexplained infertility.

In another study, Smith (2011) researched into the need for women who want to conceive, take vitamins. The study comprised fifty six (56) women who attended fertility units of College London and Royal Free Hospitals. The study indicated that, all women trying to have babies should take special conception vitamin. The researcher also discovered that, women on vitamins were more likely to conceive. Sixty percent (60%) of these women on vitamins got pregnant three (3) months later as compared to twenty five percent (25%) of women on Folic Acid. The study also identified that, women on the multivitamin (Pregnacare) had higher levels of micro nutrients than those women on only Folic Acid. Finally the study concluded that, “all women considering pregnancy should take a specifically formulated prenatal micronutrient supplement to optimize their chances of conception”.

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A study was conducted by Barczentewicz & Machlarz (2012) in the United States with the aim of identifying food hypersensitivity and dietary intervention in diagnosis and therapy during the treatment of infertility and co-existing diseases. The researchers' findings revealed that increase consumptions of vegetables, proteins, fat dairy products, mono saturated fatty acids, iron from dietary supplements and multivitamin preparations were basically the fertility diet nutritional standards supporting female fertility.

A similar study was conducted by Comhaire & Decler (2012) on the beneficial effect of food supplementation with the Nutriceutical Improve for the treatment of infertile couple. The researchers aimed at assessing the possible benefits of food supplementation with Nutriceutical Improve for the treatment of the infertile couple. The study found out that, complementary food supplements with the Nutriceutical Improve (these are products derived from food sources with extra health benefits in addition to the basic nutritional value found in food), improves the quantity and functional quality of spermatozoa, significantly increasing their fertilizing potential. In the researchers concluding remark, they emphasize that, complementary food supplementation with Nutriceutical Improve, has significant beneficial effects for the treatment of the infertile couple.

#### **2.4 Psychosocial Management of Infertility**

Uschi Van den, Marysa, Wischmann, & Thorn (2010) conducted a qualitative study in Europe on counseling in fertility: individual, couple and group interventions with the aim of describing the common interventions used in infertility counseling for individuals, couples and in group setting. The study on counseling in infertility reported that, counseling offers the opportunity to explore, discover and clarify ways of living more pleasingly and resourcefully when fertility problems have been diagnosed. They further asserted that, group work was helpful during clinical practice

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of infertility counseling since such educational group can lead to sharing of experiences, receiving information, improving communication skills, learning relaxation techniques and finally provides other forms of psychological support. The researchers in their concluding remarks stated that, counseling offers the opportunity to explore couple dynamics when faced with infertility, learn to support and understand each other, enhance communication as well as gain insight into gender differences in the experience of infertility. The qualitative research methodology used by the researchers was adequate since it helped in addressing the problem at hand and also helped in obtaining in-depth information.

Similarly, a study conducted in the United Kingdom on the management of the infertile couple: an evidence based protocol with the aim of providing the healthcare professionals evidence-based management protocol for infertile couples. It was known from the findings of the study that, there was a need to employ counseling in the various fertility clinics so as to address the psychosocial needs as well as the medical needs of those affected with infertility. The researcher also concluded that, doctors managing these people must be familiar with the causes, investigations and treatment options available so as to give realistic information about their chances of conceiving (Kamel, 2010).

In their seminal work, Bovin, Scanlan, & Walker (1999) also carried out a research on why infertile patients were not using psychosocial counseling. The study aimed at examining the sources of support that infertile patients relied on when distressed, and the factors that prevented them from not utilizing such services. The study was qualitative in nature and consisted of a total sample size of one hundred and forty three infertile patients (143), forty nine (49) couples and forty five (45) additional women who were in their mid thirties and had suffered infertility for approximately six (6) years. The findings of the study portrayed that, although counseling was

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good for people especially in such condition, most patient choose their spouse and family members when faced with such problems rather than relying on formal support such as counseling. Participants were of the view that, the coping resources available for them in terms of informal support were sufficient to help them cope with their problems (infertility), while few of the participants also expressed the fact that they did not know who to contact and were also ignorant about the cost involved in the counseling process and whether they could afford.

In concluding the study, the researchers testified to the fact that, alternative ways of intervening for people with infertility would need to be developed since only a handful patronize the type of psychosocial services most frequently introduced / offered. The researchers' findings are said to be very relevant since they outlined some reasons that prevented people with fertility problems from utilizing the various available psychosocial services.

In a quite recent study, Read et al. (2013) conducted a qualitative study in Canada on psychosocial support needed for treating infertility. The study aimed at describing the psychosocial supports that infertile couples desire to help cope with infertility related distress. A total sample size of thirty two (32) heterosexual couples seeking fertility treatments were used for the study while data were collected through interviewing. The thematic analysis approach was used to analyze the received data. The researchers in their study found that, couples desired to meet with peers in order to fulfill their needs for shared experience while others preferred booklets or websites so as to get information about infertility and its treatment. The researchers also stated that, apart from couples desiring to meet with peers in order to fulfill their needs, most couples also preferred individual peer mentoring offered by former infertility patients since that was going to help them cope. The researchers lastly stated in their findings that although counseling was one of the psychological interventions for couples with fertility problems,

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patients did not seek professional counseling because of fear of being stigmatized as “having a problem” or due to some negative attitudes of health professionals.

As a concluding remark, the researchers acknowledged the fact that infertility treatments entail a long journey and they are mostly associated with several disappointments and therefore couples who find themselves in such a situation, need access to a variety of psychosocial services in order to help them cope with the problems associated to whatever they are going through. The researchers outlined some psychosocial services as counseling, mentoring system, and easy to understand written materials about the physical and emotional consequences on infertility treatment. The researchers’ conclusions reflected the findings of the study. Interviewing both partners together allowed partners to respond to each other’s comments thereby providing more details of each partner’s viewpoint. It also allowed in a whole range of answers from each partner.

In a related study, Chan et al. (2012) conducted a quantitative study on incorporating spirituality in psychosocial group intervention for women undergoing in-vitro fertilization in Hong Kong, China. The study aimed at improving the psychosocial and spiritual well-being of Chinese women undergoing IVF using the Integrative Body-Mind-Spirit (I-BMS) intervention. The researchers conducted the study on three hundred and thirty nine (339) women undergoing IVF treatment cycle. The study on incorporating spirituality in psychosocial group intervention revealed that, women who received the intervention reported lower levels of physical distress anxiety, and disorientation.

The study also identified that, some ways by which these women were relieved from their stressors included some form of I-BMS interventions like psycho-educational group counseling,

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development of inner strength, and attainment of internal peace and a sense of control over one's life. Additionally, during the intervention, the facilitator of the group addresses issues of physical health, psychosocial well-being (including emotional and interpersonal relationships), and spiritual well-being, with a focus on the meaning of life in times of difficulty. From the experiences narrated by the participants, the interventions significantly lowered their level of anxiety, became less disorientated, and had greater marital satisfaction as before. As a concluding remark of the study, the researchers stated that, it was necessary to integrate spirituality into existing mind-body intervention and by so doing women with fertility problems would have a better chance of overcoming their adversities. This research is found to be relevant and appropriate to the current study since much work has not been done on psychosocial management of women with infertility. The researchers also did a detailed work on incorporating spirituality into psychosocial interventions.

Similar to the above mentioned findings, Latifnejad Roudsari & Allan (2011) also researched into women's experience and preferences in relation to infertility counseling: a multifaith dialogue. The study was conducted at fertility clinics in the UK and Iran. The research aimed at exploring Muslim and Christian women's experiences and preferences with regards to infertility counseling. The study was qualitative in nature and consisted of thirty (30) infertile women affiliated to different denominations of Islam and Christianity. Data were collected using a semi-structured in-depth interview guide. Data were analyzed using the Straussian mode of grand theory. The findings of the study revealed that, childless women who were spiritual, experienced infertility as an elevating experience for spiritual growth and therefore relied more on their own religious coping strategies and less on formal support like counseling. In concluding their study, the researcher's expressed the need to incorporate religious and spiritual issues into the

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psychosocial needs of these women since it helped them cope better with their worrying situation.

Donkor & Sandall (2009) conducted a similar study on coping strategies of women seeking infertility treatment in Southern Ghana. The study was quantitative in nature and aimed at exploring the coping strategies adopted by women encountering infertility problems. Sample size was six hundred and fifteen (615) women attending gynecology clinic in three different health facilities. The findings of the study revealed that, as far as these women preferred to keep issues of their fertility problems to themselves due to the stigma associated with it, they rather preferred coping with their problems through drawing on their Christian faith. The researchers added that, infertile women could be assisted to build on effective coping strategies. The suggestions given by the researchers at the end of the study was very good since that would assist health workers especially those caring for these women to redirect their focus in implementing psychosocial support for these kinds of women.

Domar et al. (2000) in their seminal work studied on impact of group psychological interventions on distress in infertile women. The study was conducted at the Beth Israel Deaconess Medical Center and Harvard Medical School in the United States with the aim of determining whether group psychological interventions could prevent the surge. The study was quantitative in nature and consisted one hundred and eighty four (184) women who have been trying to have babies on their own between the period of one (1) and two (2) years. The findings of the study on the impact of group psychological interventions revealed that, participants who received cognitive behavioral therapy experienced significant psychological improvement at six (6) and twelve (12) months as compared to the control groups. The researchers also revealed that, women who participated in group psychological interventions experienced significant improvements as they

continued to attempt conception. The topic area was well researched into as evident by the fact that, the researchers at the end of the study were able to identify that, it was possible to prevent psychological distress with group psychological interventions and that of cognitive behavioral group intervention or therapy.

Mosalanejad & Khodabakshi Koolee (2012) conducted a study on the effect of group logo therapy on psychological distress in infertile women at Jahrom, Iran with the aim of determining the unique impact of spiritual psychotherapy on concerns about infertility and their perceived psychological stresses. The study was quantitative in nature and the use of questionnaire was employed. A total of eight hundred (800) infertile couples were used for the study and data analyzed using statistical package for social sciences (SPSS). The result revealed that, logotherapy as used in a form of psychological intervention decreases the level of perceived stress, while participants also reported decreased worry from infertility symptoms.

In their concluding remarks, the researchers stated that logotherapy reduces stress, decreases psychiatric symptoms of worry and perceived stress and lastly, emphasized on the fact that this approach tends to improve an infertile person's ability to deal with their problem of finding meaning to life. The quantitative approach used by the researchers was in a way inappropriate since employing a qualitative approach, would have allowed for more in-depth information from the participants.

## **2.5 Traditional Interventions of Infertility**

Bardaweel, Shehadeh, Suaifan, & Kilani (2013) studied on complementary and alternative medicine utilization among a sample of infertile couples. The study was conducted at in-vitro Fertilization (IVF) centers at both public and private hospitals and infertility private clinics with the aim of investigating the prevalence of complementary and alternative medicine (CAM) use

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among infertile couples, while it also looked at trends and factors contributing to CAM use for infertility treatment among these couples. The study was quantitative in nature and consisted of one thousand and twenty one (1021) infertile patients attending the two types of facility. Participants who engaged in the study answered a face to face questionnaire inquiring demographic information, use of CAM for medical condition and types of CAM used for infertility treatment.

The results of the study revealed that, about 44.7% of the participants used CAM therapies for infertility treatment of which most were females. Again, the study further revealed that, the most commonly used CAM therapies were herbs and spiritual healing.

The researchers' findings suggested that, there was a high use of CAM, particularly among young infertile females, well educated and with low income. It was also identified that religious healing and herbal therapies are the most widely CAM therapies used among infertile patients in Jordan.

The present researcher feels adaptation of a qualitative methodology would have been appropriate since that would have helped in obtaining in-depth information of why participants prefer CAM as an alternative choice for treating their fertility problems. Again, the conclusion reflected the findings of the study while the problem under study was also clearly defined.

In another study Ried & Stuart (2011) conducted a research on efficacy of traditional Chinese herbal medicine in the management of female infertility. The study aimed at assessing the effect of traditional Chinese Herbal Medicine (CHM) in the management of female infertility and on pregnancy rates compared with Western Medical (WM) treatment. The study was quantitatively done and the researchers undertook meta-analyses of non-randomized controlled trials or cohort studies, and compared clinical pregnancy rates achieved with Chinese herbal medicine versus

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Western medicine. The result of the study revealed that, there was a clinical pregnancy rate of 50% among females who used Chinese herbal medicine as compared with only 30% of those females who used Western medicines.

The researchers recommended that, traditional Chinese herbal medicine diagnostic tools and therapy should be incorporated in the current Western medicine model of infertility treatment since that could improve pregnancy rate while reducing treatment time frames as well as emotional and financial burdens. The study was well completed according to its objective. The findings of the research were also very vital since it was able to quantify the percentage of participants who were successful in using herbs as an alternative treatment in the management of infertility.

In addition to the aforementioned literature, a similar study was conducted in Turkey among women with fertility problems and the use of traditional practices. The study was quantitative in nature and comprised 5700 women who attended an infertility outpatient clinic. The findings of the study revealed that 27.3% of these women trying for fertility treatment had tried a traditional practice, while 67.8% who tried traditional practices used a herbal mixture. The researchers further explained that, even though much of these women experienced adverse effects related with traditional practices, they still patronize it because of hope. It was again revealed that, women who had received unsuccessful medical treatment for infertility and those who had also experienced side effects after medical treatment, had higher rate use of these traditional practices (Ayaz & Yaman-Efe, 2010).

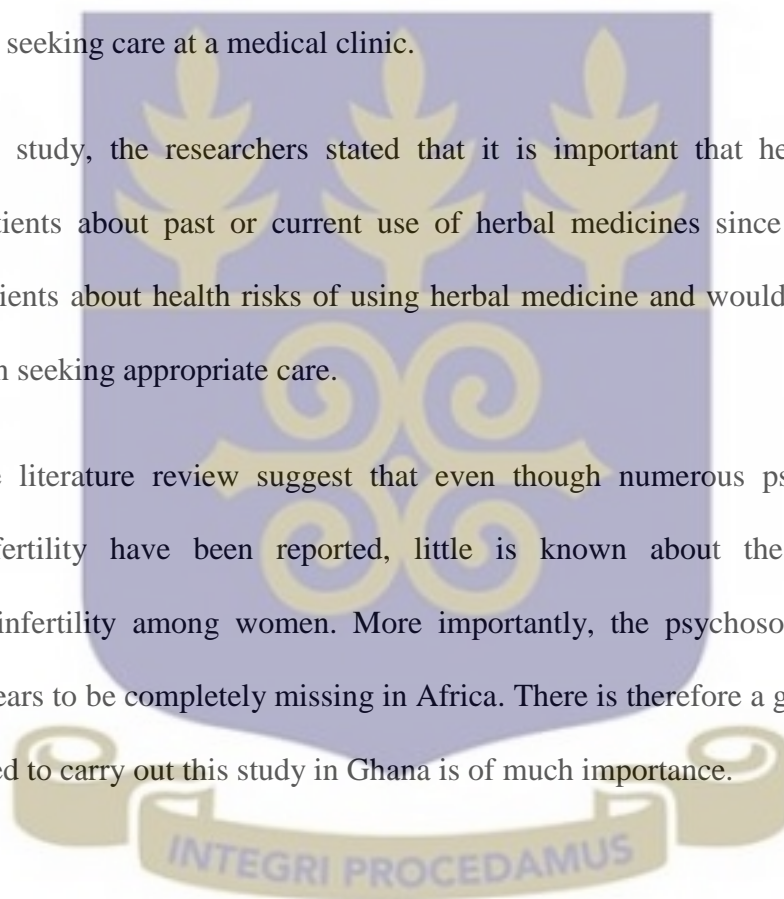
A quantitative study was conducted by Kaadaaga et al. (2014) in Uganda on the prevalence and factors associated with the use of herbal medicine among women attending an infertility clinic.

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The study focused on determining the occurrences and factors associated with herbal medicines use by women attending infertility clinic. The study was cross-sectional in nature and comprised two hundred and sixty (260) women attending the fertility clinic. The finding of the study was inconsistent with other studies that stated that, in-vitro fertilization was the first-line management for the treatment of infertility among women (thus IVF representing 71.1%). The reason given by the researchers was that, 76.2% of the participants had used herbal medicines to treat their infertility prior to seeking care at a medical clinic.

Concluding their study, the researchers stated that it is important that health professionals enquire from patients about past or current use of herbal medicines since this may help in educating the patients about health risks of using herbal medicine and would go a long way in reducing delays in seeking appropriate care.

In summary, the literature review suggest that even though numerous psychosocial health problems of infertility have been reported, little is known about the bio-psychosocial management of infertility among women. More importantly, the psychosocial aspect of the management appears to be completely missing in Africa. There is therefore a gap in the literature and hence the need to carry out this study in Ghana is of much importance.



## **CHAPTER THREE**

### **METHODOLOGY**

Research methodology is a collective term for the structured process of conducting a research. It also describes the method employed in identifying steps, procedures, and strategies used for data collection and analysis in a study. This chapter therefore deals with the research design, research setting, target population, sampling technique, data gathering method, analysis of data, research rigor, and ethical consideration.

#### **3.1 Research Design**

Qualitative research design in a form of an explorative descriptive approach was used for the study since it is deemed most appropriate for a more in-depth explorative study. The design sought to find out why a particular problem exists, identify new knowledge, new insights, understanding and as well identify new meanings to a problem under study. Qualitative research design also helps to have a better understanding of an issue or problem that is being investigated while it also brings out an in-depth understanding of existing bio-psychosocial management of infertile women. The design was chosen because the study design is particularly useful for researchers wanting to know who, what, when, where and the why of an event, what the concerns of people are about an event, and finally, the responses of people (e.g. thoughts, feelings and attitudes) towards an event, who uses a service and when do they use it (Sandelowski, 2000).

Qualitative research designs use many approaches. Three (3) of the most commonly used approaches to qualitative research in nursing are: ethnography, grounded theory, and phenomenology (Hek & Moule, 2006). Ethnography involves instances where researchers live among the group of individuals being studied. Grounded theory involves inductive type of

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research, based or "grounded" in the observations or data from which it was developed. It also involves the uses of variety of data sources, including quantitative data, review of records, interviews, observation and surveys while phenomenology on the other hand, involves exploring the subjective reality of an event or phenomenon as perceived by the study population or participants. It also involves the experiences of the person who has lived that experiences and finally attempts to discover and describe the lived experiences as explained by the person who has experienced that (Hek & Moule, 2006). In this study, the research seeks to understand the subjective bio-psychosocial management of women with infertility and for which reason, the researcher intends to use phenomenological approach since that would be most appropriate for the study, and further help get deeper understanding of the issue that is being investigated into. Also the design was preferred to the others because of the fact that, almost all the literatures reviewed under infertility used a quantitative study which sought to find out what, when, and how of an existing problem, but the current researcher believes that, there is the need to have an effective intervention for this people and therefore, the need to address the 'why' than the 'what' would be of much importance.

### **3.2 Research settings**

Research setting is an environment in which the research is carried out. The study was conducted at the Korle-Bu Teaching Hospital. The hospital which means the valley of the Korle lagoon was established as a general hospital to address the health needs of the indigenous people under Sir Gordon Guggisberg's administration, the then Governor of the Gold Coast in October 9th, 1923. The hospital is situated in the Southern part of Greater Accra Region. It is the largest teaching hospital in the country, and one of the largest on the African continent. As a tertiary level

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hospital in the country, cases are referred from all over even to the extent that some neighbouring countries do refer their cases as well.

Being a teaching hospital, it also serves as the foremost training facility for medical students and other health programmes of which some are: Medical students from University of Ghana Medical School, Nursing students from various nursing training institutions, University of Ghana and other private and state nursing schools, and Postgraduate medical programmes of the Ghana College of physicians and surgeons, and West African College of Surgeons. It also has research department which undertakes research in all its specialties and also does collaborative research works with other institutions such as University of Ghana, Ministry of Health and External Health Institutions.

The hospital at the moment has about two thousand (2000) bed capacity and three thousand five hundred (3,500) staff strength while it also sees to an average daily attendance of one thousand five hundred (1500) patients. It has seventeen (17) clinical and diagnostic departments or units. It is also made up of four (4) special centers namely the National Cardiothoracic Center, the National Radiotherapy Center, Nuclear Medicine and the Reconstructive Plastic Surgery and Burns Unit. The hospital has over seventeen (17) clinical departments within, among which are: Dental, Surgical Medical Emergency, fevers and Pharmacy departments. The study was undertaken at the obstetrics and gynecology outpatient department. The department provides two hundred and forty (240) beds for obstetrics and one hundred and fourteen (114) beds for gynecology. The department is divided into five units with each unit being headed by a senior consultant. Doctors also rotate through the units at every point in time. The unit also has its clinic days, theater and grand ward rounds days.

Korle-Bu was preferred to other facilities because it a tertiary hospital and serves whole lots of people with different gynecological problems whiles it also serves as a referral point with a very large number of women attending clinic every week. Finally, the facility was again preferred because of its proximity to the researcher.

### **3.3 Target Population**

The target population for the study consisted of women between the ages of twenty (20) to forty five (45) years diagnosed of infertility for at least a year or more, who often attend and receive treatment from the gynecological outpatient clinic at the Korle-Bu Teaching Hospital.

### **3.4 Inclusion and exclusion criteria**

#### **3.4.1 Inclusion Criteria**

Participants eligible for the study were women aged between twenty (20) and forty five (45) years, diagnosed of infertility after a year or more of unprotected sexual intercourse and often attend and receive treatment at the gynecological outpatient clinic at the Korle-Bu Teaching Hospital. Participants able to speak and understand Akan, Ga or English were also included since the present researcher is fluent and communicates better in these three languages.

Although the use of several languages comes with its limitations, the researcher still thinks it was best using all the three (3) languages since that would enhance rich responses thereby broaden the sample composition. Employing these different languages, also allowed these women to express themselves better.

### **3.4.2 Exclusion Criteria**

Women who were not yet diagnosed of infertility, those who could not express themselves in English, Akan or Ga and finally, those who did not want to participate voluntarily were excluded.

### **3.5 Sample Size and Sampling Technique**

A sample is a subgroup of a population that is selected for a particular study, and the members of a sample are the participants (Frey, Carl, & Gary, 2002). Usually in qualitative study, a small number of participants are selected because of the extensive documentations that may result from the participants and it is also mostly determined by the concept of saturation whereby no new responses come out from the respondents as they all virtually begin to say the same thing (Crewell, 2014; Frey et al., 2002). Therefore data saturation determined the sample size and no new or rich information was gathered after the fourteenth participant.

The study also employed purposive sampling to select participants. Purposive sampling is a non-probability method in which the researcher selects study participants on the basis of personal judgement and on a particular characteristics (Polit, Beck, & Hungler, 2001). This technique was used because the researcher sought to explore, describe and report on the bio-psychosocial management of infertility among women.

### **3.6 Data Collection Tool**

Data collection is a systematic gathering of information, relevant to the research purpose, or the specific objectives, questions or hypothesis of the study. Data for the study was collected through interviewing the participants using a semi-structured interview guide. The interview guide consisted of the following parts, section A, B, C, and D. Section A comprised of participants'

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demographic data which helped the establishment of good rapport and thus enabled the participants build confidence in the researcher while it also enabled them give essential information needed for the research questions. Section B, consisted of questions that gave participants the chance to talk about some psychosocial factors associated with their condition. Section C comprised of interview guide that gave participants the opportunity to talk about how they are being managed biologically or medically, while the last Section D focused on questions that gave participants the chance to talk about how they were managed psychosocially. The questions for the interview guide were pretested among four (4) participants with similar characteristics to the study participants at Ga South Municipal Hospital. This enabled the researcher to make the necessary amendments and improved on the interview skills. (See Appendix E for the interview guide).

### **3.7 Data Gathering Procedure**

Ethical clearance was sought from Institutional Review Board of Noguchi Memorial Institute for Medical Research, (IRB-NMIMR) (See Appendix A). An introductory and a permission letter signed by the Dean of School of Nursing, University of Ghana Legon was obtained to the head of Gynecological Department of the Korle-Bu Teaching Hospital in order to seek permission to use the gynecology department as a point of contact for participants recruitment (See Appendix B). The letter indicated the nature and purpose of the research. After permission was granted by the departmental head of the unit, the nurse in-charge of the gynecology clinic was also informed about the purpose of the research and the target population needed for the study. Participants who fell within the inclusion criteria and were willing to partake in the study were recruited individually from the gynecological clinic with the help of the nurse in-charge and with her permission. The interview was conducted in a designated place where privacy was ensured.

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The days and venue for the study were discussed with the participants making sure that, the interview was scheduled at their convenience. Participants were also assured of confidentiality and how data would be managed to promote privacy. They were also informed that, they have every right to withdraw at any point in time they felt like doing so. The purpose of the research was also explained to them. They were also informed that any information they gave would be audio recorded using audio tapes so as to make transcribing easier. Participants who agreed to partake in the study were given an information sheet (See Appendix C) and consent forms (See Appendix D) which had detailed information about the research. The languages used for the study were English, Twi and Ga and the reason for choosing those three languages were due to the fact that, they were the most common languages and moreover, the researcher is fluent in all and would be able to interpret.

The interview section covered issues relating to the bio-psychosocial management of women with infertility using a semi-structured interview guide (See Appendix E).

The time allotted for participants to be interviewed was 30 to 45 minutes. During the interview, leading questions were avoided. The help of a counselor was not really needed since few of the participants who were a bit emotional about their challenge were able to be controlled as soon as the present researcher paused the interview session and gave them some form of assurance.

### **3.8 Data Management**

The voice recordings as well as interview materials were kept in the researcher's custody and only the researcher and her supervisors had access to it. Personal information including demographic data was separated from the interviewed data making sure it was kept under lock and key so as to be safe. A soft copy of the tape and other information were stored on a pen drive and a hard copy of the transcripts and other documents kept under lock and key as a backup. The

transcript and the consent forms would be kept for about five (5) years following completion of the study so that when it becomes necessary to provide it in relation to the study, it would be made available.

### **3.9 Data Processing and Analysis**

Data processing and analysis in qualitative research refers to the point in the research process where the researcher has the opportunity to put into words all the recorded interviews on tapes into writing. It also involves listening attentively to narratives, sharing descriptions, and understanding what has been said as well as maintaining the highest degree of truthfulness (Carpenter & Speziale, 2007).

Analysis of data commences as soon as interview starts. All the recorded interviews on tape were transcribed verbatim by the researcher at the end of each interview. The accuracy of the transcribed transcripts were re-checked by reading repeatedly and listening to the audio-tape recordings at the same time. After all audio-recordings have been transcribed, data were typed and then analyzed using thematic content analysis (Flick, 2006).

Thematic analysis has to do with the process of labeling qualitative information to identify and interpret patterns in an unprocessed or raw text. In thematic analysis, the researcher familiarizes herself with the transcript by reading carefully in order to identify recurring themes. The themes are then given codes to differentiate them after which the researcher groups codes into a hierarchy with larger themes and their corresponding subthemes using a carefully developed thematic code frame.

The emerging themes and subthemes were reviewed by the researcher, and the relationships among categories were used to describe the bio-psychosocial management of infertility among women. All phrases or sentences that fitted a particular code were also labeled as such.

### **3.10 Research Rigor**

Rigor in qualitative research refers to the establishment of trustworthiness of the research findings. Carpenter & Speziale (2007) suggested four criteria for establishing trustworthiness of a study and these are credibility, transferability, dependability and confirmability.

The researcher therefore used these concepts to measure trustworthiness of the research findings. In this study, credibility was ensured by reviewing initial interview in order to assess the quality of the interview and competence of the researcher's questioning skills. Secondly, credibility was ensured by making sure that, participants were given the opportunity to authenticate, verify and re-read the findings in order to make sure that, their views were exactly what were transcribed and finally to cross check if the researcher is on track. In ensuring credibility, the verbatim transcribed interview written data and the research findings were taken back to the participants and explained in their local dialect for their comments after which all documents, field notes, personal journals and dairies were discussed with the supervisors thereby allowing for clarification of the information.

Plummer-D'amato (2008) defined transferability in a qualitative study as when a result of a study is also applicable to another similar setting, group, or context. Transferability was again defined as the degree to which themes or research protocols can be transferred or generalized to other settings, contexts, or populations (Malterud, 2001). To achieve this, the researcher provided an

in-depth information to allow any reader determine whether the findings were applicable (or can be transferred to) another specific environment.

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

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

### **3.11 Ethical Consideration**

Ethical issues are basically, principles that should be considered in both quantitative and qualitative research and these include ethical clearance, privacy, and confidentiality. In order to ensure proper ethical consideration, researchers must observe the following principles when dealing with any research that involves human subjects. First, one must obtain informed consent, participation must be voluntary and not necessarily the use of coercive means. Lastly participants' confidentiality and anonymity must also be ensured by the researcher (Carpenter & Speziale, 2007).

Ethical consideration for the study was sought through ethical committee at the Noguchi Memorial Institute for Medical Research (NMIMR) of the University of Ghana, Legon for

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ethical clearance and approval. This was essential in order to assure the rights, safety and protection of the participants. Secondly, permission was sought from the head of department thus the doctor in-charge of the gynecology department, and as well the nurses in-charge of the units.

Written consent forms were given to participants who met the inclusion criteria while the purpose and significance of the study was explained to them. The scheduled date and time for the study was also fixed at their convenience. Participants were assured that, refusal to participate or withdraw from the study would not affect their care in any way. All participants were given the opportunity to ask questions that bothered their minds. After all questions had been addressed, participants were asked to endorse the consent form individually by signing or thumb printing, while they also kept a copy of the consent form.

The current researcher ensured confidentiality and privacy of the participants by making sure that, personal information had no identification while their real names too were replaced with a pseudonym to avoid traces. Again participation in the study was voluntarily. Participants were only interviewed upon agreeing to partake in the study after everything about the study was understood by them.

Consent forms, audiotapes, and typed transcripts would be kept confidential for at least five (5) years following completion of the study, after which data would be destroyed. The people who would only have access to the transcript and tapes would be the managerial committee and the researcher.

## **CHAPTER FOUR**

### **FINDINGS OF THE STUDY**

This chapter presents the findings of the study. Based on the model used, psychological experiences, social experiences, biological management and psychosocial management emerged as the main themes with twenty two (22) sub-themes. Out of these, one theme (traditional intervention) which was not related to the model used, emerged from thematic content analysis.

The demographic characteristics of the participants are presented first followed by the themes.

#### **4.1 Socio-demographic characteristics of participants**

This describes the personal profile of the fourteen (14) participants who were interviewed. The ages of the participants were between twenty seven (27) and forty two (42) years; three (3) of the participants were below thirty (30) years, ten (10) were between thirty (30) and thirty nine (39) years and the remaining one (1) was forty two (42) years. All participants were women having problems with fertility and were being managed at the Korle-Bu Teaching Hospital (Gynecological Department). The duration of participants inability to conceive ranges from between two (2) to twelve (12) years. The language spoken by participants was in three categories which were Twi, Ga and English. Nine (9) of the participants spoke Twi, three (3) spoke English and two (2) spoke Ga. All the participants had some form of formal education with one being a graduate. Their occupational categories were grouped into two (Government and Private); five (5) of the participants were government workers while the rest were self employed. All the fourteen participants were married. Two (2) of them had a child each and were looking forward to have another while the remaining eleven (11) had no child at all. All participants were Christians from diverse denominations except three (3) who were Muslims.

## 4.2 Organization of Themes

Based on the constructs of the theory, five (5) themes and twenty two (22) sub-themes emerged. One (1) other theme which was not related to the theory emerged from thematic content analysis. Details of all the themes and sub-themes are presented in table 4.1

**Table 4.1: Themes and sub-themes from transcribed data**

<b>THEMES</b>	<b>SUB-THEMES</b>
1. Psychological Experience	<ul style="list-style-type: none"> <li>▪ Loneliness</li> <li>▪ Anxiety</li> <li>▪ Depression</li> <li>▪ Lack of concentration</li> <li>▪ Worrying</li> <li>▪ Thinking</li> <li>▪ Less sexual satisfaction</li> </ul>
2. Social Experience	<ul style="list-style-type: none"> <li>▪ Stigmatization</li> <li>▪ Intentional isolation</li> <li>▪ Marital instability</li> <li>▪ Inability to attend social function</li> </ul>
3. Biological Management	<ul style="list-style-type: none"> <li>▪ Assisted reproductive therapy</li> <li>▪ Drugs</li> <li>▪ Nutrition</li> <li>▪ Frequent sexual intercourse</li> </ul>
4. Psychosocial Management	<ul style="list-style-type: none"> <li>▪ Counselling from family members</li> <li>▪ Counselling from friends</li> <li>▪ Peer mentoring</li> <li>▪ Drawing more closely to God or Allah</li> <li>▪ Reading or watching of inspirational movies</li> </ul>
5. Traditional Intervention	<ul style="list-style-type: none"> <li>▪ Fetish spiritualist assistance</li> <li>▪ Herbal preparations</li> </ul>

## 4.3 Psychological Experience

Women with fertility problems experienced a whole lot of psychological stressors at their homes, work places and even at their churches. Women expressed their psychological experiences in

seven (7) categories: loneliness, anxiety, depression, lack of concentration, worrying, thinking and less sexual satisfaction.

#### **4.3.1 Loneliness**

Loneliness was experienced by the women in diverse forms. Most of the women expressed that, they felt very lonely when they come home from work and realized their homes were without a cry or a sound of a baby. Others shared that, sometimes they wished after close of work, they could involve themselves in extra chores like changing of diapers or cuddling a baby. Unfortunately, it was not so. Some participants expressed their feelings in this manner:

*I always feel lonely and at all times imagined that if I were to be having a child by now, I would have been cuddling or playing with him or her or even changing his or her diaper..... I have always bargained with God to at least let me get pregnant for once so that I can also say that, I for once got pregnant and I had a miscarriage. Unfortunately for me, I have not even gotten pregnant before considering the fact that, I have been married for over three (3) years now. In fact I feel very lonely most of the time and genuinely wished I was with my own child. I don't know why I have to go through all of this. (Elinam)*

A thirty three (33) year old participant also shared how her inability to conceive made her regret getting into a relationship. She lamented:

*Madam, ever since I got married, I have never been myself. I am always lonely and wished I had a baby I could even hear his / her cry but unfortunately for me, nothing of that sort. Sometimes, I expect that my husband will at least comfort or even console me but because he has one (1) child already, he ignores me and rather prefers to go out with his child than staying around me. (Afia)*

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Few of the women also expressed that, aside the fact that their loneliness was attributed to their incapability to bear a child, the absence of their husbands at home made them felt very lonely, while lack of support and consolation from them also add up to what they already felt. Two (2) of the women shared their stories as follows:

*I do experience loneliness sometimes and these are days that my husband had travelled and I am left all alone in the house. I wished I had a child by me at least to be talking to, playing with or even sending him / her on errands but I will look around and not even a sign of a child's cry "hmmmmmm....." (Afua)*

*I experience much loneliness especially days that my husband isn't around. I could cry my heart out and until I get a consolation from him, I do not stop crying. (Halimatu)*

Apart from the above factors that led these women to feel very lonely, a thirty (30) year old woman expressed what triggered her loneliness in a different dimension. She shared her case as this:

*I experience loneliness a lot. My sister always use my inability to conceive as a yardstick to tell me what I was not ready to hear any time there is a misunderstanding between us so as to silent me. Other times, she will carry one of her children and she will be like, can't you see I have brought children to this home? Where are yours too... .... (Adukwei)*

#### **4.3.2 Anxiety**

Anxiety stems from the fact that most women felt they were aging but showed no sign of pregnancy. Hence, they were scared of becoming old without carrying their own children. These fears were also coupled with the fact that, women claimed that their friends they married before

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and those within the same year all have their own children. Few of them also attributed their anxiety to how medical investigations proved negative (meaning they were okay to have babies), while they also lived a life full of holiness and do not see why they should face the problem with child bearing. Some women bitterly shared their experiences as follows:

*Sometimes, I get very anxious when I cast my mind back and see that all those I got married before them are having their babies. It is as if I am the only one left behind. (Afia)*

*I am aging, I am aging..... Very soon I will get to the pre-menopausal stage. What will I do when it happens? I cannot even brag of a child. (Serwaa)*

One woman who said she got married as a virgin and never did anything awful to deserve whatever she was going through also had a diverse view to share in relation to anxiety.

*Hmmmmmm..... I am always worried and very anxious. My husband was my first love and that aside too I have never seen any other man in my life. I have also not even thought of having an abortion before so I kept asking myself.... why me, why me, why is all of this happening to me. My doctor even confessed that I was over anxious and that is my main problem. (Elinam)*

Fear of losing a husband was also one of the reasons why women experienced anxiety. Two (2) of the women who were Muslims shared that, because their customs promotes polygamy, it placed much fear on them in view of losing their husbands to other women who could give them babies. These were what they had to say:

*I am always anxious madam. Being a Muslim, you know that in our tradition, a man can marry more than one (1) wife and because of this, sometimes I feel if I do not try my very best to get*

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*myself pregnant, my husband will one day go in for another woman to give him children although he has not expressed that yet to me. (Salamatu)*

The other also anxiously expressed how anxiously she was especially when she sees her husband in an unstable and moody state.

*I am anxious and desperate. In fact I fear that my husband will go and marry another woman. I am a Muslim and so is my husband. We practice polygamous marriage but my husband did not want to go in for another woman because of the hard economy. For the look of things, I realized he is no more the happy man I got married to; hence I fear in future if I don't try my best in getting him a child, he will go in for another woman to replace me. (Siadatu)*

#### **4.3.3 Depression**

Feelings of depression among some women were ascribed to the fact that, they have been married for a couple of years and there is still no sign of pregnancy. Other women expressed that, the humiliation from colleagues and friends at both the work place and homes makes them feel very depressed. A participant expressed her challenge as this:

*I am always depressed. After three (3) whole years of marriage, the society expects that I either get pregnant or at least carry my own baby and since I have failed to achieve that, anybody at all speaks to me anyhow without respect. Sometimes friends do ask me what I was waiting for..... Even my own husband puts pressure on me, he always ask me when I was going to get pregnant for him. Sometimes he goes to the extent of comparing me with other ladies he once made love with and claimed they got*

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*pregnant. In fact madam, hearing all this makes me feel very depressed. (Ama)*

One (1) woman bitterly expressed her ordeal as; whether child or no child, she would have still been fine. She said, unfortunately for me, the society in which I found myself in will never let me be. She again confessed that, what really triggered her state of depression was how some women maltreated her and gave her all sorts of names. This was how she described the challenges she goes through:

*I am always depressed and worried. Madam, my fellow women make me feel very bad and sorrowful. Sometimes in my own shop people come over and accuse me of having chewed all the babies in my womb. Some even go to the extent of calling my eleven (11) year old boy “jimi...jimi” meaning a fool since people feel because he is my only child, he is over pampered and has therefore grown to be like a fool. (Siadatu)*

Another woman also attributed her state of depression to the fact that any time she heard her friends and colleagues speak about their children in her presence, she cannot just control herself.

*When I come back from work and realized no one was around, I cry throughout especially when at work I hear colleagues and friends talked about their children. Other times too, I often have sleepless nights and therefore wake up in the middle of the night and ponder over issues in my heart whiles I ask God why He was not allowing me to even take a seed and miscarriage so that I can also boast of the fact that I took a seed but it got aborted. In fact my situation has made me become very depressed. (Elinam)*

Two (2) of the women expressed why they felt depressed in a different manner. They uttered that, anytime their menses delays and were hopeful of been pregnant, within a day or two (2) of

jubilation, they end up seeing their menses again. They expressed that, this act depresses them more. **Adukwei** shared her story of what makes her feel depressed more as:

*Madam, I feel very depressed and frustrated to the extent that I sometimes feel like drinking poison to end it all. I am going through a lot especially when my menses delays for a while and I feel that I am pregnant, by the next two to three days, I see myself bleeding again. In fact I feel so depressed and sad and if not for the word of God I have been using to console myself, I would have drunk poison by now to end it all. (Adukwei)*

Similarly, **Serwaa** reported that:

*I feel very depressed when sometimes my menses delays and I have the hope that may be I am pregnant then only for me to realize in two (2) days time that I am bleeding. In fact when it happens like that, I feel very much depressed and sorrowful for myself. In my family, we are all girls and fortunately for us, we are all married. Currently, all my sisters are carrying their children except me so sometimes I do not really understand why I should go through this at all. (Serwaa)*

#### **4.3.4 Lack of concentration**

Lack of concentration experienced by women with fertility problems had to do with the fact that, they sometimes get carried away by their challenges. Some women reported not being able to concentrate in most cases. This is what a participant had to say:

*I sometimes lose concentration to the extent that, I even forget to eat at times. (Halimatu)*

Another participant also expressed her feelings as this:

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*Sometimes, I do think and think and think to the extent that I lose concentration and as well lose track of whatever i am doing.*

**(Adjoa)**

**Salamatu** also described her feelings as:

*Sometimes I do sit down then unconsciously i begin to talk to myself as if I am mad. (Salamatu)*

A thirty three (33) year old woman confessed that, her difficulty has landed her in losing concentration even when she is selling at her shop. She voiced that, she even want to stop going to the shop to sell since her situation has made her such that, focusing has become a problem now for her and do not even notice when someone was around to buy something.

*Sometimes, I prefer staying at home and crying my heart out to Allah than going to the shop to sell. The reason being that, sometimes at the shop, I lose total concentration and due to that, a customer who wants to buy something must call me over five (5) times and even with that, until that person taps me physically, i don't hear anything. (Siadatu)*

#### **4.3.5 Worrying**

Worrying was another major challenge women with fertility problems had to battle with. These were quiet intense and varied. Although their worries were based on one condition, they all had their individual reasons for getting worried. Some were worried because of the fact that, their colleagues and age mates got married and had children whiles they are not. Others also attributed their worries to the fact that, they always felt humiliated among people. Another group also ascribed it to the fact that, instead of their husbands encouraging them, they rather mounted to the pressure.

This is what a twenty eight (28) year old woman had to say:

*I am always worried and disturbed. All my colleagues I got married before them have all conceived and always carry their babies about. In fact I am very worried because I do not know what I have done to Allah to incur such punishment. (Halimatu)*

A thirty three (33) year old woman also had this to say:

*Auntie..... I feel very worried and sad because of how people treat me. I am being treated harshly for a problem that I did not bring upon myself. I am treated as if I am nobody and it pains me a lot. (Adjoa)*

Another woman also expressed that:

*I have gone through a lot of hard times especially from my husband and due to that I have been thinking and worrying a lot. (Afia)*

In the words of Yaa, she asserted that sometimes the pressure she encounters from her husband made her felt worried and stressed. She described how she felt as this:

*I become so worried to the extent that, sometimes I do not even feel like eating. My husband always says that, "Maame" we are keeping long ooooooo, when at all are we also going to give birth and have our own children? Sometimes I assure him by telling him God was going to do it, in fact I feel very disturbed and worried and therefore wished other people's children were my own blood. (Yaa)*

#### **4.3.6 Less sexual satisfaction**

Most women stated that they experienced less sexual satisfaction of which they felt was due to their mind set. Again they uttered that, if all these years of love making could not made them pregnant, they did not see the need to engage in love making which would eventually make them get satisfaction. Some also questioned the probability of getting pregnant when they engage themselves in good sex. Due to this and many other thoughts running through their minds, these women expressed that they experienced less sexual satisfaction as expressed below.

*Hmmmmmm..... I do not really enjoy sex with my husband and this is because in my heart and mind, I feel that in all these years of regular intercourse, I have not been able to get pregnant so I do not see the need to enjoy sex now since nothing good comes out of it. Sometimes I do not even feel for sex because I feel there was no use. (Akosua)*

A thirty four (34) year old woman similarly reported the following

*In fact sometimes I do tell my husband that I do not feel for sex or feel like having sex with him. This is because all these years of our relationship, we have been making love all day long and nothing is showing forth. Hence, I do not see why we should still continue with love making. Due to these thoughts that run through my mind, I do not really enjoy sex anytime we make love. (Serwaa)*

Another woman also shared that, she really feels bothered any time her husband intended making love with her. She confessed that when it happened like that, she does not really get any satisfaction.

*Sometimes when my husband wants to make love with me, I feel he is bothering me. I have this notion that, if all these years of love*

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*making, nothing really came out of it, i see no reason why we should keep bothering ourselves with sex. Due to this and other thoughts that run through my mind, I always experience less sexual satisfaction. (Esi)*

A thirty three (33) year old woman shared a different view altogether. She bitterly shared how her husband had being maltreating her ever since she got married and there had not been any sign of pregnancy. She narrated this:

*My husband travels for over a month in the name of work and only Allah knows what he does outside, and even when he comes back home, he stays inside the room throughout and by the time I finish with the chores in the house and go to him in the room, he pretends to be sleeping. When it happens like that, formally I could wake him up but now, I dare not do such a thing. Due to this and other things I go through in his hands, I now experience less sexual satisfaction. (Siadatu)*

#### **4.3.7. Thinking**

Thinking refers to cognitive experience that involves meditating on a problem or becoming mentally aware of a problem. Most women confirmed that, the problem they found themselves in and as well as the humiliation they suffer from loved ones, friends, and colleagues made them suffer a lot emotionally. Below are some narrations:

*Hmmm..... madam I have gone through a lot. Sometimes I could think and think and think to the extent that, sometimes it looks as if I have lost my senses. (Salamatu)*

*Even my younger sister who just got married recently, have two (2) children now. Why shouldn't I think? Sometimes I get very worried*

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*and hurt and ask myself why all these things are happening to me.*

**(Yaa)**

One (1) woman shared a different story altogether in relation to thinking as being one of the psychological experiences women with fertility problems encountered. She confessed that, she usually feels something was missing in her life. She also voiced out that, she sees herself as being incomplete and due to this, she often thinks a lot.

*I am incomplete, I feel something is missing, I also feel I am a half woman and not matured enough since I cannot conceive. Anytime I dress, I feel am not okay at all..... and this is because when I compare myself with those who are married like my type, they all have their own children. In fact my mind tells me they are far better than me. Madam ever since I got married, I have never been myself. (Afia)*

Another woman who has developed a different condition as a result of how she thinks of late also shared her experiences, while she also confessed regretted getting married.

*I have developed a very strong headache of how I now think. I ask myself, why on earth at all should I have engaged myself into marriage, wouldn't I have been better off if I were single? (Adjoa)*

#### **4.4 Social Experiences**

This section focuses on women's relationship to society, its organization, interaction with human beings and the environment. Most women expressed how they were unfairly treated by people they came in contact with. Others also shared how they were humiliated at their churches by going through series of deliverance any time they were present at church. Majority of these women also expressed that due to the harsh maltreatment they experienced, they find it very

difficult mingling with people let alone attending social programmes. They also tried as much as they could to always isolate themselves from people so as to be free from embarrassments.

#### **4.4.1 Stigmatization**

Stigmatization was one of the major social stressors participants experienced. Participants expressed that they were always stigmatized whether at work, social gathering, church, and everywhere they found themselves as far as they were known by those around. Majority of the women attested to the fact that, they were always stigmatized because of their inability to conceive.

A woman shared how she finally had to stop her church she loves so much and join that of her husband's. Her reasons were that, the humiliations she had to go through in her own church were just unbearable for her and for that matter needed to take that bold decision. She shared her story as this:

*I had to stop my own church and join that of my husband because of stigma. Although, I was vibrant at my church and did not want to leave there, circumstances made me took that bold decision of leaving since the pressure there was too much for me to bear. She lamented; as for my husband's church, nobody knows me and knew when I got married. I therefore do whatever I have to do freely unlike my church that at every point in time, I am being asked how soon I was going to carry my own child. (Elinam)*

Another woman who also shared similar experience with that of the above unfortunately did not have it easy even when she had to stop her church and join that of her husband's. She shared that, the terrible experiences she went through in her own church and as a result of that had to stop hers and join that of her husband's, rather worsened the whole situation. She had this to say:

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*I thought stopping my church and joining that of my husband's own will relieve me of the stigma I am experiencing. Unfortunately, issues got worse rather at my husband's church. In my husband's church, almost all the prophets that visited the church called me in front and gave me all sorts of prophecies pertaining to my child bearing. Some prophets said within few weeks I was going to get pregnant while others also said within few months. Unfortunately for me, all these times passed by and there isn't any sign of pregnancy. In fact these acts of these pastors rather make me feel more stigmatized. (Adjoa)*

A thirty three (33) year old woman also shared a similar story of how she always felt humiliated and stigmatized at church because of the series of deliverances she has to undergo.

*I always go through deliverance at church and this is because, my pastor knew I had a problem and always called me in front and delivers me. Madam, this act of my pastor now makes me feel much stigmatized anytime am at church. (Afia)*

Two (2) other women also shared how colleagues and friends at both their work places and homes humiliated them and always made them felt stigmatised due the a problem they never intentionally incurred upon themselves. They shared these:

*I am living in a compound house that all the women there have conceived and have children. The least number of children one has is two (2). Coincidentally, these women come out most often in the evening to have fresh air, cook or do something else and in an attempt to make me feel stigmatized and humiliated, they verbally abuse me by singing all sort of songs just to insult me. Singing..... What are you waiting for womaaaaaan..... Is your husband not giving you all that you neeeeeeeed..... Give*

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*birth oooooooooo..... Stop chopping your husband's money and give birth ooooooo. (Halimatu)*

*Colleagues at work always make me feel stigmatized. They speak indirectly to me and pass comments that hurt me a lot. Others also gossip about my inability to conceive. When they realized I was coming, they start staring at me in some way. Other times, when I felt tired and wanted to rest for a while before going home, some colleagues pass comments like.....if you were to be having a child in the house, would you have waited for an extra minute or hour. Go home oooooo, your mother in law needs a grandchild to carry..... jokingly, my colleagues say all sorts of things to me and due to this sometimes at work I feel unease and always in a hurry to come home before any of them insult me indirectly. (Naa)*

#### **4.4.2 Intentional isolation**

Some women expressed that, their inability to conceive caused them a lot. Some said they had to go to the extent of changing their mobile network, while others also said they had to cut down all friends and deliberately isolate themselves so that they would not be seen and be embarrassed by people. Most of the women reported that, they intentionally isolate themselves from friends and the society.

A woman had this to share:

*My friends have now made me realized through their actions that I no more belong to their class or level. Some even address me indirectly in order to humiliate me. Now, I have cut off all my friends both good and bad. I have even gone to the extent of changing my phone number so that both my old and current friends would not have any contact of mine again. (Elinam)*

Intentional isolation was also evident in the words of one woman who expressed her feelings in this manner:

*Hmmmmmm..... I have eventually cut down my friends. I have also become choosier when it comes to friends. Madam, can you just imagine a friend can pick a phone and just call me with the intention of showing concern and at the end of the day humiliate me? Some friends are like, charley it's been a while now..... What on earth are you waiting for..... or you want to grow old before you realize you should have gotten a child.....? (Adjoa)*

Two (2) other women expressed bitterly that because of their challenge, they were not very comfortable to even go to the mosque to pray. They said that, even the times they manage to go, either they live very early from their house and go and position themselves at a place where no one could come over and talk to them, not even after the prayers were over. They shared that even sometimes they organize their own prayers in their house. Each shared her experience as this:

*At the mosque, I make sure I go early, stand in front and say my prayers (to Allah) and come home without even interacting with people since I was not ready for any questions that will embarrass me. (Salamatu)*

*Auntie, for the past one (1) year, I have stopped going to the mosque. I now do my own prayers in the house and try as much as I can to stay indoors. I am now fed up with the insults, gossips, and the humiliation I go through in the hands of people especially my fellow women. I have also stopped going for programmes whether it is related or not related to me. I prefer being alone so that I can think of myself. (Siadatu)*

#### **4.4.3 Marital instability**

Feelings of marital instability were expressed by almost all the women who were interviewed. They attributed these feelings to the fact that their inability to conceive has somehow brought several tensions into their homes and marriages. They also shared that, the presence of a child would have gone a long way to minimize such tensions.

One woman had this to say as far as marital instability was concerned:

*Sometimes there is a feeling of tension between my husband and I. This happens when at times I coil and become moody trying to think about my problem. This attitude of mine in a way affects our intimacy and sexual relations and when it happens like that, my husband ignores me and would not even come my way until I become normal again. (Naa)*

Another woman whose husband already had a child with another woman explained how the presence of another woman's child in their home has brought about chaos and maltreatment to her marriage due to her inability to conceive. She shared her story as:

*My husband has one child from another woman and since I have none for him, he refuses to cooperate with me. He makes suggestions that would only benefit him and his child even to the extent of doing all the donkey works in the house alone without the help of anybody. I have no right to complain else, it will turn into a fight. He also sleeps in the hall most often while he leaves me all alone in the bedroom. (Afi)*

A thirty one (31) year old woman also had a similar story to share:

*I know my husband to be a quick tempered person so most of the time when I see he is stressed with my inability to give him a child;*

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*I do not get closer to him since doing that will cause quarrels between us. Sometimes, I ignore him for about a day or two (2) till am convinced he is fine before I draw closer to him. (Yaa)*

Another woman whose challenge of child bearing had gone to the extent of almost losing her husband's love and care bitterly expressed her feelings as:

*Everything was fine between my husband and I until my issue of inability to conceive cropped in. Now, things are no more the same with us. At first, he leaves enough "chop money" at home but nowadays, he has drastically reduced it and anytime I asked him why, he is like are we not only two (2) in number? What do you need plenty money for or you are now taking care of a family of four (4) and over..... More often than not, my husband was always at home with me but now, I only see him once in a while, and when I ask him why, he tells me that now work was occupying all his time even to the extent that, sometimes he comes home after months... (Saidatu)*

In the words of **Adukwei**, she had a different story to share as far as marital instability was concerned. She lamented:

*Hmmmmmm..... Sometimes, there is some form of tension between myself and my husband especially when his colleagues at work talk about their children in his presence. I realized that, when such a thing happens in the office, my husband comes back home in a moody and worried state. This mood swing of my husband goes a long way to have our communication affected whiles it also affects the quality time we shared together. Other times too, he also comes out to ask me when I was also going to give him a child. (Adukwei)*

#### **4.4.4 Inability to attend social functions**

The results of the study also revealed that, women with fertility problems were unable to attend social functions like weddings, naming ceremonies just to mention a few. Nearly everyone reported that, although they had wished to go for such programmes, their difficulty hindered their desires. These women also expressed that, sometimes during social gatherings like the weddings, funerals, engagements and the others, people they usually come in contact with, do not concentrate on the purpose of the gathering, rather they present their difficulty to have a child as a topic for the gathering. Hence, they are unable to attend such gatherings. These were evident by the following narratives:

*I have stopped attending all social programmes. Formally, I was attending them but at a point in time I realized that, I was doing myself more harm than good. At times you go and you meet friends with their babies all over, some playing with their children in a manner to make you feel hurt while others also ask you what you were still waiting for. I had to advise myself and stop going for those programmes because the more I attended such programmes, the more I feel hurt and sad. Apart from work, I do not go anywhere again. Even with work, if I had my own way, I would not go because my colleagues make me feel very, very stigmatized.*

(Akosua)

A thirty nine (39) year old woman shared her experience of how at first she never absented herself from any social programmes as long as she was invited. She again said that, she eventually had to stop those programmes because of the emotional and social trauma she experiences of late from people she met around any time she had to attend for such programmes.

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*Formerly, I attended almost all the programmes that I was invited but now, I have decided to put a stop to all those outings. Sometimes I feel stigmatized and humiliated when I attend such programmes. A friend or neighbor from nowhere will just come over and approach you in the midst of everyone and ask questions like..... “When are we also coming to witness your naming ceremony?”, “don’t you think your first child is over grown and for that matter she needed to see her other siblings?”, “what on earth are you waiting for?” Madam, left to me alone, I am okay with just a child but unfortunately for me, society will never let me live in peace. (Esi)*

Similarly, another woman also gave out the reason why she was unable to attend social functions off late. She said:

*I have decided in my life never to go for any social programme. Anytime I do so, I feel more humiliated and depressed. People I least expected, question me in a disrespectful manner concerning my child bearing, some also go to the extent of asking me when they were going to be invited to my child’s naming ceremony. In fact I go through a lot of terrible moments anytime I happen to attend a social programme. (Sadiatu)*

**Yaa** described her frustration in a different manner. She said with bitterness:

*I do go for funerals and weddings but as for out-doorings I do not attend them. This is because in my mind I feel very worried and sad whiles I even cry within me since I feel my time of child bearing was taking too long. I also feel that, the invitation should have rather come from me rather than always coming from those I know. Unfortunately, it is not so for me. (Yaa)*

**Adjoa**, whose story was touching shared this:

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*I have stopped attending social programmes. My reasons are that, sometimes when I go, I meet old friends, family members and those I thought were my love ones and the question they constantly ask me makes me feel very sad. I remember one time I went for a friend's naming ceremony, and after the programme few of us decided to sit for a while and chat. Unfortunately for me, in the middle of the conversation one of my friends said, "In fact those without children are really, really missing something....." Another person was also like....."eeeeeeiiiiii" "maame le" (meaning you woman !) but if I could remember very well, you got married "loooooong" ago before this small girl did oooooooo. What exactly are you waiting for?" this humiliation depresses me more hence, I have vowed to myself never to go for such programmes again. (Adjoa)*

#### **4.5 Biological management**

Biological management describes how women with fertility problems are being managed or treated medically. Some women shared that, their mode of treatments were in four (4) distinct ways. These are assisted reproductive therapies, drugs (orals), nutrition and frequent sexual intercourse.

##### **4.5.1 Assisted reproductive therapies**

Majority of the women confessed that they have never heard of in vitro fertilization or embryo donation while a hand full of them also confirmed that, they only have a little knowledge about IVF and embryo donation. The few women who said they had little knowledge about it surprisingly confessed that, no matter how desperate they are looking for a child, they will never patronize it since they heard it is very expensive. The following quotes depict this:

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*I have never heard of IVF or embryo donation. No health personnel have also made mention of that to me. (Elinam)*

*I have heard of IVF but have never considered going for such procedure because I learnt it is expensive. (Naa)*

*IVF, madam what.....? I have never heard about it before in my entire life. (Salamatu)*

#### **4.5.2 Drugs**

These are medicines or substances which has a physiological effect when ingested or otherwise introduced into the body. Almost all the women expressed that, they were managed on Clomide and Folic Acid, whiles few of them confessed they were managed on Ovary Care, Vitamin A, and Pregnacare. The above statement was evident in the words of the following women:

*My doctor advised me to be taking daily doses of Folic Acid and Clomide since that would enhance my fertility rate. I had to stop taking the Clomide at a point in time since I realized that I was becoming obese. (Elinam)*

*I am on daily doses of Folic Acid. (Halimatu)*

*My doctor prescribed one hormonal drug for me by name "Clo....mide". I have stopped taking it for some time now since it has some hypoglycemic agent that was making me over eat. I am also on Folic Acid and I make sure I take it religiously. (Naa)*

Few of the women also shared that, they were managed on other drugs rather than Clomide.

These were what they had to say:

*Well..... fortunately for me, after going through series of investigations, I was finally told I was very okay and nothing stops me from having babies. My doctor therefore asked me to be taking*

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*Folic Acid and Pregnacare every day of my life since those two drugs enhances one's fertility rate. (Ama)*

*So far, I have been on only one drug but not too sure of the name. I think is some.....thing..... some...thing..... "Ovaricare" the doctor told me it will stimulate my ovaries so that I will be ovulating. (Siadatu)*

A small number of the women also shared that, they were being managed on three (3) different drugs at the same time. These were Clomide, Ovaricare and Folic Acid, while others had a combination of Clomide, Folic Acid and Vitamin A.

**Serwaa** expressed this:

*I was taking daily doses of Clomide, Ovaricare and Folic Acid. Fortunately, I have to stop taking them. I understand that the fault is coming from my husband and not me. (Serwaa)*

**Akosua** also made mention of the fact that, Vitamin A was added to her routine medication. She shared this:

*Currently I am on Clomide, Folic Acid and Vitamin A. My doctor said these drugs were going to stimulate my ovaries and hence facilitate my chances of getting pregnant. (Akosua)*

#### **4.5.3 Nutrition**

Nutrition in this context is the process of eating the right kind of food so that one can grow properly and be healthy while the body also makes good use of the food. Few of the women expressed the fact that, their doctors advised them to eat more of protein diet, more vegetables, and more fruits since that will enhance their fertility rate.

These were what some women said:

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*Apart from my doctor telling me to eat high protein diet, I also read from the internet that women expecting babies should eat more of protein diet, vegetables and enough fruits since that will improve their fertility rate. Ever since I had this knowledge, I have changed my diet and now eating more of protein foods, vegetables and fruits. (Akosua)*

*I was advised by a doctor to take in more of protein diets like beans, meat, egg, fish and others, since that was also going to enhance my fertility. (Elinam)*

Another woman also shared a different story all together in relation to nutrition. She shared:

*I constantly add cinnamon to my foods. I use some for my tea, put some in my drinking water and also lick some. My doctor also advised me to be eating foods rich in protein since that was good for improving fertility. I now eat more of high protein foods like red meat, fish, beans, eggs and so forth. (Naa)*

#### **4.5.4 Frequent sexual intercourse**

Again, some women expressed the fact that, as part of the medical treatments they received at the hospital, they were advised by their health care providers to engage in frequent sexual intercourse with their partners since some of them reported with the history of having irregular menstrual flow. This was evident in such expressions:

*My doctor said I should have sex intermittently more especially when I am nearing my danger zone. (Halimatu)*

**Afia** also recounted:

*A doctor advised my husband and I to be having frequent sexual intercourse. (Afia)*

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Some other women also confessed that they had irregular menstrual flow and do not even know the times they ovulate. They shared their stories as follows:

*I remember our doctor advised us to be having regular sexual intercourse because of my irregular menstrual flow. (Aku)*

*Since my menstrual flow is irregular, my doctor advised me to be having regular intercourse. (Naa)*

#### **4.6 Psychosocial managements**

The psychosocial management is one of the constructs of the bio-psychosocial model and a major theme that emerged from the data. According to the bio-psychosocial model, any person with a health deviation must be managed biologically, psychologically, and socially so as to make treatment or management complete.

Women with fertility problems in this study unveiled that, their care was only centered to one aspect of the management and that is medical. The findings of the study revealed that, apart from the medical treatments these women received from the hospital, they never received any form of psychosocial management from their health care providers.

Some women expressed that, although in most cases they leave home to the hospital with various forms of stressors, they look forward to receiving some form of psychosocial management from their health care providers but unfortunately, some health care workers rather maltreat and mishandle them. Three (3) participants miserably shared their stories in tears saying;

*I do not think such managements existed although we truly needed it. I have never and ever received just a common counseling from a health worker before. I even remember there was a time I came*

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*here and wept bitterly because of a negative attitude that a health worker portrayed towards me. (Siadatu)*

*“Hmmmmm” ..... madam sometimes I find it very difficult to even come for review. I come to the facility very depressed and worried with the hope that, a doctor or a nurse will just reassure or even counsel me. Unfortunately, it does not work like that especially for those of us who come over here. Health workers handling sensitive conditions like ours rather nag us and sometimes speak anyhow with us even when we just want to find out something. (Adukwei)*

*I have never experienced psychosocial management from any health worker. I do not even think they do that. (Afia)*

Most women further shared that, although their psychosocial needs were not met by their healthcare providers, they managed to obtain some form of informal psychosocial managements from other sources. These informal psychosocial managements received by these women were seen in five (5) forms: counseling from family members, counseling from friends, peer mentoring, drawing more closely to God or Allah, and reading or watching of inspirational movies.

#### **4.6.1 Counseling from family members**

Majority of the participants acknowledged that indeed the counseling they received from their family members really helped them. They also shared that, counseling and assurances they received from their family members in most times were very helpful and useful. Some participants who received some form of psychosocial support from relatives expressed their experiences as follows:

*I receive a lot of counseling from my mum and my husband. They also give me the hope and assurance that, everything was going to be fine and that God's appointed time was always the best.*

**(Elinam)**

*My husband always reassures and counsels me. Whenever I receive such consolation from my husband, I no more stress myself with what people say or tell me about my incapability.* **(Halimatu)**

*My husband encourages me a lot; he reassures me, prayed with me always and had always given me the hope that, there was nothing impossible for God. My mother has also stood by me in all this, I remember she always tells me that it was God who gives children and therefore when that appointed time is due, He God was going to honor His name in my life.* **(Adjoa)**

This particular woman rather had her uncle and his wife to console and counsel her at every point in her lifetime. She portrayed how that was helpful to her as this:

*My uncle and his wife always encourage me. They gave me all the support I needed, prayed with me and gave me the assurance that, I will definitely give birth.* **(Afi)**

#### **4.6.2 Counseling from friends**

The majority of the women interviewed also indicated that, some ways by which they got relieved from their psychosocial stressors was the support they had from some friends in the form of counseling. Some women shared that, the counseling they received from some friends also went a long way in helping them cope psychosocially. These are the expressions of some women:

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*I have good friends who sometimes encourage me and ask me not to over stress myself if only I really wanted to have my own child.*

**(Adukwei)**

*I have one good friend who encourages me a lot. He always tells me not to mind those who gossip and humiliate me since my only child was more precious and adorable than their four (4) to five (5) children they claim to be having. My friend's words have always kept me going. (Esi)*

Similarly, another woman also stated:

*Well by God's grace I have good friends who encourage and give me the assurance that all hope was not lost. (Serwaa)*

#### **4.6.3 Peer mentoring**

Peer mentoring in this context is referred to as the process through which a more experienced individual encourages, advises, give supports and also serves as a role model for people in similar situations. Some women revealed that, another way by which they got relieved from their stress was by the intervention of some friends who had gone through similar situations and had gained much experience. Most of the women testified that, receiving counseling and testimonies from these friends, gave them the hope that nothing was impossible. These are the statements of some participants:

A thirty three (33) year old woman said this:

*My sister had a similar problem, but she finally gave birth after years of trying. Hence, I have always used her as an example in my life and listened to all her advises hoping that I will surely carry my own baby just like her. (Siadatu)*

Another woman also has this to say:

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*I know of a church member who was childless for over seven (7) years but she finally conceived. I sometimes use her as an example in my life and therefore encourage myself by saying that, no matter the circumstance or situation, I will surely have my own baby.*

**(Ama)**

Some other women who had their peer mentoring from friends also shared their stories as these:

*Friends with similar problems also comfort me. They tell me all about their experience in the past and how they have now gotten theirs. In fact I take a lot of consolation from them. (Afa)*

*“Yea”, I had a sister in law and some concerned neighbours who had gone through similar situations and are now mothers. These people once in a while sit me down and encourage me, share with me the terrible things they had gone through and how far God has honored them. Sometimes when I hear them speak, I get encouraged and tell myself I will also conceive. (Adjoa)*

#### **4.6.4 Drawing more closely to God or Allah**

Drawing more closely to God or Allah was another means by which women with fertility problems engaged themselves in so as to wrestle with their psychosocial worries. From the data generated from the participants, it was evident that most women engaged themselves in various spiritual interventions like getting closer to God in order for God to have mercy on them and give them the fruit of the womb.

Most of these women interviewed mentioned that, their problem has made them draw closer and closer to God or Allah. This is how some women reported:

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*Through it all, I have always encouraged myself in Allah and also believed in Him that he was going to do it for me.....I have also become more consistent with our daily prayers. (Halimatu)*

*Now, I try to encourage myself in the Lord while I have also cultivated the habit of reading my Bible continually and prayed extensively as well. (Adjoa)*

*I have drawn more closely to God and this is because I know that at His own time, he will make all things beautiful and put smiles on my face. I am also solely trusting God for a miracle and have therefore intensified my prayer life too. (Yaa)*

Surprisingly, one Muslim woman shared how her experience has made her draw closer to Allah and how she has now cultivated the habit of meditating on the Quran. She testified:

*I now read and meditate on the Quran to keep my faith increasing. I have also been embarking on fasting and prayer. I tried as much as I can to be very committed to it unlike those days I did not need anything desperately and do it anyhow. Now, I am in need and I have become very serious with spiritual movies. (Salamatu)*

Similarly, a thirty two (32) year old Christian also said:

*My challenge has made me become more prayerful than before. I pray more, fast and meditate more on the word of God since I have the hope that God was more than able to see me through. (Aku)*

#### **4.6.5 Reading or watching of inspirational movies**

Reading or watching of inspirational movies was another form of psychosocial management that was adopted by women with fertility problems. Some women expressed that, another means by which they thought they could relieve themselves from their stressors was through reading or watching of inspirational movies. Some women gave some examples as, reading inspirational

books that dealt with faith. Others also said aside reading such books, they also engaged themselves in watching men of God who telecast people with difficult situations and have now gained their breakthroughs.

Three (3) women described their desires of reading and watching of inspirational movies as:

*I encouraged myself in the lord by reading books that talked about faith. I also watch and listen to programmes on the television that showcase testimonies of women who have been through similar challenges like me but are now having their own babies or children. I also take my inspiration from genuine men and women of God who preach about faith; hence, I have searched for a particular television channel that always encouraged people like my type who are already stressed in life. (Elinam)*

*I have developed a habit of watching and listening to programmes on the television that showcase the testimonies of women who were once like me but are now carrying their own babies or children. Such programmes encourage me a lot and also give me the reason to live again. (Naa)*

#### **4.7 Traditional intervention**

Traditional intervention was a major theme that emerged outside the constructs of the theory. Greater part of the women shared that, when they realized that the pressures were too much for them, they had to try all means to get pregnant hence they chose some traditional methods as alternatives means of trying pregnancy. According to the women, they sought for the intervention of a fetish spiritualist and also used herbal preparations as an alternative means of treatment.

#### **4.7.1 Fetish spiritualist assistance**

Fetish spiritualist assistance was one of the means by which some women with fertility problems engaged themselves in. From the interviews conducted, some women expressed the fact that, they sought for fetish spiritualist assistance.

A twenty seven (27) year old woman and believer for that matter had to put God aside and visit a spiritualist for a quick intervention because of the fact that, her biological father forced her to go and try that spiritualist also. She regrettably shared her experience:

*My father “ooooo”, my father. He lured me and sent me outside Accra to see a fetish priest who eventually smeared my body with herbs and the extent of fixing beads on my waist. Although doing that was against my belief and religion, I had to go through since I desperately needed a child. (Elinam)*

Similarly, two (2) other women also had their experience to share:

*Yes..... I visited a spiritualist who smeared my lower abdomen with some blackish preparations. He also gave me some to use as enema whiles I used some as tea. I prepared my foods using some and also used some as chewing sticks. (Afia)*

*I remember a friend introduced me to a spiritualist she testified to be very good. This spiritualist smeared all sort of preparations on my abdomen but unfortunately, all her effort to make me get pregnant never worked for me. (Akosua)*

#### **4.7.2 Herbal preparations**

Another intervention women with fertility problem used in order to combat their challenges of child bearing was the use of herbal preparations. Most women mentioned that, they used herbs in

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doing all sorts of things. According to some women, they used the herbs in the preparations of their foods, chewed some, used some as tea, added some to their drinking water and so forth.

The use of herbal preparations as an alternative treatment for treating fertility problems was virtually practiced by all. These were evident in the words of some women:

*I have taken herbs over and over again to improve my fertility but realized it was not yielding any fruit, I was asked to put some in tea, drink some as tea, chew some, and even use some as enema. I did all that but never worked for me although it had worked for some group of people I know. (Adjoa)*

*I have tried series of herbal preparations but there has been no improvement in my life although I know it really worked for others. (Yaa)*

*“Yees”..... I have tried herbs several times and I am hoping it will one day work for me. (Salamatu)*

*I have used herbs several times. Although it has not yet worked for me, I will keep using it until I see something positive. (Siadatu)*

In summary, the findings of the study revealed the diverse psychosocial stressors women with fertility problems encountered and how partially they were managed bio-psychosocially despite the fact that they are going through a lot. The study employed the bio-psychosocial model to get the themes and sub-themes whiles one (1) other theme that emerged was content analysed. Narrations from the women interviewed revealed the psychological and social experiences they encountered whiles it also revealed how their management was focused on only the biological aspect of management. The findings further revealed how these women were neglected from

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their psychosocial management hence, they managed to sort for an informal psychosocial management and as well traditional management.

The women gave varied descriptions of how they were psychologically traumatized by their colleagues, friends and loved ones. They also mentioned that, some of these experiences they had to go through as a result on their difficulty included; loneliness, anxiety, depression, lack of concentration, thinking, worrying and less sexual satisfaction.

Aside the aforementioned psychological stressors they experienced, they also shared going through social stressors which made them felt stigmatized at every point in time of their lives. Some of these women also shared that, as part of the social trauma they experienced, they were unable to mingle with people especially friends whiles they also deliberately isolated themselves from friends, colleagues and loved ones so as to avoid embarrassments and humiliations. As part of the bad social experiences these women had to suffer, they also confessed having an unstable relationship especially when friends, colleagues, in laws and loved ones interfered in their affairs.

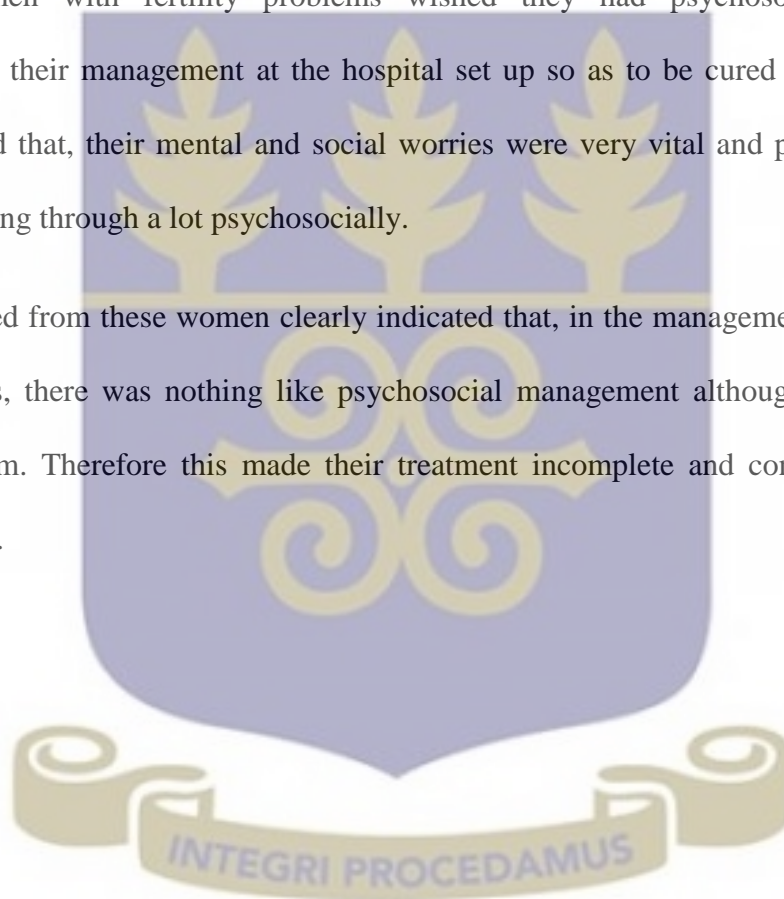
Concerning how these women were managed biologically, they shared that they were given oral medications, advised to take in well balanced diet and the need to engage themselves in frequent sexual intercourse. They expressed that since the biological management was not enough for them and there was nothing like psychosocial management for them at the hospital set up, they somehow managed to receive an informal psychosocial management from their family members, some friends and few loved ones. They shared that, these psychosocial management they received ranged from counseling to drawing closely to their maker. The findings of this study also revealed that, in as much as these women were desperately looking for a child, they

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also sought for some form of traditional intervention or management. This included; spiritualist assistance and the use of herbal preparations.

From the findings above, it is evident that women with fertility problems encountered a lot of psychosocial problems hence, needed to be managed bio-psychosocially as proposed by Engel (1977) for everyone with a health problem. From the interviews gathered so far, it was obvious that, these women with fertility problems wished they had psychosocial management incorporated into their management at the hospital set up so as to be cured completely. Some women expressed that, their mental and social worries were very vital and paramount to them since they are going through a lot psychosocially.

The data retrieved from these women clearly indicated that, in the management of women with fertility problems, there was nothing like psychosocial management although that aspect was very vital to them. Therefore this made their treatment incomplete and contrary to what the theorist proposed.



## CHAPTER FIVE

### DISCUSSION OF FINDINGS

This chapter discusses the findings of the present study which is about the experiences of women with infertility and their bio-psychosocial management. The themes and sub-themes provided the basis for discussion. The various themes were examined based on the available literature to determine areas of similarity. Hence, the findings on the experiences of women with infertility and their bio-psychosocial management were used to either confirm or build on ideas from the literature.

#### **5.1 Psychological Experience**

Infertility is a major public health problem that can result in both psychological and social consequences for couples, most especially women. Since childbearing is considered as an important goal in ones' marital life, failure to achieve such goals may results in some psychological problems. Notable among them are loneliness, anxiety, depression, lack of concentration, worrying and thinking, and less sexual satisfaction.

Loneliness is referred as a state of complex and unpleasant emotional response to isolation or lack of companionship. The findings of this current study revealed that, loneliness among these women with fertility problems was due to the state in which they find themselves in. The mere fact that they close from work, come home and there is no sign of a child really makes them feel traumatized and very worried. Loneliness was also attributed to the fact that some women in the present study claimed that their inability to bear a child for their husbands has resulted in their husbands changing their attitude towards them and as a result of that, they are being refused the necessary attention that they usually got from their husbands. This negative attitudes of their husbands of late according to these women in the present study, has really put them in a state of

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isolation and loneliness aside all their problems. This present finding was only consistent with a study conducted in Turkey by Gokler, Unsal, & Arslantas, (2014). The researchers reported that, women diagnosed of having issues with childbearing, experienced higher level of loneliness than their fellow women who are fertile. The researchers further stated that, these women felt more defective and incomplete because of having no births and due to this, they were likely to feel alone than their fellow counterparts.

Anxiety was another psychological problem encountered by women with fertility problems. Findings from the current study again revealed that women with fertility problems suffered anxiety. This finding supports a study conducted in Karachi-Pakistan by Begum & Hasan (2014) where the researchers discovered that, infertile women scored significantly high on the variable of depression and anxiety as compared to their fertile counterparts. The researchers further revealed that, women with children were well accepted and treated both in their homes and the societies as compared to infertile women who were always blamed. These blames further resulted in terrible psychological problems like anxiety. In this current study, the reason given by most women for being anxious varied from one woman to the other. The fact that these women were married for a couple of years now and had not seen any sign of pregnancy was their main reason for always getting anxious and worried. Furthermore, some other women also claimed that, they were not growing any younger was another reason why they often got anxious. This possibly means that, they were nearing their pre menopausal age and therefore their level of anxiety would rather boost up as time passes by without any sign of pregnancy. Additionally, the study also found out that, aside the above mentioned factors that lead these women into a state of anxiety, fear of losing their husbands was another major concern in the lives of these women. They always feared their husbands would exchange them with other women who were capable of

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giving them children. Lastly, the findings of this study further revealed that the pressures and threats from the husbands of some of these women, mounted to their level of anxiety. Although this current finding on anxiety is consistent with the above literature, it is inconsistent in other literature. For instance, a study conducted in Ghana by Naab, Brown, & Heidrich (2013) on the psychosocial health of infertile Ghanaian women and their infertility beliefs revealed that, although women with fertility problems encountered higher levels of infertility-related stress, they experienced lower levels of anxiety. Further researches are needed to investigate this.

The current study further revealed that women with fertility problems suffered depression as another form of psychological problems they encountered. Depression is a feeling of sadness and rejection. It is indeed considered as one of the most common psychological disorders affecting couples with fertility problems more especially women (Ali et al., 2015). Feelings of this among these women with fertility problem stems from the fact that some of them claimed they have been married for a couple of years now and yet, there was still no sign of pregnancy or even a child to own biologically. Again, the findings of the current study further revealed that the humiliations, insults, using of nick names and pointing of fingers at them depresses these women and place them in a state of extreme sadness and sorrow. While others also attributed their depressive state to the fact that several years of treatment have proved futile. Quite remarkably, this finding is similar to the findings of Naab, Brown, & Heidrich (2013) where the researchers affirmed that, most of the women with fertility problems in Ghana experienced higher level of depression. Lastly findings from the current study on depression again revealed that, most women claimed seeing their menses every month makes them feel more depressed with the impression that nothing positive was going to come out from them. Women in this study reported feeling disheartened at every point in time of their lives. This finding corroborates with previous

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studies in Ghana by Alhassan, Ziblim, & Muntaka (2014) who also reported that, depression among infertile women was extensively higher looking at the psychological stressors they encounter. It was also revealed by the researchers that, the prevalence of depression was higher among women aged twenty six (26) years and above.

Another comparable view was expressed by Gengxiang et al. (2014) concerning the issue of depression among women. It was again revealed that, women with fertility problems suffered depression especially those with longer duration of infertility leading to overwhelming mental stress and stronger desire for fertility. These findings also support the findings of several studies in Arabia, Iran and Abbottabad a town in Paskitan (Homaidan Turki, 2011; Masoumi, Poorolajal, Keramat, & Moosavi, 2013; Qayyum et al., 2014).

One other remarkable finding in the current study is the fact that these women with fertility problems also reported that, they were unable to concentrate, worry and think a lot. The result suggests that this feeling experienced by these women was attributed to quite a number of reasons. Some reasons gotten from the findings were the mere fact that these women suffer too much humiliation and stigma from their friends, loved ones and colleagues at work. It was further revealed that, the dejection they experienced in their neighborhood makes them feel more depressed. As a result of that, they ended up thinking, worrying and concentrated less. Even though the present researcher did not come across any literature that was specifically linked to the above findings, some other findings in the literature can be said to support the emotional trauma (lack of concentration) these present women go through. For example, these women attributed their emotional problem of losing concentration to the fact that, they think more and all mounted to the fact that, they were often humiliated and stigmatized as previously reported by (Donkor & Sandall, 2007).

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Additionally, some women in the current study reported that not only was their worrying and thinking related to the fact that they were often humiliated and stigmatized but also the fact that they were aging and there was still no sign of pregnancy. Another reason gotten from the findings that lead to these psychological experiences of worrying and thinking was the fear that husbands would now practice polygamous marriage since some traditions accepted that. However, the current finding on worrying as a result of fertility problems encountered by these women in the current study could be said to have some similarity with a study by (Naab et al. 2013; Fledderjohann, 2012). The researchers reported that, Ghanaian infertile women experienced many psychosocial consequences of childlessness and some mental health problem including worrying.

Another finding worth noting in relation to the psychological experiences that were encountered by these women in the present study is the fact that they are faced with the problem of less sexual satisfaction. Some of these women reported that the current state in which they find themselves in prevented them from experiencing good sex. However, the findings of the study further revealed that, the fact that these women always focused their minds and hearts towards their problem of childlessness and the fact that all these years of love making never yielded anything good, they do not even want to involve themselves in what is called sex let alone experience sexual satisfaction. The findings of this present study are congruent with a study by Tao & Coates (2011) who reported that, infertility and its associated problems as well as its treatment may lead to changes in ones' sexual relations and also interacts with couple's sexual function. In addition to the above findings, a similar view was also expressed by other researchers who stated that, women with fertility problems had the highest relationship instability and the lowest sexual satisfaction since sexuality can be greatly affected by infertility

problems and its treatment. Hence, people with fertility problems experienced difficulties in different aspect of sexuality (Chachamovich et al., 2010; Drosdzol & Skyrzpulec 2009). This result again corroborates previous studies on sexual dysfunction amongst women with fertility problems (Volkan et al., 2014; Heng, Sidi, Jaafar, Razali, & Ram, 2013).

Despite the fact that women with fertility problems are faced with several psychological problems which later have a devastating effects on their mental health as well as their well being, their management are solely biomedical. Meanwhile, no attention is paid to these psychological stressors they find themselves in. Hence they managed to seek for an informal psychological management.

## **5.2 Social Experience**

This section discusses the way women with fertility problems were treated in the society in which they find themselves in and how terribly they felt. In our African setting, the presence of a child is seen as a necessity to continue the family's heredity or the bloodline. It is also believed that, the presence of a child enhances the status of any woman. Therefore, failure for any woman to portray her motherhood leading social role at where ever she finds herself means that, she is forever subjected to lots of worst social atrocities. Amongst these social experiences were stigmatization, intentional isolation and inability to attend social function, and marital instability.

The findings of the current study revealed that amongst the upsetting social experiences of women with fertility problems was stigmatization. According to these women in the present study, they were stigmatized at every where they find themselves. Surprisingly, the findings of the study further revealed that, even within the church premises some pastors took advantage of the situation of these poor women and always performed deliverance on them claiming they were

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delivering them from the evil that has been tormenting them. They also reported being labeled, set apart, and linked to undesirable characteristics while they also suffer humiliations from most people more especially colleagues and friends. It was also identified from the study that the fact that these women were being called with all sorts of names (witches), gossiped about to the extent of people pointing fingers at them really troubled them. The findings of the present study corresponds with a study conducted in Ghana by Tabong & Baba Adongo (2013) who stated that, women without children in their old age were often branded as witches and abandoned by their relatives and friends while they also experienced severe social stigma. Again, the researchers reported that, these women were ridiculed more often than not, insulted, and pointed fingers at when friends and relatives gossip to others about their difficulties. A similar view was also expressed by Donkor & Sandall (2007), whose study also revealed that, infertility-related stress and stigma were found among women with fertility problems. The researchers recorded that, 23% of these women experienced moderate stigma while the majority representing 41% experienced severe infertility-related perceived stigma.

The findings from the current study further indicated that women with fertility problems intentionally isolate themselves from people especially friends while they also refused to attend social function like naming ceremonies, funerals, and wedding just to mention a few. Most women expressed deep disappointments in some friends for not showing interest in their fight back with their problem of child bearing. Meanwhile, these so called friends rather “gossiped behind their back”. Some of the women in the current study further claimed that, the very reason why they deliberately isolate themselves from friends and people they know was the fact that at every point in time of their gathering, that was when friends decide to ask intrusive and insensitive questions regarding their problem. These women further reported that the more they

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thought they were avoiding their friends so as to bring peace unto themselves; friends also avoided them since they were without children. These therefore mean that, a woman without a child of her own should not even think of avoiding people especially friends since the thought of doing that would rather land her into more social problems. In addition, these women again reported avoiding some social ceremonies and events like baby showers, weddings and so forth so as to avoid getting in contact with people who would want to humiliate and stigmatized them in public. The finding from this study in the area of intentional isolation and refusal to attend social function is supported by Hasanpoor-Azghdy, Simbar, & Vedadhir, (2015). The researchers reported that women with fertility problems are faced with severe social problems that could have devastating effects on the quality of their lives. The researchers outlined some of these tormenting social problems as; social isolation, including avoiding certain people or social events, social exclusion, partial deprivation and so forth. Similarly, Kamau (2011) also reported on how infertile Kenyan women suffered psychological, social and physical problems. The researcher also reported on how their problems have negatively influenced how people related to them in the society including their husbands, family members, friends, in-laws and so forth, while they also tried as much as they can to isolate themselves from those who will humiliate or stigmatize them.

One other remarkable finding in the current study under the social experiences of women with fertility problems is marital instability. Some women in the current study described how their relationships with their husbands have turned sour due to the fact that they were unable to give them children. These women in the study made mention of some factors that contributed to the change in attitude of their husbands. They reported that, the pressures mounted on their husbands from friends, relatives and significant others on the need to have a child are what usually lead to

the instability in their marriages. The current study further recorded that, due the problem these women had, some loss the love their husbands use to have for them, whiles the need for effective communication in their marriage also got destroyed. The finding of the present study seems consistent with the study that was conducted in Nigeria (Whitehouse & Hollos 2014; Behboodi-Moghadam et al., 2013). The researchers in their findings also reported that, relationship between wife, husband and husband's relatives turns to be sour as time passes by and there was no sign of pregnancy. This led to difficult marital relations, loss of love, ineffective communication, permanent separation, husband divorcing and remarrying. A similar finding was also recorded in Iran and the United States (Hasanpoor-Azghdy et al., 2015; Kamau, 2011). The researchers also confirmed in their findings that women with fertility problems suffered marital instability and uncertainty.

Although women dealing with fertility problems go through a lot in the societies they lived in, and the mere fact that they are seen as objects of misfortune by most people, ideally there should have been a formal way of giving these women some form of psychosocial support. Unfortunately, these women receive no formal consolation not even at the hospital set up.

### **5.3 Biological Management**

This section describes how women with fertility problems in the current study were managed medically. There were a number of strategies that were used by these women biologically or medically. These were grouped into four (4) main categories; assisted reproductive therapies, drugs, nutrition and frequent sexual intercourse. Surprisingly almost all the women in the present study claimed that they were never introduced to In vitro fertilization (IVF) or embryo donation as an alternative means for getting pregnant by their health care providers (doctors and nurses) who attended to them. However only a hand full of these women reported that they have heard

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about IVF and that was through reading. Although these women were desperately in need of a child, they had no intension of going in for IVF as an alternative means of getting pregnant since they heard it is an expensive procedure. The finding of the present study has some similarity with the Harvard Mental Health Letter (2013). The Health Letter also opposed to the fact that, in vitro fertilization (IVF) was an option for the treatment of infertility. According to the mental health letter, medical interventions to infertility may aggravate to some form of psychological problems. It also identified that, some medications' side effects, financial constraints and uncertain outcomes of In vitro fertilization was not the best. Hence the Harvard Mental Health was against its introduction. In support of the above findings, Kulkarni et al. (2013) also supported to the fact that fertility treatment poses health risks for women, men, and their children since the use of drugs to induce ovulation can lead to ovarian hyper stimulation syndrome (OHSS), which can be life threatening. The researchers further revealed in their study that, assisted reproductive technologies (ART) and non-ART procedures in which medications are used to stimulate ovulation are associated with an increased risk of multiple-order births, which carry health risks for women and infants whiles it also increases costs. These findings are inconsistent with a study by Menuba, Ugwu, Obi, Lawani, & Onwuka (2014) who found in their study that most couples cannot be treated without assisted reproductive therapy hence; majority will need an in vitro fertilization (IVF). The researchers also added that, there was a need to improve facilities for managing infertility and the cost for artificial reproductive techniques should be at an affordable price.

This also means that, not all facilities managing fertility issues introduces their patients to assisted reproductive therapies as Menuba et.al (2014) recommended in their findings. However,

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their reason for not doing that could also boil down to the fact that, these facilities also consider the fact that it is expensive whiles they also consider it's outcomes.

Most of the women in the present study reported that, they were given oral medications (drugs) in a way of making them achieve pregnancy. Drugs are substances that have a physiological effect whenever it is ingested or otherwise introduced into the body. The report of the present finding revealed that most of these women were managed on Clomide and Folic Acid, while a hand full of them were managed on Ovary Care, Vitamin A, and Pregnacare. These drugs are known to be helpful in ovulation induction especially the Clomide (clomifene citrate). It is also known to be the first line medical treatment. Despite its side effect, some women claimed they were managed with it, whereas, others also reported that, at a point in time they had to stop taking it since no improvement was seen in their lives aside its side effects. This present finding on the use of Clomide (Clomiphene) is similar to a study conducted by Myo & Ekpo (2011) whose report revealed that, Clomiphene citrate is considered as the first-line treatment for infertility. It is also known to be cost effective, relatively easy to use, and with minimal side effects. The report also indicated that, Clomiphene citrate for the past fifty (50) years after the first clinical trial, has demonstrated that, administration of Clomiphene citrate induces ovulation in more than 75% of women with amenorrhea.

Findings of the present study also showed that women with fertility problems were further managed on Pregnacare and Vitamin A as another form of treatment. This present finding was supported by Smith (2011) who reported that, women on vitamins were more likely to conceive as compared to those on Folic Acid. The study also revealed that, women on the multivitamin (Pregnacare) obtained higher levels of micronutrients than those taking only Folic Acid. Again, the researcher concluded that, all women considering pregnancy should take a particular

formulated prenatal micronutrient supplement to optimize their chances of conception. The researcher finally added that, Vitamin A is lowered to ensure safety of the developing baby.

Although the present findings on ovary care in relation to pregnancy was not specifically linked to the literature, the findings of Smith (2011) on the effect of multivitamin for women considering pregnancy could be likened to the effect of ovary care in women expecting pregnancy as well.

The present finding concerning the use of Folic Acid in the management of infertility is contrary to the findings of a study by Murto et al. (2014) and Menuba et al. (2014). According to the researchers, the effect of Folic Acid supplements on pregnancy outcome in women with unexplained infertility has not been well investigated. They also added that, Folic Acid supplementation or folate status was not related to pregnancy outcome in women with unexplained infertility. The researchers also emphasized on the fact that, Folic Acid supplementation or good folate status did not have a positive effect on pregnancy outcome following infertility treatment. The researchers again revealed that, intake of Folic Acid did not increase the possibility of a birth of a healthy baby after infertility treatment in women with unexplained infertility. It was also surprising to know that, some of these drugs given to these women as a form of fertility treatment rather poses health risks for them by inducing ovulation which further leads to ovarian hyper stimulation syndrome (OHSS), which could be life threatening to them.

The finding of this study also showed that nutrition was included in the biological / medical managements of these women. Nutrition in this context is the process of eating the right kind of food so that one can grow properly and be healthy while the body also makes good use of the

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food. As part of the management given to them at the health facility, these women were being advised by their health care providers (doctors) to take in foods that were rich in protein. The need to also take in more vegetables and fruits was also emphasized on. These women in the present study reported that, they were assured of the fact that doing that was going to help in the enhancements of their fertility rate. This assertion is consistent with the findings of Barczentewicz & Machlarz (2012) who reported in their study that, increase consumptions of vegetables, proteins, fat dairy products, nonheme iron (these are plants and iron fortified foods) from dietary supplements and multivitamin preparations were basically the fertility diet nutritional standards supporting female fertility. These findings also corroborate with a study by Comhaire & Decler (2012) who stated in their findings that, complementary food supplements with the Nutriceutical Improve (products derived from food sources with extra health benefits in addition to the basic nutritional value found in food), improves the quantity and functional quality of spermatozoa, significantly increasing their fertilizing potential. In the researchers concluding remark, they emphasize that, complementary food supplementation with Nutriceutical Improve, has significant beneficial effects for the treatment of the infertile couple.

Frequent sexual intercourse was also identified as a form of conventional treatments that was given to these women in the present study. It was further identified that these women in the present study were advised by their healthcare providers (doctors) on the importance of engaging themselves in what was known as frequent sexual intercourse. Frequent sexual intercourse has to do with a regular and unprotected sexual affair. According to these women, they were given this advice because of the fact that they reported to their providers about the irregularities of their monthly menstrual periods, while others also claimed that they never knew when they ovulate. Hence the need to engage in regular sexual intercourse was an option for them. This present

finding is in agreement with the findings of the Harvard Mental Health Letter (2013). It reported that, about eighty to ninety percent (80%-90%) of patients with the problem of child bearing are treated with conventional methods such as advice on timing of intercourse, and drug therapy to promote ovulation or prevent miscarriages.

#### **5.4 Psychosocial Management**

Infertility is considered as one of the most difficult life experiences that a couple may encounter. It can also negatively influence all aspects of life more especially the psychological and social well being of those involved. This therefore means that, the need to psychosocially manage couples with this devastating problem is very paramount.

Aside the aforementioned reason why there is the need to manage women with fertility problems psychosocially, it is believed that fertility treatments ranging from medical monitoring to hormonal remedies, in vitro fertilization (IVF) to the traditional management brings about both physical and emotional burden on women and their partners. For these reasons, women trying to conceive will have some feelings of both frustration and disappointment if pregnancy is not achieved. These and many others were the main reason why psychosocial management should have been incorporated in the care and management of women who finds themselves in this distressing problem. Women in this study reported how some healthcare providers maltreated them just because they had a challenge and needed a solution. They therefore reported that, since they eagerly needed some form of support, be it psychologically or socially and were deprived from at the hospital set up, they reported that, they themselves managed to resort to an informal psychosocial management. These are counseling from family members and friends, peer mentoring, drawing more closer to God or Allah and finally reading or watching of inspirational movies.

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Counseling from family members and friends describes how some of these women claimed they were received exceptional support from significant people in their lives. Some of these important people included mothers, uncles, husbands, in-laws, friends and so forth. However, these women reported that, the counseling and advices received from these significant people in their lives in a way, have helped them coped with the psychological trauma they were going through. Quite remarkably, this present finding is similar to the findings of Uschi Van den, Marysa, Wischmann, & Thorn (2010) who affirmed that counseling offers the opportunity to explore, discover and clarify ways of living more pleasantly and resourcefully when fertility problems have been diagnosed. Again, Kamel (2010) also laid emphasis on the fact that, there was a need to employ counseling in the various fertility clinics so as to address the psychosocial needs as well as the medical needs of those affected with infertility. Whiles those managing these people should also be familiar with the causes, investigations and treatments options available so as to give realistic information about their chances of conceiving. Although these were the findings of the researcher, it is virtually not so in most fertility hospitals or clinics.

Peer mentoring as identified in this study was another means by which these women managed to informally cope with the problem they found themselves in. It also described how women with fertility problems learnt from the experiences and advices of those who had been through such problems before and are either having their own children or still expecting their own. Reports from these women in the current study indicated that, these women who peer mentored them on infertility and its experiences and that of which they have been through personally and the strategies they adopted, went a long way in helping them deal with some challenges they were encountering. These women also claimed that, at the end of each session of peer mentoring, they were most often filled with hope and assurance. Whiles they were optimistic that, their time was

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definitely going to come. Women with fertility problems receiving this form of informal peer mentoring from more experienced fellow women who had gone through similar or worse scenarios, is a significant new finding because of its informal nature. However, Read et al. (2013) reported in their study that, couples desired to meet with peers in order to fulfill their needs for shared experiences while others also preferred individual peer mentoring offered by former infertility patients since that was also going to help them cope. The researchers finally added that, an infertility treatment entails a long journey and were mostly associated with several disappointments. They therefore laid emphasis on the fact that, couples who found themselves in such situation needs to have access to a variety of psychosocial services in order to help them cope with their problems.

Another finding worth noting in the present study under the psychosocial management was the fact that, these women adopted a mechanism of intervening spiritually in a way of drawing closer to God or Allah. Drawing closer to God or Allah further described these women's belief that by divine intervention, they were going to attain pregnancy. These women in the current study reported that, drawing closer to God or Allah has given them the hope, comfort, assurance and the inner peace that at God's own time, He was going to make all things beautiful and put smiles on their faces. They also expressed that, they were solely trusting God for a miracle and have therefore intensified their prayer life too. The finding from this study in the area of drawing closer to God / Allah is also supported by a study conducted in Southern Ghana (Donkor & Sandall, 2009). The researchers revealed in their study that, majority of the women coped with their fertility problems through drawing on their Christian faith. Another study by Chan et al. (2012) also reported in their findings that, incorporating spirituality in psychosocial group intervention for women undergoing in vitro fertilization (IVF) helped them report with lower

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levels of physical distress anxiety, and disorientation. A similar view was also shared by Latifnejad Roudsari & Allan, (2011). It was revealed in their study that, childless women who were spiritual, experienced infertility as an elevating experience for spiritual growth and therefore relied more on their own religious coping strategies and less on formal support like counseling. The researchers expressed the need to incorporate religious and spiritual issues into the psychosocial needs of these women because it helped them cope better with their worrying situations.

Quite remarkably, the above findings are also consistent with the finding of a study conducted by Mosalanejad and Khodabakshi Koolee, (2012). It was known from the finding of the study that, logotherapy as used in a form of psychological intervention decreases the level of perceived stress; while it is also known to reduce stress, decreases psychiatric symptoms and gives meaning to life as gained through spiritual values. Hence this approach improves an infertile person's ability to deal with their problems.

Another means by which these women managed themselves psychosocially from their devastating situation was to engage themselves in inspirational activities such as reading and watching of movies. These women reported that, in order to de-stress themselves from their troubles, worries and anxiety state, they had no option than to either read or watch something that was inspirational. The women in the present study also indicated that, reading and watching inspirational movies gave them the hope and the expectation that, they could also have their own biological children. Even though these findings are not specifically linked to the literature, some of the findings of other researches in the literature can be said to support the present finding. For instance, Read et al. (2013) in their study revealed that, couples desired to meet with peers in order to fulfill their needs for shared experience while others also preferred booklets or websites

so as to get information about infertility and its treatment. They also outlined some psychosocial services such as counseling, mentoring system, and easy to understand written materials about the physical and emotional consequences on infertility treatment.

### **5.5 Traditional Intervention**

Traditional interventions describe how women with fertility problems thought of seeking traditional remedies. Numerous traditional interventions are used in the treatment of infertility all over the world. Frequently applied methods include fetish spiritualist assistance and the use of herbal preparations. Some women in this present study reported that, at a point in time, they became so confused and therefore sought for fetish spiritualist assistance with the hope that the spiritualist was going to help them to conceive since the orthodox medications never worked for them. This finding found consistency with a study by Bardaweel et al. (2013) who reported that, about 44.7% of the participants used complementary and alternative medicine (CAM) for the treatments of their fertility problems. It was further revealed that the most commonly used CAM therapies were herbs and spiritual healing.

The other commonest traditional intervention used by these women in the present study is the use of herbal preparations. Virtually all the women in the present study claimed they have tried herbal preparations in one way or the other. The reason given by these women as to the use of these preparations was attributed to the fact that, these women claimed they were often anxious, depressed and very worried hence they wanted to explore everything they heard of hoping that their luck would shine. A study by Kaadaaga et al. (2014) affirmed that, 76.2% of the participants had used herbal medicines to treat infertility prior to seeking care at a medical clinic and for this reason, the researchers stated that it was important that health professionals enquire from patients about past or current use of herbal medicines since this may help in educating the

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patients about health risks of using herbal medicine and would go a long way in reducing delays in seeking appropriate care. This finding is also consistent with a previous study by Bardaweel et al. (2013) who also revealed in their study that, about 44.7% of the participants used complementary and alternative medicine (CAM) including herbs and spiritual means.

These findings could further be linked with a study by Ried & Stuart, (2011). It was revealed also in their study that there was a clinical pregnancy rate of 50% among females who used Chinese herbal medicine as compared with 30% of those females who used Western medicines. They therefore recommended that, traditional Chinese herbal medicine diagnostic tools and therapy should be incorporated in the current Western medicine model of infertility treatment since that could improve pregnancy rate while reducing treatment time frames as well as emotional and financial burdens.

In summary, comparison of findings of the current study with relevant research findings showed that most of the findings were consistent with the model with the exception of the psychosocial management and the traditional intervention. This was due to the fact that psychosocial management was not added to the care of these women with fertility problems, whereas traditional intervention was also not related to the model used but emerged from thematic content analysis. The findings from this current study indicated that, women with fertility problems encountered a whole lot of psychosocial problems. Some psychological problems encountered by these women ranged from loneliness, anxiety, depression, lack of concentration, worrying and thinking to less sexual satisfaction. Amongst these social problems encountered by these women also ranged from stigmatization, intentional isolation, inability to attend social function, and finally marital instability.

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In order to be free from these psychosocial stressors, these women thought of managing themselves biologically. This sort of management indicated how these women used a number of medical strategies so as to get some remedy. Some of these treatment options embarked upon by these women included the intake of drugs, eating of well balanced diet such as the intake of more protein diet and also engaging themselves in frequent sex.

Interestingly, virtually all the women in this current study claimed that they did not get any better with the treatments they received from the hospital set up. Their reasons were attributed to the fact that in most cases, they report to the facility with a hopeful aim that some of their psychosocial burdens could be taken away by at least a healthcare provider through giving of assurance or even counseling. Unfortunately for them, they reported nothing of that sort happening to them. They also described how they come to the facility traumatized with their burdens and at the end of the day, they go back home more traumatized because of the negative attitudes of some healthcare providers. These women again lamented that, since this vital care was not incorporated in their management as proposed by Engel (1977), and the mere fact that they were in need of it, they managed to seek after informal form of psychosocial management that really helped them a lot more especially in the days they were much traumatized. These included receiving of counseling from family members and friends, peer mentoring, drawing closer to God or Allah and reading or watching of inspirational stuffs.

Finally, these women in the current study further described how they also sought traditional intervention in a way of finding hope elsewhere. Few of them got themselves in fetish spiritualist assistance while a vast number of them engaged themselves in the use of herbal preparations.

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The findings of this study indicated that, women with fertility problems wished that psychosocial management would be incorporated in their care rather than being solely managed on drugs. Furthermore they reported that, sometimes they even refuse to take their medications and look forward to getting somebody to at least share their experiences with so as to get some form of assurance.



## **CHAPTER SIX**

### **SUMMARY, IMPLICATIONS TO NURSING PRACTICE, POLICY AND RESEARCH, LIMITATIONS OF THE STUDY, CONCLUSION AND RECOMMENDATIONS**

This chapter presents a summary of the study, implications for nursing practice, policy and research, the limitations encountered during the study, conclusion and the recommendations.

#### **6.1 Summary of the Study**

The study explored the experiences of women with infertility and their bio-psychosocial management using the bio-psychosocial model as a guiding framework. Prior to commencement of data collection, ethical clearance was sought from Institutional Review Board of Noguchi Memorial Institute for Medical Research in the University of Ghana. An approval was also sought from the Head of Gynecology Department of the Korle-Bu Teaching Hospital. Recruitment of participants began in November 2015 and ended in January 2016. Participants gave out their consents by signing a consent form prior to the interviews got started. Each interview was audio taped and transcribed verbatim whiles data were also analysed using thematic content analysis.

The findings from the study indicated that, women with fertility problems encountered a lot of psychosocial problems. They experienced difficulties in all aspects of their lives and were emotionally burdened with loneliness, anxiety, depression, lack of concentration, worrying and thinking, less sexual satisfaction, stigmatization, intentional isolation, inability to attend social functions and marital instability.

In as much as these women wanted to be free from the psychosocial trauma they found themselves in, they sought for medical treatment options that ranged from intake of drugs, eating

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of well balanced diet and engagement in regular sexual intercourse. However, aside this medical management these women embarked upon at the hospital set up, they were so hopeful that they would be given some form of psychosocial support in addition to their medical treatment so as to get a complete cure. Unfortunately, the women claimed that was not readily available. These women expressed that, since their expectations were unmet, they themselves managed to seek for an informal psychosocial support in the form of receiving counseling from family members and friends, peer mentoring, drawing closer to God or Allah and finally, reading of inspirational materials.

The findings of this study further revealed that, because these women were desperately looking for their own biological children, they engaged themselves in other practices against their religious values. For instances, the findings suggested that they sought for traditional interventions as a source of hope. Lastly, these women expressed that, they had wished psychosocial management was part of their management because their problems were more of psychological than just physical.

## **6.2 Implications of the Study**

The findings of this study have implications for nursing education, nursing practice, nursing research, and policy formulation.

### **6.2.1 For nursing education**

The unprofessional attitude of some nurses and other health professionals at the unit was revealed as a factor that sometimes depresses these women who were already frustrated. There is a need to address these unethical attitudes of some health professionals. The curriculum as well

as syllabus of all categories of nurses and other health professionals in the training institutions should be upgraded so as to reflect the changing needs of the society.

The need for good interpersonal relationship, interpersonal communication, counseling, and ethics on morals of nursing should be incorporated in the curriculum so as to improve the knowledge and skills of nurses and the other health professionals to enable them render quality services.

Continuous workshops and in-service training on customer care should be organized for these nurses and the other health professionals at the gynecology unit in order for them to be abreast with issues pertaining to customer care.

### **6.2.2 For nursing practice**

Fertility treatment entails a long journey often associated with whole lots of disappointments. These women with fertility problems may need psychosocial interventions in addition to the medical interventions they receive. Clinicians attending to these women mostly concentrate only on the medical aspect of their condition, neglecting their psychosocial needs. However, giving a total nursing care and as well giving patients psychosocial supports are said to be part of the nurses' role in the care of any patient they may come in contact with.

Women with this sensitive challenge of child bearing are supposed to be helped by their health care professionals so as to help them handle the various psychosocial challenges they encounter in order for them to attain optimal quality of life.

It is therefore very vital for health care professionals to probe more into the experiences and challenges these women with fertility problems go through rather than focusing solely on the medical causes and its treatment. Examining their condition from the psychosocial perspectives

and treating them as such would help these women cope better and hence increase their chances of getting pregnant.

### **6.2.3 For nursing research**

The findings of this study suggest that the psychosocial needs of women have not been met by the medical treatment. Therefore, future research should explore the psychosocial intervention in order to address the psychosocial needs of women with infertility.

### **6.2.4 For policy formulation**

The Ministry of Health and the management of the Korle-Bu Teaching Hospital should make collaborative efforts at ensuring that nurses working at the gynecological unit receive constant training on customer care and counseling through workshops, in-service training, seminars and conferences to enable them deliver quality care to women with fertility problems.

The government in collaboration with the Ministry of Health and the management of Korle-Bu Teaching Hospital should put up a structure (counseling unit) that would purposely serve as a place for solely counseling and rendering of other psychosocial services for these women who come to the gynecological unit.

### **6.3 Limitations of the study**

This study encountered a number of limitations. One of the limitations was that the study was only done at the Korle-Bu Teaching Hospital. A qualitative approach was adopted and a small sample size of fourteen (14) participants was recruited. Due to the small sample size, the findings may not be a good representation of all women suffering from infertility in Ghana. However, transferability may be done when the context is similar.

## **6.4 Conclusion**

Although infertility is seen as a life threatening situation and a bio-psychosocial crisis in the lives of women in Ghana and African at large, less attention is being paid to this devastating problem in relation to the psychosocial management of infertility. The findings from this study indicated that, women with fertility problems encountered a whole lot of psychosocial problems. Various management strategies were employed by these women so as to help them deal with their problems. These ranged from biological management, informal psychosocial management to traditional interventions. The study found that women with fertility problems were only managed medically whiles their psychosocial needs were neglected. Therefore, there is the need to have professionally trained counselors / social workers in the various fertility clinics to address the needs of these women. Findings of this study have implications for nursing education, nursing practice, nursing research, and policy formulation.

## **6.5 Recommendations**

Based on the findings of this study, the following recommendations have been made to the following bodies and institutions.

### **6.5.1 Ministry of Health (MoH)**

The ministry should:

- Formulate policies that would incorporate psychosocial managements into the biological / medical managements of women with fertility problems.
- Formulate policies that would see to it that nursing staff plays much greater role in supporting couples with fertility problems as well as providing them with the necessary information they must know.

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- Intensify public education through the media on the causes and prevention of infertility so as to get rid of the stigma attached to people with fertility problems.
- Increase effectiveness, quality and availability of medical services for people with fertility problems.
- Sponsor future researches pertaining to infertility and psychosocial management so as to check whether there had been an improvement in the management of these women.

### **6.5.2 Korle-Bu Teaching Hospital (Gynecology Department)**

The department should:

- Have counseling unit attached to the gynecological department so as to have women with fertility problems counseled prior to treatment and during treatments.
- Initial and unending psychosocial assessment of women with fertility problems should be done by health care providers.
- Organize continuous in-service training for nurses and other health personnel on customer care so as to keep them abreast with the psychosocial needs of women with fertility problems.
- Give enough health education to these women with fertility problems so as to avoid other complication.
- Reward nurses who exhibit good interpersonal relationship to their patients and as well, put up a good behavior so as to motivate them and also to encourage others to do same.
- Create complaints unit for patients and relatives so that they could address their grievances and complaints.

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- Ensure that a client friendly ambience and atmosphere is created at the unit to make clients feel more relaxed and comfortable at all points in time.



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**APPENDICES**

**APPENDIX A: ETHICAL CLEARANCE (NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH- INSTITUTIONAL REVIEW BOARD)**

**NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH**  
*Established 1979*  
*A Constituent of the College of Health Sciences*  
**University of Ghana**

**INSTITUTIONAL REVIEW BOARD**

Phone: +233-302-916438 (Direct)  
+233-289-522574  
Fax: +233-302-502182/513202  
E-mail: [nirb@noguchi.mimcom.org](mailto:nirb@noguchi.mimcom.org)  
Telex No: 2556 UGL GH

Post Office Box LG 581  
Legon, Accra  
Ghana

My Ref. No: DF.22  
Your Ref. No:

4<sup>th</sup> November, 2015

**ETHICAL CLEARANCE**

**FEDERALWIDE ASSURANCE FWA 00001824** **IRB 00001276**

**NMIMR-IRB CPN 015/15-16** **IORG 0000908**

On 4<sup>th</sup> November 2015, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) at a full board meeting reviewed and approved your protocol titled:

**TITLE OF PROTOCOL** : **Bio-Psychosocial management of infertility among women: A study at Korle-Bu Teaching Hospital**

**PRINCIPAL INVESTIGATOR** : **Deborah Yaa Kussiwaah, Mphil Cand.**

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

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

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

This certificate is valid till 3<sup>rd</sup> November, 2016. You are to submit annual reports for continuing review.

Signature of Chair:   
Mrs. Chris Dadzie  
(NMIMR – IRB, Chair)

cc: Professor Kwadwo Koram  
Director, Noguchi Memorial Institute  
for Medical Research, University of Ghana, Legon



**APPENDIX B: INTRODUCTORY LETTER**

**SCHOOL OF NURSING  
COLLEGE OF HEALTH SCIENCES  
UNIVERSITY OF GHANA  
LEGON**

Telephone: 0302-513255 (Dean)  
Ext. 6206  
0302-513250 } Secretary  
028 9531213 }

Fax: 513255  
E-mail: [nursing@ug.edu.gh](mailto:nursing@ug.edu.gh)  
SON/F.11

P. O. Box LG 43  
LEGON, GHANA

December 16, 2015

Our Ref:.....  
Your Ref:.....

The Head  
Dept. of Obst. & Gynae  
KBTH

Dear Sir/Madam,

**INTRODUCTORY LETTER**

I write to introduce to you Deborah Yaa Kussiwaah, an M.Phil Year II student of the School of Nursing, University of Ghana, Legon. She is conducting a research on **“Bio-Psychosocial Management of Infertility among Women: A Study at the Korle-Bu Teaching Hospital”**. Your facility has been chosen as her data collection outlet.

I would be grateful if you could kindly offer her the necessary information needed to enable her collect data for her thesis research.

Thank you.

Yours faithfully,



Prof. Ernestina Donkor  
SUPERVISOR



## **APPENDIX C: INFORMATION SHEET**

**Title of Research:** Experiences of women with infertility and their bio-psychosocial management: A study at the Korle-Bu Teaching Hospital.

**Purpose of the Study:** This study is been carried out for academic purpose and is also intended to explore into the experiences of women with infertility and their bio-psychosocial management at the Korle-Bu Teaching Hospital.

### **Objectives of the Study**

The objectives of this study are to:

1. Identify the psychological experiences of infertility among women.
2. Identify the social experiences of infertility among women.
3. Explore the biological / medical management of women with infertility.
4. Ascertain the psychosocial management of infertility among women.

### **Study Participants**

**Inclusion Criteria:** This study will include women aged between twenty (20) to forty five (45) years, diagnosed of infertility after a year or more of unprotected sexual intercourse who often attend and receive treatment at the gynecological outpatient clinic at the Korle-Bu Teaching Hospital. The study will also include women who are able to speak and understand Akan, Ga or English.

**Exclusion Criteria:** This included women who were not yet diagnosed of infertility, those who could not express themselves in English, Akan and Ga and finally, those who would not want to participate voluntarily.

### **Ethical Considerations**

This study has received ethical approval from Institutional Review Board (IRB) of Noguchi Memorial Institute for Medical Research. Principles such as consent procedures, ensuring confidentiality, privacy, risk and benefit will be followed. The researcher will explain the purpose, objectives and potential benefits and risk to participants in their preferred language and give them sufficient time to decide whether they still want to participate or not.

### **Possible Risk and Discomfort**

It is not expected that you would encounter any harm during your participation in the study. However if the length of the interview may cause some discomfort, you will be allowed to break for a period between ten (10) to twenty (20) minutes as you wish. Moreover, if you experience some form of emotional distress during the interview, the services of a counselor will be made available at no cost to you. (Counselor's name: Madam Theresa Mantey: 0243689035).

### **Possible Benefits**

There are no direct benefits as you participate in this study. However, your participation in the study will enable the researcher understand the kind of management that is giving to you. It will also provide other care givers the insight on how to manage women with such problems in the future.

### **Confidentiality**

Every conversation between you and the researcher will be protected and well secured to the best of my ability. Moreover, your name and any other information that might disclose your identity will not be mentioned or recorded in the research. Every information you give will be kept well and it only my supervisors that can have access to it when I am required to provide it. The information provided will also be for academic and research purposes only.

### **Compensation**

As a form of compensation, you will be given a bottle of soft drink and biscuit so as to refresh yourself after the interview.

### **Voluntary Participation and Right to Leave the Research**

Your participation in this study is voluntary. You are at liberty to withdraw at any point in time without any penalty. Your inability to participate or withdraw from the study will not in any way affect the healthcare you receive at the clinic.

### **Contacts for Additional Information**

**Deborah Yaa Kussiwaah**

School of Nursing

University of Ghana

Tel: 0243187228

Email: [kussiwaah@yahoo.com](mailto:kussiwaah@yahoo.com)



**Professor Ernestina Donkor**

School of Nursing

University of Ghana

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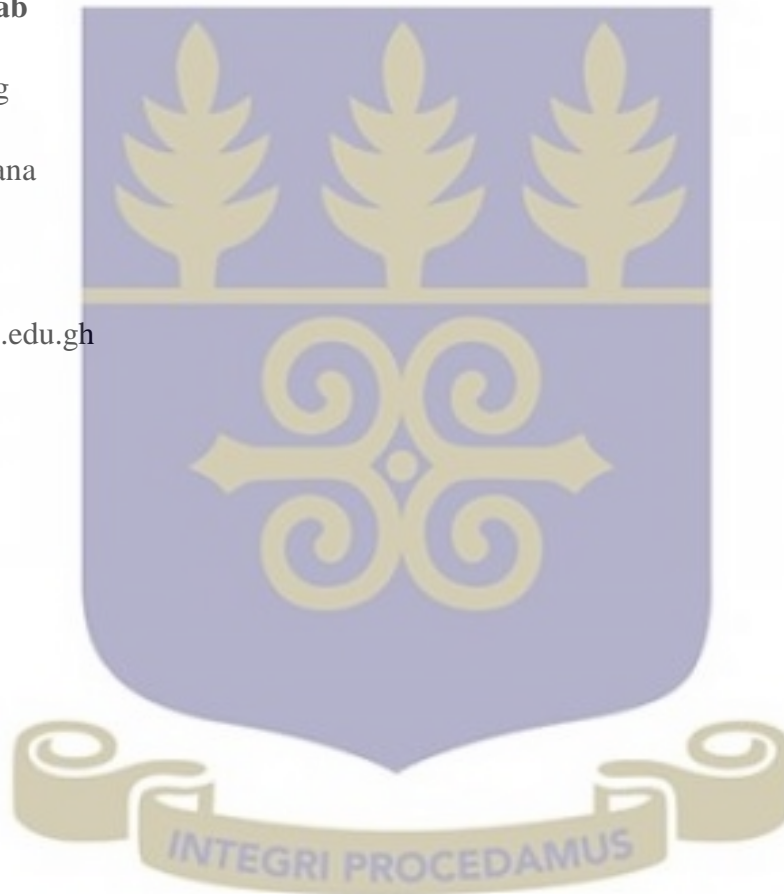
**Dr. Florence Naab**

School of Nursing

University of Ghana

Tel: 0204522332

Email: [fnaab@ug.edu.gh](mailto:fnaab@ug.edu.gh)



## **APPENDIX D: CONSENT FORM**

**Title:** Experiences of women with infertility and their bio-psychosocial management: A study at the Korle-Bu Teaching Hospital.

**Principal Investigator:** Deborah Yaa Kussiwaah

**Address:** School of Nursing, College of Health Science, University of Ghana, Legon.

### **General Information about the Research**

The study seeks to understand the mental and societal problems you have been through ever since you were told that you had a fertility problem. The medical, psychological and social management that you have also received so far needs to be revealed. Be also informed that all information you are going to provide will be for academic and research purposes only. I will have a discussion with you which will last for the next forty-five (45) minutes to one (1) hour. I will be using English, Ga or Twi to suit your language preference. The interview will be related to your opinion on how you have been managed medically, mentally and socially. You will be required to sign or thumbprint a consent form before the interview begins. The interview will be recorded with a tape recorder with your permission whiles you are also supposed to respond to question that will be asked of you by the interviewer. You are also free to offer further explanation to your responses.

### **Possible Risk and Discomforts**

It is not expected that you would encounter any harm during your participation in the study. However if the length of the interview may cause some discomfort, you will be allowed to break for a period between ten (10) to twenty (20) minutes as you wish. Moreover, if you experience

some form of emotional distress during the interview, the services of a counselor will be made available at no cost to you. (Counselor's name: Madam Theresa Mantey: 0243689035).

### **Possible Benefits**

There are no direct benefits as you participate in this study. However, your participation in the study will enable the researcher understand the kind of management that is giving to you. It will also provide other care givers the insight on how to manage women with such problems in the future.

### **Confidentiality**

Every conversation between you and the researcher will be protected and well secured to the best of my ability. Moreover, your name and any other information that might disclose your identity will not be mentioned or recorded in the research. Every information you give will be kept well and it only my supervisors that can have access to it when I am required to provide it. The information provided will also be for academic and research purposes only.

### **Compensation**

As a form of compensation, you will be given a bottle of soft drink and biscuit so as to refresh yourself after the interview.

### **Voluntary Participation and Right to Leave the Research**

Your participation in this study is voluntary. You are at liberty to withdraw at any point in time without any penalty. Your inability to participate or withdraw from the study will not in any way affect the healthcare you receive at the clinic.

**Contacts for Additional Information**

You can contact the researcher or the supervisors on the following;

**Student**

**Deborah Yaa Kussiwaah**

School of Nursing

University Of Ghana

Tel: 0243187228

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**Supervisors:**

**Professor Ernestina Donkor**

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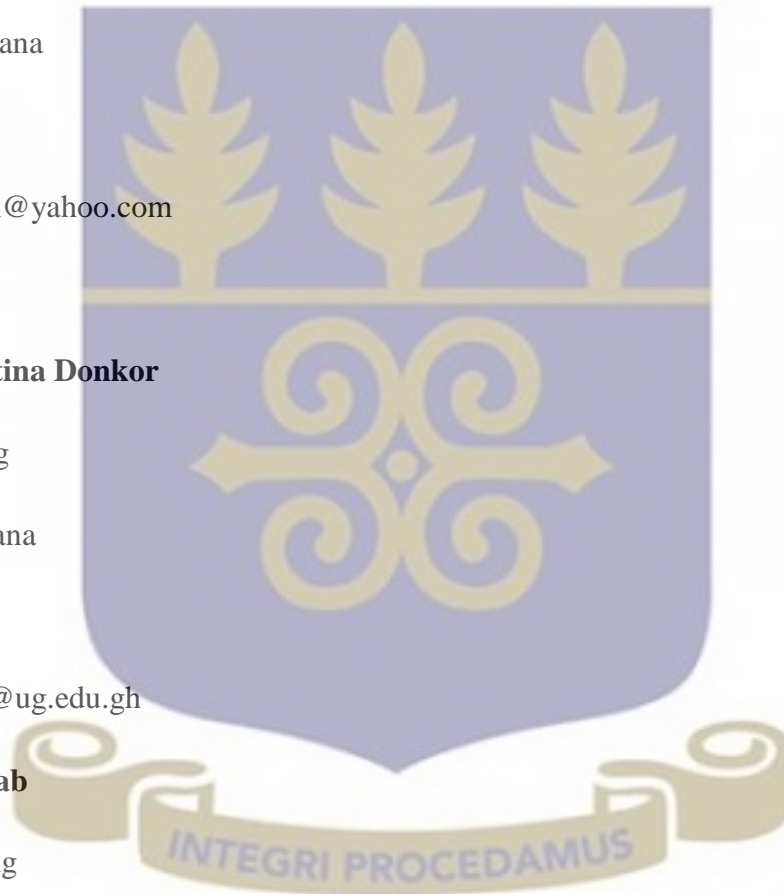
**Dr Florence Naab**

School of Nursing

University of Ghana

Tel: 0204522332

Email: [fnaab@ug.edu.gh](mailto:fnaab@ug.edu.gh)



### **Your rights as a Participant**

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 / 0289522574, or email addresses: [nirb@noguchi.ug.edu.gh](mailto:nirb@noguchi.ug.edu.gh).



*Experiences of women with infertility and their bio-psychosocial management*

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title “*Experiences of women with infertility and their bio-psychosocial management: A study at the Korle-Bu Teaching Hospital*” has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

\_\_\_\_\_

Date

\_\_\_\_\_

Name and signature or mark of volunteer

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

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

\_\_\_\_\_

Date

\_\_\_\_\_

Name and signature of witness

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

\_\_\_\_\_

Date

\_\_\_\_\_

Name Signature of Person Who Obtained Consent

## **APPENDIX E: INTERVIEW GUIDE**

You are invited to take part in a study to investigate into the experiences of women with infertility and their bio-psychosocial management. This study would help get a better understanding of the psychosocial challenges you go through and how you are being managed biologically or medically and as well as the psychosocial management that are being rendered to you.

The interview is expected to last for forty (45) to ninety (90) minutes and it will be recorded.

Thank you.

### **Section A: Demographic Data**

Age in years.....

How long have you been diagnosed as having problem with fertility? .....

Marital Status: Married ( ) Divorce ( ) Co- habitation

Employment: Employed ( ) Unemployed ( ) Self employed ( )

Education: Primary ( ) Secondary ( ) Tertiary ( )

### **Section B: Psychosocial Factors of Infertility**

1. Tell me about all that you started experiencing before you decided to seek medical attention.
2. When were you told you have problem with conceiving;
  - a. What was your feeling?

*Experiences of women with infertility and their bio-psychosocial management*

- b. What were the thoughts that run through your mind as at the time you were diagnosed and now?
3. Describe how your relationship had been with your husband, in-laws, church members, friends and any social group after they got to know your problem / diagnosis.
4. How has your fertility problem also affected your;
  - a. Emotions
  - b. Social life
  - c. Marital intimacy example; communication with spouse, sexual relationship.
  - d. Economic activities
  - e. Lifestyle

**Section C: Biological or Medical Management**

5. Give me an account of activities you have been embarking on in an attempt to conceive.
  - a. In-vitro fertilization (IVF)
  - b. Hormonal medications - (orthodox / herbal)
  - c. Spiritual interventions
  - d. Others
6. Have you experienced any challenges in terms of monetary or side effects of any drug ever since you considered to treat yourself medically?

7. How have you been living with the condition since you were diagnosed?

**Section D: Psychosocial Management**

8. Apart from the medical intervention / management, have you been introduced to any psychosocial management / support?

If yes..

9. Tell me the psychosocial support you have received during this period.

- a. Family members
- b. Counseling from psychologist / pastors
- c. Peer mentoring
- d. others

If no....

10. How have you been managing your condition and its associated challenges?

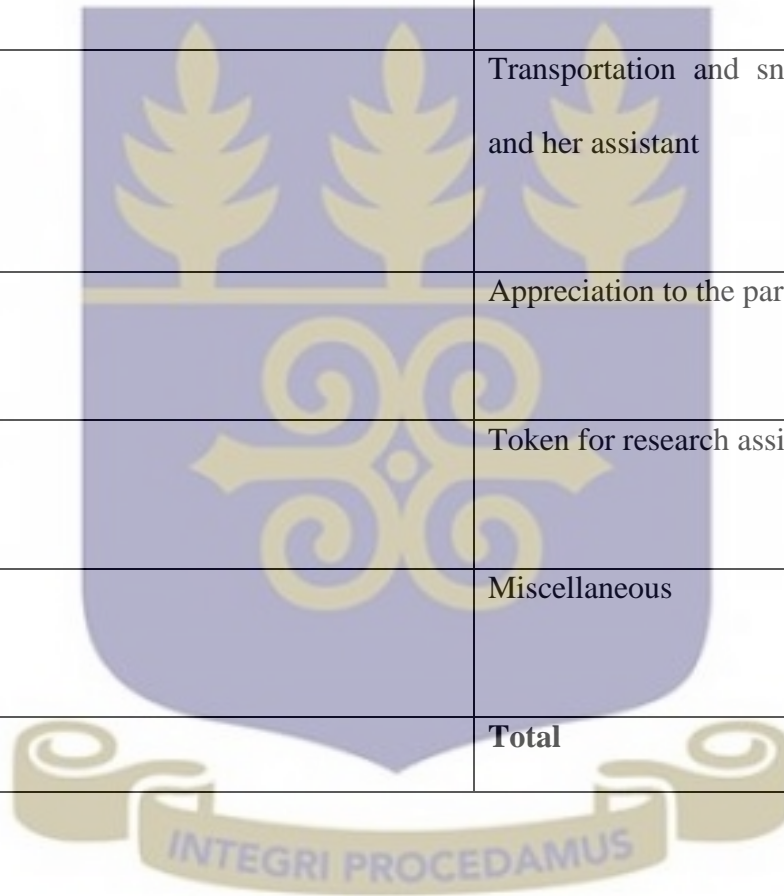
**Thank you**



**APPENDIX F: BUDGET AND BUDGET JUSTIFICATION**

**Summary of Budget and Budget Justification**

<b>Budget</b>	<b>Justification</b>
GHC 800	Stationery and voice recorder
GHC 300	Transportation and snack for researcher and her assistant
GHC 100	Appreciation to the participants
GHC 200	Token for research assistant
GHC 600	Miscellaneous
<b>GHC 2,000</b>	<b>Total</b>



**APPENDIX G: SUMMARY OF DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS**

**Concise Summary of Demographic Characteristics of Participants.**

<b>Participant pseudonym</b>	<b>Age (Years)</b>	<b>Ethnicity</b>	<b>Religion</b>	<b>Marital status</b>	<b>Level of education</b>	<b>Occupation</b>	<b>Number of children</b>	<b>Duration of condition</b>
<b>Elinam</b>	27	Ewe	Christian	Married	Tertiary	Nurse	None	3
<b>Halimatu</b>	28	Hausa	Muslim	Married	Primary	seamstress	None	12
<b>Naa</b>	32	Ga	Christian	Married	Tertiary	Nurse	None	3
<b>Ajoa</b>	33	Akan	Christian	Married	JSS	Seamstress	None	3
<b>Afia</b>	33	Twi	Christian	Married	SSS	Business	None	5
<b>Yaa</b>	31	Fante	Christian	Married	JSS	Seamstress	None	2
<b>Salamatu</b>	42	Hausa	Muslim	Married	None	Seamstress	None	4
<b>Ama</b>	32	Twi	Christian	Married	SSS	Trader	None	3
<b>Siadatu</b>	33	Hausa	Muslim	Married	JSS	Trader	1	7
<b>Aku</b>	32	Ga	Christian	Married	Tertiary	Nurse	None	3
<b>Adukwei</b>	30	Ga	Christian	Married	Primary	Hairdresser	None	4
<b>Esi</b>	39	Fante	Christian	Married	JSS	Trader	None	5
<b>Serwaa</b>	34	Twi	Christian	Married	Tertiary	Teacher	None	2
<b>Akosua</b>	28	Twi	Christian	Married	Tertiary	Nurse	None	3

**APPENDIX H: THEMATIC CODES AND DESCRIPTION****Description of Themes and Subthemes**

<b>Themes and subthemes</b>	<b>Codes</b>	<b>Description</b>
1. Psychological Experience	PE	The negative feelings, and thoughts experienced by these women
i. Loneliness	ll	Unpleasant emotional response to isolation or lack of companionship that are experienced by women with fertility problems.
ii. Anxiety	ant	The strong desire to bear a child by these women.
iii. Depression	dp	Feelings of sadness because of an inability to bear a child.
iv. Lack of concentration	loc	Difficulties in focusing associated with having fertility problem.
v. Worrying / Thinking	wy/tk	The feeling of uneasy due to what people say about these women with fertility problem.
vi. Less sexual satisfaction	lsf	Unfruitful sexual outcomes experienced by these women.
2. Social Experience	SOE	Negative feelings that influences these women's personality, attitudes and lifestyle within a society.
i. Stigmatization	stg	The unfairly treatment given to this women due to their problem.
ii. Intentional Isolation	ii	The act of deliberately drawing away from friends due to the social trauma experienced by these women.
iii. Marital Instability	mi	The difficulties experienced by this women in their marriage due to the problem they find themselves in.
iv. Inability to attend social function	inasf	The fear of being humiliated and stigmatized when engaged in social gatherings.
3. Biological Management	BM	These are medical treatment given to these women.

*Experiences of women with infertility and their bio-psychosocial management*

i. Non drugs	nd	Non medical treatment that were known by some women.
ii. Drugs	dg	Treatments introduced to these women so as to enhance their fertility.
iii. Nutrition	ntn	These describe the sort of foods taken by these women so as to enhance their fertility rate.
iv. Frequent sexual intercourse	fsi	The act of engaging in regular sex so as to achieve pregnancy.
4. Psychosocial Management	PM	These are other forms of supports used in managing women with fertility problems.
i. Counseling from family members	cfm	Describes an informal psychosocial management received by these women from their family members.
ii. Counseling from friends	cff	Another form of informal psychosocial management received by these women from their friends.
iii. Peer mentoring	pm	These are various experiences these women heard from their friends and loved ones who had similar problem.
iv. Drawing closer to God / Allah	dcga	Another form of psychosocial management engaged in by these women through increasing their religious faith.
v. Reading / watching of inspirational stuffs	rwis	These involve engaging in relaxation activities like reading and watching of stuffs that would make them get some relief from their stress.
5. Traditional Intervention	TI	An alternative treatment that were used by these women so as to attain pregnancy.
i. Fetish spiritualist assistance	fsa	These were other means used by these women to get themselves pregnant.
ii. Herbal concoction	hc	The use of herbal preparations in order to get pregnant.