

**SCHOOL OF NURSING AND MIDWIFERY
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**HEALTH SEEKING BEHAVIOURS OF MEN EXPERIENCING
INFERTILITY IN THE ACCRA METROPOLIS**

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DECLARATION

I, Ezekiel Oti-Boadi, declare that this thesis is a product of my original, independent research under the supervision of Dr. Florence Naab and Dr. Josephine Kyei, with the exception of published articles which have been duly and appropriately referenced. I also declare that this work has never been submitted elsewhere or presented in any form to any other institution for an academic award or to any journal for publication.

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ABSTRACT

Health seeking behaviours are closely linked to a nation's health status and its economic growth, and they are important as they define the disease outcomes and acceptance of health care. In Ghana, little is known about the health seeking behaviours of men experiencing infertility. The aim of this study was to explore the health seeking behaviours of men experiencing infertility in the Accra Metropolis. The theory of planned behaviour (TPB) was used as a guiding framework. An exploratory descriptive design was employed, and snowball and purposive sampling techniques were used to recruit 13 men diagnosed with and self-reported to have infertility. In-depth face-to-face interviews were conducted using a semi-structured interview guide. On average, each interview lasted between 45 and 60 minutes. The interviews were audio-recorded, transcribed verbatim, and analysed using thematic content analysis. Five major themes emerged based on the constructs of the TPB and three emerging themes were identified from the data. Participants described their health seeking behaviours in eight categories of behaviours. In addition, they also reported some barriers to their health seeking behaviours. Therefore, to improve the health seeking behaviours of men experiencing infertility, there is a need for health care providers to address the barriers identified by the participants. The findings of this study have implications for nursing practice, policy formulation, and infertility research.

DEDICATION

I dedicate this thesis to my family, especially, my father who supported me through my MPhil Nursing education.

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LIST OF ABBREVIATIONS

ART	Assisted Reproductive Technologies
GHS	Ghana Health Service
GSS	Ghana Statistical Service
IVF	In Vitro Fertilization
MOH	Ministry of Health
NHIS	National Health Insurance Scheme
NMIMR-IRB	Noguchi Memorial Institute for Medical Research-Institutional Review Board
OPD	Out-Patients Department
PBC	Perceived Behavioural Control
SN	Subjective Norm
TPB	Theory of Planned Behaviour
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.0 Background

Infertility is a major public health concern (WHO, 2017). It affects the psychological and social well-being of both males and females worldwide (Verkuijlen et al., 2016). The World Health Organization and World Bank (WHO, 2011) identifies infertility as the fifth serious disability for individuals aged 59 years and below. It affects 25% of couples in low- and middle-income countries and 15% of couples in high-income countries. It is estimated that 72.4 million couples worldwide experience either primary or secondary infertility (Asemota & Klatsky, 2015). Infertility may be primary when it is not preceded by any pregnancy or secondary when it follows a previous pregnancy, even if once, whether it ends with the birth of a live or dead fetus or ends with an abortion (Hamza, 2015). Male factor infertility contributes 40%, female factor infertility contribute 40%, and the combination contributes to 20% of all infertility cases (Moyo & Muhwati, 2013). This is an important concern for the well-being of couples and has relevant implications for individual, family, and public health (Bushnik et al., 2012), since it is estimated that, approximately, one in four to six couples experiences infertility (WHO, 2016).

Global surveys show high rates of infertility in parts of West, Central, and Southern Africa, compared to lower rates in North and East Africa (Mascarenhas et al., 2012). Geelhoed et al. (2002) identified the prevalence rate of infertility in Ghana more than a decade ago to be 11.8% for women and 15.8% for men. A report by the Ghana Health Service (GHS) revealed that male infertility was emerging in the Upper East Region of the country (Osei, 2016), but little is known about men in the southern sector. Given the relatively high prevalence of infertility in

Ghana, especially among men, addressing infertility can contribute to improvement in population health outcomes.

Male infertility is a chronic reproductive health condition contributing to more than half of all cases of childlessness globally (Inhorn & Patrizio, 2015). Men and women are equally likely to be infertile, but a couple's failure to conceive is often blamed on women (Cui, 2010). Moreover, there are differences in male infertility across diverse countries, with higher rates in Africa, especially Ghana (Geelhoed et al., 2002). Comparable prevalent estimates of male infertility have been reported across high-income countries: 9.0% in Finland, 10.1% in the UK, and 12.0% in the USA (Barratt et al., 2017). In sub-Saharan Africa, the prevalence estimates of infertility range from 9% to 30% (Chimbatata & Malimba, 2016). The prevalence estimate of male infertility in Ghana (15.8%) almost two decades ago was higher (Geelhoed et al., 2002), compared to the estimates from the aforementioned countries. Despite high estimates of infertility among men in Ghana, there has been limited attention paid to addressing male infertility problems in the country.

Male infertility is when a man is unable to impregnate a woman after regular and unprotected sexual intercourse for at least 12 months, if the woman has no gynecological issues (Emokpae et al., 2007). It can be diagnosed by performing a semen analysis on the semen produced by the man. This test affects men's psychological and emotional well-being (Naab & Kwashie, 2018; Vassard et al., 2012), when a low count is diagnosed. A sperm counts of less than 20 million sperms per ml (20×10^6 sp/ml) is regarded as low; a factor contributing to male infertility (WHO, 2016). The exact reason for the decline in semen quantity is not clear. It may be due to environmental, nutritional, socioeconomic or other unknown causes (Keegan et al., 2007)

Socio-economic and cultural contexts make infertility an important social and health issue in Africa. In high-income countries, an individual's decision not to have his or her own biological child is somewhat acceptable, compared to low and middle-income countries, where individuals are expected to have children once they are within the reproductive age or get married (Hörbst, 2010). Many families in low-income countries, especially African countries, rely entirely on their children for economic survival and social insurance; therefore, childlessness is a major social and public health issue (Ombelet, 2013). Children are seen as a means of preserving an individual's lineage through marriage in Africa (Hörbst, 2010), and therefore childbearing is revered in the African society including Ghana (Nukunya, 2016).

Moreover, masculine perspectives in Africa make infertility to be of great social and health interest. In many African countries, due to the high cultural emphasis placed on childbearing, the ability to father children is integral to a man's identity and his capability to be a worthy male in the community (van der Merwe et al., 2017), but this cultural posturing poses serious social problem for the couples who do not have children. The desire for a child is principally conditioned by socio-cultural frameworks in which individuals are born and brought up. A view of loss of control when diagnosed with infertility also appears to be present for some and may lead to men feeling disempowered or feeling anomalous (Shirani & Henwood, 2011). Male infertility is seen as a major life crisis (Hanna & Gough, 2015) that could threaten the stability of both marital and familial relationships. Creating strategies to bridge access to health services for a male experiencing infertility is an imperative public health issue.

As can be said about other countries in sub-Saharan Africa, there is a need for research evidence to inform strategies aimed at improving access to health services to address male infertility in Ghana. Available evidence suggests that a central issue affecting the capacity of an

individual to access and use healthcare facilities is their health-seeking behaviour (Kuuire et al., 2015), which is closely linked with an individual's health status (Begashaw & Tesfaye, 2016). Health seeking behaviour is any action or inaction by a person who sees himself as having a medical issue or ill health, in order to find a suitable remedy (Olenja, 2003). Most people use several avenues when seeking health such as churches (spiritualists), traditional healers and hospitals (biomedical) as well of a combination of these approaches (Chimbatata & Malimba, 2016). In Ghana, evidence indicates that women experiencing infertility issues seek health through various sources, including traditional healing and spiritual mediation (including churches), as well as orthodox biomedicine (Osei, 2016), but relatively, little is still known about the health seeking behaviours among men experiencing infertility in Ghana. It is traditionally believed that infertility is a woman's problem and male infertility appears to be a secondary health problem (Naab & Kwashie, 2018). Issues like absent husbands due to work pressure, cost of infertility treatment, male apathy and reluctance to provide semen samples for clinical evaluation have been identified as challenges among couples seeking for care (Hiadzi & Woodward, 2019).

In Ghana, the number of clinics providing various therapies for infertility has increased, ranging from medical Assisted Reproductive Technologies (ART) to herbal remedies (Hiadzi & Woodward, 2019), yet seeking for care can be complex for men. To improve access to infertility care for men in Ghana, researchers need to research into the health seeking behaviours of men experiencing infertility. The high rate of male infertility in Ghana (Osei, 2016), as well as the cultural context of the country, make the current study particularly timely and relevant for informing promotive public health efforts and social outcomes. Uncovering the health seeking behaviour of men experiencing infertility in Ghana will enable research policymakers and health

service providers to improve fertility care in Ghana. The study, therefore, sought to explore the health seeking behaviours of men experiencing infertility using the theory of planned behaviour as an organising framework.

1.1 Problem Statement

Infertility according to WHO is the inability for an individual (male or female) to conceive a child after a year of continuous and regular unprotected sexual intercourse with the opposite sex (WHO, 2002, 2012). It is common among individuals within the reproductive ages of 14 and 49 years (WHO, 2016). The prevalence of male infertility has increased drastically worldwide in the past 50 years due to industrialization, which is believed to hinder sperm production (Eze & Okonofua, 2015). It has been found to threaten men's status and reputation as males and heads of their families, but infertility is still often perceived as "women's business" (Culley et al., 2013; Inhorn & Patrizio, 2015; Naab, 2010). Africa is now regarded by some demographers as the "infertility belt" due to the prevalence of infertility within the continent (Inhorn & Patrizio, 2015). Male infertility is on the rise in Africa (Eze & Okonofua, 2015), yet many men experiencing infertility are often in denial about their situation.

In Ghana, the prevalence rate of infertility is relatively high (11.8% among women and 15.8% among men) (Geelhoed et al., 2002). The problem of infertility is therefore a rising issue which needs to be examined (Boateng, 2015; Tabong & Adongo, 2013). Even though infertility is on the rise, it appears women experiencing infertility are mostly researched more than men. Regardless of the fact that male infertility has an enormous psychosocial burden on men, only a few studies in low to middle income countries have recruited male participants (Zaake et al., 2019). Health-care treatments for male infertility can downgrade the intensity of intervention required for the couple to achieve a pregnancy and can also be a cost-effective method to help

couples achieve pregnancies (Chandra et al., 2014; Eisenberg et al., 2013; Meng et al., 2005).

Despite the involvement of the male partner in infertility, it is often overlooked in the evaluation and treatment of couples experiencing infertility (Petok, 2015). In effect, overlooking the male factor in treatment regimens could lead to increased use of higher cost-assisted reproductive technologies.

Social science studies from South Africa and Mali indicate that male-infertility diagnosis threatens the self-worth and secrecy of men, bringing upon them shame (Hörbst, 2010). It is therefore not surprising that a study by Yusuf et al. (2012) found that young men in Nigeria having fertility issues were more likely to have sexual intercourse with multiple partners in order to father a child, but this increases their risk of sexually transmitted disease infection. In Ghana, some men (experiencing infertility) engage in infidelity to prove their cultural faultlessness (Naab & Kwashie, 2018). A critical implication of excluding male infertility is that clinical evaluations would risk missing opportunities to identify serious medical diseases associated with infertility and genetic conditions that may be transmitted to offspring (Barratt et al., 2017).

Male infertility is often associated with poorer general health, including obesity, diabetes, cardiovascular disease, as well as prostate and testicular cancers (Walsh, 2011), which also place men at a higher risk for cardiovascular mortality later in life (Eisenberg et al., 2011). In addition, men experiencing infertility problems are stigmatised from the community and also their families, and suicide risks are also common among young men experiencing infertility (van der Merwe et al., 2017). Clearly, to address these diverse social and health consequences, more sound research is needed to improve the health status of males experiencing infertility.

Nonetheless, many men who suffer infertility are not able to access treatment for male infertility; even though treatment is available, there is limited access to infertility care in low-to-

middle income countries (Asemota & Klatsky, 2015). Ghana is not an exception since most fertility hospitals are privately owned and may be costly to an average individual. There is a need to improve access and use of health services by men who experience infertility. Addressing health seeking behavior of men is critical to developing educational programmes and interventions that can improve access to health care services. The study, therefore, sought to explore the health seeking behaviours of men experiencing infertility using the theory of planned behaviour as an organising framework.

1.2 Purpose

The general purpose of this study was to explore the health seeking behaviour of men experiencing infertility in the Accra Metropolis.

1.3 Specific Objectives

The formulation of the specific objectives of this study was guided by the order of the constituent constructs of the theory of planned behavior (Ajzen, 1991). These specific objectives were to:

1. Describe the attitudes of men with infertility about health seeking.
2. Explore the subjective norms that influence the health seeking behaviour of men experiencing infertility.
3. Investigate the perceived behavioural control that impedes or facilitates the health seeking behaviour of men experiencing infertility.
4. Identify the intentions of men experiencing infertility towards health seeking.

1.4 Research questions

1. What are the attitudes of men with infertility about health seeking?
2. What are the subjective norms that influence the health seeking behaviour of men experiencing infertility?
3. What are the perceived factors that impede or facilitate the health seeking behaviour of men experiencing infertility?
4. What are the intentions of men experiencing infertility towards health seeking?

1.5 Significance of the study

Potentially, the results of the current study will inform policy and practices to facilitate health service use by Ghanaian men experiencing infertility. It will also create awareness and increase the knowledge level of Ghanaian men on male infertility and change some misconceptions about male infertility to help increase patronage of various health services. The findings of the study would give a picture of what men experiencing infertility experience in seeking health care. It would further add to the existing literature on infertility whilst enriching data.

1.6 Operational definitions

Men: males aged 18 years and above who are experiencing infertility.

Infertility: It is the inability for an individual (male or female) to conceive a child after a year of continuous and regular unprotected sexual intercourse with the opposite sex (WHO, 2002, 2012).

Health seeking behaviour: A practice associated with establishing and retaining a healthy state, in addition to aspects of managing any departure from that state.

CHAPTER TWO

LITERATURE REVIEW

2.0 Theoretical Framework and Review of Related Empirical Studies

This chapter outlines the framework that provided the theoretical lens of this study, and a review of relevant empirical literature.

2.1 Selection of a theoretical framework

In order to assess the health seeking behaviour of men experiencing infertility, several models were considered, including the health belief model, social behaviour model, and social learning theory. The health belief model initially formulated in 1950 to examine individual beliefs and behaviour was not a good-fit for the current study because the researcher was not interested only in the beliefs of men towards usage of infertility services. Similarly, Social learning theory by Albert Bandura, focuses on helping an individual to change his or her behaviour through the process of observation, imitation, and modeling (Bandura & Walters, 1977). This theory was also not applied in the current study because it does not consider the individual's facilitating and predisposing factors that affect behaviour change. The Social Behaviour Model, even though describes individual behaviour related to utilising or not utilising health services, was not considered for application in the current study because the model has some constructs like personal resources and social constructs that are not of interest to the current study (Amico et al., 2018). The researcher, therefore, settled on the theory of planned behaviour which has the relevant constructs to understand the health seeking behaviour of men experiencing infertility.

2.1.1 Theory of Planned Behaviour

The theory of planned behaviour (TPB) which was developed by a social psychologist (Ajzen, 1991) has attitudes, perceived norms, and perceived control that directly influence behavioural intentions, which in turn, affect behaviour change (Ajzen, 1991, 2011). Thus, behavioural intention is the factor that inspires the performance of the behaviour which is evident in the determinations and preparedness of an individual to try the 'new' behaviour (Ajzen, 1991). The theory of planned behaviour is used to predict and explain a wide range of behaviours, including fertility issues (Billari et al., 2009). Fertility studies show that attitudes, subjective norms and perceived control of having a child can predict the desire to have a child (Billari et al., 2009; Dommermuth et al., 2011; Klobas, 2010). Three considerations or beliefs used to assess these determinants (attitudes, subjective norms and perceived control) are behaviour beliefs, normative beliefs and control beliefs (Ajzen, 2006; Ajzen & Klobas, 2013).

The first construct, behaviour beliefs, represents the attitude of the individual to the behaviour. Attitude towards the behaviour is the assessment and overall evaluation of the outcome of the behaviour by the individual (Ajzen, 2011; Greaves et al., 2013). Behaviour beliefs are an individual's feelings about the behaviour of interest to be implemented. An individual's evaluation of a behaviour, according to Bortoleto et al. (2012), could be a positive or negative feeling about that individual's own behaviour. The perception that the individual has a responsibility to perform a behaviour defines the denial or performance of a behaviour.

Subjective norm (SN) is the perceived social pressure to participate or not to participate in a certain behaviour (Ajzen, 2006). It is assumed that subjective norm is determined by the total set of accessible normative beliefs regarding the expectations of significant others – parents, spouse, friends, family, and several others (Bortoleto et al., 2012; Greaves et al., 2013). Bezzina

and Dimech (2011) posit that subjective norms relate to the influence of others on the individual to adopt behaviours. Hagger et al. (2006), describe subjective norms as a series of factors relating to the perception a person holds that he/she has to consider the key people in his/her life which serves as a motivation to conform to what others expect of him/her.

Perceived behavioural control (PBC) is the ease with which a person may execute an action based on an assessment of whether the person possesses the requisite skills, resources, ability to perform the behaviour, and perceived control over the behaviour (Ajzen, 2002). This view was explained by Ajzen (1991) that perceived behavioural control may be influenced by control beliefs such as experiences of friends, and other factors that may increase or reduce the perceived difficulty in performing the behaviour. This may include the perceived presence of facilitators or barriers and how they either augment or obstruct the performance of the behaviour (Ajzen, 2006). Furthermore, Ajzen (1991) explains that the availability of resources such as time, money and knowledge reflects the actual degree of behavioural control. He further indicated that the fewer the impediments and obstacles, the higher the likelihood that the individual would perceive a higher control over the behaviour.

Ajzen (2002) explains that intentions are the immediate antecedents of behaviour which indicates an individual's willingness to adopt an expected behaviour. This is influenced by an individual's attitude towards the behaviour, subjective norms, and perceived behavioural control. Also, intention consists of motivational factors influencing a particular behaviour which has a strong direct and positive influence on the actual behaviour (Ajzen, 1991). The intentions of an individual towards a particular behaviour is a precursor to the performance of the behaviour (Ajzen, 1991).

Ajzen (2011) further explained that attitudes, subjective norms and perceived behavioural control, contribute to the formation of a behavioural intention. It is expected that an individual will realise an intention when it is sufficiently strong and when she or he has a sufficient degree of actual control over the behaviour. However, in many situations people may lack control over the behaviour and a lack of perceived behavioural control decreases the likelihood for both the intention and the behaviour itself.

This theory has received substantial research support (Ajzen, 2011) and has been applied in many fields. Over time, it has demonstrated its effectiveness in predicting actual behaviour in areas such as health and care practices, educational behaviour, sexual practices, agricultural practices and behaviour of individuals in their environment (Billari et al., 2009; Macovei, 2015; Synodinos & Bevan-Dye, 2014). In fertility research, particularly, fertility intentions, the greatest strength of the planned behaviour theory is often attributed to its ability to bridge the gap between the macro and micro drivers of fertility determinants (Billari et al., 2009). It offers an understanding of the ways in which factors, such as normative beliefs about childbearing influence intentions to have children (Ajzen & Klobas, 2013). However the model does not include other behavioural factors like emotions even though it can have an impact on the perception, belief and willingness to perform an action (Ajzen, 2011).

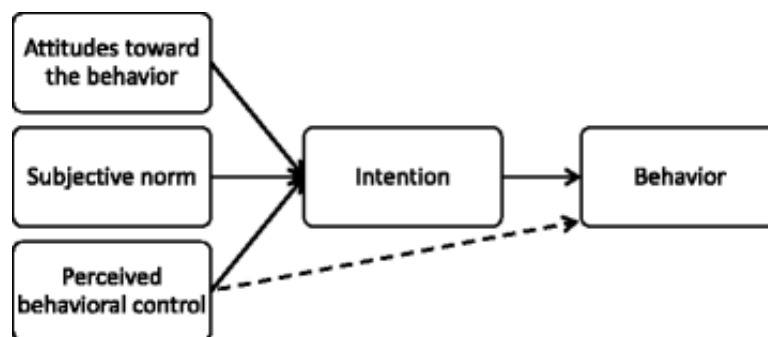


Figure 2. 1: Theory of planned behaviour

Source (Ajzen, 1991)

2.1.2 Application of the Theory to the Study

In the current study, attitude refers to how an individual values having children, as this may in turn affect whether the individual supports a fertility behaviour or not. The assumption therefore, is that a person with strong beliefs or positive feelings about seeking treatment is likely to have a positive attitude towards seeking treatment, whereas a person with negative feelings or a negative belief about seeking treatment is likely to have a negative attitude towards the behaviour (Ajzen, 2011) and will decline participation.

Subjective norm is defined as the social pressures that one feels while making a decision to perform or not to perform the behaviour. In low-to-middle income countries, individuals such as wives play an influencing role in the course of men's health seeking behavior. Also, opinions and/or advice of parents and in-laws and childbirth experiences from friends and other people may also directly or indirectly influence the health seeking behaviour of men experiencing infertility. Personal beliefs held by the men experiencing infertility are also worthy of consideration.

Perceived behaviour control (PBC) refers to the extent to which men experiencing infertility control perceived factors that either impede or facilitate health seeking behaviour. It can be either internal factors or external factors.

The intention is whether men experiencing infertility desire to have a family or not, which will in turn help develop strategies to increase men's intention towards seeking infertility treatment. The individual's intention may be the partner's desire to have a child or meeting the needs of family inheritance.

Behaviour is whether men experiencing infertility will seek health care or not. This will help map out strategies to help men overcome their infertility. The constructs of the TPB theory are in line with the topic and objectives for this study.

2.2 Review of Related Empirical Studies

Literature review provides a scientific and theoretical knowledge about a research problem enabling synthesis of what is already known and unknown (Polit & Beck, 2014). This section, therefore, discusses relevant empirical primary literature in relation to the study. Databases and search engines such as Google Scholar, Medline, Scopus, African-based academic database AJOL (African Journals Online), PubMed, and Cumulative Index to Nursing and Allied Health Literature (CINHAL) were utilised. Literature was reviewed on men's health seeking behaviour, men's access to health, and male infertility access to health care. Key words including "infertility", "male infertility", "treatment-seeking", "health seeking", "men access to healthcare" were used for the search. The literature review was organised according to the objectives of the study and the constructs of the model (See Section 1.3 and 1.4). The scope of literature reviewed was from 2003 to 2020 publications around the globe.

Generally, the relatively lower levels of men seeking medical care is a phenomenon that is well documented through research (Agarwal et al., 2015; Hammarberg et al., 2017; Lee, Neo, Tan, Cook, Wong, Tan, Sayampanathan, Lim, Tang, Goh, et al., 2014; Naab & Kwashie, 2018; Osei, 2016; Yousaf et al., 2015). Moreover, serious health-related fertility issues may occur if they fail to seek assistance, leading to deterioration of the medical condition as well as creating an additional burden on the healthcare system (White et al., 2011). This may be due to several barriers that hinder their health seeking behaviours: socio-economic status, geographic settings, cultural issues, healthcare system policy and procedures (Iyalomhe & Iyalomhe, 2012). Even

though men are faced with barriers when seeking health, generally, they welcome the opportunity to discuss their health care needs (Coles et al., 2010).

2.2.1 Attitude of Men with infertility about health seeking behaviour

Attitudes towards medical conditions and its management are significant contributors to health seeking behaviour. In the case of infertility, attitudes associated with the condition are more striking, compared to other health-related conditions (Greil et al., 2011). This is primarily because couples experiencing infertility may not present for professional treatment or any other intervention put in place within the healthcare system to address the issue, unless they accept parenthood as a desirable social role. The attitudes of health workers also play a significant role for men experiencing infertility (Jonas et al., 2017; Mikkelsen et al., 2013).

Men do not consider that they are the problem when it comes to issues of infertility, but rather the women (Culley et al., 2013; Schick et al., 2016). Some men experiencing infertility have reported that the condition affects all aspects of their lives (Collins, 2018; Gamel et al., 2019; Hanna & Gough, 2020). Sometimes, they do not see the need to talk to anyone about their problem, yet some men are willing to talk openly about issues related to infertility affecting them in treatment and their experience of coping with undesired consequences (Schick et al., 2016). In the Ghanaian culture, men do not easily admit that they have problems and need assistance with fertility (Naab & Kwashie, 2018). It is mostly the women who seek assistance first and the man is only contacted when the woman is considered fertile (Naab & Kwashie, 2018).

Elsewhere, non-Caucasian men have expressed concerns about the desire for treatment and believe that infertility should be treated since the condition decreases a man's quality-of-life (Gerhard et al., 2014). Other authors have indicated that men seek healthcare services based also on their observations of the illnesses or death of their parents, relatives, public service

announcements, mass media campaigns, and news stories and do not want to admit their illness, even though they know that they are susceptible to illness (Eley et al., 2019; Tyler & Williams, 2013). Men tend to have low perceived seriousness of their conditions and believe it will go away (Fish et al., 2015; Yousaf et al., 2015). This implies that some men do not perceive the severity of the condition even though they are at risk.

Although some men are reluctant to seek health care, they can be proactive in seeking help for illness by using different pathways, even though they want to appear strong in the eyes of others (Buckley & Ó Tuama, 2010; Coles et al., 2010; Hajdarevic et al., 2011; Rochelle, 2019). In Zimbabwe, men believe that infertility is as a result of their witchcraft and punishment from either God or angry ancestors, and therefore resort to seeking help from spiritual and religious healers, rather than from professional medical practitioners (Moyo & Muhwati, 2013). According to Ritgak and Simon (2013) and Moyo and Muhwati (2013), men only seek medical care when religious and traditional methods fail, because they believe the cause is more spiritual than physical. In Ghana, generally, the society commonly supports the idea that men cannot experience infertility and this makes men reluctant in seeking healthcare (Osei, 2016). This means that issues of masculinity, culture and religion need to be looked into.

2.2.2 Subjective Norms of Men experiencing Infertility

A man with many children is considered a reputable member of the society in most parts of Africa, whereas a man who is unable to father children biologically is often marginalized (Richard et al., 2017; Rouchou, 2013). This is even worse in cases where individuals experiencing infertility are denied some rights in the community (Chimbatata & Malimba, 2016). It has been found that societal attitudes are an influential factor for men experiencing infertility

(Hinton & Miller, 2013). Society's over valuing of children and tagging childless couples as useless in society needs to be critically looked at because it puts more pressure on men experiencing infertility.

In general, although male infertility is viewed as stigmatizing, it appears that men do not readily share their fertility issues with people other than their wives (Wischmann & Thorn, 2013). As a result, men experiencing infertility rarely discuss their condition or speak with anyone about their feelings (Babore et al., 2017; Wischmann & Thorn, 2013). Other authors also indicated that men reportedly sought medical care for themselves only if they wanted to see their offspring (Eley et al., 2019; Zaake et al., 2019). Furthermore, in a phenomenological study, men who had their spouses around indicated that their wives were their driving force in terms of seeking health care (Sale et al., 2016), while others confided in clinicians (Fisher & Hammarberg, 2012). Men who stayed alone described other women as their driving force in seeking care as well as their personal belief about infertility (Basse et al., 2018; Sale et al., 2016). There is the need to understand the personal view of these men to help put up strategies to help them (Fainberg & Kashanian, 2019). In Ghana, men experiencing infertility are mostly pressured by their wives, neighbors, friends and other family members to seek healthcare (Mumtaz et al., 2013; Naab & Kwashie, 2018; Tyler & Williams, 2013). Family, wives, and partners, in particular, are perceived as a source of pressure to seek healthcare for men experiencing infertility.

2.2.3 Perceived behavioural control of men experiencing infertility

These are perceived factors that either impede or encourage men experiencing infertility to seek health care. In most low-income countries, infertility services are only available in the private sector where the cost of such services may exceed half of the annual income of an

average individual, making such services inaccessible, especially for the poor (Hammarberg & Kirkman, 2013). The cost of treatment can place a high financial burden on affected couples leading to violence, isolation, and divorce and also affect the quality of care rendered at the facility (Bushnik et al., 2012; Dowden et al., 2019; Group et al., 2015). Men with higher income more often agree to see the doctor than men who earn less money (Anderson et al., 2009; Lee, Neo, Tan, Cook, Wong, Tan, Sayampanathan, Lim, Tang, Goh, et al., 2014; Yusuf et al., 2012). This is as a result of lack of health insurance coverage for the diagnosis and treatment of infertility (Dupree, 2018; Mehta et al., 2016). In Ghana, the National Health Insurance Scheme (NHIS) does not cover infertility treatment. Most of the fertility services are private which can place financial burden on the average individual and some men go as far as selling their properties to cover the cost of treatment (Osei, 2016). The average income of an individual or the spouse or family is key to seeking health care.

In Ghana, fertility centers are gradually increasing, with more advanced options being based in these private health facilities. The centers providing fertility services are often located in cities and couples from remote areas often find it time-consuming and expensive to access them. At the same time, there is a proliferation of herbal clinics offering infertility treatments, particularly, in Accra – the national capital (Hiadzi & Woodward, 2019). In another study among couples, the men felt they cannot afford to take time off work as they are the sole breadwinners for their families (Coles et al., 2010). Men believe that infertility services that are provided at the various health facilities are friendlier for women than men. They are of the view that men have to wait for long period before they are attended to, which discourages them (Coles et al., 2010). Another issue that is critical at the health facilities is the lack of access to a waiting space separate from that used by pregnant couples (Fisher & Hammarberg, 2012), which makes men

experiencing infertility uncomfortable. This means the location, lack of waiting space and time also play a key role in the health seeking behaviour of men.

Knowledge about health seeking behaviour for infertility originated with information collected from women (Culley et al., 2013) and has helped women in decision making (Naab & Kwashie, 2018; Osei, 2016). Men have little knowledge about the risk factors of infertility and its management and avoid seeking medical care (Daumler et al., 2016; Griffith et al., 2011; Hammarberg et al., 2017). In Nigeria, majority of men experiencing infertility had formal education and that informed their decision to seek orthodox care (Yusuf et al., 2012). A study conducted in some parts of Ghana indicated that men had low knowledge about male infertility (Akuffo, 2017). This can be attributed to the fact that there is limited public awareness of male infertility (Mehta et al., 2016). It is therefore clear that health seeking behaviour of men can improve with knowledge and awareness creation on male infertility.

Even though men reported low levels of anxiety and depression (Patel et al., 2018), they feel health care professionals need to communicate clearly and sensitively to them (Chapple et al., 2007) since there is a disparity of services for specialised male infertility (Mehta et al., 2016). Thus, the health centers should be welcoming to men in order for them to feel the need to seek for help. This shows that the ability of the individual, resources and opportunities play a vital role in seeking for health care.

2.2.4 Intention of men experiencing infertility towards health seeking

Men are often characterized as unwilling to seek health care even when they are going through difficulties. Contrary to this, a study conducted in Sweden indicated that men with higher educational status desire more to seek health care than those with poor educational level

or those who are uneducated (Bodin et al., 2017). However, men experiencing infertility seem to be reluctant when it comes to seeking health care, because they assume there is nothing wrong with them (Mumtaz et al., 2013). The desire to have a child is determined by multiple factors including age, marital status, culture and religious beliefs (Fisher & Hammarberg, 2012). Men's intention to have their own biological children may change with age, therefore it is important to understand their intentions in order to aid health workers and policy makers during education and policy development (Roberts et al., 2011).

Men desire to seek health care as much as women do since men who have been able to father children have good mental health than those who do not (Hammarberg et al., 2017). Men seeking treatment in the formal medical sector tend to be earning higher income, being married and having infertility duration of more than five years in both sexes (Dhont et al., 2010). Men would want to continue the family lineage because children are revered in the African society (Almeida-Santos et al., 2017).

Studies have shown that majority of men in Sweden wish to have children (Schytt et al., 2014) that are genetically their own. Men wish to be fathers so that their children will succeed them and hence will seek treatment when they fail to reproduce (Almeida-Santos et al., 2017; Bodin & Käll, 2020). Elsewhere men want a greater sense of purpose in life, personal fulfillment, complete family and stability of relationship (Almeida-Santos et al., 2017; Hwang et al., 2014; Sylvest et al., 2018). Leung et al. (2018) identified factors such as closeness of the person to the facility and easy access to fertility experts helped men experiencing infertility. This however shows that men are eager to seek health care.

Even though men have the desire to be fathers there are some individuals who encouraged them to seek healthcare. Men experiencing infertility in Ghana and Malawi were

encouraged by their partners, friends, families and church members to pursue health care (Hiadzi & Woodward, 2019; Parrott, 2014). In addition, men having reduced semen quality frequently wanted to know why the sperm count was low and tried to find explanations and consequences (Sylvest et al., 2016). This means that men are mostly encouraged by several individuals to seek health care and find out what the problem is.

2.2.5 Health Seeking Behaviour of Men experiencing Infertility

Health seeking behaviour is a way of finding an appropriate remedy to avert any adverse consequences by an individual who perceives himself as having a health problem or illness or for check-up (MacKian, 2003). Men experiencing infertility in Uganda resort to seeking health care from health facilities (Zaake et al., 2019) when traditional remedies (Dutta & Sengupta, 2018; Jaradat & Zaid, 2019; Wang et al., 2018) or getting drugs from over-the-counter (Ko & Sabanegh Jr, 2012) fails. In Ghana women are mostly blamed for infertility issues and therefore they resort to traditional remedies and other health care facilities in order to conceive (Fledderjohann, 2012; Osei, 2016). This shows that the health seeking behaviour of men experiencing infertility needs to be looked at.

Men's health seeking behaviour are mostly influenced by culture, socio-economic and service factors; even though their partners, friends and relatives who are healthcare providers also play an important role in their seeking of healthcare (Dierickx et al., 2018; Dolan et al., 2017; Mehta et al., 2016). In addition, men perceive the cause to be spiritual rather than medical and therefore do not see the need to seek health care (Moyo & Muhwati, 2013; Parrott, 2014). Moreover, men in Nigeria also considered the fear of discovering their challenge (Olanrewaju et al., 2019) and want to keep their challenges away from their partners and friends (Petok, 2015).

In Ghana, men are faced with the cost of treatment, apathy towards seeking health care and various pressures from their workplaces (Hiadzi & Woodward, 2019). This means men should be encouraged to seek health care even though they are faced with physical and psychological factors.

Men visit the health facility in order to know their status even though they find it difficult to accept the results for fear of being stigmatised (Dolan et al., 2017). Although there are various treatment options for the management of male infertility, certain methods are either inaccessible or unavailable (Inhorn & Patrizio, 2015; Madhukar & Rajender, 2009; Reindollar, 2017). Men in Kenya and India consider the quality of care rendered at the facility (Dowden et al., 2019; Kumar et al., 2019) and are not ready to compromise with any delay in the treatment of their condition (Anawalt, 2013). Men in United kingdom (UK) feel that majority of the support before, during and after treatment in health facilities are given to women and they are not comfortable when they visit the facility (Arya & Dibb, 2016). Other men are concerned about how some of the health workers are insensitive to their issues (Mikkelsen et al., 2013) at the various facilities. In Ghana men seek healthcare when their partners put pressure on them to seek care (Naab & Kwashie, 2018). There is the need to pay more attention to men experiencing infertility as done to women experiencing infertility.

During the process of seeking health care, men fail to share their problems and struggles with others when it comes to seeking health care for infertility even though they are affected by the unfulfilled desire to have a child in the marriage (Arya & Dibb, 2016; Dolan et al., 2017; Fisher & Hammarberg, 2012; Miner et al., 2019). Men in Britain with high occupational status and higher education are likely to consult with medical professionals about their condition (Datta et al., 2016). However the health seeking behaviour of men is lower as compared to women

experiencing infertility (Anderson et al., 2009). The treatment process can be complex especially for the fact that there are new studies evolving in the treatment of men experiencing infertility and also due to the limited specialist in male infertility around the globe (Mehta et al., 2016). In Ghana, men experiencing infertility who seek health care are reluctant when it comes to producing semen for evaluation (Hiadzi & Woodward, 2019), since most of them are not comfortable (Parrott, 2014). Seeking healthcare provides hope for men who want to have a family.

Problematically, although previous surveys indicate that males have access to health care facilities at comparable frequencies to females, they often do not actively seek professional assistance for the complete range of their health issues unless they are encouraged to do so by a partner or by a relative or health professional (Eley et al., 2019; Holden et al., 2006; Hourani et al., 2016; Yousaf et al., 2015).

2.2.6 Summary of Literature Review

Studies have indicated that health seeking behaviour of men is influenced by a wide range of factors. With regard to attitudes of men towards health seeking, studies indicate that masculinity, culture and religion play a key role in influencing their behaviour. In addition, subjective norms such as pressure from partners, friends and family also contribute to the health seeking behaviour of men experiencing infertility. Furthermore, certain behavioural factors that impede or facilitate the health seeking behaviour of men were identified as time, knowledge of the condition, cost of treatment and geographical location as well as the resources available at the health center. Society's over valuing of children and tagging childless couples as useless in society needs to be critically looked at because it puts more pressure on men experiencing infertility. Men with an intention to have children of their own will desire to seek health care

despite the various factors they encounter. This in turn will influence men whether to seek healthcare or not. However, most of these studies have been conducted outside Ghana. While there are studies in Ghana that have provided a glimpse of health seeking behaviour of men in Ghana, these studies are conducted from the perspective of women. The voice of men in Ghana is largely missing from the literature on health seeking behaviour of men experiencing infertility in Ghana. Thus, this study will examine the health seeking behaviour of men who experience infertility in Ghana.

The following gaps have been identified in the empirical literature:

- Most of the studies about infertility in Ghana have been conducted among women, with only a few focusing on men.
- There was no theory backing most of the literatures reviewed about infertility in Ghana. This study uses a theory to study the health seeking behaviour of men.
- Male infertility is on the rise, yet only a few studies have considered men and their health seeking behaviours.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the methods used to address the research questions of the study. The chapter discusses the study design, the research setting, target population, sample size and sampling technique. In addition, the research materials, the data collection procedure, data management, and analysis as well as the strategies of methodological rigour and ethical considerations were highlighted.

3.1 Research design

In this study, a qualitative research approach using an exploratory design was employed to elicit responses from men experiencing infertility, since little is known about the phenomenon under study in Ghana. Qualitative research helps to understand the context that shapes health seeking behaviour among men experiencing infertility. Furthermore, Rubin and Babbie (2011) posits that qualitative research approach provides “thick and rich” information about a phenomenon or participants. Even though some researchers raise concerns about the fact that qualitative methods cannot be generalised (Harry & Lipsky, 2014) because the sample size is small, it has been indicated that this research method does not aim at generalisation (Labaree, 2009), rather, the purpose is to provide a rich data and relevant contextual information that will enhance the transferability of the work to diverse settings and contexts.

This method was employed because even though quite a number of research works have been done on infertility, little research has been done on health seeking behaviours of men

experiencing infertility and none done in the Accra Metropolis where the research was conducted.

3.2 Research Setting

This study was conducted in the Accra Metropolis, which is the largest population size Metropolis in Ghana. It also has most of the facilities for the treatment of individuals experiencing infertility. Accra Metropolis is an urban area within the Greater Accra region. The Region is situated in the south-eastern part of Ghana along the Gulf of Guinea.

The Accra Metropolis has a total area of about 173 km², with about four million inhabitants (GSS, 2014). It is bounded to the North by Ga West, to the West by Ga South, the south by the Gulf of Guinea and to the East by La Dadekotopon. Majority of the population are females (50.9%) and the remaining are males (49.1%). A great majority (62.5%) of the population is aged between 15 and 64 years, and only 3.5% forms age 65 and above, with those aged below 15 years forming 31.3% (GSS, 2014). There are different ethnic groups of which Akans form the main ethnic group (39.8%), followed by Ga-Dangme (29.7%) and Ewe (18%). The Gas – the indigenous people of the Greater Accra Region, however, represent the largest single sub-ethnic grouping, accounting for 18.9%. The largest religious groups are Christians, which make up 83% of the population, Muslims make up 10.2% of the population, and 4.6% identify as having no religion.

According to the local government structure, Accra Metropolis is divided into eleven (11) sub-metropolitan areas as follows: Ablekuma Central, Ayawaso West-Wuogon, AblekumaNorth, Ablekuma South, Okaikoi South, AshieduKeteke, Ayawaso Central, Ayawaso East, La, Okaikoi North, andOsuKlottey. Some economic activities include manufacturing, farming, fishing, real

estate, quarrying, electrical, construction, wholesale trade, financial intermediation, service, retail trade, hotel, restaurant services, gas and water manufacturing, transportation, storage, communication, education, public administration, health, and other social services.

The Accra Metropolis houses the government of Ghana administrative businesses as well as international business activities and other private organisations. The metropolis also has a lot of public and private schools. In terms of health facilities, there are a total of 28 government hospitals including Greater Accra Regional Hospital, 60 private hospitals, 130 health centers, and Korle-Bu Teaching Hospital (KBTH) which is a major referral center. The Greater Accra Regional Hospital caters for all referrals from the entire region.

According to the Fertility Society of Ghana (FERSOG), which was launched in September, 2016 with the aim of bringing together all the stakeholders under one umbrella, there are about fourteen (14) recognised fertility centers in Ghana, out of which 11 facilities are located in the Greater Accra region, one (1) located in the Ashanti Region, one (1) in the Western Region and one (1) in Volta Region (Osei, 2016). Some of the hospitals within the Accra Metropolis that provide fertility services are Lister Hospital & Fertility Center, Airport Women Hospital, Finney Hospital & Fertility Center, Tantra Community Clinic Fertility Center, St. John's Hospital, Lapaz Community Hospital, Lighthouse Mission Hospital, Fertility & Specialist Center, Medifem Hospital and Del International Hospital. However, Jaggreys infertility & Natural health Clinic, Greater Accra Regional Hospital and Korle-Bu Teaching hospital also provide some form of fertility services to the general public. There are also herbal hospitals within the metropolis.

Out of the above hospitals, two centers namely: Jaggreys Infertility & Natural health Clinic, and Greater Accra Regional hospital, were used for the study because men experiencing infertility were available in these facilities during the period of data collection.

Jaggreys Infertility & Natural Health Clinic is a private modern, state of the art health facility that was established in May 2013. This facility is focused on providing fertility treatment through excellent and researched natural medicine solutions. The Greater Accra Regional Hospital is a public hospital that caters for all referrals from the entire region. However, it furnishes the metro with statistics and data from maternal and child health. These sites are chosen in order to capture the diverse socio-demographic characteristics of the target group.

3.3 Target Population

Target population focuses on a particular group of individuals that the researcher is interested in forming conclusion on after a study has been completed (Polit & Beck, 2014). The target population of this study were males experiencing infertility who were aged 18 years and above, accessing fertility services within the Accra Metropolis.

3.4 Sampling techniques and sampling size

Sampling technique is a characteristic feature distinguishing between qualitative and quantitative studies. In quantitative studies, where the aim is to generalise findings to the larger population, random sampling techniques and statistical probability theory are applied (Polit & Beck, 2010), but in qualitative research, the concern is to get the meaning of the phenomenon or obtain quality information and in order not to generalize the study, convenience and purposive techniques are commonly used (Crouch & McKenzie, 2006). The researcher adopted purposive and snowball sampling techniques for the study. Purposive sampling technique is a non-

probability method to select participants who have specific experience or knowledge in the given phenomenon under study (Marshall & Rossman, 2014). This method helped the researcher to select males who met the inclusion criteria and who were ready and willing to participate in the study. The technique also helped the researcher to explore, describe and report on the health seeking behaviour of men experiencing infertility. Researchers use snowball technique (also known as chain-referral) to identify potential subjects in research where respondents are difficult to locate or limited to a very small subgroup of the population (Sharma, 2017). This helped the researcher to locate men experiencing infertility, with men contacted initially requested to facilitate the identification and selection of other men they know to be also experiencing infertility, since issues of infertility are sensitive and people do not openly speak about it.

Polit and Beck (2014) posits that data saturation is whereby no new information emerges at the stage of interviewing. Even though there is no specific limit for data saturation, it can be reached as low as six interviews depending on the population, thus, the richness of the data matters more than the size (Dibley, 2011; Guest et al., 2006). The sample size for the study was 13 participants and by the time the 13th person was interviewed the study reached its saturation.

3.4.1 Inclusion Criteria

The study included male participants who were aged 18 years and above, attending or receiving treatment from any recognised fertility center within the Accra Metropolis and resided within the Accra Metropolis. Participants selected were experiencing infertility issues at least 12 months preceding the study.

Participants could express themselves in Asante Twi (a local dialect), or English which are languages the researcher speaks frequently.

3.4.2 Exclusion Criteria

Men who were male partners of women experiencing infertility undergoing treatment were excluded from the study due to lack of rich experience on health seeking behaviour of infertility. Participants who were not mentally stable, not willing to voluntarily participate in the study and having hearing impairment were also excluded from the research.

3.5 Data collection tool

A semi-structured interview guide based on the construct of the framework guiding the study was used to conduct an in-depth face-to-face interview with each participant. It allowed the researcher to probe participants' responses and also redirect participants' responses that were out of context (Edwards & Holland, 2013). The interview guide (see Appendix E) captured the demographic characteristics of participants and questions guided by the objectives of the study, theory of planned behaviour, and literature reviewed.

3.6 Piloting tool for data collection

The tool for data collection was piloted among two men experiencing infertility who met the inclusion criteria within the Accra Metropolis. The data used for piloting was excluded from the main data. The purpose of the pilot study was to clarify the ability of the interview guide to elicit information that would address the research questions. This ensured that the interview guide was appropriate whiles questions were clear and easily understood. It also enabled the researcher to determine the time required for each interview and helped the researcher to improve his interviewing efficiency.

3.7 Data collection procedure

The researcher obtained formal permission from the authorities of the various facilities after showing ethical clearance from Noguchi Memorial Institute for Medical Research (NMIMR) and the Ghana Health Service Ethical Review Committee, in addition to an introductory letter from School of Nursing and Midwifery, University of Ghana. Multiple visits were made to the selected fertility centers within the Accra Metropolis for the recruitment of participants and helped establish rapport and built a trusting relationship between the researcher and participants. The nurses at the OPD and consulting rooms were first contacted, and the study was explained to them to help identify potential participants. Flyers were given to the nurses to paste on their notice boards and to distribute to potential participants. The nurses introduced the researcher to the gynecologist and physicians who were directly involved in the care of the participants. At each facility, the researcher explained the research and its relevance to the health sector to the gynecologist and physician after which they agreed to contact the participants and then get back to the researcher since women attend the unit more than the men. The gynecologist and physicians then gave the researcher the telephone numbers of all participants who had agreed to be enrolled on the study. The participants were called by the researcher and further screened to ensure they met the inclusion criteria. A date and time were scheduled to interview participants who voluntarily agreed at their place of convenience. Most of the participants were recruited through the gynecologist and physicians at the selected fertility centers upon discussion of the research questions and purpose. Two participants were met at the fertility centers and willingly gave consent after the research was explained to them. The in-depth interviews were conducted from December 2019 to March 2020. An audiotape recorder was used with the permission of participants for recording the interviews and to

facilitate verbatim transcription. All participants were taken through the study process for voluntary participation. Before the start of the interviews, the researcher established rapport with each participant to ensure trust. Eligible participants who gave their consent participated in the study (refer to Appendix D). Participants were made to sign the consent form to indicate their willingness to participate in the study after the nature of the study was explained in simple language. Participants were made aware of withdrawing from the research if they wished, before the writing up and presentation of the final thesis for assessment. The interviews were conducted in the English language, and Asante Twi (a local dialect) based on the preference of the participants. The duration of the interview was approximately between 45 and 60 minutes, at a venue based on agreement with the participants for privacy and confidentiality. Participants were allowed to respond, express their views and opinions without any coercion during the interview.

Participants were not rushed to respond to questions they were not comfortable with or interrupted unnecessarily. Interruptions were done to keep participants on track and to get deeper clarifications. Non-verbal communications like demeanor, body language and facial expressions were captured in a field diary and reflexive notes were taken to contextualise and support verbal responses. The researcher developed a trusting relationship with participants and was professional during all interviews. Participants were allowed to ask questions before the interview started and when the interview was over. After the interview process, respondents were thanked and given snacks.

3.8 Data management

Data management is the processes involved in the storage and easy retrieval of the data for use in the analysis. In the current study, data was managed electronically after it was obtained through interviews and audio recordings. The goal of data management is to present data in a

manner that allows for quick analysis and access (Padgett, 2016). The researcher listened to each audio-recorded data multiple times to ensure familiarity with the interview contents. The responses in English were transcribed verbatim unto a word document and the audio-recorded data in the local dialect were translated into English, based on meaning, by the researcher which was verified by a proficient speaker in Twi for accuracy.

Information elicited from respondents were treated confidentially. Anonymity was also ensured by assigning codes to the participants. Whole or part of information was not shared with any other party, relatives or friends of the participants. Pseudonyms were used for each participant and transcripts to ensure anonymity. Contents of the field notes and recordings from the audio tape were transferred immediately after each session onto the researcher's laptop, using pseudonyms and secured with a password. The electronic copies of the transcribed responses were saved on a personal laptop of the researcher with a password. Also, the signed consent forms were also kept under lock and key. The audio-recorded information, field-notes and transcribed data was kept on a personal pen drive under lock and key and saved in different files on a personal laptop of the researcher with a password. This will be destroyed and discarded after five years.

3.9 Data Analysis

Data analysis was conducted concurrently with data collection using thematic content analysis to search for relevant themes and patterns in the data. Thematic analysis is a descriptive presentation of data and the most basic of qualitative data analysis (Braun & Clarke, 2006). It helps researchers to organise and peruse all transcribed data into common themes which provide a real presentation of data (Rosemarie, 2007). Thematic analysis is useful in summarising main themes of a large volume of data in order to provide a rich description of their similarities and

differences. It involves identifying and condensing meaning units of words or texts (Mihás, 2019). Codes and themes are created to summarise what the participants said, taking into account every line, sentence, or phrase. The researcher read the transcribed interviews several times to understand the world of the participants regarding the issue, taking note of the research objectives. The data collected were coded in line with the research objectives whilst those not in the objectives were coded under emerging themes to reveal the findings of the study. Based on how they were linked, the codes were sorted into themes. Emerging ideas were further grouped under subthemes. The main themes and subthemes were constantly revised until they were appropriate for presentation of findings. The research also paid attention to divergent views and minor responses of participants to avoid generalised conclusion (Huberman & Miles, 1994). Data were exported into Nvivo version 12 software and used to group responses under similar themes based on the objectives and the constructs of the model guiding the study.

3.10 Methodological Rigour (Trustworthiness)

Rigour is a process used to determine if the data obtained from respondents represent their experiences and thoughts and whether it can be relied upon (Polit & Beck, 2014). Rigour of a research can be accurate when the researcher uses a suitable research tool in order to meet the stated objectives of the study (Creswell & Creswell, 2017). According to Creswell and Creswell (2017), research may not be of any use without ensuring rigour.

The trustworthiness of a study examines the quality and the true sense of the study results (Anney, 2014). This study ensured trustworthiness by applying Lincoln and Guba (1985) criteria for establishing trustworthiness in qualitative research: the extent to which results are credible, transferable, dependable and confirmable.

3.10.1 Credibility

Credibility, which is suggested as an analog to internal validity, refers to a study producing results that depicts the view of the participants (Murphy & Yelder, 2010). It can also be defined as the process of ensuring that the findings of research is truthful (Anney, 2014). To this end, only participants who met the inclusion criteria were included. This ensured that there was no bias and those interviewed were a typical sample of the larger group to obtain a variety of perspectives. To further strengthen the credibility of the study, prolonged engagement was ensured by establishing rapport and building trust with the participants. Participants were told to be frank from the commencement of each interview. Participants were given the opportunity to refuse or withdraw from the study to ensure that data collected are from those who were willing and prepared to give information freely. The researcher used probes to elicit information previously raised to detect inconsistencies and ensure that appropriate responses were received from participants. There were frequent debriefing sessions with the supervisors of the researcher to test developing ideas and interpretations, while opportunities were also given to the researcher's colleagues to scrutinise the study to help the researcher refine the methods and also allow them to challenge any assumptions.

There was member checking by giving the transcript of preliminary results to participants to confirm their responses and ensure that the meaning of health seeking behaviour is maintained prior to producing the final research report. This is very vital part as far as credibility is concerned (Anney, 2014; Lincoln, Yvonana & Guba, Egon, 1985). In addition, reflexivity of the study was maintained throughout the current project by making known relevant assumptions, values, interest, and beliefs of the researcher in advance with detailed reflective journal recording that indicate evidence of all the planning and research interaction.

The researcher continually examined his positionality throughout the research process and questioned his assumptions, values, beliefs and how it shapes the data. The researcher reviewed previous literatures to determine the degree to which the findings of the study were either in contrast or consistent with those studies.

3.10.2 Transferability

Transferability suggests as an analog of external validity; it is the process through which the findings of a study's results can be applied to other settings (Anney, 2014). Transferability has been described by some researchers as comparable to generalisability (Murphy & Yelder, 2010). To ensure this, the researcher presented a detailed overview of the research setting, background of participants and methodology for other researchers to be able to apply them when transferring the study conclusions to other similar setting or cases. The researcher used participants from fertility centers within the Accra Metropolis. The researcher was the only person in the field since this is a sensitive topic. Participants were interviewed using the same interview guide, audio-recorded and transcribed verbatim after the interview with each transcript subjected to the same approach of arriving at themes and subthemes. The researcher ensured this by formulating questions based on objectives of the study and ensuring that the questions were clear and easily understood by participants going strictly by the model used to guide the study. The data were collected for a period of four months and each interview session lasted between 45 and 60 minutes. Furthermore, the participants were quoted directly, and this would allow readers of this thesis to have a better understanding of the context in which the study was conducted.

3.10.3 Dependability

Dependability is the extent to which the results of the study are consistent, reliable and could be replicated. This was measured by the standard of which the research was conducted, analysed and presented. To enable an external researcher to repeat the inquiry and achieve similar results, each process in the study was to be reported in detail (Anney, 2014). To achieve dependability, the researcher described in details the research design used and the data collection techniques used in gathering data from participants by indicating what was planned and executed at a strategic level. The researcher addressed the minutiae of what was done at the research setting and did a reflective appraisal of the study.

3.10.4 Confirmability

Confirmability is the researcher's ability to demonstrate that the findings and interpretations of the study are simply the reflections of the participants and not the researcher's preferences (Anney, 2014). To ensure confirmability in the current study, the researcher ensured that findings of the research were only the results of the experiences and ideas of the participants. Also, beliefs underpinning decisions made, and methods adopted were acknowledged within the research, as well as the reasons for favoring one approach when others could have been taken were explained and the weaknesses in the techniques adopted were clearly stated. All documents used for the research process were kept for audit trail which allows any observer to trace the course of the research step-by-step via the decisions made and procedures described.

3.11 Ethical considerations

Ethics is mainly concerned with morality and deals with issues of right and wrong among groups, society or communities (Vanclay et al., 2013). Polit and Beck (2013) recognised the fundamental ethical considerations for studies as, participants being fully informed about the aims, methods, and benefits of the research, granting voluntary consent and maintaining the right of withdrawal. Ethical approval was obtained from Noguchi Memorial Institute for Medical Research (NMIMR-IRB CPN 029/19-20) and Ghana Health Service Ethical Review Committee (GHS-ERC046/11/19) before the commencement of the study to gain entry for the study at various fertility centers. An introductory letter from the School of Nursing and Midwifery, University of Ghana was added to the ethical clearance and sent to various fertility centers in the Accra Metropolis introducing the researcher to seek permission for participant recruitment. The researcher ensured that there was no emotional, physical, or financial harm to any participant when they voluntarily agreed to participate in the research. A clinical psychologist, Dr. (Mrs) Mabel Oti-Boadi who is a lecturer at University of Ghana, Psychology Department was briefed about the study and she was on standby for referrals.

Prior to data collection, all potential participants were briefed about the study to enable them to either take part in the study or not. The researcher's task was to ensure that respondents were fully aware of the purpose and techniques used in the research, the risks involved, and their roles as participants (Jones & Kottler, 2005). Participation was voluntary and participants were at liberty to withdraw from the study before the presentation of the final version of this thesis. Potential participants who agreed to participate in the study were required to sign a consent form while ensuring anonymity and confidentiality. Some participants decided not to continue the

research after the researcher explained the study to them and their decision was accepted in good faith.

Identities of participants from whom data was collected were kept confidential and were not mentioned in the write-up or when the results were presented and published. There was minimal risks and discomfort for participating in this research. The participants were assured that the information collected would be used for the purpose of this research only. They were all given the same level of information, taking into consideration privacy and confidentiality. All electronic files from field notes, transcripts and audio tapes were kept secured by the researcher and thesis supervisors using a password-protected files and locked drawers. Recruitment of participants was done when ethical approval was obtained from Noguchi Memorial Institute for Medical Research (NMIMR) and Ghana Health Service Ethical Review Committee in December 2019. Participants were each given snacks to compensate them for their time and energy spent.

CHAPTER FOUR

FINDINGS

4.0 Introduction

This chapter presents the findings of the study. The findings were put under five main themes and three emerging themes with 31 subthemes.

4.1 Socio demographic characteristics of the participants

A total of thirteen men aged between 30 and 42 and were experiencing infertility were recruited for this study. Ten of the men were in their thirties and three of them were in their forties. All the men resided in different locations within the Accra Metropolis but had their hometowns in different parts of the country. Twelve of the men were Christians from different denominations, while one was a Muslim. All the men were married with their duration of infertility between 1 ½ years and 10 years. Three of the men were self-employed, while ten of them were employed in various positions within the government and private sectors. With regard to educational background, two had Master's qualifications, while two had secondary school education qualifications, one had a diploma and eight had tertiary education. The broad summary of the participants has been provided in Appendix F.

4.2 Organisation of themes

Using thematic content analysis, five main themes were derived from the data in line with the model guiding the study and three emerged themes from the data. Each of these major themes had sub-themes. The themes and their corresponding subthemes are presented in the table 4.1 below.

Table 4. 1: Organisation of themes and subthemes

Themes and subthemes

S/no.	Themes		Subthemes	Code
	Theoretical	Emerged		
1	Attitude of men experiencing infertility	-	<ul style="list-style-type: none"> • Behaviour of health care providers • Seriousness of disease • Perceptions of male infertility • Reaction to male infertility diagnosis 	ATT
2	Subjective norms of men experiencing infertility	-	<ul style="list-style-type: none"> • Personal beliefs about male infertility • Influence from significant others • Perception of the community • Family influence 	SN
3	Perceived behavioural control of men experiencing infertility	-	<ul style="list-style-type: none"> • Financial factor • Unavailability of Time • Religion as an impediment • Work related factors • Lack of knowledge about male infertility • Institutional factors 	PBC
4	Intentions of men experiencing infertility towards health seeking	-	<ul style="list-style-type: none"> • Desire to seek healthcare • Source of motivation 	HSI

5	Health seeking behaviours of men experiencing infertility	-	<ul style="list-style-type: none"> • Consultation about the condition • Perceived benefits of health seeking • Men's experience regarding health seeking 	HSB
6	Coping strategies of men experiencing infertility		<ul style="list-style-type: none"> • Child Adoption • Defense mechanism • Support from family 	CS
7	Misconception about male infertility		<ul style="list-style-type: none"> • Personal misconception • General misconception about male infertility 	MC
8	Strategies to improve health seeking behaviours of men experiencing infertility		<ul style="list-style-type: none"> • Role of men • Role of the community • Role of wives • Role of the government • Role of the family • Role of the media 	SHSB

Source: Transcribed data (2020).

4.3 Attitude of men experiencing infertility

Attitude refers to participants' emotions or feelings or reactions towards infertility. All the participants were open and forthcoming to share their experiences during the interview process. These men saw male infertility as a threat to women and therefore attributed infertility to mainly women. Some of the men attested to the fact that male infertility affected their role performance in the society, while others were not bothered about it. Some of the participants did not believe they were having the condition after they were diagnosed, but others accepted it. The

men were of the view that their attitudes depended largely on the behaviour of health workers. These men described their attitude to be a consequence of the behaviour of staff, seriousness of disease, their perceptions of male infertility, and reaction to male infertility diagnosis.

4.3.1 Behaviour of health care providers

The men indicated a wide range of behaviours and emotions that are exhibited by health workers when seeking healthcare for infertility as a man. Generally, seeking health care for male infertility affected them negatively. The way health workers interacted and related with them when they visited the facilities either encouraged or discouraged them to visit the facility.

Several of the participants were concerned about how health workers communicate with them when they visit the health facility, which either encouraged or discouraged them. A 40-year-old goldsmith who had been married for four years without a child disclosed that:

“[In] Government hospitals, sometimes, the nurses don’t respect because you are having this problem, they will just be shouting at you as if you are a small boy. I think that is the reason some men don’t want to go to infertility hospitals. Sometimes you can be there and some of the nurses will be feeling pompous. Some are good and others will handle you in such a way that will discourage or won’t make you go back again.” (John, 40)

Some of the men indicated contradictory information from medical doctors that affected their attitude towards seeking health care, as demonstrated by a 32-year-old revenue collector who had been married for three years without a child:

“The doctors are good, they are doing their best, but the doctors have different approaches in solving the problem, some are saying I should go for surgery, some are also saying I should go and do IVF (In Vitro fertilisation) and things. So, I don’t know

what I should even go in for.” (Kwame, 32)

Others indicated that the inadequate level of knowledge and poor competency in the area of male infertility treatment also affected their attitude towards seeking healthcare. This is indicated by a 38-year-old banker who had been married for five years without a child:

“I think for now majority do guess work especially with the fact that there is a condition called unexplained infertility... So, they end up either giving you tabs that will increase your testosterone level, or they will just do guess work and say ‘you try this and let’s see if this could be the issue.’” (Kofi, 38)

4.3.2 Seriousness of disease

In this study, the seriousness of disease explains how the man views or sees this condition and whether it is worth seeking for treatment or not. Several of the men were of the opinion that it was a condition that affected their everyday life as men and productivity at their workplaces. This had a negative impact on their social life and reduced their confidence. Several of the participants indicated the needs to have their own family while some were not bothered about the condition.

Participants reported that male infertility has reduced their level of confidence, affected their social life and brought them pain and suffering as clearly lamented by a 35-year-old banker who had been married for five years without a child:

“Well, it is serious, because I have been married for over five years and I haven’t had a child so it’s so serious.....Now male infertility is more serious than infertility within women or ladies...it puts you at very uncomfortable situation and it can have a very negative impact on your health, on your social life, you know, and it reduces your

confidence too at the same point. That really brings a lot of pain and trouble.” (Kofi, 38)

Furthermore, participants noted that male infertility affected their performance at their workplaces and at home. A 32-year-old businessman who had been married for two years without a child pointed out how it affected him as follows:

“...If you have issues with infertility, it is going to negatively affect your performance at the workplace.... this affects your productivity because you will not be able to execute your duties well, you will be thinking about your condition and it is also going to affect your role as a man at home.” (Nana, 32)

Moreover, the men equated the significance of having their own families, the need to have a successor, and avoiding insults from friends and the public as a way of expressing their seriousness towards male infertility.

John, a 40-year-old goldsmith who had been married for four years without a child disclosed that:

“Oh, it’s serious because if a married man cannot give birth, it’s a serious issue...I have a wife for so many years no children to inherit me, I need to have my own family....The way people will talk to you kora you won’t feel like going out. Because of the insults that will come; some will make fun of you, especially, your friends and other people you are friends with. They will say some things and if you are not careful you will have serious effects” (John, 40).

4.3.3 Perceptions of male infertility

Perception is the participants’ unique way of viewing infertility in men. Here, the participants indicated how they viewed infertility in relation to their experiences and memories about infertility. The men indicated that infertility is a problem that affects women and it is hard

for a man to understand he is infertile, because it leads to stereotyping and mockery by people, especially, when attending a fertility centre. Some men also did not see it as a problem, as they did not have a reason to worry about it. Other men were of the view that they never believed it until they heard it in the media and people talking about it.

Several of the men were of the view that infertility is the fault of women and not men. Ohene, a 32-year-old agronomist who had been married for 1 ½ years without a child shared his sentiments as follows:

“We always have this perception that women are to be blamed when it comes to having babies....so if there is no child in the marriage, we always think that the cause should be from the women.” (Ohene, 32)

Some of the men indicated that other people mostly mock men experiencing infertility once they are seen attending fertility centers for treatment. A 32-year-old businessman who had been married for 2 years without a child expressed his view thus:

“....if I come here with male infertility [issue] and somebody comes to see me and they know what is going on or what is wrong with me.....that person will mock you whenever he or she sees you.” (Nana, 32)

It is worth noting that in some cases the men were not bothered about the condition and had decided not to worry themselves. A 35-year-old marketing manager who had been married for five years without a child was of the opinion that:

“If you listen to my conversation, I don't think it is an issue that I should worry about every day or [for] the rest of my life I don't think if it happens the person should see himself as condemned or has a problem... it doesn't come into my thoughts at all and if it has come to my thoughts and I have thought about it and decided that this is not going to

worry me.” (Kojo, 35)

Asare a 42 -year-old businessman who had been married for 10 years without a child was of a different opinion that there is nothing like male infertility as reported below:

“...with the past experience I have about infertility, a man is always fertile no matter the age. In my family, even an old man of 80 years can impregnate a young girl of 15 years, so every man should be able to produce at any given time... I think the problem of male infertility doesn't exist.” (Asare, 42)

4.3.4 Reaction to male infertility diagnosis

The reaction to male infertility diagnosis is related to the way the participants behaved when they were informed about the outcome of their diagnosis. Several of the participants were in a state of denial and disbelief upon diagnosis.

During the interviews some participants were still in the state of disbelief as to whether they have the condition or not. This is captured by a 41-year-old banker who had been married for four years without a child as follows:

“For now, me personally, I am on treatment after my test came out that I have a problem with my sperm count, but I still don't believe I am having this condition.... For now, I cannot confirm that I have the condition or not.” (Dan, 41)

Some of the participants doubted the authenticity of the machines used for the tests and therefore did not believe they had infertility. A 39-year-old driver who had been married for eight years without a child indicated that he did not trust the machine used for the tests. This is how he explained it:

“...I still do not believe I have infertility. I think the machine they used is faulty, I think the results is wrong. This is because every man-made thing has some limitations, so I think the machines used during my time were not functioning properly, that’s why I had that results. So, I can’t trust that.” (Adjei, 39).

4.4 Subjective norms of men experiencing infertility

Subjective norms of men experiencing infertility embodies aspects such as personal beliefs about male infertility, influence from significant others, family influence, and perceptions from the community. In the Ghanaian society, women are blamed not only by their partners but also by the community members when there is a problem with childbearing. On the other hand, men identified as infertile are often prevented from holding positions in the community and are marginalised and stigmatised. The community members see men experiencing infertility as under the attack of evil spiritual forces. The study, however, revealed that men had personal beliefs that infertility could be either spiritual or medical. Additionally, these men reported pressures from significant others to have their own children.

4.4.1 Personal beliefs about male infertility

The study revealed that men have various beliefs concerning infertility. They attributed the cause of male infertility to be either medical or spiritual factors. Several of the men during the interview identified infertility as a medical problem other than a supernatural problem.

A 40-year-old teacher married for two years without a child had this to say:

“I have been married for two years ...most of the problems we think are spiritual because of our negligence in seeking physical solutions...I don’t think male infertility is spiritual.

I don't think so... So it's not spiritual, but some people still live on that. It is not spiritual; it is a medical condition.” (Charles, 40)

Others attributed the cause of infertility to be both medical and spiritual. A participant who had been married for four years without a child believed that infertility could be both medical and spiritual:

“I believe it is both medical and spiritual... medically, the way we live, our lifestyle sometimes can cause damage to our sperm or whatever. Maybe your diet, the food we eat, sometimes you wear things that are tight because they said our testis does not like heat...And the work we do, too, that there is so much heat, it will affect you. That is medical. But spiritually, maybe you marry and due to envy, someone can go to a 'juju man' and do something to 'lock' you.” (John, 40)

4.4.2 Influence from significant others

Findings from the study indicated that participants acknowledged being influenced by significant others in so many ways to seek healthcare. They were influenced through mockery, encouragement, recommendation of healthcare facilities, and prescribing medications that pushed them to seek healthcare.

The study revealed that several men wanted to keep the condition to themselves even though their friends observed and tried to help them. John who had been married for four years without a child reported pressure from friends:

“I don't have many friends but the few I have don't know I am having such a problem, and this is to avoid embarrassment due to the sensitive nature of this condition. I don't discuss anything with them. But still my friends pass comments like, 'it's been a long time

that you have not given birth. What is the problem? If you can't give birth, go and seek medical care or I will get you medicine to help you'. (John, 40)

The men who disclosed their condition to their friends reported different levels of mockery. A cashier recalled how his friends laughed at him and asked him to prove that he is a man by getting his wife pregnant. He stated that:

"My friends, they will be laughing at you that you are not a man ...in my workplace, my co-workers...some of them keep laughing at me... If you are really a man you should have produced." (Kwesi, 37)

Some participants indicated that their significant others encouraged them with scriptures, testimonies and convinced them to seek healthcare. An accountant, married for four years without a child had these words to share:

"Some friends give you encouragement and say God's time is the best. They encourage you with some of the stories in the Bible. Some also have real testimonies of how people have looked for children for 10years, 20years. They share testimonies like how a 60-year-old woman gave birth, just to encourage you...Then others also recommend a clinic to you'. (Paapa, 39)

4.4.3 Family influence

Almost all the participants encountered pressures from family members. In most cases, the mothers-in-law questioned the womanhood of their daughters-in-law when there was no childbirth and advised their sons to go in for another woman, so they can have their grandchildren. Mostly the pressure is directed at their 'fertile' wives, which makes them worried

and therefore pushes the men to seek healthcare. Others also reported how their wives pressurised them to seek healthcare.

The in-laws without knowing who is experiencing infertility always put pressure on their daughters-in-law to give them their grandchildren or get another woman for their sons to marry. One participant provided a perspective that his mother and siblings put pressure on his wife to give them a child. A teacher who is married for six years without a child, shared his experience as:

“If they see that there is no childbirth in the marriage, erh... they tell you to go and marry another woman... my mother will say ‘please I wish you had one child, I wish you had one child’ ...there is a little pressure from my sister, my senior sister. They give my wife the pressure to bring forth a child. There is a little pressure from my in-laws’ side.”
(Kwabena, 39)

Two of the participants, an agronomist and a teacher, shared their experiences with their wives that prompted them to seek health care. They recounted as follows:

“I have been married for 1 ½ years...but I was not really bothered about my inability to impregnate my wife until one night I saw my wife crying and complaining about the issue. Apparently, she had gone to the hospital and after a series of tests she was told nothing was wrong with her, so she told me I have to also go and check. The pressure that night was what prompted me to visit the hospital”. (Ohene, 32)

“There are couples of months she will be in the corner weeping and asking why she has seen her blood, she was expecting that she will miss her period, so that it will be a baby for her. She is a midwife, whenever she sees a child, whenever she delivers someone of a child, she comes home moody expecting that it should have been hers. This really puts

pressure on me to find solutions to the problem”. (Charles, 40)

4.4.4 Perception of the community

The participants were concerned about the perceptions of the community. Men who were unable to give birth did not earn respect and not allowed to hold certain positions in the community. Men with infertility were not allowed to speak on issues in the society. Furthermore, individuals in the community also have the perception that infertility is from the woman rather than the man.

Several of the men reported that “you will not be accorded the necessary respect when you are infertile”. They added that men experiencing infertility are not given the opportunity to hold certain important positions in the community. According to the cashier, life without a child was not worth living because he could no longer bear the disrespect and stigma in his community:

“If you haven’t given birth and you want to occupy some positions in a society that is what they will use to kick you out, since they don’t know how you will handle them. So, they will deny you [that leadership] opportunity even if you qualify and sometimes, they even look down on you” (Kwesi, 37)

John, a 49-year-old goldsmith married for four years agreed to what Kwesi said by stating that:

“Well, people just see you as someone not needed in the family. Even if it comes to discussing an issue, they won’t involve you, especially, family issues. Even for positions in the family, they will not allow you to occupy it, because they think when you do not have children you are not capable of leading them. If you talk, they don’t even take your ideas” (John, 40).

In the Ghanaian cultural setting, beyond the perception that a childless couple maybe infertile, the issue of a couple's infertility is generally perceived to be a 'woman's business' – the wife or woman is perceived to be infertile, even though the husband or man could be the one experiencing infertility. This was highlighted by Charles, a teacher, that the challenge may be with the man, but men are often marginalised when it comes to infertility.

“In our culture, when couples aren't able to bring forth a child they mostly turn to blame the woman but it's always not the case of the women, we men are also at risk you go for a test and realize it is the fault of the man...the community actually sees it as the problem of the women. In our community, men are marginalised a lot when it comes to fertility matter”. (Charles, 40).

4.5 Perceived behavioural control of men experiencing infertility

Perceived behavioural control are factors that facilitate or impede participants from seeking healthcare. Participants cited financial factors, unavailability of time, religion, knowledge related factors, and institutional factors as either impeding or facilitating their health seeking behaviour. Even though the men indicated these barriers, they believed that if men are well educated on male infertility, it would encourage them to seek healthcare.

4.5.1 Financial factor

The average income in Ghana ranges between 600-5000 Cedis monthly (\$103.57-\$ 863.10), and the average cost of service for infertility treatment ranges between 3500-4000 Cedis (\$604.17-\$ 690.48) depending on the facility. This cost of service means that poor people are unable to access this treatment, which several participants stated explicitly as a reason for not

seeking healthcare. The high cost associated with male infertility treatment was because the National Health Insurance Scheme (NHIS) did not cover the tests, diagnosis and treatment of infertility in general.

Paapa, an accountant with four years of infertility history clearly recalled how costly the services were.

“The cost is the main issue.... The cost is higher than seeking for treatment for normal ailments and therefore one has to prepare before seeking for care. From the diagnosis to the medications to be bought, I will say all is expensive... I will say it’s an area that people have a lot of need, but the services are expensive. My salary is not enough to cover all expenses” (Paapa, 39)

Participants’ responses illustrated that the cost is high because the National Health Insurance Scheme (NHIS) does not cover it. Kofi, a 38-year-old banker who had been married for five years without a child shared his views.

“You go through the process at the infertility center knowing very well that NHIS doesn’t cover it. This makes it very difficult. You have to use your money all the time to do that and it’s very expensive” (Kofi, 38)

Asare felt that because of the high cost of services some facilities take advantage and charge men without solving their problems. This businessman who had been married for 10 years could not hide his frustrations about this situation, as it prevented men from seeking healthcare.

“When you even go to some facilities, because of the money they don’t tell you the truth, what they can’t handle, they’ll tell you they can do it just to take huge amount of money from you and at the long run the problem will still be there...they are not there to solve

the problem rather the money they will make... that is why men feel reluctant to seek healthcare” (Asare, 42)

4.5.2 Unavailability of Time

The process participants go through for diagnosis and treatment demands a lot of time and therefore the men saw the unavailability of time as an impediment to healthcare seeking. Most of the participants were concerned about the time they would spend at the facility, due to their busy schedules. A 37-year-old cashier married for three years without a child expressed how time spent at the hospital affected him.

“Fertility doctors are not many in Ghana, so when you visit the hospital, especially, the government facilities, they will book so many people at a time and that is what delays us when we visit the hospital...At times, after all the is time wasted [in the queue], they postpone your appointments to see the doctor, and due to this I do not want to visit the hospital often” (Kwesi, 37).

John, a 40-year-old goldsmith who had been married for four years without a child also shared his view similarly thus:

“[at] The government facilities they delay a lot, you can go there for many hours before you could see the doctor. Sometimes, you will go there and they will tell you the doctor is not around and that you have to wait for a very long time, sometimes the whole day even without seeing the doctor and you will have to go back home and come back later”.
(John, 40)

Some of the participants were of the opinion that the private facilities normally have fewer patients and therefore one does not waste a lot of time there. This was expressed by a 39-year-old accountant who had been married for four years without a child.

“For the government facilities, due to the bureaucracy and high volumes of patients you can spend the whole day there and you may not be able to carry out what you wanted to do.... whereas [at] the private [facilities] you are able to spend 1 hour or 2 hours maximum and you are done and you go and continue your work. So due to the time that will be spent at the facility, one will consider the private hospitals”. (Paapa, 39)

4.5.3 Religion as an impediment

Religion played an important role in the participants’ health seeking behaviour. The study revealed that majority (12 participants) were Christians and only one was a Muslim. Due to their religious beliefs, these men acknowledged that they relied on God or Allah for solutions rather than seeking professional healthcare. Two of the participants, a cashier and a teacher, stated how religion influenced their health seeking behaviour as depicted in the following statements.

“...I have been married for 3years... all this while I sought for spiritual solution, by going to church to pray because I am a Christian ... So, this really prevented me to go to healthcare center to seek for solution.” (Kwesi, 37)

“I have been married for 2 years.....I was told by my pastor that I should not be worried because it is God that gives children and I was assured that I was going to conceive in God’s own time as children are gifts from God and that is why I was not bothered initially to seek health care”. (Charles, 40).

4.5.4 Work related factors

More than half of the participants (9 participants) voiced that the nature of their work prevented them from seeking healthcare. The men who were mostly the breadwinners of the family could not hide how the nature of their work prevented them from seeking healthcare. Dan, a 41-year-old banker who had been married for four years without a child said:

“For my job, it’s not easy, as I am talking to you, I have to be at work by 10:40am since today is Saturday. I work with a bank; I am a teller. I work from Monday to Saturday. I even told my supervisor that, I have to go for some tests and return around 10:30am, but he said he won’t allow me”. (Dan, 41)

Charles, a 40-year-old teacher married for two years without a child shared how work schedules were a hindrance to him. He went on to say:

“...I was supposed to come for review on the 4th of February 2020, but I called the facility and told them that I won’t get the time because I have been given an assignment at work which I have to do” (Charles, 40)

4.5.5 Lack of knowledge about male infertility

Knowledge is one factor that has either aided or prevented men from seeking healthcare. The men indicated that male infertility is a topic not mostly discussed in the society and therefore most of them were not aware. This was voiced by a 32-year-old agronomist who indicated he initially hesitated to seek healthcare due to little information on male infertility. He was of the view that:

“...Because in the society we don’t talk about it, we don’t know. So, a lot of men are there, they don’t know what causes or leads to male infertility and what can be done to prevent male infertility... there is little information that is available on the treatment or

management... So that is what prevents many of us from not going to the hospital for treatment". (Ohene, 32).

Kwesi a 37-year-old cashier added that if men are educated or made aware of male infertility it will encourage men to seek healthcare.

"Let us educate every man, whether young or old, that male infertility is real...I think when men become aware, they will seek early treatment". (Kwesi, 37).

4.5.6. Institutional factors

The participants were concerned about how certain factors within the various fertility centers affected their seeking of healthcare. The men were concerned about resources like inadequate professionals, lack of space designated for men experiencing infertility, and the lack of equipment at various fertility centers. The men added that these factors affected the quality of care rendered. The men placed private facilities above the government facilities in the area of fertility. Several of the men indicated that delays as a result of doctor-patient ratio affected the care they received, particularly, at the government hospitals. Ohene, a 32-year-old agronomist who had been married for 1 ½ years without a child was not happy about how men experiencing infertility are rushed through the process of diagnosis and treatment, due to the limited number of trained health workers in the area of male fertility. He expressed his thoughts as follows:

"The government hospitals because of few trained professionals to patient ratio in the area of fertility...it causes a lot of delays...and even if the professionals are around they want to rush through the process because they don't want to keep a lot of people at the facility and that compromises quality of care rendered to men with infertility and this does not motivate us to seek health care". (Ohene, 32).

Aside the inadequate professionals, the men also indicated that some of the government facilities did not have units specifically designated for male infertility. Kwabena, a 39-year-old teacher who had been married for six years without a child reported how it affected their health seeking.

“...Some of the government hospitals, are not having fertility units for men who come with male infertility... And because of this you are mixed with other patients and sometimes they may get to know of your condition, and this is another factor that prevents most men from seeking health care”. (Kwabena, 39).

Kofi, a 38-year-old banker who had been married for five years without a child added that most government facilities are not having advanced equipment. He was of the view that the private facilities had advanced equipment and so many men prefer to go there.

“Most government facilities do not have advanced equipment for diagnosing and patients have to go to private hospitals to conduct these tests... I will say the private hospitals have a lot of equipment than the government hospital and so that is why most of us do not visit the government hospitals”. (Kofi, 38).

4.6 Intentions of men experiencing infertility towards health seeking

The pinnacle of reasons for intention to seek healthcare was to have children who will succeed them and continue the family lineage. Particularly, several of the men indicated how their partners motivated them to seek healthcare. These men described their intentions to seek care in two categories, the desire to seek healthcare and their source of motivation.

4.6.1 Desire to seek health care

Even though men mostly do not have the desire to seek healthcare for their conditions, the study revealed several of the men (9) had the desire to seek healthcare for infertility. The desire to seek health care as expressed by the participants was triggered due to various reasons such as knowing the problem and getting a successor.

Participants in this study acknowledged that the length of time that lapsed without a pregnancy set them onto the path to seek healthcare to find out the problem. This is evident by the following segment of an accountant who had been married for four years without a child.

“After getting married and waiting for over a year and a child was not coming, I decided to seek medical care to find out why this was happening to me. This is because it is not like my wife and I are staying apart from each other; we are together in the same room having sexual intercourse, at least all things being equal there should be conception... I mean when you marry you want to have your children as a young man to take care of them... That is why I decided to go to the hospital.” (Paapa, 39).

John, with four years of infertility history, was of the opinion that if a man believes that infertility can be solved medically, there was the desire to seek healthcare. This is supported by the following quote.

“Some men do not view infertility as a problem and hence they will not seek health care, but men who realise that infertility is a medical problem will want to seek health care to find solutions to it. This is because they believe that the problem can be solved medically” (John, 40).

The desire for a child, according to a driver, who had been married for eight years without a child was the intent to seek healthcare. This is evident in the following quote:

“...I want a successor, somebody I will call my child, so I had to go to the hospital to do some test without the knowledge of my wife so that I will be sure of myself...So, one day, my boss sent me to Accra and I used that opportunity to go to the hospital and did the test. As I was being attended to, my boss called that I was delaying, but I told him [a lie that] I was in the traffic, because I really needed a child of my own”. (Adjei, 39)

4.6.2 Source of motivation

Beyond the desire to seek healthcare, the men also had different sources of motivation that encouraged them to seek healthcare. The men identified their partners, the media and friends as sources of their motivation.

Several of the men indicated their partners as their source of motivation in seeking healthcare.

Dan, a banker who had been married for four years without a child shared the following:

“My motivation, I will say, is my wife; she was the one who pushed me to go and see a doctor; so, I just went along with her to the facility.” (Dan, 41).

Other men were motivated by various testimonies that couples were giving on television. Nana, a businessman who had been married for two years without a child shared how the advert of a facility motivated him to seek healthcare. He posited that:

“I saw the advert on television and then I heard the kind of testimonies of how couples who were not having babies finally gave birth when they visited the facility, the woman ends the advert with “the home of babies”.... that motivated me.” (Nana, 32).

Interestingly, Kwabena who is married for six years but without a child also mentioned a friend who had gone through the same situation as his source of motivation. He shared his view thus:

“What motivated me is one of my friends. He also passed through this problem of infertility and he told me to seek healthcare and that everything will be fine”.(Kwabena, 39).

4.7 Health seeking behaviours of men experiencing infertility

The responses gathered revealed that the participants consulted some individuals to help them resolve their issues of infertility. Several of the men talked to friends, family members, and experts about their condition to inform their decision in seeking healthcare. The men also highlighted the benefits associated with seeking healthcare and their experiences regarding seeking healthcare.

4.7.1 Consultation about the condition

For men facing infertility issues, one of the biggest challenges is who to open up to about the issue. Participants acknowledged that they talked to either medical experts, friends, or their wives about their condition.

Some of the participants acknowledged how they disclosed their condition to experts in the area of infertility. This was evident in a quote by a marketer who had been married for five years without a child.

“The only people I have spoken to are some doctors in the area of infertility, aside my wife. I haven’t spoken to anybody else, because I believe it is only the doctors that can do something about this situation”. (Kojo, 35).

Other participants also disclosed their condition to friends. A 32-year-old businessman who had been married for two years expressed his view in the following statement:

“I spoke to a friend, a very confidante person and he told me he was also going through such thing. Then he started mentioning a lot of people, then I realised it was not me alone. So he’s aware I’m going through this process and I’ve been updating him...My wife wasn’t even aware that I discussed my condition with my friend.” (Nana, 32).

Several participants, however, stated that they discussed what they were going through with their wives since they were the immediate people around them. This was demonstrated in a statement by a teacher who had been married for two years without a child.

“I discussed with my wife because she is the first person I talk to when I have issues, she is like a friend, mom and everything to me. Issues of that nature, I don’t trust anyone except my wife that is why I discussed with her” (Charles, 40).

4.7.2 Perceived benefits of health seeking

Men felt that they should be able to solve their own medical conditions and are mostly reluctant in seeking health care. This places most of the men at risk of complications, which could otherwise be avoided during the early stages. The study revealed that all the participants who sought health care enumerated the benefits in seeking health care by sharing various thoughts. A businessman with 10 years of infertility history was of the opinion that Africans are not used to seeking healthcare but indicated seeking healthcare early could save one a lot of money and also deterioration resulting from the condition. He verbalised the following:

“It is not our practice as Black men, when we are not sick, we don’t seek healthcare, but health seeking for infertility issues is very important and every man has to make it a priority, because when it reaches an advanced stage it may be incurable, and the victim

may spend more money in treating it, compared to when the person has visited the hospital earlier” (Asare, 42).

Another participant, a cashier, with three years of infertility history also elaborated on the benefits of seeking health care. He expressed his thoughts as follows:

“Seeking healthcare makes you know your status, especially, through the tests that are conducted. But without seeking health care you may not know that you have this condition in order to take some medications...In addition, without seeking healthcare there are things you might be doing which may worsen your condition”. (Kwesi, 37).

4.7.3 Men’s experiences regarding health seeking

In relation to their experiences with regard to male infertility, the men had different experiences and how they handled the situation. Several of the participants were outspoken about their feelings and emotions regarding male infertility.

Most of the men were upset when they did not see any improvement in their conditions and therefore had to stop attending the facility. A teacher who had been married for six years expressed his frustration of how his condition did not improve:

“I went to a facility to seek for healthcare. At that facility all those people that came together with me during that time to seek for a child, all of them got the result but I didn’t get a result. It pained me, I felt disappointed and embarrassed because I could not still impregnate my wife, so I stopped going there” (Kwabena, 39).

Several of the participants preferred not to know their fertility status due to the fear of knowing that they may be at fault. Due to this, the men started taking concoctions that were proposed by

family or friends. A 38-year-old banker who had been married for five years shared his views of how fear hindered his health seeking behaviour and he had to resort to herbal preparations.

“I resorted to herbal treatment... my mother brought some herbs from the village which was very bitter, but I had no option. I was taking the herbs with my wife because we had, by then, not gone to the hospital to know whose fault it was, so we were just taking to improve on our chances...after a while it didn't work ... I had the fear that when I go to the hospital and they say that it's me, I can't handle it. But finally, I went to the facility and they asked me go for analysis of the semen and that is where the true picture showed... Varicocele was detected and the option was for me to go for surgery” (Kofi, 38).

Some of the men were not comfortable with the idea of going to the hospital, since some facilities combine other cases with infertility at the same unit. Charles a 40-year-old teacher who had been married for two years voiced his experience.

“The first experience I had I wasn't much comfortable..... At the facility I saw a lot of women but few men, so it made me shy. Because of that I sat outside for a while till most of the women have left before I later joined her” (Charles, 40).

In addition, an agronomist married for 1 ½ years described feeling uncomfortable during semen collection. He recalled how he was psychologically disturbed when he was asked to do that.

“And my main challenge was about the erm...sperm collection for analysis, whereby you'd have to go to the washroom of the facility, undress and masturbate to obtain your semen. I was not comfortable about the whole process, but I didn't have an option” (Ohene, 32).

4.8 Coping strategies of men experiencing infertility

In relation to coping strategies adopted by the participants, they acknowledged various strategies they used to deal with their condition. Some of the men indicated how family members were very understanding and offered support throughout the period of infertility. However, men who were not getting such support resorted to other means such as child adoption, and the use of some defense mechanisms.

4.8.1 Child adoption

Though child adoption is not a treatment option for most people in the country, some participants in this study had plans for child adoption as a means of coping with infertility.

A driver who had been married for eight years argued that it is not only one's biological children that we can consider as one's children, but also children obtained through adoption:

“It is not only biological children that are our children. So, if you are married and you don't have children, it doesn't mean you cannot be a father. You can adopt a child as your own and take care of him/her even though I am not in favor of that ” (Adjei, 39).

It is interesting to note that a 35-year-old marketer who had been married for five years without a child shared similar sentiment with the above participant:

“Even though I do not have a child of my own, I find fulfilment, including caring for children who can be legally adopted. And because of that I am not really bothered about being infertile” (Kojo, 35).

4.8.2 Defense mechanism

Men often want to be seen as strong, independent, and self-reliant. A man who admits to having infertility issues could be seen as weak and vulnerable. It threatens male pride and therefore many men devise ways to deal with the unpleasant feelings associated with male infertility. The participants recounted various strategies they adopted in trying to cope with infertility.

Adjei, a driver who had been married for eight years without a child voiced how he was telling lies and pretended not to hear what people said about him. He handled the unpleasant feelings of infertility by switching topics anytime he was being asked by others, as demonstrated by the quote below:

“Even though I and my wife do not have a child of our own and family and friends are complaining I always try to ignore those who complain and pretend I didn’t hear them, by switching the topic... sometimes, too, when people ask me [about it], I tell lies that I am having children, just to cover up, so people will not know that my wife hasn’t given birth. This is because I own my life, so I do not want anyone to make my life uncomfortable for me” (Adjei, 39).

Another participant who had been married for five years also said he occupied himself with other personal stuffs rather than engaging in conversations or thinking about issues of infertility. He responded thus:

“Nobody can come and ask or even say I am having issues of infertility; I don’t even have the time to listen to what people say, and I don’t have the time for such conversations. This is because I always occupy myself with other fulfilling things like education, career and having more time for my partner to help deal with the infertility issue” (Kojo, 35).

4.8.3 Support from family

The participants also expressed how family support is vital in helping them cope with infertility. One of the participants, Kwabena, who had been married for six years without a child shared how his brother provided various supports:

“I thank God for my junior brother who always pray for me and calls me all the time to encourage me. He has been supporting me financially since I was diagnosed of the condition” (Kwabena, 39).

Similarly, Adjei who had been married for eight years also added how his family had been supportive:

“My family have been supportive; they still give me the maximum respect as a man. My mom has been patient with me and been encouraging [me] during these challenging times” (Adjei, 39).

4.9 Misconceptions about male infertility

Misconceptions about male infertility was an emerged theme after thematic content analysis. Men’s lack of acceptance of infertility diagnosis and their health seeking behaviour appeared to stem from some misconceptions about male infertility. These misconceptions were reported in two categories: personal misconception and general misconception about male infertility.

4.9.1 Personal misconceptions

Despite awareness of infertility, the aspect that is often not talked about in the Ghanaian society is male infertility, which has left a lot of men with some misconceptions. Several of the

participants believed that once they were able to have sex it meant they did not have a problem with fertility. An Agronomist with 1 ½ years of infertility history recounted how he thought having sex meant one was fertile.

“Once I’ve been able to have intercourse with my wife and have been able to release sperm, I knew that it is.....I thought I’m good to go...So I don’t need to go to the hospital (Ohene, 32).

A banker married for four years without a child was of the view that his infertility might have resulted from his previous promiscuous lifestyle and masturbation. According to him,

“When I was in secondary school, I was having numerous girlfriends, not a girlfriend. When you are young, you have sex as if you are a machine. In a day, I can have sex with 2 or 3 ladies. I think it has weakened my semen to impregnate a woman. Aside that, someone who masturbates too can have this infertility problem” (Dan, 41).

Kwesi, a 37-year-old man also touched on the how changing religion, by forgoing allegiance with lesser gods can make a man infertile. He had been married for three years without a child and had this to say.

“Once you change your religion from Traditional to Christianity it is believed that the powers of the gods may prevent you from having children so that you get back to them and seek for solution (Kwesi, 37).

4.9.2 General misconceptions about male infertility

Most of the men in the study reported general misconceptions regarding male infertility as a result of low publicity of male infertility. The participants acknowledged that this information delayed or prevented them from seeking healthcare on time.

A driver recalled how a friend told him what to do in order to know that your sperms can fertilize the eggs of a woman. This man who had been married for eight years:

“My friend told me how to analyse my sperms at home. My friend told me to pour my semen on a white handkerchief and after fold the handkerchief. He said after a while if the handkerchief gets stuck together, like starch holding two things together, then I can impregnate a woman but if it doesn’t get stuck then my sperms are weak. So, I did that on five occasions, and I observed that it got stuck. So, I saw that I was ok. So, I did not bother about that” (Adjei, 39).

Charles, a teacher, highlighted how some pastors said their relatives have bewitched men with infertility. The 40-year-old man with two years of infertility history reported thus:

“Some men have the notion it’s a spiritual issue ...so these men go to these fake pastors and elders and they tell you your mother or your sister is a witch and has been using your manhood for something” (Charles, 40).

4.10 Strategies to improve health seeking behaviours of men experiencing infertility

Strategies to improve the health seeking behaviour of men experiencing infertility also emerged after content analysis. With a lot of conditions now largely preventable and curable, it is important to identify strategies that will encourage men to seek healthcare. The participants were clear about various roles that had to be played by family, community, the government, their wives, and men themselves to improve the health seeking behaviour of men experiencing infertility. The men agreed that there should be much education to sensitise people on male infertility since that is the only way to improve on the health seeking behaviour of men experiencing infertility.

4.10.1 The role of men

The men in this study suggested various roles that men should play to improve their health seeking behaviours since it is difficult for a man to willingly walk to a facility to seek infertility treatment.

Some men suggested that, to help improve health seeking behaviour, the men experiencing infertility should first accept that they have the condition. Below is an excerpt from a 38-year-old banker who has five years of infertility history.

“Seek help and stop saying ‘I am a man, it's not possible I could have it’. Anyone can find himself in such a situation, so accept it, so that you will find a need to seek healthcare” (Kofi, 38).

Several of the men were of the view that forming small self-help groups of men experiencing infertility will encourage and inspire members to seek health care. A driver who had been married for eight years without a child suggested that,

“I think when men experiencing infertility form groups where they come together to encourage one another, share ideas, pray for one another, it will help to motivate those who have not sought health care to do so” (Adjei, 39).

4.10.2 The role of the community

The community contributes a lot in shaping the thinking of individuals with issues of infertility. The men acknowledged that if the people in the community accept or change their mindset about men with infertility it will go a long way to improve their health seeking behaviour.

Several of the men believed that stereotyping and stigmatisation in the community about men

with infertility discouraged them from seeking healthcare. To improve the health seeking behaviour of men, the participants were of the view that community members should eschew such practices. This is according to a 35-year-old marketer who had been married for five years without a child.

“...The negative perception the society has about men with infertility should stop. When the negative perception is removed people will surely seek healthcare and freely accept it if it is a lifetime thing” (Kojo, 35).

Kwesi was of the view that chiefs in the community should choose a center and invite experts to come and educate community members on male infertility. The cashier with three years of infertility history said:

“The community, also, through the chiefs and opinion leaders they can choose a center and invite some experts to educate the community members of various health issues including infertility. For example, all the men in the community can be grouped to talk about issues affecting men and this will make the men with issues including infertility to seek medical advice” (Kwesi, 37).

4.10.3 The role of the government

In low- and middle-income countries, people mostly rely on their governments for the provision and access to healthcare. The introduction of the NHIS, a social intervention programme by government to provide financial access to quality health care for residents in Ghana brought a sign of relief for Ghanaians but unfortunately issues of infertility are not covered. The men asserted that if the government includes issues of infertility on the scheme it will go a long way to help men experiencing infertility. A goldsmith married for four years without a child suggested that:

“I will plead with the government to make infertility [treatment] cost free or to be covered by the NHIS, since all fingers are not equal and [it] is not all men who have money to pay. I think if NHIS or a special fund covers the cost for infertility, men with infertility will be motivated to seek health care for their condition” (John, 40).

The men also said that infertility centers should be part of all facilities rather than being at designated places, in order to make it easily accessible to men experiencing infertility and also to help reduce the stigma associated with infertility. The revenue collector who had been married for three years without a child said:

“I think the government should ensure that every hospital has an infertility center, so that it will be easier to access and get treated rather than [at] a special place. If they make it [an isolated or] a special place, people will not go [there], because if you are seen by others that you are going there, it means you are going for infertility treatment. If all hospitals have infertility units, I think it will encourage many men with the condition to seek health care” (Kwame, 32).

Some of the men said that the government should include male infertility in the syllabus of the primary and secondary education, so that individuals will be aware during the early stages of their lives. Below are excerpts from an accountant married for four years without a child.

“I think it is already there, but if it is not there then it should be included in the primary and secondary education syllabus. This will help people to be aware of it and will not be afraid to seek health care when one is diagnosed of the condition” (Paapa, 39).

4.10.4 The Role of the Family

In Africa, marriage is considered as a union between families of the couples and therefore the family plays a vital role when couples are faced with challenges, especially, in cases of

childbearing problems. Therefore, in cases where there is a male infertility challenge, which is not mostly accepted to be true by the family, men experiencing infertility need to be supported, either through financial support or words of encouragement to improve on their health seeking behaviour for the condition.

Several of the men indicated that they needed the support of the family to help improve their health seeking behaviour. A driver married for eight years and a banker married for five years without children commented on the role of the family as follows:

“I have been married for eight years now and trying to get my own child...I think the family should also encourage the men and support them financially. This will help men [to] seek healthcare, because a lot of people look at the cost involved and decide not to seek health care, so parents and other family members should support them to seek health care rather than accusing or pointing fingers at them” (Adjei, 39).

“Family members should care [about] and show love to their members with this condition. Family should understand and find better ways of helping men with infertility come out of it, rather than accusing and putting pressure on them, and all this can help men with such problems to seek health care, in order not to complicate issues” (Kofi, 38).

4.10.5 The Role of Media

The media are not left out as they play a role in educating the public to create awareness of (male) infertility. Most of the men indicated that female infertility is mostly talked about, leaving out the male aspect, which hinders the health seeking behaviour of men experiencing infertility.

Several of the participants said that the media should create awareness of male infertility as

being done to other conditions, to encourage men experiencing infertility to seek healthcare. This is highlighted in the following statements of a businessman and an agronomist who have been married for four years and 1 ½ years respectively but are childless.

“The media, like radio, television, also play a role in helping men to know about issues of infertility, especially, male infertility, and seek health care, since me for instance, I heard about it on the television that men can also get infertility [issues]; that is why I came to the hospital. Many people think it doesn’t exist, but the moment the media brings it up a lot of people will be aware” (Asare, 42).

[“...] there should be a lot of radio teachings, television discussions; it should cut across just like how they do for malaria and other sicknesses, they should do the same about infertility, so that men will know that infertility, especially, male infertility is real and it is not only with women, so that men who notice some changes will seek early treatment” (Ohene, 32).

4.10.6 The Role of Wives

The findings suggest that the partners of men experiencing infertility form an integral part in improving or helping them in seeking healthcare. The men believed that their wives have a part to play by encouraging them to go to the hospital. During the process of treatment, the participants also indicated that their wives ensured their diets were nutritious and the treatment regimens were followed religiously.

Several participants said their partners made them seek healthcare. This is depicted by an accountant who had four years of infertility history:

“I think our partners also have a part to play for men to seek health care, because my

wife used to disturb me day and night that she has gone for the test so I should also go [and get tested], and that is what made me go to the hospital for a checkup". (Paapa, 39).

Other participants pointed out how their wives understood what they were going through and helped them to seek healthcare. A banker who had been married for five years but childless said:

"She understands what I am going through... She has 'closed her mind' to what society or the family is saying and encourages and advises me to seek healthcare and that everything will be fine...She doesn't make it look like it's the man's issue. This helped me to seek healthcare since she was supportive." (Kofi, 38)

During the treatment process, too, the men said that their wives made sure that they (the men experiencing infertility) followed the treatment regimen. A 40-year-old goldsmith who had been married for four years without a child shared the following:

"My wife tells me to take my medications... she reminds me of the time I should take it. She is concerned about the food I will eat so that my condition will improve. Her support and encouragement is what helped me to seek healthcare". (John, 40).

4.11 Summary of Findings

The study assessed the health seeking behaviour of men experiencing infertility in the Accra Metropolis. In all, 13 participants within the age range of 32-42 years were recruited, with the majority (12 participants) being Christians and one identifying as a Muslim. In terms of educational background, ten of the participants had tertiary educational background, two had secondary school level education, and one was a post-secondary school diploma holder. The findings of the study were organized around five themes related to the theory of planned behaviour and three additional themes that emerged from the data.

Male infertility was seen as a threat to men and thus was attributed to women. The negative behaviour of health care providers, seriousness of the diseases, and the perceptions of male infertility, to a great extent, influenced the attitudes of men towards health seeking. Some of the men did not believe that they had the condition, even though they had been diagnosed with the condition. Men experiencing infertility indicated that their condition affected both their productivity at their workplaces and the performance of their social roles and duties in the community.

Even though the men were of the view that male infertility is multicausal, they attributed the condition to mainly medical or spiritual causes. The men attributed pressure from wives, family members, and significant others as factors that encouraged them to seek healthcare. In the community, the perception that men are always fertile led to, predominantly, negative experiences of men experiencing infertility, where they reported being prevented from holding positions, stigmatised, and marginalised.

The participants highlighted several barriers that delayed them in seeking healthcare. It became apparent that male infertility had been sidelined and this has led to lack of knowledge about the condition. The men considered the cost of treatment high. Aside the finances, because spirituality is common among Africans, several of the men reported relying on God or Allah to help them overcome their challenge. Additionally, due to work demands, men experiencing infertility were constrained with time to seek healthcare. Moreover, participants reported lack of space designated for men experiencing infertility and lack of equipment at various fertility centers as barriers that hindered their health seeking behaviour.

The participants relied on the support of the family, in terms of finances and advice, which they reported as useful in encouraging them to seek health care. However, men who were

unfortunate enough to benefit from the family resorted to using some defense mechanisms like telling lies, occupying themselves with personal stuff, and not engaging in conversations related to male infertility. Since child-bearing is of cultural importance, some of the men indicated that they would adopt a child if all processes fail.

The men held a lot of myths about male infertility, which delayed seeking for healthcare. Some of the myths were personal while others were gotten from people around them. The study also revealed that low education and lack of knowledge on male infertility contributed to negative myths. Finally, the men outlined some strategies to help improve their health seeking behaviour.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

The key findings of the study are discussed in this chapter in relation to literature. The demographic characteristics of men experiencing infertility are presented first followed by the other findings. The discussion is presented according to the major themes and subthemes which were based on the objectives of the study and the research questions.

5.1 Demographic characteristics

This current study recruited 13 men aged between 32 and 42 years, who were experiencing infertility. This was in line with findings by Zaake et al. (2019) study which revealed most of the men interviewed were within the age of 30-50 years. This implies that most of the men were within their reproductive age where they are expected to reproduce to continue the family lineage. All participants had formal education and were married. The infertility duration of the men was between 1 ½ years to 10 years. The higher educational status of participants in this study could account for why they sought treatment for infertility as supported by some studies among women which linked higher educational status to good infertility prognosis (Brand & Davis, 2011; Ellwood & Jencks, 2004).

5.2 Attitude of Men experiencing Infertility

Participants in this current study shared varied concerns regarding the behaviour of health workers that negatively influenced their attitudes towards seeking healthcare for infertility. Majority of the participants revealed that the poor attitude towards seeking health care for male

infertility was as a result of the poor treatment received from health workers followed by inconsistency in information provided by health workers, and finally, incompetency of some health workers regarding infertility treatment. These findings were congruent with the findings that attitude of health care providers can influence the utilisation of sexual and reproductive health services (Jonas et al., 2017; Mikkelsen et al., 2013). With regard to the behaviour of health care providers, some of the men in this study reported that they were not pleased with the behaviour of health workers. Some of the behaviours exhibited by the health care providers included disrespectfulness, poor communication, and provision of inconsistent information.

A unique finding of the study was that most of the men shared how their productivity at work was affected by their infertility. This is in line with previous findings that infertility affects all areas of a person's life, including productivity at their workplaces (Collins, 2018; Hanna & Gough, 2020), and in consonance with several studies in other countries which ascertained that infertility could lead to poor quality of men's health as well as the psychological well-being (Gerhard et al., 2014; Luk & Loke, 2015). The study also found that the view of men with regard to the seriousness of infertility facilitated or prevented them from seeking healthcare for infertility. The study revealed that men perceived infertility as serious and needed urgent care, unlike previous studies where men did not see infertility as serious (Fish et al., 2015; Yousaf et al., 2015). It was expected that the men with infertility will seek early medical attention due to the seriousness, however, it was revealed that men with this condition delayed seeking treatment due to several reasons such as the idea that infertility is a female-related problem (Naab & Kwashie, 2018; Tyler & Williams, 2013).

The study also ascertained that the attitudes of men towards seeking healthcare was influenced by the way they perceived male infertility. With this, the men in the study were of the

view that infertility is a female problem and associated with stereotyping and mockery. This perception influenced their attitude towards seeking health care. The finding was consistent with several other studies in Ghana and abroad (Culley et al., 2013; Naab & Kwashie, 2018; Schick et al., 2016). This explains why men assume there is nothing wrong with them, while they push their wives to seek treatment (Mumtaz et al., 2013; Naab & Kwashie, 2018; Tyler & Williams, 2013). This could also be attributed to why wives are always blamed by the public when couples experience issues of infertility.

It is worth noting that few of the participants in this study denied their diagnosis at the facility. Due to their denial and disbelief, the men were not fully committed to the treatment process. Even though denial and disbelief were identified in this current study, they have not been reported by other studies. However, it could be linked to the fact that males diagnosed with infertility face several emotional and psychological challenges (Dooley et al., 2014; Gamel et al., 2019). Moreover, the finding that the men in the current study denied their infertility diagnosis is inconsistent with evidence by Dolan et al. (2017) which revealed that the men in UK diagnosed with infertility accepted their status.

5.3 Subjective norms of men experiencing infertility

This refers to pressures and personal beliefs of the men that influenced them to seek health care. Some were viewed as external factors (perceptions of the society, family, or friends), whilst others were classified as internal factors (the men's personal belief that infertility is women's problem). The study revealed that male infertility is believed by men as either medical or spiritual or both which could affect their health seeking behaviours.

Even though the views people have about others affect the way they behave and perform some actions, internal factors such as personal beliefs was found to have a significant influence on individuals themselves. The personal beliefs held by these men in this study were found to either motivate them or serve as a hindrance towards seeking health care for infertility, as similarly found in a previous study in Nigeria (Bassey et al., 2018). Due to the role personal perceptions play in seeking infertility health care, Zaaake et al. (2019) suggested the need to understand the personal views of men experiencing infertility. This will provide a platform for health workers to develop strategies such as educating males experiencing infertility to improve the outcome of men experiencing infertility as suggested by Fainberg and Kashanian (2019). Furthermore, majority of the men in this study were of the belief that infertility is a disease condition which made them seek health care at the fertility center, whilst others had the notion that male infertility has spiritual causes. Contrary to this finding, Bassey et al. (2018) discovered that most of their participants in Nigeria did not know the cause of male infertility.

One day as the researcher was waiting at the OPD to interview a participant, a woman shouted at the husband angrily that "the doctor says I am ok, so I know it is you that cannot give birth". Immediately the facial expression of the husband changed and he walked out of the place to the car. This shows that men are influenced by a significant number of people around them to seek healthcare. Even though some of the strategies used by these significant others to influence the men to seek health care were positive, others were viewed by some participants as negative. In addition, other men kept the condition to themselves without disclosure of the diagnosis to anyone, which is a behaviour reported by previous studies as well (Babore et al., 2017; Miner et al., 2019). This accounted for why majority of the men in this study availed themselves for

medical treatment at the fertility centers without the knowledge of people around them due to the sensitive nature of the condition.

It is interesting to note that the family of the men exerted pressure on the wives of the men, rather than the men themselves for being ‘responsible’ for the couple’s childlessness. This irony of blame is not different from findings reported in Ghana and other countries (Chimbatata & Malimba, 2016; Dierickx et al., 2018; Naab & Kwashie, 2018; Rouchou, 2013). This act discovered by participants in this study may be attributed to the notion that, generally, Ghanaians view infertility as a problem of women rather than men’s problem, hence, there is the need to intensify the education regarding infertility among men.

Another unique finding of this study was the role the community has to play in relation to men seeking infertility health care. Participants in this study listed some practices of members of the community such as lack of respect, and denial of some important positions in the community which influenced the health seeking behaviour of the men. These findings are consistent with findings of several other studies which revealed that men experiencing infertility were not accorded the necessary respect in their society (Chimbatata & Malimba, 2016; Culley et al., 2013). This finding is also in line with the earlier finding by Hinton and Miller (2013), who reported that the society has a significant role to aid men experiencing infertility to seek health care.

5.4 Perceived behavioural control that affect men experiencing infertility

Even though participants in this study were recruited from fertility health centers, they acknowledged to several factors that prevented them from seeking health care initially as well as those that prompted them to seek health care. Based on the shared views from these men, factors

that impeded or facilitated their health seeking behaviour included high cost for infertility treatment, unavailability of time, religious beliefs, work related factors, poor knowledge about male infertility and institutional factors such as limited health professionals.

Participants in this study expressed high cost of infertility treatment as a factor that delayed most men in seeking treatment. They shared their grievances concerning their salaries which was less, compared to the charges they were made to pay while receiving treatment for infertility. The high cost identified by participants in the current study supports several other studies which found cost as an obstacle to men seeking health care for infertility (Bushnik et al., 2012; Hammarberg & Kirkman, 2013). These findings are consistent with other studies which ascertained that men of high socio-economic status often seek for healthcare (Anderson et al., 2009; Lee, Neo, Tan, Cook, Wong, Tan, Sayampanathan, Lim, Tang, & Goh, 2014). In addition, participants in this study were not happy about the fact that infertility treatment was not covered by the NHIS. This recent finding is similar to findings of (Osei, 2016) who identified this same problem four years ago. This implies that it has been a problem for so many years and this could be the reason for low turnout of men experiencing fertility challenges at the various fertility centers.

Another remarkable finding in this study is the unavailability of time on the men's part as it hindered men's health seeking behaviour. Majority of the participants expressed dissatisfaction with the time spent at most government facilities, when seeking health care. According to them, the time wasted at these centers explains why most men sought health care from private and other centers rather than government facilities. This finding supports findings of Hiadzi and Woodward (2019) who revealed that most fertility centers are located in urban areas in Ghana

and hence it is time consuming for men experiencing infertility in the rural areas to seek health care from these fertility centers and hence resort to other forms of treatment.

In addition, the men indicated that their busy schedules at work was another factor that hindered them from seeking infertility treatment care. The participants in this current study posited that due to the nature of their work, coupled with busy schedules at work, hindered the process of diagnosing and treatment for infertility. Moreover, the men in this study stated that, even if they managed to get time to go to the fertility centers, they spent the whole day at these facilities. They attributed the delay to the high number of people at the government facilities, which further served as a barrier towards seeking health care for infertility, compared to privately owned treatment facilities. Lack of time and spending much hours at the fertility centers as indicated by the participants in this study are in conformity with other studies where men sought help from other sources other than health centers due to busy schedules at work and the hours spent in the hospitals (Coles et al., 2010; Fisher & Hammarberg, 2012).

Religion was one of the factors identified by the men in this study as a barrier to seeking health care among men experiencing infertility in Ghana. They indicated that they would rather rely on God or Allah, who they think could heal all sicknesses, rather than seeking health care from health professionals. Some of the participants in this current study also indicated that their religious leaders encouraged them to wait upon God, as children are gifts from God. According to the participants, these factors also accounted for both non-attendance and the late reporting to health facilities for treatment. The finding that some religious beliefs of some Ghanaian men experiencing infertility served as a negative influence towards seeking health care was in conformity with what has been previously published by other authors (Gerhard et al., 2014; Hammarberg et al., 2017)

Another notable finding that could serve as a facilitator or hindrance to health seeking behaviour for male infertility as ascertained by participants in this study was the knowledge about male infertility. Participants were of the belief that not knowing the cause of infertility will cause men with this condition to be adamant in seeking health care. Some men were of the view that the poor knowledge on male infertility could be due to the fact that male infertility is not a topic that is discussed in the Ghanaian society. This finding was similar to findings of several other authors in Ghana (Naab & Kwashie, 2018; Osei, 2016) and abroad (Culley et al., 2013). The participants in the current study were, therefore, of the opinion that if the education goes down well it will make men experiencing infertility seek early treatment.

The men in this recent study were of the view that certain factors at the various facilities also affected their health seeking behaviour. They pointed out that inadequate infertility experts at the various fertility centers in the country was a problem, since it affects the quality of care rendered. This finding supports earlier evidence by Chapple et al. (2007) in UK that found that the skills exhibited by health care professionals at the fertility centers could improve the attendance rate of men experiencing infertility. Moreover, the facilities had no designated places for men experiencing infertility problems, and were made to mingle with other people who were presenting different conditions, coupled with inadequate advanced equipment in diagnosing men experiencing infertility at the fertility centers. These institutional factors were mentioned by participants in this study as accounting for the low turnout rate of men experiencing infertility at the fertility centers.

5.5 Intentions of men experiencing infertility towards health seeking

The current study has shown various motivations for the health seeking behaviours of men experiencing infertility. Even though women have a greater desire to have their own children and would therefore be more motivated to seek health care than men (Boivin et al., 2018), this study has revealed that men experiencing infertility were also willing to seek health care. The men also pointed out formal and informal supports such as media, partners and friends that motivated them to seek health care.

In relation to the desire of the men to seek health care, the present study ascertained that several of the men sought health care purposely to find out the reasons for their infertility and to access ‘healing’, in order to be able to produce children who would succeed them, when they are no more. This evidence is similar to previous finding that men’s desire to seek care was informed by their motive to have their own children and find out their inability to impregnate their partners (Fisher & Hammarberg, 2012; Hörbst, 2010; Roberts et al., 2011; Sylvest et al., 2016). The study further discovered that the desire to seek health care is significantly influenced by how men view infertility. The participants mentioned that men who view infertility as a problem will have a strong desire to seek health care as compared to those who do not view it as a problem or deny the existence of the problem. This finding supports findings of several other studies in Sweden and Pakistani (Bodin & Käll, 2020; Mumtaz et al., 2013).

Aside the desire to seek health care, some of the men asserted that there were certain factors that motivated them to seek health care. The factors mentioned by the participants which influenced their intentions to seek health care centered on the media, informal support such as their partners and friends. The main motivating factor identified by several of the men was their wives, as they indicated that their wives played an active role with regard to their intention to

seek health care. The finding that partners play a key role concerning men experiencing infertility intention to seek health care agrees with several other studies which revealed that intention to seek health care for male infertility was higher among married couples than partners who were not married (Fisher & Hammarberg, 2012; Hiadzi & Woodward, 2019; Parrott, 2014)

5.6 Health seeking behaviour of men experiencing infertility

Participants sought various remedies and means of dealing with their infertility. Although the study discovered that participants had a challenge in disclosing their infertility status, most of the participants consulted their wives, medical experts, and friends who were going through a similar situation to help them find solutions.

Even though people who are suffering from various conditions felt reluctant in seeking help until the condition has advanced, as reported in previous studies (Chimbatata & Malimba, 2016; Hess et al., 2018), the current study revealed that majority of the participants sought help by consulting their wives, friends, and medical personnel and this behaviour is consistent with findings of MacKian (2003). This revelation was consistent with previous studies in some high-income countries which revealed various help seeking sources such as herbalist, friends, medical experts and wives (Dutta & Sengupta, 2018; Jaradat & Zaid, 2019; Wang et al., 2018; Zaake et al., 2019). The participants added that not seeking help for the condition could lead to more harm than good, so it was better for them to talk to somebody about it.

The men in this study recounted several benefits they got from informing people about their condition of infertility and seeking early medical care from experts, even though health seeking is typically, not a habit of African men. The major finding in the study indicated that men seek health care to know what is wrong with them in order to get remedy which was

congruent with findings of several other studies (Inhorn & Patrizio, 2015; Zaake et al., 2019).

The benefits delivered from health seeking as identified by the participants included reduced cost for health care and the opportunity to knowing one's fertility status.

The men in this study further shared their experiences regarding health seeking. Most of the men expressed disappointment for not getting their condition resolved after several months of seeking health care. Other experiences shared by the participants centered on feeling shy, getting to know that they are the cause of the infertility, and feeling uncomfortable during the process of getting sperms for specimen analysis. These findings from the current study were consistent with the results of several other studies in Africa and some high-income countries (Arya & Dibb, 2016; Fisher & Hammarberg, 2012; Mehta et al., 2016; Miner et al., 2019), contrary to several other studies where men experiencing infertility did not want to seek health care because they thought it was spiritual (Chimbatata & Malimba, 2016; Hess et al., 2018; Moyo & Muhwati, 2013; Parrott, 2014).

5.7 Coping strategies of men experiencing infertility

Men in this study indicated several ways they coped with the situation to minimise the (potential) negative effects of the condition on their overall health. The study revealed coping strategies such as child adoption, family support, and personal coping.

Concerning how the men felt with their condition, one major coping strategy that was shared by the participants was adoption of children. They were of the view that if the treatment available fails, they do not mind adopting a child as their own who will continue the family lineage. In contrary to this finding, it was revealed six years ago in Sweden by Schytt et al. (2014) that, men want to have children who are of their blood.

In addition, the men narrated how their families have been supportive in these difficult times. According to them, relatives provided emotional, social, physical and spiritual support to help them cope. In contrast to the findings of this study that males experiencing infertility receive emotional and social support from their families, findings from several other studies (Richard et al., 2017; van der Merwe et al., 2017) have reported men experiencing infertility are disregarded by their family members and denied of some responsibilities in the family.

Few of the men in this study preferred to use personal coping strategies rather than disclosing their problem to other people. They shared that men are expected to be strong when faced with such issues and hence most men with such condition will keep it to themselves until they are pressured, or it gets out of hands. This finding was in agreement with several other studies in Ghana and some high-income countries which revealed that some men experiencing infertility are able to cope personally with the condition without telling others (Buckley & Tuama, 2010; Coles et al., 2010; Naab & Kwashie, 2018; Schick et al., 2016). The men in this study used some defense mechanisms such as telling lies, pretending, and occupying themselves with various activities in order not to think about their present condition.

5.8 Misconceptions about male infertility

Even though majority of the men in this study accepted the problem and sought help, few of them had some misconceptions regarding male infertility. The misconceptions included personal misconceptions and misconceptions held by others. Before the start of the interview one of the participants made a comment like this "I know it is all the doing of my family members because they think I do not help them"

Regarding the misconceptions about infertility, the men in this study recounted that being able to have sex as a man meant one was fertile and therefore doubted the fact that men can be infertile. This finding is consistent with other studies where men did not view infertility as a male problem (Culley et al., 2013; Tyler & Williams, 2013). This belief was found to affect the behaviour of men to seek medical care consistent with other studies (Agarwal et al., 2015; Hammarberg et al., 2017).

Few of the men also thought that having sex continuously and masturbating could bring about infertility. This finding regarding frequent sex and masturbation as a cause of infertility discovered by the current study was not directly linked to other studies, however, other studies in Zimbabwe and Nigeria revealed some misconceptions regarding the cause of infertility such as witchcraft and punishment from either God or angry ancestors (Moyo & Muhwati, 2013; Ritgak & Simon, 2013).

Furthermore, few of the men recounted some misconceptions held by their friends and other people about male infertility. According to them, some men have misconceptions that male infertility has spiritual backing and hence prefer seeking for interventions from pastors rather than seeking medical interventions as consistent with Moyo and Muhwati (2013) study where participants sought care from religious and spiritual leaders. The men also indicated that some people attribute male infertility to witchcraft. A similar finding was revealed seven years ago in a study done in Zimbabwe (Ritgak & Simon, 2013), which caused poor health seeking behaviours among the participants.

5.9 Strategies to improve health seeking behaviour of men experiencing infertility

The men outlined various strategies that could (potentially) help them improve upon their health seeking behaviour. Furthermore, these men had the notion that they had a major part to play, to improve their health seeking behaviour. According to them, men experiencing infertility should stop denying the existence of the condition and accept the reality of the condition, so that they can seek help early. According to the participants, men with such condition could form small groups to encourage each other during their challenging period. These men believed that they had a part to play to improve their health seeking behaviour, and this is contrary to several other studies which found that men are reluctant to seek health care for male infertility (Dutta & Sengupta, 2018; Jaradat & Zaid, 2019; Wang et al., 2018).

A study conducted in The Gambia by Dierickx et al. (2018) revealed that community members and other significant others play a key role in helping to improve the health seeking behaviour of men experiencing infertility. In contrast, the current study in Ghana discovered that stereotyping and stigmatisation by community members were two key factors that hinder men from seeking health care, and therefore suggested that community members could help improve the health seeking behaviour of infertile men by accepting them and not criticising them. Cultural influence is also another factor identified to influence infertile men's health seeking behaviour. This finding supports recent evidence reported by Dierickx et al. (2018), Dolan et al. (2017) and Mehta et al. (2016) in Gambia, UK and USA respectively.

With regard to the governmental role in helping men experiencing infertility to seek health care, the men suggested that the government should include treatment of infertility in the National Health Insurance Scheme to help reduce the high cost of treatment, since majority of the men were not able to afford the cost of treatment. The finding that infertility treatment should

be shouldered by the government is in consonance with a study by Group et al. (2015) which ascertained that Assisted Reproductive Technology (ART) services for infertility are very expensive. This implies that if the government does not cut the cost for the treatment, it will deter most men from seeking treatment. Furthermore, the men in this study were of the view that the various government hospitals should have infertility centers as part of the services provided for easy access. Similar to the current finding, governmental support was found to be effective in reducing the of cost of infertility treatment, thereby increasing patronage of treatment services provided at the fertility centers (Ombelet, 2011).

The participants suggested that strengthening public education on male infertility through the media, including radio and television would help boost the confidence of the men experiencing infertility to seek treatment. The men in this recent study reported that the poor health seeking behaviour among men experiencing infertility was as a result of poor knowledge about male infertility; hence, they suggested that the media should help to increase public awareness to help improve the health seeking behaviour of men experiencing infertility. Similarly, a research conducted in Canada by Daumler et al. (2016) and in USA by Gerhard et al. (2014) suggested that creating public awareness on male infertility could motivate more men with this condition to seek health care.

In summary, this section covered a discussion of the evidence on health seeking behaviour of men experiencing infertility who participated in this study. Generally, some of the findings were in consonance with evidence of previous studies from Ghana and elsewhere, while others were at variance and others were entirely new.

CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, RECOMMENDATION AND CONCLUSION

6.0 Introduction

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

6.1 Summary of the study

Infertility affects both men and women, but has been generally centered on women, because women prefer to seek treatment while men are reluctant to seek medical advice (Chimbatata & Malimba, 2016). Globally, there have been researches on health seeking behaviour of men experiencing infertility, however, little research has been conducted on the health seeking behaviour of men in Ghana. The theory of planned behaviour was used as a guiding framework for the study. Relevant literature from both quantitative and qualitative studies in the related area of health seeking behaviour were reviewed. An exploratory descriptive design was used to give an in depth understanding of the health seeking behaviour of men experiencing infertility.

Ethical clearance was given by Ghana Health Service Ethics Review Committee and Institutional Review Board at Noguchi Memorial Institute for Medical Research for the study. A total of thirteen participants were recruited from two health facilities using purposive and snowball sampling techniques and a face-to-face in-depth interview was conducted with the help of a semi-structured interview guide. The participants were between the ages of 30 and 42 years, with the self-reported period of male infertility ranging between 1 ½ years and 10 years. Twelve

of the participants identified as Christians and one was a Muslim. Data collection and analysis were done concurrently while ensuring methodological rigour. All interviews were audio-recorded and transcribed verbatim. Thematic analysis was used in data analysis giving rise to five main themes and three emerging themes with a total of 31 subthemes.

All participants were willing to seek treatment from the hospital as well as other places like the herbal and faith-based remedies. They also described how the negative behaviour of some health care providers affected their attitude towards health seeking. The men lamented how their condition affected their day-to-day activities. All the participants desired to have their own children although they were pressured and motivated by their wives, friends and testimonies of couples experiencing infertility issues, in the media.

The men identified several barriers that hindered them from seeking health care. They were grouped into two: personal and institutional. They mentioned some personal barriers as lack of money, busy schedules at work, and inadequate knowledge on male infertility. The men listed some institutional barriers as inadequate professionals, lack of space designated for men experiencing infertility, and lack of equipment for diagnosis of the condition.

Even though the men were not in favour of child adoption, they indicated they would adopt if only nothing could be done about their infertility condition. For health seeking behaviour to improve, it is important to understand the collective nature of various roles stakeholders like men, media, government, community and family need to play for men experiencing infertility.

6.2 Implications of the findings

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

6.2.1 Nursing practice and health education

The study established that men experiencing infertility saw the condition as a threat and therefore attributed it to women. This delayed them in seeking health care aside some barriers encountered due to the stigma associated with male infertility. Though their intention to seek healthcare was to have their own children, it took pressures and motivations from their partners and significant others for them to seek health care. Even though they were recruited from the hospital for this study, most of the participants reported that they have sought care from herbal and faith-based treatments before. There is the need for health care practitioners to appreciate spirituality in treatment of infertility in order to enhance adherence to the treatment. It was also known from the study that due to some barriers such as lack of money, behaviour of health care providers and the time for the treatment, the men may either start or stop intermittently along the way during the treatment process. Nurses should involve the family and the partners of men experiencing infertility during the treatment process. This will help the family and partners to give them the needed support and avoid unnecessary pressure on them. There is the need for nurses to be trained on how to handle men experiencing infertility in order to meet up with their needs. Nurses with the fertility specialist team should be abreast with knowledge on male infertility and its treatment in order to educate men because several of the men had inadequate knowledge and misconceptions. It is therefore necessary to formulate policies to sensitise the public about male infertility to create awareness via various platforms like the media and

curriculum within the primary and secondary schools. This will help reduce the stigma associated with male infertility and encourage men to seek early treatment.

6.2.2 Nursing research

Nursing research enhances clinical expertise, better patient care, and provides consistency in nursing care. The study revealed some interesting findings of research importance. There is a need for further studies on the impact of male infertility on roles and productivity at workplaces. There is also the need to look at the effects of infertility on men's quality of life. The study found that the men were not happy with the behaviour of some health care providers within the facilities. There is therefore the need for further studies on the perceptions of health care providers regarding male infertility. This will better help health care providers to give the best of care to the patients. The study revealed that the men were motivated by their wives and family to seek health care. There is the need for further research on the impact of family support for men experiencing infertility. This phenomenon could also be quantitatively studied to establish relationship between the constructs of the conceptual framework used.

6.2.3 Community sensitization

The findings of the research suggest that the community is the source of stigmatisation for men experiencing infertility due to the perception that infertility is a woman's problem. These men were often not comfortable when seeking health care, due to the fear of being mocked. The general population should be sensitised on male infertility and its treatment options, since the subject is less talked about in the public space.

6.2.4 Policy formulation

The study also revealed that the public hospitals do not carry out most of the investigations requested, leaving the men with no option than to seek care elsewhere. There should be a policy to establish well-resourced friendly infertility units in all public facilities to improve the health seeking behaviour of men with infertility. The study also revealed that the cost of treatment to a large extent deterred them from seeking early treatment. There should be innovative policies regarding the cost and treatment by including some if not all the treatment onto the National Health Insurance scheme (NHIS) to reduce the financial burden on men experiencing infertility. There should be a clear policy on infertility, especially, male infertility and its treatment since it is mostly not talked about.

6.3 Conclusion

This qualitative study explored the health seeking behaviour of men experiencing infertility within the Accra Metropolis using the theory of planned behaviour as a guiding framework. Although infertility is a condition that affects both men and women, male infertility is often given less attention. The findings of the study revealed remarkable insights into the health seeking behaviours of men experiencing infertility and strategies to help improve their behaviour. In several ways, the current study corroborated what has previously been reported in other countries and added new knowledge, particularly, the fact that the condition affects men's productivity at their various workplaces and their day-to-day activities. There is the need to improve education and counselling for men experiencing infertility and promote greater social awareness about male infertility and its treatment among the community in general. This requires a multi-sectorial approach led by government, health authorities, and the traditional system.

6.4 Recommendations

The following recommendations are made based on the findings of this study to the Ministry of health (MOH), Churches, Ghana health service, Community leaders, and fertility clinics in Accra, Ghana.

6.4.1 The Ministry of health (MOH)

The MOH should:

- Formulate polices to establish fertility units in all hospitals within the country.
- Stock facilities with infertility treatment resources such as drugs and equipment for clinical investigation of the condition.
- Ensure ethical practices at the various health facilities are duly followed by checking periodically.
- Enact policies to increase awareness on infertility, through the use of the media and other public education avenues.

6.4.2 The Ghana Health service

The GHS should:

- Promote health education on infertility across all health facilities in the country, herbal fertility centers, churches and local community.
- Create infertility friendly services for men, to encourage them to seek early treatment.
- Train and post health care providers who have specialised in male infertility to all facilities.

6.4.3 Churches and Mosques

They should:

- Train their religious leaders on how to support men experiencing infertility

6.4.4 Community leaders

The community leaders should:

- Create self-help and interest groups where men experiencing infertility can come together to encourage one another.
- Use various information centers within the community to create awareness on male infertility, to correct myths and misconceptions held by community members.

6.4.5 Fertility Clinics

Fertility clinics should:

- Provide men experiencing infertility with adequate information for them to make informed decisions on the best treatment option suitable for them.
- Employ health practitioners who have specialised in men's health, especially, infertility.
- Create awareness on male infertility since it is mostly not talked about.
- Liaise with funding agencies to help reduce the cost of treatment to enable more men to have access to infertility treatment.

6.5 Limitations of the study

Transferability of findings to a similar setting with same characteristics needs to be done with thoughtfulness, since the findings of the study are from 13 participants sampled from two facilities within the Accra Metropolis. Due to the sensitivity of the subject, stigma and the general negative cultural script regarding infertility in Africa, most of the potential participants contacted did not want to participate in the study. The researcher had to visit several fertility centers on several occasions within the metropolis before even getting participants for the study. Efforts to overcome this limitation included spending considerable time with participants to build rapport before conducting the interviews. The aim was to make participants feel comfortable and relaxed. In addition, the interviewer used probing questions during the interview to reduce any stigma or discomfort associated with infertility. There should be public education on male infertility for men to be aware that males can suffer infertility. Despite these limitations, the study findings could form a basis for further male infertility studies in Ghana.

REFERENCES

- Agarwal, A., Mulgund, A., Hamada, A., & Chyatte, M. R. (2015). A unique view on male infertility around the globe. *Reproductive Biology and Endocrinology*, *13*(1), 37.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of applied social psychology*, *32*(4), 665-683.
- Ajzen, I. (2006). Behavioral interventions based on the theory of planned behavior. In: In. Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology & Health*, *26*(9), 1113-1127. <https://doi.org/10.1080/08870446.2011.613995>
- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *Demographic Research*, *29*, 203-232.
- Akuffo, G. A. (2017). *Knowledge and Perceptions about Male Infertility in the Kumasi Metropolis* University of Ghana]. <http://ugspace.ug.edu.gh/handle/123456789/23826>
- Almeida-Santos, T., Melo, C., Macedo, A., & Moura-Ramos, M. (2017). Are women and men well informed about fertility? Childbearing intentions, fertility knowledge and information-gathering sources in Portugal. *Reproductive Health*, *14*(1), 91.
- Amico, K. R., Mugavero, M., Krousel-Wood, M. A., Bosworth, H. B., & Merlin, J. S. (2018). Advantages to Using Social-Behavioral Models of Medication Adherence in Research and Practice. *Journal of General Internal Medicine*, *33*(2), 207-215. <https://doi.org/10.1007/s11606-017-4197-5>
- Anawalt, B. D. (2013). Approach to male infertility and induction of spermatogenesis. *The Journal of clinical endocrinology and metabolism*, *98*(9), 3532-3542. <https://doi.org/10.1210/jc.2012-2400>
- Anderson, J. E., Farr, S. L., Jamieson, D. J., Warner, L., & Macaluso, M. (2009). Infertility services reported by men in the United States: national survey data. *Fertility and Sterility*, *91*(6), 2466-2470. <https://doi.org/10.1016/j.fertnstert.2008.03.022>
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, *5*(2), 272-281.
- Arya, S. T., & Dibb, B. (2016). The experience of infertility treatment: the male perspective. *Human Fertility*, *19*(4), 242-248. <https://doi.org/10.1080/14647273.2016.1222083>
- Asemota, O. A., & Klatsky, P. (2015). Access to infertility care in the developing world: the family promotion gap. *Seminars in reproductive medicine*,
- Babore, A., Stuppia, L., Trumello, C., Candelori, C., & Antonucci, I. (2017). Male factor infertility and lack of openness about infertility as risk factors for depressive symptoms in males undergoing assisted reproductive technology treatment in Italy. *Fertility and Sterility*, *107*(4), 1041-1047.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice-hall Englewood Cliffs, NJ.
- Barratt, Björndahl, L., De Jonge, C. J., Lamb, D. J., Osorio Martini, F., McLachlan, R., Oates, R. D., van der Poel, S., St John, B., Sigman, M., Sokol, R., & Tournaye, H. (2017). The diagnosis of male infertility: an analysis of the evidence to support the development of global WHO guidance—challenges and future research opportunities. *Human Reproduction Update*, *23*(6), 660-680. <https://doi.org/10.1093/humupd/dmx021>

- Bassey, I.-A. E., Isiwele, E. M., Omotoso, A., Ushie, E. D., & Ekwere, P. D. (2018). Knowledge, Perceptions and Attitudes towards Male Infertility: A Cross Sectional Survey in a Tertiary Institution in South-Southern Nigeria. *Age*, 20, 21-30.
- Begashaw, B., & Tesfaye, T. (2016). Healthcare utilization among urban and rural households in Esera district: Comparative cross-sectional study. *American Journal of Public Health Research*, 4(2), 56-61. <https://doi.org/10.12691/ajphr-4-2-3>
- Bezzina, F. H., & Dimech, S. (2011). Investigating the determinants of recycling behaviour in Malta. *Management of Environmental Quality: An International Journal*, 22(4), 463-485.
- Billari, F. C., Philipov, D., & Testa, M. R. (2009). Attitudes, norms and perceived behavioural control: Explaining fertility intentions in Bulgaria. *European Journal of Population/Revue européenne de Démographie*, 25(4), 439.
- Boateng, A. A. A. (2015). *Factors influencing the return to fertility after contraceptive discontinuation among contraceptive ever-users in the Accra Metropolitan Area, Ghana*
- Bodin, M., & Käll, L. (2020). Is it an issue before it's a problem? Investigating men's talk about fertility. *Sociology of Health & Illness*, n/a(n/a). <https://doi.org/10.1111/1467-9566.13148>
- Bodin, M., Käll, L., Tydén, T., Stern, J., Drevin, J., & Larsson, M. (2017). Exploring men's pregnancy-planning behaviour and fertility knowledge: a survey among fathers in Sweden. *Uppsala Journal of Medical Sciences*, 122(2), 127-135. <https://doi.org/10.1080/03009734.2017.1316531>
- Boivin, J., Buntin, L., Kalebic, N., & Harrison, C. (2018). What makes people ready to conceive? Findings from the International Fertility Decision-Making Study. *Reproductive Biomedicine & Society Online*, 6, 90-101. <https://doi.org/10.1016/j.rbms.2018.10.012>
- Bortoleto, A. P., Kurisu, K. H., & Hanaki, K. (2012). Model development for household waste prevention behaviour. *Waste Management*, 32(12), 2195-2207.
- Brand, J. E., & Davis, D. (2011). The Impact of College Education on Fertility: Evidence for Heterogeneous Effects. *Demography*, 48(3), 863-887. <https://doi.org/10.1007/s13524-011-0034-3>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Buckley, J., & Ó Tuama, S. (2010). 'I send the wife to the doctor' – Men's behaviour as health consumers. *International Journal of Consumer Studies*, 34(5), 587-595. <https://doi.org/10.1111/j.1470-6431.2010.00908.x>
- Buckley, J., & Tuama, S. (2010). 'I send the wife to the doctor' – Men's behaviour as health consumers. *International Journal of Consumer Studies - Int J Consum Stud*, 34, 587-595. <https://doi.org/10.1111/j.1470-6431.2010.00908.x>
- Bushnik, T., Cook, J. L., Yuzpe, A. A., Tough, S., & Collins, J. (2012). Estimating the prevalence of infertility in Canada. *Human Reproduction*, 27(3), 738-746.
- Chandra, A., Copen, C. E., & Stephen, E. H. (2014). Infertility service use in the United States: data from the National Survey of Family Growth, 1982-2010.
- Chapple, A., Salinas, M., Ziebland, S., McPherson, A., & Macfarlane, A. (2007). Fertility Issues: The Perceptions and Experiences of Young Men Recently Diagnosed and Treated for Cancer. *Journal of Adolescent Health*, 40(1), 69-75. <https://doi.org/10.1016/j.jadohealth.2006.07.010>

- Chimbatata, N. B., & Malimba, C. (2016). Infertility in sub-Saharan Africa: a woman's issue for how long? A qualitative review of literature. *Open Journal of Social Sciences*, 4(8), 96-102. <https://doi.org/10.4236/jss.2016.48012>
- Coles, R., Watkins, F., Swami, V., Jones, S., Woolf, S., & Stanistreet, D. (2010). What men really want: a qualitative investigation of men's health needs from the Halton and St Helens Primary Care Trust men's health promotion project. *British Journal of Health Psychology*, 15(4), 921-939.
- Collins, M. E. (2018). Impact of Infertility on Daily Occupations and Roles. *American Journal of Occupational Therapy*, 72(4_Supplement_1), 7211505128p7211505121-7211505128p7211505121. <https://doi.org/10.5014/ajot.2018.72S1-PO6008>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, 45(4), 483-499. <https://doi.org/10.1177/0539018406069584>
- Cui, W. (2010). Mother or nothing: the agony of infertility. *Bulletin of the World Health Organization*, 88(12), 881-882. <https://doi.org/10.2471/BLT.10.011210>
- Culley, L., Hudson, N., & Lohan, M. (2013). Where are all the men? The marginalization of men in social scientific research on infertility. *Reproductive biomedicine online*, 27(3), 225-235.
- Datta, J., Palmer, M. J., Tanton, C., Gibson, L. J., Jones, K. G., Macdowall, W., Glasier, A., Sonnenberg, P., Field, N., Mercer, C. H., Johnson, A. M., & Wellings, K. (2016). Prevalence of infertility and help seeking among 15 000 women and men. *Hum Reprod*, 31(9), 2108-2118. <https://doi.org/10.1093/humrep/dew123>
- Daumler, D., Chan, P., Lo, K. C., Takefman, J., & Zelkowitz, P. (2016). Men's knowledge of their own fertility: a population-based survey examining the awareness of factors that are associated with male infertility. *Human reproduction*, 31(12), 2781-2790. <https://doi.org/10.1093/humrep/dew265>
- Dhont, N., Luchters, S., Ombelet, W., Vyankandondera, J., Gasarabwe, A., van de Wijgert, J., & Temmerman, M. (2010). Gender differences and factors associated with treatment-seeking behaviour for infertility in Rwanda. *Human Reproduction*, 25(8), 2024-2030. <https://doi.org/10.1093/humrep/deq161>
- Dibley, L. (2011). Analysing narrative data using McCormack's Lenses. *Nurse Researcher*, 18(3). <https://doi.org/10.7748/nr2011.04.18.3.13.c8458>
- Dierickx, S., Rahbari, L., Longman, C., Jaiteh, F., & Coene, G. (2018). 'I am always crying on the inside': a qualitative study on the implications of infertility on women's lives in urban Gambia. *Reproductive Health*, 15(1), 151. <https://doi.org/10.1186/s12978-018-0596-2>
- Dolan, A., Lomas, T., Ghobara, T., & Hartshorne, G. (2017). 'It's like taking a bit of masculinity away from you': towards a theoretical understanding of men's experiences of infertility. *Sociology of Health & Illness*, 39(6), 878-892. <https://doi.org/10.1111/1467-9566.12548>
- Dommermuth, L., Klobas, J., & Lappegård, T. (2011). Now or later? The theory of planned behavior and timing of fertility intentions. *Advances in Life Course Research*, 16(1), 42-53.
- Dooley, M., Dineen, T., Sarma, K., & Nolan, A. (2014). The psychological impact of infertility and fertility treatment on the male partner. *Human Fertility*, 17. <https://doi.org/10.3109/14647273.2014.942390>

- Dowden, J., Mushamiri, I., McFeely, E., Apat, D., Sacks, J., & Ben Amor, Y. (2019). The impact of “male clinics” on health-seeking behaviors of adult men in rural Kenya. *PLOS ONE*, 14(11), e0224749. <https://doi.org/10.1371/journal.pone.0224749>
- Dupree, J. M. (2018). Insurance coverage of male infertility: what should the standard be? *Translational andrology and urology*, 7(Suppl 3), S310-S316. <https://doi.org/10.21037/tau.2018.04.25>
- Dutta, S., & Sengupta, P. (2018). Medicinal herbs in the management of male infertility. *Journal of Pregnancy and Reproduction*, 2. <https://doi.org/10.15761/JPR.1000128>
- Edwards, R., & Holland, J. (2013). *What is qualitative interviewing?* A&C Black.
- Eisenberg, Lathi Ruth, B., Baker Valerie, L., Westphal Lynn, M., Milki Amin, A., & Nangia Ajay, K. (2013). Frequency of the Male Infertility Evaluation: Data from the National Survey of Family Growth. *Journal of Urology*, 189(3), 1030-1034. <https://doi.org/10.1016/j.juro.2012.08.239>
- Eisenberg, Park, Y., Hollenbeck, A. R., Lipshultz, L. I., Schatzkin, A., & Pletcher, M. J. (2011). Fatherhood and the risk of cardiovascular mortality in the NIH-AARP Diet and Health Study. *Human Reproduction*, 26(12), 3479-3485. <https://doi.org/10.1093/humrep/der305>
- Eley, Namey, McKenna, Johnson, & Guest. (2019). Beyond the Individual: Social and Cultural Influences on the Health-Seeking Behaviors of African American Men. *American Journal of Men's Health*, 13(1), 1557988319829953. <https://doi.org/10.1177/1557988319829953>
- Ellwood, D. T., & Jencks, C. (2004). The spread of single-parent families in the United States since 1960.
- Emokpae, M., Uadia, P., Omale-Itodo, A., & Orok, T. (2007). Male infertility and endocrinopathies in Kano, Northwestern Nigeria [Research Article]. *Annals of African Medicine*, 6(2), 64-67. <https://doi.org/10.4103/1596-3519.55714>
- Eze, U. A., & Okonofua, F. E. (2015). High prevalence of male infertility in Africa: are mycotoxins to blame? *African journal of reproductive health*, 19(3), 9-17.
- Fainberg, J., & Kashanian, J. A. (2019). Recent advances in understanding and managing male infertility. *F1000Research*, 8, F1000 Faculty Rev-1670. <https://doi.org/10.12688/f1000research.17076.1>
- Fish, J. A., Prichard, I., Ettridge, K., Grunfeld, E. A., & Wilson, C. (2015). Psychosocial factors that influence men's help-seeking for cancer symptoms: a systematic synthesis of mixed methods research. *Psycho-Oncology*, 24(10), 1222-1232. <https://doi.org/10.1002/pon.3912>
- Fisher, J. R. W., & Hammarberg, K. (2012). Psychological and social aspects of infertility in men: an overview of the evidence and implications for psychologically informed clinical care and future research. *Asian journal of andrology*, 14(1), 121-129. <https://doi.org/10.1038/aja.2011.72>
- Fledderjohann, J. J. (2012). ‘Zero is not good for me’: implications of infertility in Ghana. *Human Reproduction*, 27(5), 1383-1390. <https://doi.org/10.1093/humrep/des035>
- Gamel, W. M. A., Hassan, H. E., & El-ezazy, A. A. (2019). Male Infertility and Psychological Repercussions: A Neglected Problem in Northern Upper Egypt. *International Journal of Studies in Nursing*, 4(4), 1.
- Geelhoed, Nayembil, Asare, Leeuwen, S. v., & Roosmalen, v. (2002). Infertility in rural Ghana. *International Journal of Gynecology & Obstetrics*, 79(2), 137-142. [https://doi.org/10.1016/S0020-7292\(02\)00237-0](https://doi.org/10.1016/S0020-7292(02)00237-0)

- Gerhard, Ritenour, Goodman, Vashi, & Hsiao. (2014). Awareness of and attitudes towards infertility and its treatment: a cross-sectional survey of men in a United States primary care population. *Asian journal of andrology*, 16(6), 858-863. <https://doi.org/10.4103/1008-682X.132782>
- Greaves, M., Zibarras, L. D., & Stride, C. (2013). Using the theory of planned behavior to explore environmental behavioral intentions in the workplace. *Journal of Environmental Psychology*, 34, 109-120.
- Greil, A., McQuillan, J., & Slauson-Blevins, K. (2011). The Social Construction of Infertility. *Sociology Compass*, 5(8), 736-746. <https://doi.org/10.1111/j.1751-9020.2011.00397.x>
- Griffith, D. M., Ober Allen, J., & Gunter, K. (2011). Social and cultural factors influence African American men's medical help seeking. *Research on Social Work Practice*, 21(3), 337-347.
- Group, E. C. W., Group, E. C. W., Baird, D. T., Barri, P. N., Bhattacharya, S., Devroey, P., Evers, J. L. H., Gianaroli, L., Somigliana, E., Tapanainen, J. S., van Wely, M., Crosignani, P. G., Diedrich, K., Fraser, L., Geraedts, J. P. M., Lundin, K., Sunde, A., Tarlatzis, B., Van Steirteghem, A., Veiga, A., Bhattacharya, S., Crosignani, P. G., Evers, J. L. H., & Somigliana, E. (2015). Economic aspects of infertility care: a challenge for researchers and clinicians. *Human Reproduction*, 30(10), 2243-2248. <https://doi.org/10.1093/humrep/dev163>
- GSS. (2014). *2010 population and housing census report*. Ghana Statistical Service.
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59-82. <https://doi.org/10.1177/1525822X05279903>
- Hagger, M. S., Chatzisarantis, N. L., & Harris, J. (2006). From psychological need satisfaction to intentional behavior: Testing a motivational sequence in two behavioral contexts. *Personality and social psychology bulletin*, 32(2), 131-148.
- Hajdarevic, S., Schmitt-Egenolf, M., Brulin, C., Sundbom, E., & Hörnsten, Å. (2011). Malignant melanoma: gender patterns in care seeking for suspect marks. *Journal of Clinical Nursing*, 20(17-18), 2676-2684. <https://doi.org/10.1111/j.1365-2702.2011.03788.x>
- Hammarberg, K., Collins, V., Holden, C., Young, K., & McLachlan, R. (2017). Men's knowledge, attitudes and behaviours relating to fertility. *Human Reproduction Update*, 23(4), 458-480. <https://doi.org/10.1093/humupd/dmx005>
- Hammarberg, K., & Kirkman, M. (2013). Infertility in resource-constrained settings: moving towards amelioration. *Reproductive biomedicine online*, 26(2), 189-195. <https://doi.org/10.1016/j.rbmo.2012.11.009>
- Hamza, S. (2015). Infertility (Causes and Treatment). Assessment of Quality of Life for Infertile Men. In U. o. B. College of Nursing, Iraq (Ed.), (pp. p. 5).
- Hanna, E., & Gough, B. (2015). Experiencing Male Infertility: A Review of the Qualitative Research Literature. *SAGE Open*, 5(4), 2158244015610319. <https://doi.org/10.1177/2158244015610319>
- Hanna, E., & Gough, B. (2020). The impact of infertility on men's work and finances: Findings from a qualitative questionnaire study. *Gender, Work & Organization*, 27(4), 581-591. <https://doi.org/10.1111/gwao.12414>
- Hess, R. F., Ross, R., & Gililand Jr, J. L. (2018). Infertility, psychological distress, and coping strategies among women in Mali, West Africa: a mixed-methods study. *African journal of reproductive health*, 22(1), 60-72. <https://doi.org/10.29063/ajrh2018/v22i1.6>

- Hiadzi, R. A., & Woodward, B. J. (2019). Infertility treatment decision-making in Ghana and contestations that may arise: a prospective sociological study. *Global Reproductive Health*, 4(2), e32.
- Hinton, L., & Miller, T. (2013). Mapping men's anticipations and experiences in the reproductive realm: (in)fertility journeys. *Reproductive biomedicine online*, 27(3), 244-252. <https://doi.org/10.1016/j.rbmo.2013.06.008>
- Holden, C. A., Jolley, D. J., McLachlan, R. I., Pitts, M., Cumming, R., Wittert, G., Handelsman, D. J., & de Kretser, D. M. (2006). Men in Australia Telephone Survey (MATEs): predictors of men's help-seeking behaviour for reproductive health disorders. *Medical Journal of Australia*, 185(8), 418-422. <https://doi.org/10.5694/j.1326-5377.2006.tb00637.x>
- Hörbst, V. (2010). Male perspectives on infertility and assisted reproductive technologies (ART) in sub-Saharan contexts. *FVV Obgyn*, 22-27.
- Hourani, L., Williams, J., Bray, R. M., Wilk, J. E., & Hoge, C. W. (2016). Gender differences in posttraumatic stress disorder and help seeking in the US Army. *Journal of Women's Health*, 25(1), 22-31.
- Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods. In *Handbook of qualitative research*. (pp. 428-444). Sage Publications, Inc.
- Hwang, D. S., Jeon, T. G., Park, H. J., & Park, N. C. (2014). The attitudes of infertile male patients toward the use of artificial insemination by donor: a Korean regional survey. *Korean journal of urology*, 55(2), 134-139.
- Inhorn, M. C., & Patrizio, P. (2015). Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. *Human reproduction update*, 21(4), 411-426.
- Iyalomhe, G. B., & Iyalomhe, S. I. (2012). Health seeking behavior of rural dwellers in Southern Nigeria: Implications for healthcare professionals. *International journal of tropical disease and health*, 2(2), 62-71.
- Jaradat, N., & Zaid, A. N. (2019). Herbal remedies used for the treatment of infertility in males and females by traditional healers in the rural areas of the West Bank/Palestine. *BMC Complementary and Alternative Medicine*, 19(1), 194. <https://doi.org/10.1186/s12906-019-2617-2>
- Jonas, K., Crutzen, R., van den Borne, B., & Reddy, P. (2017). Healthcare workers' behaviors and personal determinants associated with providing adequate sexual and reproductive healthcare services in sub-Saharan Africa: a systematic review. *BMC pregnancy and childbirth*, 17(1), 86. <https://doi.org/10.1186/s12884-017-1268-x>
- Jones, W. P., & Kottler, J. A. (2005). *Understanding research: Becoming a competent and critical consumer*. Pearson Merrill Prentice Hall.
- Keegan, B. R., Barton, S., Sanchez, X., Berkeley, A. S., Krey, L. C., & Grifo, J. (2007). Isolated teratozoospermia does not affect in vitro fertilization outcome and is not an indication for intracytoplasmic sperm injection. *Fertility and Sterility*, 88(6), 1583-1588. <https://doi.org/10.1016/j.fertnstert.2007.01.057>
- Klobas, J. (2010). Social psychological influences on fertility intentions: A study of eight countries in different social, economic and policy contexts.
- Ko, E. Y., & Sabanegh Jr, E. S. (2012). The Role of Over-the-Counter Supplements for the Treatment of Male Infertility—Fact or Fiction? *Journal of Andrology*, 33(3), 292-308. <https://doi.org/10.2164/jandrol.111.013730>

- Kumar, H., Kapinakadu, S., & Anil, M. (2019). Health seeking behaviour and its determinants among rural population- a cross sectional study in South India [Health seeking behaviour, Determinants, Health insurance, Rural]. 2019, 6(11), 6. <https://doi.org/10.18203/2394-6040.ijcmph20195085>
- Kuure, V. Z., Bisung, E., Rishworth, A., Dixon, J., & Luginaah, I. (2015). Health-seeking behaviour during times of illness: a study among adults in a resource poor setting in Ghana. *Journal of Public Health*, 38(4), e545-e553. <https://doi.org/10.1093/pubmed/fdv176>
- Labaree, R. (2009). Organizing your social sciences research paper: Types of research designs. *University of Southern California available online at <http://libguides.usc.edu/writingguide/researchdesigns> visited on, 8(04), 2016.*
- Lee, W., Neo, A., Tan, S., Cook, A. R., Wong, M. L., Tan, J., Sayampanathan, A., Lim, D., Tang, S. Y., & Goh, W. L. (2014). Health-seeking behaviour of male foreign migrant workers living in a dormitory in Singapore. *BMC Health Services Research*, 14(1), 300.
- Lee, W., Neo, A., Tan, S., Cook, A. R., Wong, M. L., Tan, J., Sayampanathan, A., Lim, D., Tang, S. Y., Goh, W. L., Chen, M. I. C., & Ho, C. (2014). Health-seeking behaviour of male foreign migrant workers living in a dormitory in Singapore. *BMC Health Services Research*, 14(1), 300. <https://doi.org/10.1186/1472-6963-14-300>
- Leung, A. K., Henry, M. A., & Mehta, A. (2018). Gaps in male infertility health services research. *Translational andrology and urology*, 7(Suppl 3), S303-S309. <https://doi.org/10.21037/tau.2018.05.03>
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic inquiry*, 289, 331.
- Luk, B. H.-K., & Loke, A. Y. (2015). The Impact of Infertility on the Psychological Well-Being, Marital Relationships, Sexual Relationships, and Quality of Life of Couples: A Systematic Review. *Journal of Sex & Marital Therapy*, 41(6), 610-625. <https://doi.org/10.1080/0092623X.2014.958789>
- MacKian, S. (2003). A review of health seeking behaviour: problems and prospects. *Health Systems Development Programme*.
- Macovei, O.-I. (2015). Applying the theory of planned behavior in predicting proenvironmental behaviour: The case of energy conservation. *Acta Universitatis Danubius. Œconomica*, 11(4), 15-32.
- Madhukar, D., & Rajender, S. (2009). Hormonal Treatment of Male Infertility: Promises and Pitfalls. *Journal of Andrology*, 30(2), 95-112. <https://doi.org/10.2164/jandrol.108.005694>
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.
- Mascarenhas, M. N., Flaxman, S. R., Boerma, T., Vanderpoel, S., & Stevens, G. A. (2012). National, Regional, and Global Trends in Infertility Prevalence Since 1990: A Systematic Analysis of 277 Health Surveys. *PLOS Medicine*, 9(12), e1001356. <https://doi.org/10.1371/journal.pmed.1001356>
- Mehta, A., Nangia, A. K., Dupree, J. M., & Smith, J. F. (2016). Limitations and barriers in access to care for male factor infertility. *Fertility and Sterility*, 105(5), 1128-1137. <https://doi.org/10.1016/j.fertnstert.2016.03.023>
- Meng, M. V., Greene, K. L., & Turek, P. J. (2005). Surgery or assisted reproduction? A decision analysis of treatment costs in male infertility. *The Journal of urology*, 174(5), 1926-1931.
- Mihas, P. (2019). Qualitative data analysis. In *Oxford Research Encyclopedia of Education*.

- Mikkelsen, A. T., Madsen, S. A., & Humaidan, P. (2013). Psychological aspects of male fertility treatment. *Journal of advanced nursing*, 69(9), 1977-1986.
- Miner, S. A., Daumler, D., Chan, P., Gupta, A., Lo, K., & Zelkowitz, P. (2019). Masculinity, Mental Health, and Desire for Social Support Among Male Cancer and Infertility Patients. *American Journal of Men's Health*, 13(1), 1557988318820396. <https://doi.org/10.1177/1557988318820396>
- Moyo, S., & Muhwati, I. (2013). Socio-cultural perspectives on causes and intervention strategies of male infertility: a case study of Mhondoro-Ngezi, Zimbabwe. *African journal of reproductive health*, 17(2), 89-101.
- Mumtaz, Z., Shahid, U., & Levay, A. (2013). Understanding the impact of gendered roles on the experiences of infertility amongst men and women in Punjab. *Reproductive Health*, 10(1), 3. <https://doi.org/10.1186/1742-4755-10-3>
- Murphy, & Yelder. (2010). Establishing rigour in qualitative radiography research. *Radiography*, 16(1), 62-67. <https://doi.org/10.1016/j.radi.2009.07.003>
- Naab, F. (2010). Psychosocial Experiences of infertile men in Accra Metropolis. *Ghana Social Science Journal*, 7, 145-157.
- Naab, F., & Kwashie, A. (2018). I don't experience any insults but my wife does": The blame game of male infertility in Ghana. *South African Journal of Obstetrics and Gynaecology*, 24(2), 45.
- Nukunya, G. K. (2016). *Tradition and change in Ghana: An introduction to sociology-Revised and expanded edition* Woeli Publishing Services.
- Olanrewaju, F. O., Ajayi, L. A., Loromeke, E., Olanrewaju, A., Allo, T., & Nwannebuife, O. (2019). Masculinity and men's health-seeking behaviour in Nigerian academia. *Cogent Social Sciences*, 5(1), 1682111. <https://doi.org/10.1080/23311886.2019.1682111>
- Olenja, J. (2003). Editorial Health seeking behaviour in context. *East African medical journal*, 80(2), 61-62.
- Ombelet, W. (2011). Global access to infertility care in developing countries: a case of human rights, equity and social justice. *Facts, views & vision in ObGyn*, 3(4), 257-266. <https://pubmed.ncbi.nlm.nih.gov/24753875>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3987469/>
- Ombelet, W. (2013). The Walking Egg Project: Universal access to infertility care - from dream to reality. *Facts, views & vision in ObGyn*, 5(2), 161-175. <https://www.ncbi.nlm.nih.gov/pubmed/24753941>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3987356/>
- Osei, N. Y. (2016). Need for accessible infertility care in Ghana: the patients' voice. *Facts, views & vision in ObGyn*, 8(2), 125-127. <https://www.ncbi.nlm.nih.gov/pubmed/27909570>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5130302/>
- Padgett, D. K. (2016). *Qualitative methods in social work research* (Vol. 36). Sage Publications.
- Parrott, F. R. (2014). 'At the hospital I learnt the truth': diagnosing male infertility in rural Malawi. *Anthropology & medicine*, 21(2), 174-188. <https://doi.org/10.1080/13648470.2014.915618>
- Patel, A., Sharma, P. S. V. N., Kumar, P., & Binu, V. S. (2018). Illness Cognitions, Anxiety, and Depression in Men and Women Undergoing Fertility Treatments: A Dyadic Approach. *Journal of human reproductive sciences*, 11(2), 180-189. https://doi.org/10.4103/jhrs.JHRS_119_17

- Petok, W. D. (2015). Infertility counseling (or the lack thereof) of the forgotten male partner. *Fertility and Sterility*, 104(2), 260-266. <https://doi.org/10.1016/j.fertnstert.2015.04.040>
- Polit, D. F., & Beck, C. (2014). Essentials of nursing research: Appraising evidence for nursing practice. In: Wolters Kluwer/Lippincott/Williams Wilkins Health, Philadelphia, PA, USA.
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451-1458. <https://doi.org/10.1016/j.ijnurstu.2010.06.004>
- Polit, D. F., & Beck, C. T. (2013). *Study guide for essentials of nursing research: appraising evidence for nursing practice*. Lippincott Williams & Wilkins.
- Reindollar, R. H. (2017). Increasing access to infertility care- What will it take? *Fertility and Sterility*, 108(4), 600-601. <https://doi.org/10.1016/j.fertnstert.2017.09.002>
- Richard, J., Badillo-Amberg, I., & Zelkowitz, P. (2017). “So Much of This Story Could Be Me”: Men’s Use of Support in Online Infertility Discussion Boards. *American Journal of Men's Health*, 11(3), 663-673. <https://doi.org/10.1177/1557988316671460>
- Ritgak, A. D., & Simon, L. D. (2013). The Work of a Woman is to give Birth to Children: Cultural Constructions of Infertility in Nigeria [research-article]. *African Journal of Reproductive Health / La Revue Africaine de la Santé Reproductive*, 17(2), 102. <http://login.ezproxy.library.ualberta.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjrs&AN=edsjrs.23485925&site=eds-live&scope=site>
- Roberts, E., Metcalfe, A., Jack, M., & Tough, S. C. (2011). Factors that influence the childbearing intentions of Canadian men. *Human Reproduction*, 26(5), 1202-1208. <https://doi.org/10.1093/humrep/der007>
- Rochelle, T. L. (2019). Health and help-seeking behavior among Chinese men in Hong Kong: The influence of culture. *Psychology of Men & Masculinities*, 20(1), 71. <https://doi.org/10.1037/men0000146>
- Rosemarie, A. (2007). Thematic content analysis (TCA). *Descriptive presentation of qualitative data*, 1-4.
- Rouchou, B. (2013). Consequences of infertility in developing countries. *Perspectives in public health*, 133(3), 174-179.
- Rubin, A., & Babbie, E. (2011). Qualitative research: General principles. *Research methods for social work*, 436-455.
- Sale, J. E. M., Ashe, M. C., Beaton, D., Bogoch, E., & Frankel, L. (2016). Men’s health-seeking behaviours regarding bone health after a fragility fracture: a secondary analysis of qualitative data. *Osteoporosis International*, 27(10), 3113-3119. <https://doi.org/10.1007/s00198-016-3641-4>
- Schick, M., Rösner, S., Toth, B., Strowitzki, T., & Wischmann, T. (2016). Exploring involuntary childlessness in men—A qualitative study assessing quality of life, role aspects and control beliefs in men’s perception of the fertility treatment process. *Human Fertility*, 19(1), 32-42.
- Schytt, E., Nilsen, A. B. V., & Bernhardt, E. (2014). Still childless at the age of 28 to 40 years: A cross-sectional study of Swedish women’s and men’s reproductive intentions. *Sexual & Reproductive Healthcare*, 5(1), 23-29. <https://doi.org/10.1016/j.srhc.2013.11.001>
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International journal of applied research*, 3(7), 749-752.

- Shirani, F., & Henwood, K. (2011). Taking one day at a time: Temporal experiences in the context of unexpected life course transitions. *Time & Society*, 20(1), 49-68. <https://doi.org/10.1177/0961463X10374906>
- Sylvest, Koert, E., Birch Petersen, K., Malling, G. M. H., Hald, F., Nyboe Andersen, A., & Schmidt, L. (2018). Attitudes towards family formation among men attending fertility counselling. *Reproductive Biomedicine & Society Online*, 6, 1-9. <https://doi.org/10.1016/j.rbms.2018.06.001>
- Sylvest, R., R, Fürbringer, J. K., Schmidt, L., & Pinborg, A. (2016). Infertile men's needs and assessment of fertility care. *Upsala Journal of Medical Sciences*, 121(4), 276-282. <https://doi.org/10.1080/03009734.2016.1204393>
- Synodinos, C., & Bevan-Dye, A. (2014). Determining African Generation Y students' likelihood of engaging in pro-environmental purchasing behaviour. *Mediterranean Journal of Social Sciences*, 5(21), 101.
- Tabong, P. T.-N., & Adongo, P. B. (2013). Infertility and childlessness: a qualitative study of the experiences of infertile couples in Northern Ghana. *BMC pregnancy and childbirth*, 13(1), 72.
- Tyler, R. E., & Williams, S. (2013). Masculinity in young men's health: Exploring health, help-seeking and health service use in an online environment. *Journal of Health Psychology*, 19(4), 457-470. <https://doi.org/10.1177/1359105312473784>
- van der Merwe, A., Graewe, F., Zühlke, A., Barsdorf, N. W., Zarrabi, A. D., Viljoen, J. T., Ackermann, H., Spies, P. V., Opondo, D., Al-Qaoud, T., Bezuidenhout, K., Nel, J. D., Bailey, B., & Moosa, M. R. (2017). Penile allotransplantation for penis amputation following ritual circumcision: a case report with 24 months of follow-up. *The Lancet*, 390(10099), 1038-1047. [https://doi.org/10.1016/S0140-6736\(17\)31807-X](https://doi.org/10.1016/S0140-6736(17)31807-X)
- Vanclay, F., Baines, J. T., & Taylor, C. N. (2013). Principles for ethical research involving humans: ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, 31(4), 243-253. <https://doi.org/10.1080/14615517.2013.850307>
- Vassard, D., Lund, R., Pinborg, A., Boivin, J., & Schmidt, L. (2012). The impact of social relations among men and women in fertility treatment on the decision to terminate treatment. *Human Reproduction*, 27(12), 3502-3512.
- Verkuijlen, J., Verhaak, C., Nelen, W., Wilkinson, J., & Farquhar, C. (2016). Psychological and educational interventions for subfertile men and women. *Cochrane Database of Systematic Reviews*(3). <https://doi.org/10.1002/14651858.CD011034.pub2>
- Walsh, T. J. (2011). Male reproductive health and prostate cancer risk. *Current opinion in urology*, 21(6), 506-513. <https://doi.org/10.1097/MOU.0b013e32834bdf14>
- Wang, S.-C., Wang, S.-C., Li, C.-J., Lin, C.-H., Huang, H.-L., Tsai, L.-M., & Chang, C.-H. (2018). The Therapeutic Effects of Traditional Chinese Medicine for Poor Semen Quality in Infertile Males. *Journal of clinical medicine*, 7(9), 239. <https://doi.org/10.3390/jcm7090239>
- White, A., McKee, M., Richardson, N., Visser, R. d., Madsen, S. A., Sousa, B. C. d., Hogston, R., Zatoński, W., & Makara, P. (2011). Europe's men need their own health strategy. *BMJ*, 343, d7397. <https://doi.org/10.1136/bmj.d7397>
- WHO. (2002). *The world health report 2002: reducing risks, promoting healthy life*. World Health Organization.
- WHO. (2011). *WORLD REPORT ON DISABILITY*.

- WHO. (2012). Report of the meeting on the prevention of infertility at the primary health care level. *WHO, Geneva*, 12-16.
- WHO. (2016). *World health statistics 2016: monitoring health for the SDGs sustainable development goals*. World Health Organization.
- WHO. (2017). Infertility is a global public health issue. In: Hämtad 18-04-06 från <http://www.who.int/reproductivehealth/topics>
- Wischmann, T., & Thorn, P. (2013). (Male) infertility: what does it mean to men? New evidence from quantitative and qualitative studies. *Reproductive biomedicine online*, 27(3), 236-243. <https://doi.org/10.1016/j.rbmo.2013.06.002>
- Yousaf, O., Grunfeld, E. A., & Hunter, M. S. (2015). A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health psychology review*, 9(2), 264-276.
- Yusuf, A., Maitama, H., Amedu, M., Ahmed, M., & Mbibu, H. (2012). Socio-demographic correlates of psychological distress among male patients with infertility in Zaria, Nigeria. *African Journal of Urology*, 18(4), 170-174.
- Zaake, D., Kayiira, A., & Namagembe, I. (2019). Perceptions, expectations and challenges among men during in vitro fertilization treatment in a low resource setting: a qualitative study. *Fertility Research and Practice*, 5(1), 6. <https://doi.org/10.1186/s40738-019-0058-8>

Appendix B: Introductory Letter



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

Ref. No.:.....10701609.....

October 17, 2019

The Chairperson
NMIMR – IRB
University of Ghana
Legon

Dear Sir/Madam,

LETTER OF INTRODUCTION

I write to introduce to you Ezekiel Oti-Boadi an MPhil second year student of the School of Nursing and Midwifery.

The Scientific Review Committee of the School has approved the thesis topic: “**Health-seeking behaviours of men with infertility in the Accra Metropolis**”.

I hope that the board will consider the proposal and grant him Ethical approval to undertake the study.

Counting on your usual co-operation.

Thank you.

Yours faithfully,

Dr. Florence Naab
SUPERVISOR

COLLEGE OF HEALTH SCIENCES

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

Appendix C: Ghana Health Service clearance

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

MyRef. GHS/RDD/ERC/Admin/App/19/660
Your Ref. No.

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE



Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
GPS Address: GA-050-3303
Mob: +233-50-3539896
Tel: +233-302-681109
Fax + 233-302-685424
Email: ethics.research@ghsmai.org
22nd November, 2019

Ezekiel Oti-Boadi
School of Nursing and Midwifery
College of Health Sciences
Department of Maternal and Child Health
University of Ghana

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC046/11/19
Project Title	Health-seeking Behaviours of Men with Infertility in the Accra Metropolis
Approval Date	22 nd November, 2019
Expiry Date	21 st November, 2020
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report **after completion** of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....

Dr. Cynthia Bannerman
(GHS-ERC Chairperson)

CC: The Director, Research & Development Division, Ghana Health Service, Accra

Appendix D: Consent form

**NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR)
COLLEGE OF HEALTH SCIENCES, UNIVERSITY OF GHANA, LEGON**

INSTITUTIONAL REVIEW BOARD

NMIMR-IRB CONSENT FORM

Title: Health-seeking behaviours of men with infertility in the Accra Metropolis

Principal Investigator: Oti-Boadi Ezekiel

Address: P.O.BOX DT LG 43, University of Ghana, Legon-Accra.

Phone number: +233242730460

Email: otiboadi@yahoo.com

General Information about Research

This study seeks to understand the health-seeking behaviour of men with infertility in the Accra Metropolis. You have been selected to participate in this study because you are a male, 18 years and above, within the Accra Metropolis and you can speak English or Twi. Even though I will need your indulgence, you have the right to refuse and also to withdraw anytime you deem fit. After you have agreed to take part in this study, you will be required to sign this form after which you will be invited for an interview which will be audio-recorded. You are required to answer the questions that are asked based on your knowledge. However, you are free to decline from answering any question that makes you uncomfortable. The interview may last for 30-45 minutes.

Possible Risks and Discomforts

There are no anticipated potential risks as you engage in this study. However it is possible to encounter some emotional discomfort while answering some of the questions but you are not obliged to answer questions that will cause emotional discomfort. A clinical psychologist will also be provided to help you overcome your emotional discomfort. Contact details of Clinical psychologist: Dr. Mabel Oti-Boadi, Department of Psychology, Tel No: 0579777579

Possible Benefits

There are no direct benefits to you as a participant. However, the findings of the study will be used to educate other men who are experiencing infertility.

NMIMR-IRB Form A (Students Only)
Version Date: February 2018





**NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR)
COLLEGE OF HEALTH SCIENCES, UNIVERSITY OF GHANA, LEGON**

INSTITUTIONAL REVIEW BOARD

Confidentiality

You are not required to mention your name or give any information that will reveal your identity. The information you give during the interview will be audio-recorded with your permission. The actual audio recording will be accessible to the principal investigator and the research supervisors for research purposes. The audio recorded data will be destroyed after 5 years. Publication of this study will not include any information that may reveal your identity.

Compensation

You will be given snack in the form of soft drink and biscuit for your time and energy spent in answering the questions

Voluntary Participation and Right to Leave the Research

You have a free will to or not to engage in the study. After deciding to engage in this study you are free to withdraw from the study at any point in time. Note that your decision to withdraw from this study will not affect that interpersonal relationship that exists between you and the researcher. As soon as you withdraw, all your audio-recorded information will be deleted.

Contacts for Additional Information

In case of any questions or further clarification please contact any of the following individuals:

Name: Ezekiel Oti-Boadi

Contact: 0242730460

Name of Supervisor: Dr. Florence Naab

Contact: 0263741717

NMIMR-IRB Form A (Students Only)
Version Date: February, 2018





**NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR)
COLLEGE OF HEALTH SCIENCES, UNIVERSITY OF GHANA, LEGON**

INSTITUTIONAL REVIEW BOARD

Your rights as a Participant

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

nirb@noguchi.ug.edu.gh





**NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH (NMIMR)
COLLEGE OF HEALTH SCIENCES, UNIVERSITY OF GHANA, LEGON**

INSTITUTIONAL REVIEW BOARD

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title (*health-seeking behaviours of men with infertility in the Accra Metropolis*) has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ Date

_____ Name and signature or mark of volunteer

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

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

_____ Date

_____ Name and signature of witness

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

_____ Date

_____ Name Signature of Person Who Obtained Consent



NMIMR-IRB Form A (Students Only)
Version Date: February, 2018

Appendix E: Interview Guide

Introduction

I am Ezekiel Oti-Boadi, MPhil nursing student at the University of Ghana, Legon. My research topic is on Health- seeking behaviours of men experiencing infertility in the Accra Metropolis. This interview is for academic purpose so you are please encouraged to answer the questions without any hesitation. Also, you are permitted to ask for clarification to any of the questions that is not clear to you. You may also skip any of the questions if you are not comfortable to respond without any sanctions. Your responses will be kept confidential. You will not be identified with any of your responses. Thank you

SECTION A

BACKGROUND CHARACTERISTICS

1. How old are you?
2. Marital Status.....
3. Religion.....
4. Employment Status..... Specify.....
5. Level of education.....
6. How many children do you have?

SECTION B

Attitude of men experiencing infertility about health-seeking behaviour

1. What is your view about male infertility?
2. What makes you see yourself as susceptible to infertility?
3. How serious is male infertility?
4. What do you think about the care provided by fertility centers in Ghana?
5. What link exists between male infertility and being a man in the country?
6. What link exists between male infertility and seeking treatment for male infertility in the country?

Subjective norm of men experiencing infertility

1. What are your thoughts about male infertility?
2. Tell me about how you discovered you are having problems with infertility.
3. What made you decide to seek healthcare?
4. What are your beliefs about male infertility?
5. How are you perceived in your community?
6. What are the concerns of your wife, friends and family about your situation

Perceived behavioural control of men experiencing infertility

1. What initially prevented you from seeking healthcare?
2. What barriers did you face in accessing healthcare for infertility?
3. What facilitated or motivated you to seek healthcare for infertility?
4. How will you accept the idea of male infertility if it is covered by the NHIS?

5. What is your view concerning the fact that educating men on male infertility increases men seeking healthcare? What are some ways to help increase awareness on male infertility?
6. What is your view concerning the fact that educating men on male infertility increases men seeking healthcare? What are some ways to help increase awareness on male infertility?
7. What do you think can be done to improve access to healthcare for men experiencing infertility?
8. What can the government do?
9. What can the community do?
10. What can the family do?
11. What can men do for themselves?
12. How important do you see the government, community and your own effort in seeking healthcare?

Intention towards health-seeking of men experiencing infertility

1. Before you sought for health care what were your thoughts?
2. Tell me how you decided to seek health care
3. What motivated your decision to seek care?
4. Tell me about your experience seeking healthcare for infertility
5. What else did you do to improve your chance of having a child? What worked? What didn't work?

Health-seeking behaviour of men experiencing infertility

1. Who did you speak to once you realized you were experiencing challenges?

2. Where did you first seek for care when you realized you had a problem?
3. How would you describe your views and thoughts about health seeking?

Thank You.

Appendix F: Profile of participants

Pseudo name	Age	No of years of infertility	Gender	Languages spoken	Religion	Education status	Children	Job status
Kofi 01	38	5	Male	Hausa English Twi	Muslim	Tertiary	None	Employed Banker
Kwame 02	32	3	Male	Ga English	Christian	Tertiary	None	Employed Revenue Collector
Kojo 03	35	5	Male	English Ewe	Christian	Tertiary	None	Employed Marketing manager
Kwesi 04	37	3	Male	English Ewe	Christian	Tertiary	None	Employed Cashier
Charles 05	40	2	Male	English Twi	Christian	Tertiary (Masters)	None	Employed Teacher
Nana 06	32	2	Male	English Twi	Christian	Tertiary	None	Self- employed Businessman
Adjei 07	39	8	Male	Twi English	Christian	Secondary	None	Employed Driver
Ohene 08	32	1 ½	Male	Twi English	Christian	Tertiary	None	Employed Agronomist
John 09	40	4	Male	Ewe English	Christian	Secondary	None	Self- employed Goldsmith
Paapa 10	39	4	Male	English Twi Ewe	Christian	Tertiary	None	Employed Accountant
Dan 11	41	4	Male	English Twi	Christian	Tertiary	None	Employed Banker
Asare 12	39	10	Male	Twi English	Christian	Tertiary	None	Self- Employed Businessman
Kwabena 13	42	6	Male	Ewe English	Christian	Diploma	None	Employed Teacher

Appendix G: Codes and Description

Codes	Descriptions
ATT	Attitude of men experiencing infertility
SN	Subjective norm of men experiencing infertility
PBC	Perceived behavioural control of men experiencing infertility
HSI	Health seeking intention of men experiencing infertility
HSB	Health seeking behaviour of men experiencing infertility
CS	Coping strategies of men experiencing infertility
MC	Misconception about male infertility
SHSH	Strategies to improve the health seeking behaviours of men experiencing infertility