

UNIVERSITY OF GHANA

COLLEGE OF HUMANITIES

DEPARTMENT OF SOCIAL WORK

**EXPERIENCES OF PERSONS ACCESSING ASSISTED REPRODUCTIVE
TECHNOLOGY**

IN SELECTED HEALTH FACILITIES IN SOUTHERN GHANA

GIDEON NII OKAI OKANTEY

(10333122)

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LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
AWARD OF MPhil SOCIAL WORK DEGREE**

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DECLARATION

I Gideon Nii Okai Okantey declare that this work is my own and has not been submitted to any university by myself or any other person.

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Gideon Nii Okai Okantey

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Date

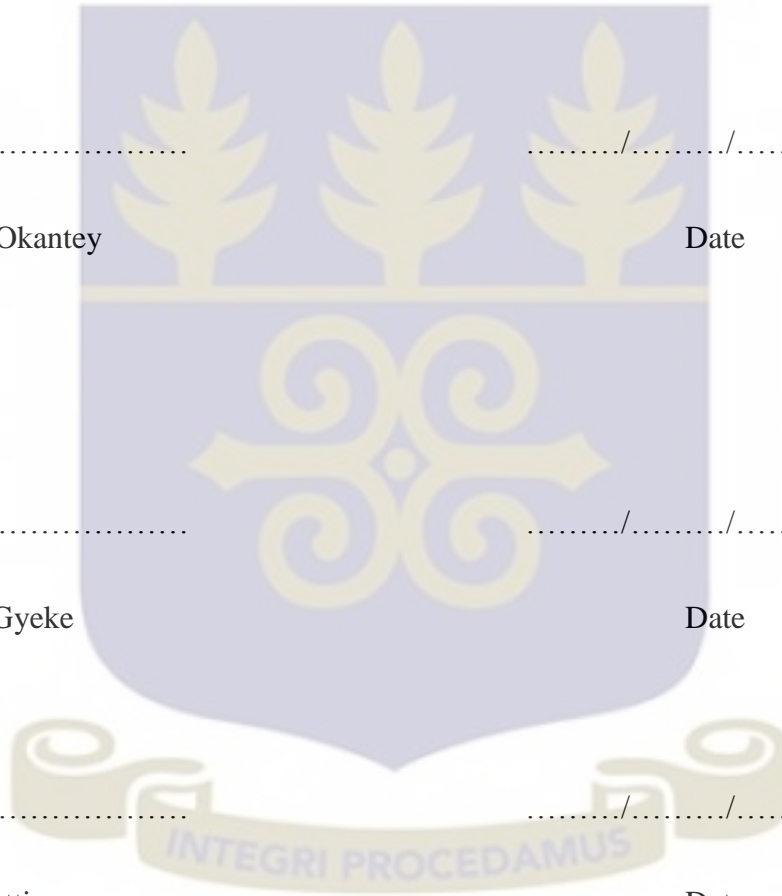
Supervisors:
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Dr. Mavis Dako-Gyeke

...../...../.....
Date

.....
Dr. Cynthia A. Sottie

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Date

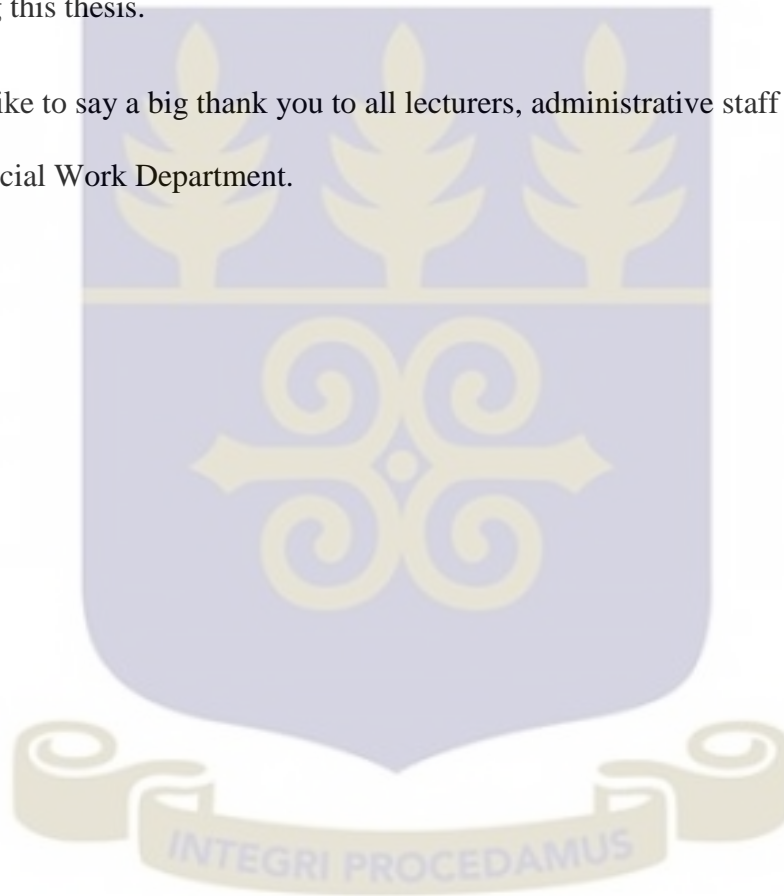


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My profound thanks goes to my wife Vicky, for her enormous support, words of encouragement and proof reading this thesis.

Finally, I would like to say a big thank you to all lecturers, administrative staff and colleague students at the Social Work Department.



DEDICATION

I dedicate this work to my wife Vicky, my children Nii Okaitey, Nii Tetteh Kua, Naa Okailey, Nii Okaitey Shikatse and Nii Okaitei Dzormor.



ABSTRACT

The value placed on children in developing countries, including Ghana compels persons who do not have children to resort to alternative means of having children. Thus, this study explored the experiences of persons accessing assisted reproductive technology in selected health facilities. The objectives of the study were to (a) ascertain how infertility affects men and women in selected health facilities, (b) explore the socio-cultural implications of infertility among persons with fertility problems in selected health facilities, (c) identify the various types of assisted reproductive technology available to persons, and (d) explore the challenges that individuals and couples encounter as they access assisted reproductive technology in selected health facilities. Using a qualitative research design, twenty participants were purposively selected as participants for the study. Individual in depth interviews were conducted to collect data and the findings revealed that, even though both men and women were affected by infertility, the intensity on women was severe. This was mainly due to society's perceptions about the causes of infertility. The study also found that, there were some challenges associated with assisted reproductive technology, which included psychosocial, economic, and medical. In addition, the findings indicated that, society had negative perceptions about infertility and the use of assisted reproductive technology as an alternative means of having children. Based on the findings, the study recommended that there should be education and sensitization programs that would aim at changing society's perceptions about infertility and assisted reproductive technology. Also, there is the need for practitioners of assisted reproductive technology to educate the public about assisted reproductive technology and its benefits.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The challenges in having children and the desire to get treatment, tend to negatively affect persons with fertility problems. Most often, these individuals are traumatized both psychologically and emotionally (Peloquin & Lafontaine, 2010; Ying, Wu, & Locke, 2015), and may experience anger, regret, loss of self-esteem, and are ostracized by community members, particularly in developing countries (Behboodi-Moghadam, Salsali, Eftekhar-Ardabilly, Vaismoradi, & Ramezanzadeh, 2013). In most developing countries, individuals are charged with the responsibility for giving birth and married couples are also expected by society to have children of their own (Ombelet, 2014). This expectation burdens couples especially, to conceive immediately after marriage, making infertility a socially constructed process whereby individuals define their inability to give birth as a problem (Greil, Slauson-Blevins, & McQuillan, 2010).

Most often, the decision by individuals to conceive or not comes with stigma and prejudices depending on the nature of the community in which these persons reside (Inhorn & Birenbaum-Carmeli, 2008). In developed countries, an individuals' decision not have children is somewhat acceptable as compared to developing countries where individuals are expected to have children at all cost. For example, in developing countries including Ghana, child bearing is considered important in determining the power and economic wellbeing of both women and men (Riessman, 2000). In Madagascar, not having a child is attributed to a woman's marriage to a spirit, inability of husband's and wife's blood to mix or being the captive of a witch (Gerrits, 1997). In Egypt, it

is attributed to husband's 'worms' being weak (Inhorn, 2003). The meanings associated to infertility tend to affect individuals negatively.

Generally, due to the frustrations associated with infertility in Ghana, persons with fertility problems resort to alternative means of having children such as assisted reproductive technology (ART). Over the past three decades, many ART, including in-vitro fertilization, intracytoplasmic sperm injection, intrauterine insemination or artificial insemination, and surrogacy have been introduced to assist reproduction among persons with fertility problems (Inhorn & Birenbaum-Carmeli, 2008). ART was introduced primarily to help persons with fertility problems have their own children and to ease sociocultural pressure and psychological distress that are often associated with infertility.

Nevertheless, conceiving or having a child through ART has come under serious scrutiny since its inception (Bradbury & Sutcliffe, 2014; Gourounti, 2016). Ethical and medical concerns have been raised against reproducing through ART (Inhorn & Birenbaum-Carmeli, 2008). Scholars (e.g. Bradbury & Sutcliffe, 2014; Inhorn, 2003) have argued that ART challenges the traditional and sociocultural norms of giving birth and parenthood.

It is assumed the experiences that come with the use of ART put persons with fertility problems in dilemma. Sometimes, resorting to ART becomes the only option these persons could have a child (Morreale, Balon, Tancer, & Diamond, 2010). However, the negative experiences that come with conceiving and having a child through ART could scare persons with fertility problems and may compound their problems. It is against this backdrop that the study sought to explore the experiences of persons who have accessed ART to have children.

1.2 Statement of the Problem

In Ghana, infertility is a serious social problem because child bearing is expected of individuals and married couples (Gyekye, 1996). Given that in most cases, a child is supposed to cater for his or her parents in their old age, being unable to conceive tends to affect individuals and couples in their old age (Gyekye, 1996). In developing countries, traditional stories or folklores modeled around the significance of children tend to disempower persons facing challenges in having a child (Inhorn & Birenbaum-Carmeli, 2008).

In Ghana, the prevalence rate of infertility is relatively high (Tabong & Adongo, 2013). As it is estimated that, 15% of persons of child-bearing age in Ghana are faced with the problem of infertility (Donkor & Sandall, 2007). Further, it has been estimated that infertility affects one in four couples in developing countries (Rutstein & Shah, 2004). The statistics above suggests that many Ghanaians in their reproductive age are facing difficulties in having children. It is therefore important for persons with fertility problems to seek treatment or resort to alternative means to have children.

Whilst ART has been recommended as treatment for fertility problems, its side effects could result in lifelong challenges which include health, socio-cultural and psychological (Jacob, 2004). Further, persons that resort to alternative means of conceiving are stigmatized and go through countless challenges as a result (Lindheim, Coyne, Ayensu-Coker, O'leary, Sinn, & Jaeger, 2014). Additionally, it is argued that, ART result in multiple births (Reynolds, Schieve, Martin, Jeng, & Macaluso, 2003), with poor maternal health complication, preterm delivery, and unhealthy infants coupled with low birth weight and infant mortality (Kiely, 1998).

In Ghana, whilst trying other coping and health seeking behaviors to bear a child, persons with fertility problems experience stigmatization and discrimination, which are coupled with

psychological distress that result from socio-cultural beliefs of society (Osei, 2014). The pressure associated with infertility and its treatment could lead to negative socio-cultural experiences, which could result in psychological problems, mental disorder and marital problems among persons. Besides, the use of ART could lead to both parental complication during and after conception as well as complications that come with the health of the baby that will be born (Kiely, 1998).

Studies on fertility and ART in Ghana have focused on depression among women who are facing fertility problems (Alhassan, Ziblim, & Muntaka, 2014), experiences of couples who are facing fertility problems (Tabong & Adongo, 2013), coping strategies of women seeking infertility treatment (Donkor & Sandall, 2007), and implication of infertility in Ghana (Fledderjohann, 2012). The focus of research on infertility in Ghana has left other issues related to fertility treatment partially addressed, thereby creating a research gap. The study explored the experiences of persons with fertility problems regarding the use of ART, and it is hoped that the findings of the study would contribute to existing knowledge.

1.3 Objectives of the Study

The objectives of the study were;

1. To ascertain how infertility affects men and women in selected health facilities in Southern Ghana.
2. To explore the socio-cultural implications of infertility among persons with fertility problems in selected health facilities in Southern Ghana.
3. To identify the various types of ART available to persons in Ghana.
4. To explore the challenges that persons with fertility problems encounter as they access ART in selected health facilities in Southern Ghana.

1.4 Research Questions

1. How does infertility affects men and women in selected health facilities in Southern Ghana?
2. What are the socio-cultural implications of infertility among persons with fertility problems in the selected health facilities in Southern Ghana?
3. What are the various types of ART available to persons in Ghana?
4. What are the challenges that persons with fertility problems encounter as they access ART in the selected facilities in Southern Ghana?

1.5 Significance of the Study

Infertility is considered a social problem as a result of the value society places on children and how society perceives persons who do not have children. The findings of the study would highlight the challenges associated with the use of ART. This would provide information to practitioners and persons who would opt to have children through ART. Furthermore, the findings would be published in academic journal to enhance easy access by social workers and other interested institutions and individuals.

Moreover, the findings of the study would equip social workers with the experiences associated with the use of ART and how infertility affects both men and women. Accordingly, social workers would design interventions for both men and women on issues of infertility. In addition, the study would aid policy makers to understand the experiences of persons with fertility problems as well as the challenges of using ART. This would assist in the implementation of policies that would help mitigate the complications associated with the use of ART.

Further, the findings of the study would serve as an advocacy tool for social workers to advocate for favorable policies that would ease the pressure associated with the use of ART to have children. In academia, the study would add up to the existing literature in the field of infertility and ART and also serve as a reference material for future research. Based on the findings of the study, the researcher has made suggestions in the form of recommendations, on what future studies should focus on in the area of infertility.

1.6 Definition of Terms

Fertility: The ability of a person to conceive within twelve months of continuous unprotected sex (American Society for Reproductive Medicine, 2012).

Primary Infertility: Refers to a person who has never conceived a child after countless unprotected sex with the opposite sex (Tabong & Adongo, 2013).

Secondary Infertility: Refers to a person who has at least conceived a child in the past (Tabong & Adongo, 2013).

Infertility: The inability for a person (male or female) to conceive a child after twelve months of continuous unprotected sexual intercourse with the opposite sex (American Society for Reproductive Medicine, 2012, World Health Organization, 2002).

Assisted Reproductive Technology: A medically aid birth technology used to have children and overcome infertility (Inhorn & Birenbaum-Carmeli, 2008).

In-vitro Fertilization: A technique by which sperm and eggs are retrieved from bodies, allowed to fertilize in a petri-dish outside the body and further transferred as fertilized embryo back to the woman's uterus (Inhorn & Birenbaum-Carmeli, 2008).

Intrauterine insemination (Artificial Insemination): A technique whereby the sperm of a (male partner or donor's) are injected directly into the uterus, sometimes following sperm-sorting for sex selection (Inhorn & Birenbaum-Carmeli, 2008).

1.7 Overview of Chapters

The study has been divided into five chapters. Chapter one presents the background of the study, problem statement, study objectives, research questions, significance of the study and definition of terms. Chapter two reviews literature on the topic under study and discusses the theoretical perspective adopted for the study. Chapter three discusses the methodologies employed to collect and analyze data for the study. Chapter four presents the analysis and findings of the study and chapter five summarizes the findings, concludes and makes recommendations for the study.



CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL PERSPECTIVE

2.1 Introduction

This section reviews literature related to the topic under study. Literature were reviewed on the following topics; (a) effects of infertility on men and women, (b) sociocultural implications of infertility, (c) types of assisted reproductive technology, and (d) challenges encountered in accessing assisted reproductive technology.

2.2 Effects of Infertility on Men and Women

Infertility generally affects both males and females negatively. The intensity of the effects with regard to males and females has been documented by previous scholars (Farhi & Ben-Haroush, 2011; Fledderjohann, 2012; Karaca & Unsal, 2015). Due to differences in socialization and society's gender role expectations, it is believed that men and women may experience and respond to infertility differently (Ying, Wu, & Loke, 2015). Some scholars are of the view that the implication of having fertility problems affects men and women differently (Benazon, Wright, & Sabourin, 1992; Bolsoy, Taspinar, Kavlak, & Sirin, 2010; Chachamovich et al. 2009; Fledderjohann, 2012; Monga, Bogdan, Katz, Stein, & Ganiats, 2004), while others believe it affects men and women similarly (Onat & Beji, 2012). Besides, while some studies have reported female factor as a primary cause of infertility (Meng et al., 2015), other studies have reported male factor as a primary cause of infertility among individuals (Ferhi & Ben-Haroush, 2011). This section reviewed literature on how infertility affects males and females.

Studies on the experiences of infertility among men have been very scanty as infertility has been considered a woman's problem (Hinton & Miller, 2013). Nevertheless, the limited studies on

men's experiences on infertility have revealed that men experience infertility negatively. Hinton and Miller (2013) conducted a study on the experiences of men as they sought for cure for infertility in the United Kingdom. The study used the results of two qualitative studies that focused on experiences of infertility and fatherhood in the UK. The researchers found that men felt marginalized and were much concerned about their masculinity. Also, the study revealed that some of the men whose partners received donor spermatozoa regarded themselves as bystanders and separated from the reproductive processes.

Another study conducted by Hanna and Gough (2015) explored male experiences of infertility. The researchers reviewed 13 qualitative studies that focused on experiences of males facing difficulty in having children. Articles for the review were taken from the CINAHL, MEDLINE, and PsychINFO databases. The researchers found that even though studies on males' experiences of infertility are scanty, the few have reported negative experiences of male infertility.

Fledderjohann (2012) investigated the experiences of persons with fertility problems in Ghana. The study employed semi-structured interviews to collect data from 107 women who were seeking treatment in gynecological and obstetric hospitals in Accra. The study found that, women with fertility problems faced severe social stigma, marital strain, psychological and mental health complications. Furthermore, the women felt that they were subject to blame for not having children and faced greater social consequences for their difficulty in conceiving and having children than their male partners.

Furthermore, Karaca and Unsal (2015) investigated the psychological challenges of infertility among Turkish women. A descriptive qualitative approach was employed and individual in-depth interviews were conducted to collect data from participants. After analyzing the data using content analysis, the study reported that societies exert more pressure on women with fertility

challenges than men. Also, husbands and other family members most often blame women for couple's inability to have a child. The study concluded that women's difficulty in having children in Turkey subjected them to myriad psychosocial problems such as discrimination and stigmatization.

Moreover, Järholm, Broberg, and Thurin-Kjellberg (2016) examined symptoms of depression and anxiety in men and women who were planning for pre-implantation genetic diagnosis and compared this to men and women who were planning for their first in vitro fertilization in Sweden. The study found that women who had experienced miscarriage exhibited symptoms of depression in the pre-implantation genetic diagnosis group. Also, men who were planning for pre-implantation genetic diagnosis experienced anxiety and other stressors as compared to the men planning for in vitro fertilization.

A similar study conducted in Turkey by Bolsoy et al. (2010) employed a quantitative study and sampled 141 women and 107 men who were facing difficulties in having children. Questionnaires were used to collect data on the quality of life on participants. The study found physical health complications and poor social relations on infertile men who were unemployed. The authors further added that, infertile women were more likely to be subjected to negative experiences than infertile men. The study concluded that healthcare workers should abreast themselves with factors that affect quality of life of individuals with fertility problems in order to design a tailored fit intervention to address them.

However, Ramazanzadeh, Noorbala, Abedinia, and Naghizadeh (2009) explored the coping strategies adopted by couples facing fertility challenges and the psychological outcomes of their adjustment. The researchers reviewed literature written within the last two decades prior to the study. The study found that emotional and physical abuses women with fertility problems

experienced in their respective communities compelled them to adopt isolation as a coping strategy. The authors concluded that isolation results in loneliness, reflection on the past, and self-accusations, which could lead to depression.

Nevertheless, studies have reported that symptoms or predictors for stress, anxiety, depression and other negative experiences of infertility differ from men and women (Leach, Christiansen, Mackinnon, Windsor, & Butterworth, 2008). While it has been acknowledged that both men and women are emotionally affected by infertility, the stressors, pressure and depression turn to be higher and severe among women than men (Sexton, Byrd, O'donohue, & Jacobs, 2010). Women who do not have children experience insomnia, loss of appetite, obsession thoughts, guilty due to husbands and society expectations, and other depression symptoms (Karaca & Unsal, 2015).

Studies conducted in developing countries like Ghana, has reported that women are more likely to experience prejudices in a childless relationship (Weinger, 2009). In most developing countries, infertility is only seen as a woman's problem and the cause of infertility is attributed to only women (Guntupalli & Chenchelgudem, 2004). It has been reported that couples with fertility problems in developing countries experience family interference, which is often directed towards wives (Karaca & Unsal, 2015).

A survey conducted by Donkor and Sandall (2007) examined how women seeking fertility treatment in some health facilities in Ghana perceived themselves. Data from 615 women facing fertility challenges revealed that women or wives were more likely to be blamed for infertility in marriage and were often divorced by their husbands as a result of family pressure. Further, the results from a sequential multiple regression analysis that women were stressed up due to family pressure. Nevertheless, the authors found that educated women felt lesser infertility related

stress. The study concluded that women should be empowered through education in order to minimize the level of stress associated with infertility.

Ying et al. (2015) reviewed 33 literatures to examine the role of gender in shaping infertile couples' experiences and coping strategies. The authors found that due to different gender roles and expectations, women were more affected negatively by infertility than men. In addition, the authors reported that even though couples with fertility problems experience interpersonal stressors, physical stressors, emotional stressors and moderate stressors, women reported severe stressors than men. The study concluded that infertility subjected women to low level of identity and self-esteem, anxiety, stigma, higher level of depression and shame and they felt less confident about themselves.

Besides, infertility tends to affect the leisure of women negatively. A study conducted by Parry and Shinew (2004) investigated the constraining impact of infertility on women's leisure lifestyle. Data from 33 participants revealed that the leisure of women with fertility problems are negatively affected in three different dimensions. These were; (a) infertility and desire to get treated are time consuming and these women are left with little or no time for leisure, (b) the changes in a woman's lifestyle as a result of seeking infertility treatment negatively impact on their leisure, and (c) women facing fertility problems felt socially isolated, which negatively influenced their leisure satisfaction.

Furthermore, infertility has been highlighted by previous scholars as a major contributor to intimate partner violence. A study conducted by Stellar, Garcia-Moreno, Temmerman, and Van der Poel (2016) explored the association between infertility and intimate partner violence. The authors reviewed 21 quantitative studies that focused on the relationship between infertility and intimate partner violence. The study found that women in childless relationships experienced

physical and sexual abuses. A quantitative study by Aduloju, Olagbuji, Olofinbiyi, and Awoleke (2015) in Nigeria examined the impact on infertility on intimate partner violence. Semi-structured questionnaires were administered to collect data from 170 women with fertility problems. The authors used the Statistical Package for Social Science [SPSS] to analyze data. The study found that women in childless marriages experienced physical, emotional, sexual, and psychological abuses.

A Rwandan study conducted by Dhont, van de Wijgert, Coene, Gasarabwe, and Temmerman (2011) explored the experiences of infertility among couples. A focus group discussion was conducted to collect data from women who were not having children after years of marriage. The researchers reported that, in Rwanda, it is the duty of the woman to have children for the husband's family. As a result, after spending years in marriage without children attracted abusive words from husband's family. In more serious instances, husbands were advised by their families to look elsewhere for children which consequently, hindered the longevity of the marriage. The study further recommended the need for public education to reduce stigma associated with infertility.

2.2.1 Beliefs Regarding Factors that Contribute to Infertility

Even though males and females encounter negative experience of fertility problems, women are the most affected group. In most settings across the globe, wives or female partners are blamed in childless marriages irrespective of the cause of the infertility (Guntupalli & Chenchelgudem, 2004). The cause of the biased in blame according to the reviewed literature include: socialization and differences in gender roles and other sociocultural factors. Nevertheless, previous scholars in the area of infertility have highlighted that infertility should not be treated as a woman problem but rather a condition that affects both men and women (Oakley, 1994).

However, Obesity has been identified by scholars as a major contributor to infertility among women. For example, studies on factors contributing to infertility have revealed that obesity could lead to polycystic ovary syndrome, which affects four to seven percent of all women (De Mola, 2009). Obese women who contract this disease may suffer from infertility that results from lack of ovulation and may be at a high risk of experiencing miscarriage and complications during pregnancy (De Mola, 2009). In addition, cardiovascular diseases are strong antecedence to erectile dysfunction among men (McCabe et al., 2016). However, scholars in the area of infertility have reported that factors contributing to male and female infertility constitute 30 to 40% of infertility related cases (Peterson, Gold, & Feingold, 2007).

Generally, a review of related literature by McCabe et al. (2016) on factors contributing to sexual dysfunction among men and women reported many biological and lifestyle factors that contribute to sexual dysfunction. Among the factors were: urinary tract infections, diabetes, heart diseases and substance abuse. Another study conducted in India on factors contributing to infertility by Guntupalli and Chenchelgudem (2004) reported sexually transmitted infections, abortions, and adolescent sterility as the major contributing factors to infertility. Other studies have reported alcohol abuse and tobacco smoking among men and women as causal factors to infertility (Tengs & Osgood, 2001).

Female genital mutilation is a major cause of sexual dysfunction among women, which can result in infertility (Mohammed, Hassan, & Eyada, 2014). Some studies have reported ovulation dysfunctions among women as the cause of infertility (De Mola, 2009), intimate partner violence (Oberge, Fugle-Meyer, & Fugle-Meyer, 2002), and pelvic inflammatory disease that may cause induced abortion or pelvic surgeries (Durugbo, Nyengidiki, Bassey, and Wariso, 2015).

Besides, phthalates have been identified by scholars as a cause of dysfunction to the male reproductive system (Gray et al., 2000). Similarly, a study conducted by Wang et al. (2015) examined whether Phthalate level in semen were associated with infertility among men. The experimental study sampled 107 infertile and 94 fertile men. The researcher reported based on findings that a significant level of phthalate was found in the semen of the infertile men. The study concluded that the exposure of men to chemicals that contain phthalate can be detrimental to their reproductive system.

2.3 Socio-Cultural Implications of Infertility

Due to the value placed on children by most societies, infertility has been described as a serious condition in the lives of people (Ferreira, Antunes, Duarte, & Chaves, 2015). Not having a child in developing countries like Ghana could be very challenging and could affect the normative wellbeing of individuals (Alhassan et al., 2014). Infertility tends to affect every aspect of the life of an individual, which includes: interpersonal relationship, professional activities, and social wellbeing (Drosdzol & Skrzypulec, 2009). Moreover, infertility has been highlighted by previous scholars as the most difficult or challenging experience that individuals and married couples may face (Karaca and Unsal, 2015). This section reviewed related literature on the socio-cultural implications associated with infertility.

A study conducted in Iran by Hasanpoor-Azghdy, Simbar, and Vedadhir (2015) on infertility, employed a qualitative research method and collected data from a sample of 25 participants. The findings indicated five major implications that are associated with infertility. These were, psychological and domestic violence, marital instability, social isolation and self-imposed isolation from social gatherings and family and friends, social exclusion and being disregarded by family members and relatives, and social alienation. The study further reported that, in an

attempt to seek treatment, persons with fertility problems were subjected to social stigmatization, which affected their quality of life. In another study, which explored the impacts of infertility on couples, Daar and Merali (2002) reported that, in addition to the negative implications of infertility, couples face a stringent of social pressures which are unbearable and stressful.

Furthermore, a study conducted in Northern Ghana by Tabong and Adongo (2013) investigated the experiences of infertility among couples. The authors collected data from 15 couples with fertility problems, 45 couples with children and eight key informants. Focus group discussions and individual in-depth interviews were conducted to collect data from participants. The authors reported that couples with fertility problems were stigmatized and were excluded from leadership roles in their respective communities. The study also found that, individuals with fertility problems were denied membership in the ancestral world and are denied the opportunity to live again. In an attempt to prove their fertility, both males and females engaged in sexual intercourse with multiple partners. The study concluded that such acts could result in the spread of sexually transmitted diseases, hence the need for policy concern on fertility issues in Ghana.

A quantitative study conducted in Ghana by Alhassan et al. (2014) examined depression among women with fertility problems. The authors used a purposive sampling technique to select 100 women attending fertility treatment at selected health facilities in Northern Ghana. The study revealed that, participants experienced intense depression due to negative attitudes held by the community toward infertility. The authors concluded that the Ghana Health Service and other stakeholders should design interventions aimed at mitigating depression and stressors associated with infertility. Another study in Cameroon by Olayinka and Njikam (1992) on socio-cultural implications of infertility reported that individuals do not perceive ART as an acceptable solution to infertility. Individuals are therefore reluctant to access ART due to socio-cultural barriers.

Infertility is an unexpected event, and as a result, could affect people's personal and social lives negatively (Ferreira, Antunes, Duarte, & Chaves, 2015). In some countries, the socio-cultural implications of infertility are very damaging. In Turkey, for instance, infertility affects the quality of life and the social status of persons with fertility problems (Onat & Beji, 2012). A qualitative study conducted in India by Nene, Coyaji, and Apte (2005) interviewed 40 participants and reported that, infertility among individuals reduces sexual activities among married couples. Furthermore, poor interpersonal relationships among couples and external pressures could lead to marriage breakdown. The findings indicated that, difficulties in having children and other sexual dysfunctions are stigmatized characteristics. Couples who have lived several years without a child are labelled and stigmatized.

Similarly, results from a qualitative study conducted in Turkey by Karaca and Unsal (2015) on psychosocial problems associated with infertility revealed that, societies attach meanings to infertility, which tends to negatively affect persons with fertility problems. As a result, couples' inability to have a child places burden on them, experience negative self-concept, encounter pressure and stigmatization, negatively affect how they view life, withdrawal and isolation from other persons in the community. This suggests that the societal pressure placed on individuals without children affects them and impacts negatively on their social lives (Sahinoglu & Buken, 2010).

Some studies have highlighted on how the social construction of infertility and the demands that comes with a life without children shapes the perceptions of individuals who are having fertility challenges. For instance, a qualitative study conducted in New Zealand by Ulrich and Weatherall (2000) investigated the perceptions among women having fertility challenges. The researcher sampled 19 participants and conducted in-depth individual interviews. It was revealed that the

women were very desperate to have their own children. The reason was that, having children would complete their womanhood and fulfill societal expectation. Participants also established that, motherhood is a vital stage in any relationship, hence relation is deemed incomplete without children. Motherhood was viewed as a fulfilment for women and failure to have a child leads to the feeling of guilt. The study concluded that the social construction of motherhood affects individuals who are facing fertility challenges negatively and makes them feel incomplete as women. There is the need for community interventions designed to change public perceptions about motherhood.

2.4 Types of Assisted Reproductive Technology

Infertility does not necessarily mean that individuals cannot have a child rather they require medical treatment and assistance to have children (Merck Serono Australia Pty Ltd, 2011). Infertility is caused by myriad factors (Meng et al., 2015), which requires different treatment options. For example, infertility that results from deficiency in the union of sperm and egg is treated by In Vitro Fertilization. This is done when fertilized egg or eggs are transferred into the woman's uterus, implant in the uterine lining and develop (American Society for Reproductive Medicine, 2015). This section reviewed literature on the types of assisted reproductive technology.

Also, ART has been accepted as alternative ways to realize the quest for a child (Kirkman & Rosenthal, 2008; Orhue & Aziken, 2008). In searching for a cure or solution, persons with fertility problems resort to different kinds of treatment methods. There are myriad types of ART that are available for persons having fertility problems to have their own children. Among these medical treatment of infertility are; in vitro fertilization, intracytoplasmic sperm enthood, intrauterine insemination, among others (Muller, Ophuis, Broekmans, & Lock, 2016).

A research conducted in New Zealand by Lovelock (2010) investigated the use of ART by couples and individuals for conception. The study reviewed previous literature on ART between 1965 and 2004. The results of the study indicated the most used ART in New Zealand to include in-vitro fertilization, intracytoplasmic sperm injection, artificial insemination (both men and women), embryo transfer, and gamete intrafallopian transfer.

Furthermore, another type of ART is artificial insemination by donor. Scholars have established that artificial insemination is commonly used worldwide (Robinson & Miller, 2004). Even though it has gained a lot of popularity in the Euro American world, knowledge about artificial insemination by donor is very low in the African region (Savage, 1992). This is because most African countries often prefer to cure infertility with traditional medications, which tend to yield poor results (Orhue & Aziken, 2008). Studies over the years, have reported that the use of ART to conceive and have children has received little attention in Africa due to the perceptions people have about it (Inhorn and Birenbaum-Carmeli, 2008).

Nevertheless, a recent study conducted in South Africa by Mwaba (2013) on In vitro fertilization and embryo transfer has reported a surge in the use of ART in having children. The author employed a qualitative research method and sampled 21 women who had used In Vitro fertilization and embryo transfer. Individual in-depth interviews were conducted by the researchers to collect data from participants. After analyzing the data using thematic data analysis, the author reported that, the use of ART as an alternative means to conceive and have children is on the ascendency. The reason for the increase according to the author was that, participants had decided not to be discouraged by the negative attitudes of the society towards ART.

It is important to note that each type of ART is suitable for a particular problem that may cause one's infertility. For example, a study conducted in the Netherland by Muller et al. (2016) revealed that cryopreservation of semen is the best form of ART for cancer patients. The study explained that the side effects of cancer treatment drugs may lead to infertility and this is prevented when cryopreservation semen is obtained prior to the treatment. The semen can be used after the treatment of cancer for patients to have children.

2.5 Challenges Encountered Accessing Assisted Reproductive Technology

The value placed on children by society and negative experiences persons without children go through, influence them to resort to other means of having children (Hasanpoor-Azghdy, et al., 2015). In most African countries, some persons seek infertility treatment from traditional healers and sometimes pastors due to the belief that their condition is as a result of witchcraft (Dyer, Abrahams, Hoffman, & Van Der Spuy, 2002). Others also perceive infertility as a phenomenon that requires medical condition with a significant attention to psychosocial consequences (Greil, Slauson-Blevins, & McQuillan, 2010).

The socio-cultural and emotional challenges associated with infertility have been highlighted by the World Health Organization and World Bank (World Health Organization, 2011). Of importance to note is that, infertility is considered a disability as it has been considered a disease that generates disability in a person's reproductive organs (World Health Organization, 2011). Due to the expectations placed on persons to have children after marriage, couples begin to feel anxious when a plan for conception does not happen as each month passes (Hinton & Miller, 2013). As a result, couples tend to resort to medically approved ways like ART to have children. However, ART come with its side effects, including medically related complications and socio-cultural stigma (Inhorn & Birenbaum-Carmeli, 2008). This section reviewed literature on the

challenges faced by persons as they accessed ART with emphasis on psychosocial effects and medical complications.

2.5.1 Psychosocial Effects of Accessing Assisted Reproductive Technology

The use of ART has come under serious scrutiny, as some scholars have reported that it is against the norms and traditions of giving birth (Inhorn & Birenbaum-Carmeli, 2008). This is because some societies hold the belief that assisted reproductive technology create problems as to who are the biological parents of a child as the dichotomy between biological and social basis of kingship has become unclear (Taylor, 2005). Even though assisted reproductive technology could serve as an alternative means for having children, its consequences could be detrimental to the wellbeing of persons who access it.

Furthermore, studies have revealed that some fertile and infertile persons do not perceive assisted reproductive technology as an acceptable solution for treating infertility due to fear of stigma (Savage, 1992). This is supported by a research conducted by Bradbury and Sutcliffe (2014) in the United Kingdom. After a review of previous studies on the use of ART as an alternative means to conceive, the researchers reported that users were affected psychologically and emotionally. Further, the researchers explained that due to society's unacceptance of conceptions through ART, parents face a dilemma with regard to disclosing information about conception to their children and other members of the community (Bradbury & Sutcliffe, 2014).

Besides, previous studies have stressed on the difficulty in disclosing information regarding the use of ART to resulting children. In the United States, a study was conducted by Gross, Clay, Harper, Stockman, Van Voorhis, and Syrop (2010). The study sought to examine the nature of counselling services available to persons who accessed ART, with emphasis on disclosure to

resulting children. Results from 182 clinics indicated that counselling with regard to disclosure of information to resulting children were less frequent. This created much burden on parents when children start to ask them questions. Based on the findings, the researchers highlighted on the need for counselling services that focused on how parents should address questions from their children.

Another study conducted in the United States by Morreale et al. (2010) assessed the impact of psychosocial stress on the outcome of ART. The researchers reviewed 28 articles over 15 years published in PubMed. The review focused solely on women and found that the use of ART to conceive and have children could be very stressful and affected women negatively, and in turn affected the outcome of ART. Based on the findings of the study, it was recommended that there was the need for hospital facilities and other stakeholders that offered ART services to introduce interventions aimed at reducing stress among users.

A recent study by Gourounti (2016) conducted a systematic review of qualitative studies that were published within the period of 2004-2014 in the area of ART. The study included only articles that were published in the English language and the review was done with 20 published articles. The purpose of the study was to examine the psychological outcomes and adjustment in pregnancy by ART users. The findings of the study reported that women who conceive by accessing ART go through emotional stress as compared to women who conceived naturally.

A qualitative study conducted in Taiwan by Lin, Tsai, and Lai (2012) investigated the experiences of women after series of attempts to conceive through ART. The inclusion criterion for the study was that, participants should have undergone fertility treatment for the last three years. Further, data from 15 users of ART revealed that women experienced anxiety and fear after they were declared pregnant through ART. Participants experienced intense fear within the

first three months of pregnancy, which tended to be stressful and emotionally exhausting. It was also indicated by the researchers that after series of unsuccessful attempts to conceive through ART, users expressed disbelief after being declared pregnant. Due to the emotional stressors users experienced, the authors recommended the need for psychological counselling that would assist users to manage their feelings after going through a successful fertility treatment.

2.5.2 Medical Related Complications Associated with Assisted Reproductive Technology

Infertility is supposed to be a private issue but the socially construction of the phenomenon has made infertility a serious medical condition (Greil, McQuillan, & Slauson-Blevins, 2011). As a result, scholars have highlighted that infertility requires medical treatment and attention (Ferreira, Antunes, Duarte, & Chaves, 2015). Nevertheless, in trying to seek treatment for infertility by accessing ART, users are said to experience medical complications (Qin, Liu, Sheng, Wang, & Geo, 2016). This section reviewed literature on the medically related complications associated with the use of ART.

While the use of ART has been acknowledged by some scholars as a suitable alternative for having a child (American Society for Reproductive Medicine, 2015) other scholars have been much concerned about the medical and health related issues that are associated with the use of ART (Qin et al., 2016). The medical complications that come with ART have been highlighted by previous scholars.

A study conducted in China by Qin et al. (2016) reviewed related literature on conception through ART and used a meta-analysis to examine the side effects of the use of ART to conceive. Results from the study revealed that ART puts pregnant women at a higher risk of pregnancy related complications, such as pregnancy-induced hypertension, gestational diabetes mellitus, placenta abruption, antepartum hemorrhage, postpartum hemorrhage and perinatal

mortality. In addition to the above, myriad complications were also identified on the babies born ART. These were preterm birth and low birth weight. The researchers concluded based on the findings that, conception through ART should be managed and considered by gynecologists and obstetricians as high risk to the health of users.

Moreover, another study conducted in the UK by Bradbury and Sutcliffe (2014) relied on previous qualitative research on conception through ART to investigate the health of children born through ART. The study established that there is the problem of multiple births with the use of ART, which affects the health of children. Specifically, the health complication on children born through ART included stillbirths, cerebral palsy and low birth weight. In addition, the researchers reported long term effects associated with children conceived through ART to include poor physical health, developmental malfunctioning and cardiovascular diseases in adulthood. The researcher concluded that there may be other health complications associated with children conceived through ART in their life cycle. Therefore, health workers and other stakeholders should have a close monitoring of such children.

Besides, Belva, Henriët, Liebaers, Van Steirteghem, Celestin-Westreich, and Bandulle (2007) conducted a thorough medical examination on the long term health complications among children conceived through assisted reproductive technology in Belgium. The researcher collected and assessed medical outcome of 150 children who were eight years old singletons and were conceived through ART and 140 eight years old singletons who were conceived naturally. The researcher used questionnaires to collect data regarding the general health of the sampled children from their parents. The outcome of the research revealed that children born through ART experienced relatively intensive congenital dysfunctions as compared to the children who were conceived naturally.

Lu, Wang, and Jin (2013) conducted a long term follow up on children conceived through ART. They study reviewed related literature on the health of children conceived through ART. Results from the previous literature reviewed by the researchers revealed health related complications, including growth malfunctions, neurodevelopmental and neurological consequences, cancer related risk, psychological development malfunctions, physical risks and other birth deficiencies. Based on the high risk of complications associated with the use of ART, the researcher recommended the need to do follow-ups on children conceived through ART. This would help identify and address any health complications that may be associated with ART.

Besides, another study conducted by Belva et al. (2008) on ART revealed that cryopreservation of semen that is taken from cancer patients before they get treated have malfunctions on the resulting child. Contrary, another study on cryopreservation of semen by Thomson et al. (2002) reported that the use of cryopreservation of semen in ART after cancer treatment has no negative effect on the resulting child. This differences in findings could be as a result of the methods as well as the settings for the studies.

2.6 Theoretical Perspective

The Theory of Planned Behaviour (Ajzen, 1991)

This section discusses the theoretical perspective that underpinned the study. The theory of Planned Behaviour by Ajzen (1991) was employed as the theoretical perspective for the study. The theory of planned behaviour explains why individuals engage in a particular activity or exhibit certain behaviours. Since its introduction, the theory has been very influential for the prediction of human social behaviour (Ajzen, 2011). Also, the theory of planned behaviour has been used by scholars for the prediction of many health behaviours by individuals (Armitage & Conner, 2001). The theory stresses on what influences individual intentions. According to the

theory, an individual's intention to do something is influenced by personal attitudes, subjective norms, and perceived behavioural control (Ajzen, 2001). Individuals are motivated to perform a particular behaviour when they have strong intentions for such behaviour (Ajzen, 1991).

According to the theory of planned behaviour, attitudes are determined by an individual's personal evaluation of performing a particular behaviour (Ajzen, 2011). In this regard, individuals are likely to access ART if they are certain it would help them have a child and avoid the negative consequences associated with not having a child. In addition, the subjective norms are the perceptions that would be developed by individuals about the importance community members place on the intended decision (Cameron, Ginsburg, Westhoff, & Mendez, 2012). Also, the subjective norm defines the perceived approval or disapproval of other members in the community if the behaviour is manifested. In this regard, persons who have fertility problems are likely to evaluate if the decision to seek other means of having children is accepted or frowned upon by community members. Besides, the perceived behavioural control relates to individual perception about the comfort or difficulty of performing the intended behaviour. Attitude towards the behaviour, subjective norm and perceived behavioural control shape individual intention before a behaviour is manifested.

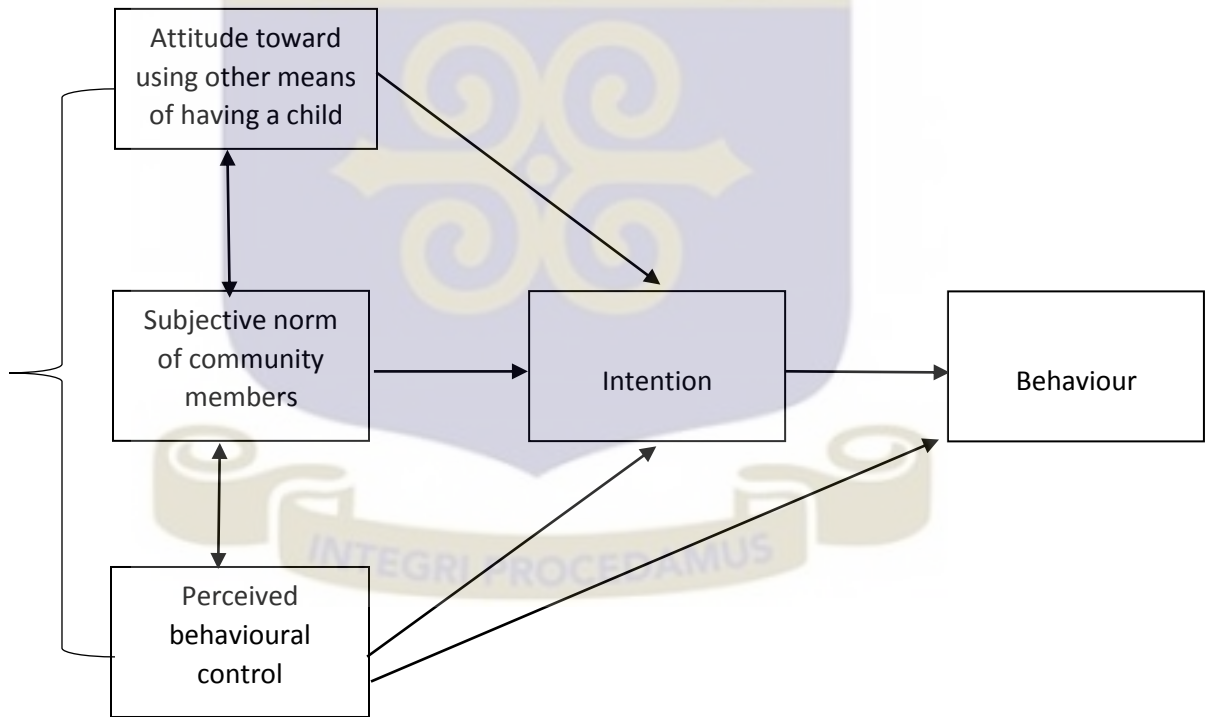
2.6.1 Usefulness of the Theory to this Study

Moreover, the study employed the theory of planned behaviour to explain what influences individuals to seek alternative means of having children. Accordingly, the theory of planned behaviour helped the researcher with a prior understanding of why persons who have fertility problems use ART to have children, irrespective of the sociocultural implications associated with it. Again, the theory of planned behaviour aided the researcher to explore the subjective norms of

the community about using other means to have children and the difficulties individuals face and the comfort they derive from seeking other means of having children.

Most often, the use of ART to have children is not accepted by most societies and it is coupled with countless medical complications. However, the strong pressure societies exert on persons without children compels them to resort to alternative means of having children. It is assumed persons with fertility problems view ART as effective fertility treatment since it helps them to have children and reduces pressures that come with infertility. Figure 1.1 shows how the behaviours of persons with fertility problems are shaped.

Figure 1.1. The Theory of Planned Behaviour



Source (Ajzen, 1991)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Methodology guides the design of a study. This section covers the research design, study area, sources of data, target population, study population, sample size, sampling technique, data collection processes, data management and analysis, and ethical considerations.

3.2 Study Area

The study was conducted in selected health facilities in an urban community in Southern Ghana. This urban community was chosen because it is noted for hospitals that specialize in the provision of ART. The selected health facilities specialized in the provision of assisted reproductive technology such as in vitro fertilization, surrogacy, embryo transfer, and artificial insemination. The study area was considered appropriate because most hospital facilities that provide assisted reproductive technology services are situated in Southern Ghana.

3.3 Research Design

The study employed a qualitative research design. Qualitative research design helps researchers to understand socially constructed realities and interpret cultural meanings (Erikson & Kovalainen, 2008). In order to explore the experiences of persons who have accessed ART, it was considered appropriate to use a qualitative research design. A qualitative design allows researchers to engage directly with participants and allow them to tell their stories as they experienced it (Creswell, 2013). In this study, participants were allowed to share their experiences with regard to the issue.

3.4 Source of Data

The study collected data from primary source. Primary data were collected from the study participants using in-depth interviews. A topic guide was developed by the researcher and used for the interviews.

3.5 Target Population

The target population for the study consisted of persons who had accessed ART in selected health facilities in the study area, nurses and gynecologists who had specialized in ART in selected health facilities.

3.6 Sample Size

The study sampled twenty participants and sixteen of the participants were persons who had accessed ART as an alternative means to conceive at the time of data collection. The study also included two gynecologists and two nurses. Initially, the researcher intended to interview 30 participants but reached saturation with 20 participants due to the intensive and detailed nature of the interviews (Ritchie, Lewis, & Elam, 2003). The criteria for inclusion in this study were (a) persons must have accessed ART at the time of data collection and (b) gynecologists and nurses were included only if they had specialized in the area of ART and engaged with persons who had accessed ART to conceive. Persons who had accessed ART were included in the study because it was believed they had experienced the problem under study and were important for the study. Also, gynecologists and nurses were selected because they have specialized in ART and were responsible for treating persons with fertility problems with ART and were knowledgeable about the types of ART services available, as well as the experiences of their clients or patients.

Table 1.1 Number of Participants Selected from each Health Facility

Health Facility	Individuals	Gynecologists	Nurses
Facility 1	8	1	1
Facility 2	8	1	1
Total	16	2	2

3.7 Sampling Technique

The study employed a purposive sampling technique to select the study participants. Purposive sampling helped the researcher to select participants who had the needed information to help address the study objectives (Creswell, 2013). The sampling technique was adopted because certain categories of individuals had unique and important perspectives or ideas on the subject under study; hence their inclusion in the study (Mason, 2002). Participants were selected for the study on the basis that they have experienced infertility or have knowledge about the subject under study.

3.8 Data Collection Procedures

The study collected data from participants through individual in-depth interviews. Individual in-depth interviews allowed the researcher to have face-to-face contacts with the study participants. Also, individual in-depth interviews allowed the researcher to ask open ended questions that attracted follow up questions based on the answers that participants provided. Individual in-depth interviews with Gynecologists and Nurses were held between the hours of 9am to 3pm on week days at the premises of the facilities. Interviews with other participants were held between the hours of 9am to 3pm at the homes of participants. The individual in-depth interviews were

conducted in the English language and Twi. A total of 20 interviews were conducted and each interview lasted between 40 to 60 minutes. Besides, interviews with participants were recorded using an audio recorder. Permission was sought from participants before recording each interview.

3.9 Data Management and Analysis

Data were kept safely on a personal computer and protected with a password. The researcher ensured that recorded interviews were managed well to prevent third party access. Furthermore, Microsoft Word was used in transcribing the field data. Braun and Clark's (2006) six phases of thematic data analysis were used to analyze data. The first phase ensured that the researcher familiarized himself with the transcribed data. In the second phase the researcher generated initial codes and made categorizations from the codes. The codes were collated into potential themes in the third phase. Further, in the fourth phase, the researcher generated thematic map and ensured that themes were in relation to the entire data. In the fifth phase, names were assigned to the generated themes based on the objectives of the study. Finally, the researcher presented the report in the sixth phase.

3.10 Ethical Considerations

Ethical issues in social science research were considered throughout the study. Codes of ethics such as informed consent, privacy and confidentiality (Denzin & Lincoln, 2011), were ensured. The study participants were informed about the nature and potential consequences of the study in which they are involved (Denzin & Lincoln, 2011). Participants were informed that they could withdraw from the study at any point in time. Privacy and confidentiality of participant's information were ensured in the study. Participants identities were not disclosed to third party

and the privacy of their information were assured. Also, plagiarism was avoided in the study. Secondary sources were acknowledged both in text and in the reference list.



CHAPTER FOUR

PRESENTATION OF FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the findings of the study. The findings have been discussed under the following sections: demographic characteristics of participants, effects of infertility on men and women, socio-cultural implications of infertility, types of ART and challenges encountered in accessing ART. The chapter ends with a discussion of the findings.

4.2 Demographic Characteristics of Participants

This section presents the demographic information of the study participants. In this study, 20 participants were selected and 16 of them were persons who had accessed ART as an alternative means to have a child. The remaining four were made up of gynecologists and nurses.

Participants who had accessed ART were between the ages of 36 and 51 years and the gynecologists and nurses were aged 35 to 73 years. The gynecologists and nurses had worked in the field between 13 and 40 years. Two of the gynecologists were males and the nurses were females.

Almost all persons who had accessed ART had completed tertiary education with the exception of two who completed Ordinary Level. With regard to occupations, the persons who had accessed ART were revenue officers, traders, businessmen and women, bankers, auditors, accountants, and secretaries. Six of them were married, seven had married but divorced, and the remaining three had never married. In addition, 10 of the participants who had accessed ART had conceived before. The remaining six had never conceived, even though they were in intimate relationships. Also, regarding the number of years participants had been trying to have children,

findings of the study indicated that the minimum number of years was six and the maximum was twenty.

4.3 How Infertility Affects Women and Men

In this study, participants who had sought or were seeking treatment at the selected health facilities had been looking forward to have a child between six to twenty years. During this period, participants experienced many challenges at both personal and social levels. The challenges were related to their gender. In this regard, the culture and social construction of the roles and responsibilities of both gender came to play. Females were more affected by infertility than men. Socially, women who were interviewed expressed feelings of stress and depression due to family pressure, isolation and blame for not having children:

I have gone through lots of sleepless nights and stress; my in-laws were always on me just after one year of marriage without a child, they put pressure on me to give them a grandchild. My brother, they believed I was the one to be blamed for not having a child, if we hadn't gone to the hospital as a result, we would not have known who had the problem. (Female, #7, ART).

For this participant, she almost lost her husband due to her inability to give him a child:

It wasn't easy at all, after a couple of years of marriage and there was no child, my in-laws started grumbling and asked me to give them reasons for my inability to give them a grandchild. My husband too was unhappy due to my inability to have a child, he felt he was wasting his time having me around, I felt sad anytime I saw my mother in-law because of her attitude towards me (Female, #12, ART).

This participant attested that usually women were accused of infertility and provided this explanation:

Most often, in Ghana, whenever there is difficulty in giving birth, they always point accusing fingers at the woman, but it could be any of the couple, medically, sometimes when you get to the hospital, the doctor would confirm the problem is from either the man, the woman or both (Female, #6, ART).

Narrating her story, a female participant indicated that she was the most affected due to the efforts she had made in order to conceive:

I am the one who is always eager to have a child, I had to go to the hospital, prayer camps and places where I think I could be helped to get pregnant. Most at times, I am home alone, he was always at work and comes home late, I only had television in the house and nobody to talk to, I felt lonely and dejected, so I need my own child at least so that I can also be happy (Female, #8, ART).

A male participant revealed that, blame was always targeted at his wife rather than him:

As human as I am, you know I will be affected but I must admit, my wife suffered a lot. She was receiving attacks from my sisters and her own family. Even though they did not know who had the fertility problem, they directed their anger at my wife. I can say everything is okay for now, it was a child they wanted and we have given them one (Male, #1, ART).

In the face of adversity, some men encouraged their wives to keep faith as indicated by this participant:

I always advised my wife to keep faith; you see pressure was coming from everywhere, from my mother and her mother, my wife sometimes had to sleep on empty stomach and cries the whole night. . . there were times I felt so bad for her but thanks to God, we have gone past this problem safely and here we are, very happy again (Male, #4, ART).

With regard to whether infertility affected men and women differently, the nurses and gynecologists had different perspectives as compared to the responses from participants who were seeking fertility treatment. Narrating their experiences, the gynecologists and nurses indicated that the problem affected men the same way it affected women. The only difference had to do with the demeanor of men as regarded the issue:

From my experience, I can tell you that infertility affects men and women the same way, just that the men know how to control their emotions than the women, when the men meet someone who can offer them help, they confide in the person and reveal everything they are going through (Gynecologist, #1).

According to a nurse, men included in this study were affected even more than their wives because having a child was a true indication of their manhood:

Sometimes I hear people say that men do not care about not having children, who told you? they are affected even more than their wives, do you know what it takes for somebody to think you are not man enough because you do not have a child? .

. . they are seriously affected too, I tell you, their (men) ego makes them want to keep their condition a secret (Nurse, #2).

A gynecologist who indicated that infertility affected males and females equally had this to say:

From my experience, I can attest that, infertility affects males and females equally, until recently, infertility was seen as a female problem but due to the improvement in technology, it has become clear that, male factor can also result in infertility. . . if you are a male and you know you are the cause for not having a child in your marriage, you would be affected negatively just as the woman would, if she had the problem (Gynecologist, #2).

Whilst wives and husbands were expected to embrace the problem of infertility collectively, wives were most often left alone by their husbands to search for treatment. As illustrated in the narrative:

The attitude of my first husband was very horrible, very horrible, that's how I can describe his attitude; I was the only one searching for a cure to the problem, it was like he didn't care about our situation of not having a child. The most annoying part was that, he would not even ask about the progress of the treatment when I finally had to consult a gynecologist (Female, #11, ART).

Another participant shared her experience regarding the treatment she had to endure from her mother and sisters:

Could you imagine, it got to a point where my own mother and some sisters, asked me to see a specialist for treatment, some even went to the extent of openly

accusing me for our inability to have a child, I cannot fathom how one can be tormented just because she is yet to have a baby (Female, #9, ART).

Another female participant shared her experience of how her neighbours treated her:

At first I felt okay that I didn't have a child but it got to a point where people intentionally began to ask me funny questions about children, this made me feel disheartened and became very worried because my husband already had two children before I got married to him, I believe that was the reason why some of my neighbours engaged me in conversations that had to do with children (Female, #2, ART).

Furthermore, during the interviews it came to light that the Ghanaian society exerts more pressure on women without children than men. This is evident in the responses of some male participants who openly accused their wives as the cause of their inability to have children:

Actually, in the Ghanaian context it is always the woman who is blamed when a couple is yet to have a child after some years of marriage and this can lead to divorce. It is in extreme cases where men are blamed for a couples' inability to have children, this blame most often comes at the heels of a doctor's report (Male, #1, ART).

According to this female participant, some men believe that they can never be the problem when it comes to the inability to have a child in a relationship:

Some men will openly tell you, they will never follow you to the hospital because they do not believe they have a fertility problem. With this kind of attitude, they are trying to say, you are the problem, therefore, you should find an antidote to

the problem. Sometimes your partner will ignore the invitations from the doctor after -you have been examined and the doctor does not find any problem with your reproductive system (Female, #14, ART).

The male reluctance to be assessed for infertility tends to delay the process in finding solutions for couple's infertility:

Unfortunately, men most at times find it very difficult to approach us when it becomes obvious that there is the need for us to examine them as well, after their spouses had been examined. You know the character of some men makes them think they do not have a problem when it comes to infertility. This attitude really affects the pace of our work in trying to ascertain who really has the problem (Gynecologist, #2).

Women who are yet to have children were forced by their families to take some strange concoction with the hope that they would conceive. In this regard, families see infertility as a disease or dysfunctions that needs to be cured:

If I told you what I had to endure from my own mother, you would not believe it, she was seriously blaming me for our inability to have a child, one day she called me to come and visit her and when I went, she had gone for some strange concoction, as to where she got it, I cannot tell, could you believe I was forced to drink this concoction which nearly resulted in my death? (Female, #5, ART).

Accordingly, women are perceived as the gender that is likely to have fertility dysfunctions and are treated poorly by their parents or persons who are close to them. Below is a quotation that represents a participant's response:

For me there was no doubt my mother thought I was the problem. She took me to see a couple of herbalists who administered several herbal concoctions but I did not conceive either, I only conceived after I had gone to the hospital. . . Our parents, only put unnecessary pressure on us and if you do not take care you may end up doing something bad to yourself (Female, #3, ART).

As part of seeking treatment for infertility, some female participants established that they were made to consult different kinds of faith based healers:

At a point, the pressure became very unbearable to contain, so when you hear any testimony about a pastor, you have to visit his church, my mother and I visited over twenty churches where the pastors attributed our inability to have children to supernatural causes, nothing really changed after these visits (Female, #13, ART).

This participant narrated her experience of how stressful it was to go and see pastors:

My mother was very serious, you cannot imagine, almost every day she will call and say, I have heard about this pastor, when will you come for us to go and see him? . . . hmm it became too stressful for me because I was not getting any good time for myself (Female, #6, ART).

Some participants explained why women always become a subject of blame when it comes to infertility; they believed that some cultural beliefs in Ghana portray men as super human, therefore they cannot have fertility problems:

I have lived in the Northern Region most of my life, as a woman it is very difficult to live there without having a child; what I observed is that, they see men as super human, who at any given time cannot be associated with infertility. I lived there with my first husband for more than four years, it was very difficult to cope with not having a child (Female, #16, ART).

The response below attests to how single women without children are labelled:

As a woman, to be married for years without a child and living in the North is considered a taboo, even women who are single and above twenty years, are sometimes labelled as barren women when they find themselves in heated argument with a colleague who has a child (Male, #4, ART).

For this participant, she believed women are always associated with infertility because God made men in such a way that they can always have children but not all women are made to have children:

We the women are not like men, they (men) can impregnate any woman at any time, even in their old age and have children, I can remember some old men in my village who were still having children in their seventies, that is how God made them, so they (men) would be able to have children anytime in their lives (Female, #9, ART).

The gynecologists established that, many of the male infertility cases that come to their attention had to do with either azoospermia (semen with no sperms) or oligospermia (semen with low sperm count to impregnate a woman):

I have been practicing for more than 20 years and I can tell you for a fact that many of the cases we diagnose can be attributed to the male, some of the men you see on our streets tend to blame their wives because of their inability to bear them children, but I would like to stress that, some of them (men) do not even have sperms in their semen to impregnate a woman (Gynecologist, #1).

Sadly, some women suffer in vain when it is actually the men who have fertility problem as indicated in the quote below:

Some cases make our work very interesting, can you imagine, a man who had been blaming his wife all these years for their inability to have a child came to me with the wife, after a couple of lab tests, the results indicated he had the fertility problem. . . When they (men) are the problem they plead with you not to disclose their condition to their spouses (Gynecologist, #2).

Besides, some participants established that they were not receiving any pressure whatsoever from either their family or their in-laws. Yet they believed they were more affected by their situation than their husbands:

To me, women are the most affected when the issue of infertility is raised, to be truthful to you and myself, I did not receive any kind of pressure from my mum or my mother in-law, they were very supportive during those difficult times. But I was never okay with my situation, I was depressed and felt lonely all the time . . .

whilst- I was so worried about our situation my husband was behaving like there was nothing at stake because he refused to show concern (Female, #2, ART).

The spouse of the participant above, responded by giving reasons for his behavior which seemed like he was not worried for not having a child. His response suggests that some men adopt coping strategies to deal with the absence of a child in their marriage:

It is not that I was happy about our situation, I also wanted a child the same way she wanted, just that I did not want to be stressed, after all, life is not only about having a child, living healthy and enjoying life is enough for you to be happy, women always worry about things you do not have to worry about (Male, #1, ART).

Responses of some participants showed that, even though their in-laws related well to them, they still had doubts about these relationships. They were of the view that, whilst their in-laws were so nice to them whenever they meet at social gatherings, they had reservations of the sentiments they expressed:

My in-laws were so nice and related well to me, but I was always worried because they said a lot of things behind my back and later turn around and behave as if they were okay with our situation, sometimes my instincts tell me they were pretending to be nice (Female, #9, ART).

Furthermore, a participant shared a very touching experience of how she was pressured by her mother in-law and other members of her husband's family to leave her marital home:

Whenever I remember this, I find it difficult to control my tears, my mother in-law was always on me that she wants to see her grandchildren because my husband

was her only child, this continued for more than two years and one day my mother-in-law came to our home with her sisters to drive me away from my marital home whilst my husband had travelled . . . could you imagine, my husband did not do anything on his return, he rather rented an apartment for me and told me he was solving the issue with his mother, nothing good came out of it and he had to go his way and I also went my way (Female, #14, ART).

In addition, so much value is placed on children in the various communities in Ghana which then compels some men to cheat on their wives with the motive of getting a child elsewhere. Some participants indicated that they had no option than to watch their husbands cheat on them:

Due to our inability to have children, my loving husband became a cheat, a liar and womanizer, at first, we closed from work together and got home around the same time even though we worked at different places, this changed overnight when he realized I was not giving him a child . . . even though I accept that I had the problem, he has not been able to get a child either from his cheating errands that led to our divorce (Female, #10, ART).

Nurses and the gynecologists revealed how some men divorce their spouses when they (wives) are diagnosed of having fertility problems. However, if it is the men who have the problem, they try to hide their condition from their wives and tend to treat their wives nicely:

Men will always prevent you from disclosing their condition when they realize they are the reason for their inability to have children but when the problem is the woman, they will do everything to expose her and sometimes to the extent of

divorcing the woman, we have encountered a lot of situations like this in the past (Gynecologist, #1).

Even a minor operation to identify the problem in a woman's womb can lead to dire consequences for the woman:

Some men disrespect their wives and treat them very badly, when they (women) come to do a minor operation like laparoscopy just to assess the womb to see if there are fibroids and also to examine the fallopian tubes, some men divorce their wives or go in for other women when it becomes obvious that the wives have fibroids or blocked tubes (Gynecologist, #2).

Participants revealed that, infertility can affect both men and women and there are some instances that some men and women can never have biological children:

The factors that causes infertility can affect either the man or woman, they can all have one fertility problem at a point, from my experience, biologically, some men and women cannot have children and this is one of the extreme cases that couples and individuals had to contend with (Gynecologist, #2).

Sometimes societal perception about causes of infertility, tend to point fingers at women regardless of who had the problem:

When you get married and you are not getting pregnant, some members of society point accusing fingers at the woman because they (society) think that, these women in their youthful days might have had a couple of abortions. However, they tend to forget that the man can also have fertility problems which may prevent him from impregnating a woman (Female, #13, ART).

It is important to add that, infertility can affect people who have had children in the past and not necessarily those who are yet to conceive. A situation like this, is referred to as either secondary or primary infertility:

I must say that, the fact that one has given birth, conceived or impregnated a woman in the past does not mean that this person cannot have fertility issues, it can happen at any point in the reproductive life of an individual, when situations like this occurs, we refer to it as secondary or primary infertility (Gynecologist, #1).

Participants indicated that infertility can affect individuals due to some infections like sexually transmitted diseases and other medical conditions if not treated effectively:

From my experience, women with fertility problems that I have treated are often diagnosed of having fibroid and blocked fallopian tubes, when these tubes are blocked and there are growths of fibroids in the uterus, it would be difficult for such patients to conceive naturally (Gynecologist, #2).

In addition, the assertion of this participant revealed how sexually transmitted diseases can contribute to infertility:

Some sexually transmitted diseases like chlamydia, gonorrhoea, syphilis and pelvic inflammatory disease among others, can affect human fertility if not treated, this can affect both females and males later in life when it comes to conception and child bearing (Nurse, #1).

4.4 Socio-Cultural Implications of Infertility

In Ghana, the expectation of every marriage according to the study participants was to have children. Therefore, after years of marriage without any sign of pregnancy and children, may attract concerns from the community. At this point, the decision of whether to have a child or not, is influenced heavily by the community rather than the couples. In many cultures, marriage ceremonies are marked by prayers to God and the ancestors to bless the marriage with children, this explains how much value society places on children:

To society, children are the priority in marriage, to them the primary motive of every marriage is to have children, if you do not have children after two years of marriage then you are inviting pressure upon yourself, it happened to us and we had to go through difficult times to cope with the pressure which was coming from all angles (Male, #4, ART).

Society has very negative perceptions about infertility and makes them associate infertility with promiscuity on the part of couples and individuals, especially women, before marriage. Participants revealed that, society viewed infertility as a condition caused by excessive abortions during one's youthful age:

Some people are of the view that, your inability to give birth is because you abused your reproductive system through numerous abortions and excessive sex, it is very disgraceful to some of us when people can have such thoughts because you have not been able to have a child (Female, #8, ART).

This participant narrated how she was insulted without any provocation by her in-laws:

Sometimes your in-laws without any provocation can tell you in your face that, you have removed all your children into the gutter and you are coming to waste their son or brother's time . . . can you say this to a person you only knew after she- married your son? this is what I had to endure, all in the name of bad marriage (Female, #14, ART).

In addition, participants indicated that, they were sometimes viewed as victims of a curse. Some community members believed that, infertility is as a result of a curse due to disobedience of the elderly or a bad spirit. Also, it is believed the curse could be have been placed on a person's forefathers and they are bearing the consequences for their forefathers:

Sometimes the inability to have a child is seen as a curse, some people believed that you or your wife had done something to someone and the consequences is your inability to have children, in my case, my mother always inquired if I have wronged somebody. . . . I remember a pastor told my mother that my husband and I had done something very sinful to someone and we need to make a sacrifice to God, even though we know we have not offended anyone, we made the sacrifice but nothing happened (Female, #3, ART).

For this participant, her inability to have a child was attributed to the sins of her grandparents:

Some people may trace your infertility to sins your great-grandparents committed and will cast a lot of insinuations about your family just because you are not having a child, meanwhile, these same people forget that, it is not everybody that came to this earth to bear children (Male, #1, ART).

Among the Akans and other tribes in Ghana, couples with ten or more children are often rewarded with a sheep. This is done to encourage other family members to have more children which is vital for the survival of the lineage:

The Akans and some tribes in Ghana, reward women who had given birth to ten children or more and they claim this is to encourage others to also have more children, my brother, I can tell you that, in this day and age, having more children would affect your finances and well-being. . . . even though I know the importance and value society places on children, I think ten children is too much (Female, #15, ART).

Most often adults without children were often not recognized in some Ghanaian communities and they experienced countless social hardships. Participants' were sometimes left out of decision making and sometimes seen as useless and burdensome to the family and the communities in which they live:

I believe this is something that happens in every region in Ghana, adults without children are not recognized, they are not respected and tend to go through all kinds of negative treatment wherever they live, I know it would be difficult to change this practice but not having a child should not affect your contributions when it comes to decision making (Male, #1, ART).

This participant revealed how persons without children were disrespected:

To live without a child can be very difficult in some Ghanaian communities, one sad thing is, no matter your age you are not recognized, you are not respected

and- some members of the family see you as useless and not fit for anything (Female, #10, ART).

In most parts of Ghana, children are supposed to be heirs to their parents and carry on the lineage of their parents. Failure to have children means that a person will die without leaving a legacy whatsoever. Participants revealed that, after death persons without children are not recognized anymore. They do not qualify to be ancestors, making their names fade off just after their demise:

In Ghana, children are inheritance, when you are dead and gone, it is the generation you have left on this earth that will inherit you, whatever achievement you made on earth is carried on by your children . . . so, if you came to this earth and no matter your achievement and you die without children your name will be forgotten (Female, #16, ART).

This participant narrated how the inability to have a child can prevent you from becoming an ancestor:

In my hometown we grew up to believe that ancestors are very important in our tradition but death does not make one become an ancestor, you need to bear children and die a respectable death, that will make you an ancestor (Male, #4, ART).

In the Ghanaian context, not having a child is frowned upon, therefore, voluntarily deciding not to have a child is unacceptable. The culture demands children from any marriage relationship:

In Ghana, you cannot say that I am married and I do not want to have children, you will be ridiculed by your friends and neighbours. It is a must to have

children- . . . I think it's better you do not marry than to marry and tell your family and friends you do not want to have children (Male, #1, ART).

This is what another participant had to say, concerning marriage and the need to have children:

Our society has been structured in such a way that once you marry you must bear children, unlike Europe where married couples can decide they would not want to have children, is it very difficult for such a decision to be accepted here . . . so, any marriage that lacks a child or children becomes problematic (Nurse, #2).

This participant revealed how married couples are expected to have children at all cost:

In Many African countries, which includes Ghana, people think that, once you get married the next thing is for you to have children, they forget about other functions of marriage, they forget about everything, whether you have a problem or you do not have a problem, they think that, oh, once you are married by hook or crook give birth (Female, #7, ART).

Society's strong desire for children in every marriage compels couples to go the extra mile to get children of their own. In this regard, resorting to all possible means to get a child was considered the only coping strategy to contain the pressure from society:

I think all these negative factors should encourage every couple to go the extra mile to have children of their own, because these are challenges that arise when you are not having kids . . . but how to overcome these challenges is paramount, we all need to be encouraged to go the extra mile to at least get a child to glorify the name of God (Female, #11, ART).

Some participants opined that society does not treat persons who are yet to have children fairly. They believed there are times in everyone's life to have children and that society should support their relatives instead of labelling them and taking them through all sorts of negative treatments:

I was treated unfairly just because I am yet to have a child but society fails to understand that, people have children at a particular time in their lives, it could be earlier or it could be later, I do not think it is the wish of any woman to be in any marriage relationship without children . . . all we need from our parents, relatives and friends are words of encouragement instead of the meanings they attach to one's inability to have children (Female, #5, ART).

Moreover, in Ghana children are considered as a source of social security among the aged. In view of this, adults in their reproductive age are required by tradition to have children, take good care of them in a way that they will be equipped enough to take good care of their parents in their old age. Ghana practices a reciprocity nature of social security where parents give to their children in their tender ages and children are expected to give back to their parents when they are old. Also, in Ghana there are no day care centers for the aged, parents are cared for by their children. Therefore, the consequence of not having a child is felt more during old age. This tends to put pressure on couples and even individuals in their reproductive ages to do everything humanly possible to have children. These are what participants had to say about this:

Our way of life in Ghana places value on children thus making them very important, I am saying this because I have seen patients who were much concerned when they were growing old. They were much concerned about who would care for them when they become weak and weary . . . situations like this

puts pressure on every- Ghanaian to have a child . . . at least one child who would be there for his or her parents in their old age (Gynecologist, #1).

For this participant, she believes pension benefits are not enough and there is the need to have children who would support you in your old age:

Talking about pension benefits in this country is not enough and older people will always need support, where will these support come from? It will effectively come from your children, even when someone in the family would have to assist, it would not be like your own child . . . so, I think all these exerts pressure on Ghanaians to have children (Nurse, #2).

4.5 Types of Assisted Reproductive Technology

Infertility has been constructed by society as a disease that prevents persons in their reproductive ages to bear children. As a result, it requires medical treatment for persons who have reproductive dysfunctions to be able to have children. Treatment of infertility takes many forms where the individual (male or female) is treated with medicines such as clomiphene, follicle-stimulating hormone (FSH), hormonal injections, tubal surgery, treatment of infections and other assisted reproductive technology interventions. Each fertility treatment medication is used specifically to treat a particular condition which varies from patient to patient. Besides, the common types of ART accessed by participants were surrogacy, intrauterine insemination and in vitro fertilization:

I think when you talk of ART there are many of them and I must also say, the fact that they are many does not guarantee they should be used anyhow, I would like

to say that each technology is expected to solve a particular fertility problem (Gynecologist, #2).

Participants indicated that, the doctors suggested a particular ART for them to access after they had been diagnosed of having fertility problem. In addition, they were offered ample counselling on what the treatment entails. Surrogacy in this regard was recommended for participants who had problems with their uterus and had other medical conditions which may be life threatening should they attempt carrying the pregnancy to term. Many of the women interviewed accessed In Vitro Fertilization (IVF) as an alternative means to have their children:

I accessed surrogacy and the reason was, after the doctor had assessed me, he told me that, it is the best option for me, I was aging and there was no way I could carry the fetus by myself . . . It would be risky on my part to carry the pregnancy so I had to employ the services of a surrogate mother (Female, #10 ART).

Another participant who also accessed surrogacy had this to say:

I accessed surrogacy services and like I indicated earlier, I had a couple of surgeries and the doctor concluded that it would be life threatening if I carried the pregnancy myself, I did not have any option than to heed to the counselling of the doctor (Female, #15, ART).

Medical conditions such as hypertension, diabetes, and anemia were considered risk factors to maternal mortality. After a patient seeking to have a child through ART is diagnosed of these health complications they are counselled to opt for surrogacy services.

One of the services we offer at this facility is gestational surrogacy because some patients cannot carry pregnancy due to one or two medical conditions. We have

instances where the uterus of some patients had been removed due to the presence of fibroids (Gynecologist, #2).

The voice below indicates why some participants had to use surrogate mothers:

When we diagnose a patient with diabetes, hypertension and high blood pressure we hardly allow them to carry the fetus by themselves, we advise them to go in for a surrogate mother who is expected to carry the pregnancy to term if all things being equal (Gynecologist, #1).

In addition, some participants indicated they had some medical condition, so in vitro fertilization was suggested to them in order that they can conceive and subsequently have a child:

I had to access IVF because I had ovarian cyst at a point in time, I did not have any option than to use an egg donor for the procedure. We agreed that he would give his sperm, I mean my husband, then we can get the ovaries of a donor which would then be fertilized with my husband's sperm (Female, #16, ART).

For this participant, in vitro fertilization was a method of choice for her:

I accessed In vitro fertilization, actually, it is my doctor who counselled me to opt for that, because I was having irregular menstrual periods, I was given some medications to rectify this anomaly but nothing really changed (Female, #5, ART).

A woman narrated why she opted for in vitro fertilization and the use donor eggs:

I opted for IVF because the doctor after diagnosing me said my ovarian reserves had depleted, you do not expect to have eggs as you grow older because I am told

as we menstruate every month we lose the eggs, the only option in my case was to use the eggs of a donor for the treatment (Female, #8, ART).

A gynecologist gave account of why they suggest in vitro fertilization as an antidote for patients who have fertility problems and want to have children:

One common type of ART is in vitro fertilization, we advise our male patients with low sperm count and mobility, as well as females who have fallopian tube blockage to avail themselves to this procedure in order to have a child (Gynecologist, #1).

This participant revealed why in vitro fertilization is suggested for patients with unexplained infertility:

I think I should also add that, in vitro fertilization can be used to assist couples and individuals who fall in the category of unexplained infertility, in situations like this, both the man and woman do not have any fertility problem, yet still, they cannot have children, therefore, in vitro fertilization is the option to conceive (Nurse, #1).

Besides, other ART are used by the selected health facilities where the study was conducted. Among them are Gamete Intrafallopian Transfer, donor eggs, and sperm donation. Some of these types are considered to be third party ART. For example, donor egg, semen donation and surrogates are used when the man's semen or the woman's eggs cannot enhance pregnancy.

In situations like these, there is the need to get a donor egg or semen to enhance pregnancy. Also, with surrogacy, a third party is recruited to carry the pregnancy for the intended mother who cannot carry the pregnancy due to medical complications or other health concerns.

Besides IVF and surrogacy, we have other types of ART in this hospital, I can mention egg and semen donation, when there is a problem with the eggs of a female client or problem that has to do with the semen of a male client, we resort to the use of donors, who willingly donate to assist the would be parents (Nurse, #2).

Another gynecologist elaborated further on how in vitro fertilization works:

IVF is a procedure where the woman's eggs or ovaries are retrieved and then the husband's sperm is added in order to achieve fertilization, after some days, the embryo is transferred into the womb or uterus of the woman with the hope that she would conceive (Gynecologist, #2).

This is what another participant had to say in addition to the assertion above:

Gamete intrafallopian transfer is another type of ART but it is not a procedure that is often used in this facility but when the need arises we counsel patients to access it (Gynecologist, #1).

Some participants revealed that sometimes they do not need to take patients through IVF or IUI but they can treat couples for them to conceive on their own:

At times, it may happen that the fallopian tubes have come together but they are not blocked and this can be detected during a minor operation like laparoscopy, air is then blown into the tubes in order to separate them . . . within some months after this operation, the patient can conceive naturally (Gynecologist, #2).

However, gynecologists and nurses explained how they use various types of ART methods to assist patients who have fertility complications due to varied reasons:

Some women have their womb removed for some reasons or the other and also, there are situations such that, the ovarian reserves are depleted due to aging, because the woman was pursuing higher education or not getting a husband early enough, by the time they are ready to have kids, they would not have eggs in order- for pregnancy to be achieved. In the case of men, they have weak sperms or what we refer to as low sperm count . . . with these scenarios, all we have to do is to recruit, surrogate mothers, egg and sperm donors to assist (Nurse, #1).

Among the various types of ART, the nurses and gynecologists revealed that the commonly accessed procedure is In Vitro Fertilization. They believed it is very convenient which allowed many women to carry their own pregnancies than allowing a surrogate mother to carry it on their behalf:

As I have mentioned earlier, there are many types of ART but the type we normally advice patients to access is the IVF, I must admit that, this is patient specific, which also depends on the fertility problem and its convenience to the patient (Gynecologist, #2).

This is the assertion of another participant with regard to the success rate of IVF:

We suggest IVF to our clients because unlike the other procedures, the success rate is relatively high and very encouraging, since its inception in the seventies, statistics indicates that IVF supersedes the other procedures in terms of numbers (Gynecologist, #1).

4.6 Challenges Encountered Accessing Assisted Reproductive Technology

Having realized that infertility is a medical condition which affects both men and women and prevents them from having children, it has become imperative for patients to find treatment for infertility. ART has been considered among other medical treatments and interventions as among the most effective ways of treating infertility. However, ART as an alternative means of having children has not been completely accepted socially in most developing countries, including Ghana. As a result, ART is said to contradict the social ethics of having children and as such has attracted lots of challenges from various cultures. In addition, ART as a medical treatment comes with its own side effects, which can lead to serious health complications. Also, it has been revealed by persons who accessed it and practitioners as very costly and tend to drain the resources of couples and individuals who access this technology:

I think ART has helped my husband and I a lot, that needs to be acknowledged, but I must admit that it is very costly. You need to have substantial amount of money before you would be able to access this technology, if you are not well prepared in terms of finances, you might get stuck half way during the procedure (Female, #13, ART).

Based on the responses from study participants, the researcher has grouped the challenges in accessing ART under two broad themes, which includes psychosocial and economic challenges and medical challenge.

4.6.1 Social and Economic Challenges

Social and economic challenges include the challenges faced by couples and individuals in their various communities as they resort to ART as an alternative means to have children. In addition,

it encompasses the costly nature of ART, as its utilization involves a lot of money. Participants contended that the Ghanaian society frowns upon any untraditional methods of having children. As a result, persons who had conceived or had children through ART keep their situation confidential and would not like to disclose it to anybody:

The truth must be told that most Ghanaians are ignorant about ART, I mean, not many people know about it and if they get to know that a child was born through this procedure they would see this child differently from other children who were conceived naturally (Female, #9, ART).

This participant revealed how she and the spouse had been discreet after engaging the services of a surrogate mother to have their children:

My husband and I haven't told anyone we sought the services of surrogate mothers to have our children, during all these two periods I had to behave as if I was pregnant, I had a costume that I wore and it made me look like I was pregnant . . . hmm, despite what I had to go through, I thank God for giving us these adorable children (Female, #3, ART).

Prior to accessing ART, participants are often left in a dilemma due to comments from spouses or partners and most importantly the larger family. These comments tend to discourage people from accessing ART:

The first and foremost challenge is the acceptance by your spouse and parents, if only they think it's necessary for you to access it, they come up with lots of excuses like; these children are not healthy, they are not children from God, some

may even be physically challenged, they say these things in order to deter you from accessing the technology (Female, #12, ART).

This participant supports the revelation by other participants who had accessed ART:

The problem we have about ART is that, to the lay man IVF simply means producing test tube babies, they feel the babies are reared in test tubes as we know in the normal lab test tube and they are kept in there and when you come, we remove one- for you. I think, it is about time a lot of public education comes up, for people to really understand what ART entails (Nurse, #2).

Participants indicated that if they had disclosed the process they went through before having their children, they and their children would be stigmatized and discriminated against:

Society is not ready to know this, that is how I see it, if you are not careful and you let anybody know your children were born through ART they will discriminate against you and the child for reasons best known to them (Female, #7, ART).

This participant supports the assertion above, that children born through ART are stigmatized in the community:

Most often, I hear people say ART is not good and that children born through ART are abnormal but I can assure you that they are just like those who were born through natural conception (Nurse, #2).

This participant revealed what a patient who had a child through ART told her:

One day this patient who was also a friend came to me and she looked so depressed and sad, I asked her what the problem was and she told me she had some misunderstanding with a neighbor and this neighbor said to her in the presence of the child that “you are bringing yourself, that toy you went to the hospital to bring, you think you have brought a human being” (Nurse, #1).

Also, some participants identified religious and ethical challenges that tend to prevent people from accessing ART. Participants consider these beliefs to be misconception, which put unnecessary pressure on persons with fertility problems:

Even though many of my church members are aware I am a medical doctor, they consider my assistance to would be parents who had accessed ART to have children as ungodly just because they think ART is not something God approves of (Gynecologist, #1).

This participant had this to say with regard to people’s view on ART:

Some people believe it is ungodly to manipulate sperms and eggs, then after fertilization, the embryo is transferred into the uterus. For them, it is unethical way of conception and giving birth, as a medical practitioner, I do not see it that way (Gynecologists, #2).

This participant gave a brief history on ART and some personal experiences he had encountered over the years:

I would like to give you some history about ART, a lot of issues came up when Louise Brown, the first IVF baby was conceived and born, it raised a lot of moral, religious and ethical concerns. A lot of newspaper articles came up that, monsters

would be created. Now it is quite funny when clients walk into my office, and ask me, are the kids normal? Are they intelligent? How do they look like? and so on and so forth (Gynecologist, #2).

Furthermore, another participant pondered on the public perceptions about ART as an alternative means to have a child:

Initially, when ART was discovered, a lot of countries disallowed it, they thought doctors were going to create monsters. There are still some religious groups who are still opposed to ART because they do not think it's natural. However, we are - not creating eggs, we do not create sperm, we only manipulate the sperm that God has given to the man and the eggs that God has given to the woman, so we are not doing anything unnatural (Gynecologist, #1).

This is what another participant had to say about perceptions people have about ART:

In Ghana, some people think IVF is fake, not natural, it is not of God and so lots of people frown against it, and they do everything possible to discourage persons with fertility problems from accessing it, they think people who cannot have children naturally are less fortunate and have to live with this condition, (Female, #14, ART).

In addition, pregnancy in its broader sense can lead to a lot of psychological effects on couples. Pregnancy through ART can be psychologically arduous; some participants shared their psychological challenges:

Earlier, I felt very bad that I could not carry my own baby due to certain health issues, it was a bitter pill for me to swallow, come to think of it, psychologically,

this weighed me down for almost a year, by his grace I was able to overcome the problem and I am happy to say I have a child (Female, #10, ART).

This is what another participant said in with regard to the stress and psychological trauma she had to through:

I was affected psychologically because I had tried the procedure about three times but wasn't successful, I waited for a year after the last one and tried again, I became pregnant at the fourth attempt . . . my brother, I went through stress and psychological trauma till I delivered (Female, #8, ART).

For this participant, accessing ART for countless number of times without getting results, could be psychologically challenging:

At a point, I felt it was a waste of time and money, psychologically it wears you down and can make you very bitter because you psyche yourself towards having a baby and it does not work out, having gone through the procedure twice or three times without any positive results is heartbreaking and very frustrating (Female, #5, ART).

A nurse gave her assertion about the psychological issues associated with the use of ART:

What I have observed over the years is that, sometimes, some couples come to you with high hopes and when things do not go as they had anticipated, it affects every aspect of their lives, their mood and ability to work, all these are affected, but you see them very excited when the result is positive, especially when they see their baby or babies after delivery (Nurse, #2).

A gynecologists supported the assertion above by narrating how emotional the use of assisted reproductive technology could be:

The whole procedure you are doing is emotional, there is an emotion attached to it, you do not know the end from the beginning, right from start you are a bit down, if you should finish and you are successful, let me say, you are happy, extremely happy to tell yourself that I have also joined the league of women in quotes, as I would say (Gynecologist, #1).

Also, acceptance of the baby by family members and the larger community became a vital psychological concern to individuals who accessed ART:

Another challenge is, after the delivery of the baby, how are they (society) going to accept the baby. Will they accept the baby as one of the normal babies or one who was just pushed into you? You know they have a whole lot of perceptions about these children and their attitude towards them is different from the children they call normal babies (Female, #12, ART).

Economically, participants stated they were cash strapped after accessing ART, with some indicating they would like to have another child through ART but considering the financial demands, they feel reluctant accessing it again:

I guess it is a good idea to access ART to have a child or children when there is no light at the end of the tunnel that you can have a child naturally, at a point, I had to take a loan from my bankers to support the process . . . we wish we can

have another child through the same process but the money involved is scaring us (Male, #1, ART).

This participant revealed that, ART is good but expensive and persons who have intentions to access it but do not have the finances should go in for loans:

I must admit that ART is good, as much as you have resources to access it, financially, it is expensive no doubt about that, because there are a lot of people who want to access it but cannot finance it. Thank God we can, but for others who want to access it and think they do not have the money, my advice to them is to go in for a loan, after all, people go for loans to buy cars and houses (Male, #2, ART).

For this participant, whilst it is very costly for one to access ART, the success rate is not guaranteed:

I can tell for a fact, ART is not cheap and ART is not absolute, success rate is still low, compared to what happens in nature where the success rate of pregnancy is higher, with natural conception when you give one hundred women one chance to have a baby, a few of them may fail but with ART, when you give them one chance the success rate is about forty or fifty percent and it's very expensive and not everybody can access it because of the cost (Gynecologist, #2).

4.6.2 Medical Complications

Despite the assistive nature of ART, as it has been proven as an effective alternative means of having a child, it sometimes affects the health conditions of persons who access it. Miscarriage was identified as one major health complication as participants accessed ART. Some participants

that were interviewed revealed that they encountered miscarriage at some point when they were accessing ART:

I experienced two miscarriages but was very fortunate when I attempted the third time and it worked, because at a point I had told myself I would not go in for the fourth IVF if it fails . . . luckily enough it worked out, I would like to say that, sometimes it pays to persevere (Female, #8, ART).

This gynecologist revealed some of the side effects associated with ART:

I would say the side effects of ART are minimal and sometimes it can even happen in normal pregnancies. The issue of congenital anomalies and all those things can happen in natural pregnancies. Miscarriage can happen in IVF and the same can- happen in natural pregnancies just that the rate of miscarriages in IVF is very high than the normal pregnancies (Gynecologist, #2).

Participants revealed some common side effects associated with the use of ART. Side effects such as ovarian hyper stimulation, headaches, dizziness and drowsiness were stated as the most reported side effects by persons who accessed ART:

Yes, like I said earlier on, I mentioned ovarian hyper stimulation syndrome, that is one possible side effect, the risk in stimulating the oocytes or stimulating the ovaries to produce multiple eggs. A lesser side effect normally could be bruises at the injection site which can be attributed to the numerous injections that these patients had to take (Gynecologist, #1).

For this participant, the use of fertility medications may affect or may not affect every patient:

Sometimes fertility treatment medications may have some side effects like slight headache, dizziness and drowsiness which may or may not affect every patient, it is patient specific, every patient reacts to these medications differently (Nurse, #2).

This participant shared her experience on what she had to go through after she became pregnant having accessed ART:

I suffered a lot when I became pregnant, at a point, I thought I would die, just two months into the pregnancy I started having complications which led to my admission to hospital for almost nine months, after which, I had to deliver my twins through caesarian section and since then, I am still recovering (Female, #16, ART).

Despite the numerous challenges associated with accessing ART as an alternative means of having children, persons who accessed ART labelled the children they had as lucky children. To them, the end justifies the means and once you have a child after years of endurance, it is worth accessing ART:

Prior to accessing ART, I thought the most important thing was for me to have a baby, a baby I can call my own, so whatever method you go through to have the baby, so far as it is affordable and would be successful, I would not hesitate to access it . . . I think these children are lucky because parents go the extra mile to get them in and so when they come, I think they are even luckier and should be treasured more than the normal babies who just popped into your womb and was delivered (Female, #12, ART).

For this participant, her only conviction was to be called a mum one day:

When I started the procedure, I was not too concerned about the challenges that are associated with ART, my only conviction was to be called a mom one day, so that, those who think I am barren to be ashamed . . . I am happy now, that I have two kids and trust me, I really do not remember the challenges I went through (Female, #13, ART).

4.7 Discussion of the Findings

This study has shown that children are the priority of any marriage or relationship in Ghana. Marriage without children is frowned upon by society and attracts intense pressure from the families of the couples. A few years after marriage without children raises concerns about infertility and most couples try to find remedy for it. The most available and reliable remedy for persons to find solution to their fertility problem is the use of ART (Inhorn & Birenbaum-Carmeli, 2008). However, ART as an alternative means of having children is not acceptable in most African communities (Savage, 1992). As a result, individuals who have children by accessing ART tend to face intense stigma and prejudices.

Despite these intense pressures from the community, individuals without children ignore these intended pressure and stigma and go on with their pursuit of having a child by accessing ART. In this study, persons who accessed ART as an alternative means of having children shared their experiences about society's negative perceptions about ART. However, they believed that, life without a child is unbearable than being stigmatized for having a child through ART. This affirms the theory of planned behavior regarding why participants access ART despite the

challenges associated with it. In this study, the decision of participants to have children through ART was shaped by their personal attitudes, subjective norms and perceived behavioral control.

Participants personal evaluation of accessing ART made them understood that, all society wants is for one to have a child. Therefore, there is a greater possibility that they would get a child after accessing ART, which shaped their intentions to access ART. Thereafter, these persons came to the realization that the means by which they want to have a child is not acceptable and frowned upon by the community. However, after assessing the comfort or discomfort of having children through ART they evaluated their decision to be beneficial (Ajzen, 1991).

Infertility is a serious social problem that may occur in the lives of persons, especially in Africa and other developing countries. Whilst infertility is a problem that mainly affects two persons (husband and wife), women were affected severely than men. The study found that infertility affected females more than it affected men. These findings are supported by research findings by Aduloju et al. (2015); Fledderjohann (2012); Karaca and Unsal (2015).

Society holds the perception that, in most cases, women were likely to have problems when it comes to childbearing than men, therefore women were blamed in almost every marriage without children (Donkor & Sandall, 2007; Guntupalli & Chenchelgudem, 2004; Weinger, 2009). Even though men were sometimes affected by infertility (Hinton & Miller, 2013), the stressors, pressure, anxiety, depression and abuses women go through are severe than men (Sexton et al., 2010).

In most instances, married women without children became victims of divorce, emotional and psychological abuses. This is in support of research findings by the World Health Organization (2015). Marriages without children for a couple of years tend to attract family interference

(Karaca & Unsal, 2015). At this point women were subjected to blame and men were pressured to test the strength and potency of their manhood. Intense pressure on men led them to ignore their wives and look elsewhere with the aim of getting children from other women, which eventually could lead to divorce (World health Organization, 2015).

Intense and repeated accusations stressed women without children as they adopted many health seeking behaviors. By trying to find a cure to infertility, women without children often take the mantle themselves in search for an antidote, sometimes without the knowledge of their spouses or partners. Intensive search for cure and other health seeking behaviors coupled with intense pressure from families and friends as well as neighbors makes coping with infertility burdensome to women. Besides, in this study, persons without children devoted much time in search of treatment, with some visiting traditional health workers and faith based pastors. These women have limited time for other aspects of their lives. These findings are in support of a study by Parry and Shinew (2004) whose study revealed that women with fertility problems have limited leisure or no leisure time.

Generally, the value placed on children in developing countries like Ghana negatively affects couples and individuals who do not have children. In this study, the socio-cultural implication of infertility was very negative. This is consistent with a study conducted in Ghana by Alhassan et al. (2014) whose findings reported negative perception about infertility in Ghana. Marrying without children is unacceptable and couples are supposed to go the extra mile to have their own children. As a result, couples and individuals without children experience stigmatization and prejudices in their various communities, which affects them negatively. The findings are in line with research findings by Hasanpoor-Azghdy et al. (2015); Karaca and Unsal (2015) whose respective findings reported that couples without children are affected emotionally and

psychologically. Also, in this study, it had been revealed that couples with fertility problems experience social exclusion and are often disregarded by families, friends, and neighbours. This is consistent with research findings by Hasanpoor-Azghdy et al. (2015).

Furthermore, persons who are in their reproductive ages but are finding it difficult to have children resort to alternative means of having children. Among these alternative means is ART which has proven to be the most effective alternative means for having children. Persons with fertility problems access ART such as in vitro fertilization, surrogacy, donor eggs, donor semen, intrauterine insemination, and gamete intrafallopian transfer. In this study the most accessible ART was in vitro fertilization and surrogacy. This type was often suggested to clients due to its convenience and success rate. Also, each type of ART is said to be feasible to a particular fertility complication.

However, the use of these types of alternative birth methods comes with its own challenges. The study Participants revealed socio-cultural, psychological, financial, and medical challenges. For the Socio-cultural challenges, ART as an alternative means of having children is perceived to contradict the traditional means of having children. As a result, the use of ART has attracted ethical, religious and moral responses since its inception. These findings are supported by Inhorn and Birenbaum-Carmeli (2008); Olayinka and Njikam (1992) who reported that, assisted reproductive technology are not perceived as an acceptable solution to infertility. Persons who access this form of alternative birth methods are subjected to stereotyping and prejudices, which includes the children that are born.

In this study, individuals who resort to ART to have children encountered some form of health complications. Participants highlighted on some health complications such as ovarian hyper stimulation, headaches, dizziness and drowsiness. Sometimes clients who accessed ART were

admitted to the hospital throughout the period of pregnancy and normally their babies were delivered through cesarean section. Besides, miscarriage was very common among users of ART. Similar side effects of ART had been reported by Ferreira et al. (2016); Qin et al. (2016). In addition, accessing ART to have children was financially costly and persons who accessed it were affected psychologically due to its unpredictability.



CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the findings as presented in chapter four of this study, draws conclusions from the findings and provides recommendations based on the findings.

5.2 Summary of Findings

The study explored the experiences of persons who had accessed ART as an alternative means to have children. Specifically, the study aimed to: (a) explore the experiences of persons with fertility problems, (b) find out the types of ART, (c) ascertain the challenges in accessing ART and (d) explore the socio-cultural implications of infertility. The study found that, men and women experienced infertility differently.

The experiences of women with fertility problems were severe than that of men. Although men and women faced negative experiences with regard to infertility, women were more affected than men due to society's perception about the causes of infertility. The findings revealed that women were more likely to be associated with infertility and sterility than men. As a result, the blame for a couple's inability to have a child after years of marriage was placed on women. Women in such relationships were often accused by in-laws and their own family members. Besides, women experienced psychological distress and other emotional challenges as they cope with the condition of infertility. In addition, the study reported that women were more likely to be divorced in a relationship without children than men. Further, the study found that, infertility was caused by both male and female factors and not a female disorder as perceived by some members of the society.

Furthermore, the study found that many socio-cultural implications were associated with infertility due to the value placed on children in Ghana. Accordingly, persons with fertility problems who were included in this study were stigmatized and discriminated against and were subjected to ridicule in their communities. They experienced verbal and emotional abuse respectively. The study further found that, couples with fertility issues were most often denied the privacy that marriage couples should observe. Interference from families means that, decisions of the couples are influenced by external persons like parents, siblings and in-laws of the couples.

In order to overcome challenges associated with infertility, persons with fertility problems included in this study adopted different methods in other to conceive. The most effective among these methods as revealed in this study, was ART. The different types of ART were sperm and egg donation, in vitro fertilization, surrogacy, intrauterine insemination, and gamete intrafallopian transfer. The study established that these types of procedures were often suggested by gynecologists to patients based on their complications. Also, the most common ART which is accessed, is the in vitro fertilization as it was revealed by participants to be the most viable and convenient among the others.

Moreover, the study found that having children through ART as an alternative means comes with health complications as well as psychosocial and financial challenges. ART as an alternative means of having children contradicts the traditional ways of conception that leads to child bearing. As a result, the study found that, ART has come under serious ethical, religious and moral scrutiny since its inception. Also, there seems to be a lot of inconsistencies in accessing ART to have children. The possibility for the outcome to be successful has not been guaranteed. Nevertheless, the uncertain nature about its success and the cost involved in accessing ART,

psychologically affects persons who access it. Besides, ART as a medical treatment comes with its own side effects. Most of the study participants commented on some potential side effects associated with accessing ART. These were ovarian hyper stimulation, headaches, dizziness and drowsiness. In addition, there was high rate of miscarriage and pregnancy related complications among persons who accessed ART.

5.3 Conclusions

The findings of the study and the literature reviewed indicated that infertility is a socio-cultural concern in Ghana due to the value placed on children. Therefore, not having a child is a serious personal and social problem. Children are important as they are supposed to continue the lineage of parents upon their demise. Also, in a country where day care centers for the aged are limited and not encouraged to a larger extent, adults in their reproductive ages are required to have children who would take care of them in their old age. Not having children therefore, becomes a problem, which attracts countless abuses from the larger society.

Marrying for years without a child in Ghana attracts stigmatization and prejudices. As found in this study, couples without children were perceived differently. They faced verbal and emotional abuses in their respective communities. This led to discrimination in their extended families when it comes to decision making. These and other challenges associated with infertility compel persons without children to adopt other alternative means such as ART in order to have children.

It has been revealed in the current study and other studies that, accessing ART contradicts the traditional means of having children in Ghana and other developing countries. As a result, persons who resort to ART to have children are stigmatized and discriminated against; these discriminations does not exclude the children that are born. Furthermore, parents go through myriad psychosocial problems after ART to conceive. They are faced with the problem of

disclosing information to members of the community and resulting children, regarding their decision to conceive and have children through ART.

Aside the socio-cultural challenges of accessing ART as an alternative means to have children, its accessibility is also very costly and not all persons can afford it. Also, the use of ART to have children has health complications, and persons who access it are likely to experience headaches, dizziness and other medical side effects. Also, accessing ART has resulted in some miscarriages (even though participants acknowledge miscarriage occurs in natural pregnancy, the rate of miscarriages among persons who have accessed ART was high) among persons who have accessed ART. It is based on these findings that, the next section suggests recommendations to mitigate the negative perceptions towards persons with fertility problems and also to improve the quality of health among persons who access ART as an alternative means to have children.

5.4 Recommendations

The findings of the study indicated that there was limited public awareness of ART as an alternative means of having children. It was also found that the society has negative perceptions about infertility. It is therefore recommended that, there should be education and sensitization to create public awareness on ART and to change the negative perceptions about infertility.

Practitioners of ART should endeavour to educate the public about the benefits of ART. It is believed this would change the negative perceptions the public hold about ART and even encourage its access in order to mitigate the challenges that persons with fertility encounter.

Also, there is the need for public education on the factors that contribute to a persons' inability to have children. This would create more awareness on how infertility is a problem and the need to treat persons without children with dignity and respect. The mass media should be encouraged to

sensitize the public by introducing programs that would educate the public about infertility and why they should change their negative perceptions towards persons with fertility problems.

Furthermore, the study reported that, persons who have accessed ART go through countless medical complications. It is therefore recommended that, before starting the procedure, gynecologists and doctors should counsel patients on the merits and demerits of ART. This would offer them the opportunity to inform patients of some of the expected side effects and interventions that would be utilised to prevent or minimize these side effects.

Again, infertility is a major social problem due to the value placed on children in Ghana. This makes infertility a serious health problem like other health problems in the country. It is therefore recommended that the Ministry of Health include ART in the services they provide and at a subsidized cost. It is believed this would mitigate the problem of infertility in Ghana.

Besides, based on the findings, the study has recommended that hospital facilities that provide ART services should have continuous counselling sessions to support patients. It is believed this would help mitigate the challenges as they experience it during after the use of ART. Again, counseling services would prepare parents on how to disclose information to the children that are born through ART.

5.4.1 Recommendations for Future Studies

The study focused on selected hospital facilities in Southern Ghana. As a result, the findings of the study may not reflect on other conditions in other parts of the country. Based on this, it is recommended that future studies may extend investigations to other parts of the country. It is believed, this would bring to the fore what pertains in the country as a whole on the experiences of persons who have accessed ART to have children.

5.4.2 Implications of the Findings for Social Work

This section provided recommendations based on the various levels of Social Work practice.

At the micro level of practice, counselling of couples and persons with fertility problems is crucial. In their effort to maximise clients' social functioning and wellbeing, social workers must work to help build clients coping skills and functioning capacities. As counsellors, social workers will be able to address some of the challenges clients with fertility problems face on daily basis. Due to the value society that places on children, it is important that, clients with fertility problems are empowered in order to deal with everyday challenges associated with infertility.

At the mezzo level, it is important for social workers to assume multiple roles; as brokers, facilitators and educators. Social workers can work to link clients to needed resources such as clinics or hospitals that offer solutions to infertility at affordable cost and support groups where clients can meet and interact with others facing similar challenges. Social workers can also facilitate service delivery between clients and service providers in their quest to find solutions to infertility. Education is also crucial, in the sense that, it beholds on social workers to take up the challenge of educating family members and society about accepting other means of having children such as ART or adoption.

At the macro level, social workers should advocate for better policies that will make ART accessible and affordable through subsidies to persons with fertility problems. Social workers through advocacy should ensure that the government recognises the value society places on children by putting in place appropriate measures in the quest to address the needs of persons with fertility problems.

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Appendix

Interview Guide for Individuals / Married Couples

In partial fulfillment of the requirement for Master of Philosophy Degree in Social Work, I am conducting an Academic Project Work on the topic **“Exploring the Experiences of Persons Accessing Assisted Reproductive Technology”**. I would be pleased if you could spend some few minutes of your time to answer these questions.

Information is required solely for academic purposes and strict confidentiality is assured.

Demographic Information

- Age
- Occupation
- Educational background
- Marital status
- Do you live with your spouse?
- How long have you been trying to have a child?
- Have you conceived before? (Have you conceived as a couple before?)

Socio-Cultural Implications of Infertility

- Why do you think society places so much value on children?
- How does society's strong desire for children makes you feel?
- What do you think are the perceptions held by the society about infertility?
- From your candid opinion, do you experience any stigmatization or discrimination by your spouse/partner's family because you cannot get pregnant or have a child?

Experiences of Persons with Fertility Problems

- From your candid opinion, explain to me the relationship with your spouse/partner after you were diagnosed you cannot conceive naturally.
- In your candid opinion, do you think not having a child after years of marriage has affected your relationship with your spouse/partner?
- What has been the relationship with your spouse/partner's relatives and friends after it was revealed you cannot have a child naturally?
- From your candid opinion, do you think people are treating you unfairly because you are finding it difficult to get pregnant or have a child?
- Can you please briefly tell me of any other experiences of infertility we have not talked about?

Experiences of Accessing Assisted Reproductive Technology

- What prompted you to access ART?
- What do you think are the perceptions people have about ART?
- What perception did you have prior to accessing ART, and probably children who were conceived through ART?
- From your candid opinion, can you tell me how you feel as you accessed ART to have a child?
- Please I would like to know if you have encountered any challenge after accessing ART
- Can you tell me your experiences (medically, psychologically, socially, and financially) since you accessed ART?

How Infertility Affects Men and Women

- How you have been affected by your condition?
- How does your spouse/partner's family treat or relate to you after finding out you cannot have a child naturally?
- Do you think your spouse/partner's family blames you for not having a child?
- From your candid opinion, which one of you is more eager to have a child?

Types of Assisted Reproductive Technology

- Can you tell me the type of ART you accessed and why you opted for that?

Interview Guide for Gynecologists and Nurses

In partial fulfillment of the requirement for Master of Philosophy Degree in Social Work, I am conducting an Academic Project Work on the topic **“Exploring the Experiences of Persons Accessing Assisted Reproductive Technology”**. I would be pleased if you could spend some few minutes of your time to answer these questions.

Information is required solely for academic purposes and strict confidentiality is assured.

Demographic Information

- ❖ Age
- ❖ Educational background
- ❖ Years of service

Socio-cultural Implications of Infertility

- ❖ How often do you see patients with fertility problems?
- ❖ Does society's strong desire for children put pressure on individuals to have a child at all cost?

- ❖ From your experience, what do you think are the socio-cultural beliefs about infertility?
- ❖ What do you think are the perceptions held by society about infertility?
- ❖ From your experience, do you think persons with fertility problems experience discrimination and stigmatization?
- ❖ Do you think infertility is a socially constructed problem?

Experiences of Persons with Fertility Problems

- ❖ From your experience, what are the experiences of infertility among individuals?
- ❖ What do patients tell you about their experiences of infertility?

Experiences of Accessing Assisted Reproductive Technology

- ❖ How does ART work?
- ❖ Does ART have any medical side effects?
- ❖ The children conceived through ART, are they the same as the children conceived naturally?
- ❖ What perceptions do you think people have about ART?

How Infertility Affects Men and Women

- ❖ From your experience, do you think infertility affects men and women differently?
- ❖ What do patients tell you about the behaviours of their partners towards their condition?

Types of Assisted Reproductive Technology

- ❖ Can you please tell me the types of ART you have in this facility and the reasons why patients are advised to access a particular type?