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# Exploring the health-seeking behaviour of men with infertility in Southern Ghana

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## Abstract

**Background:** Despite the rising prevalence of male infertility and the challenges associated with its treatment, there is limited documentation on their health-seeking behaviours worldwide. Health-seeking behaviours are closely linked to a nation's health status and economic growth, and they are essential as they define disease outcomes and acceptance of health care. In Ghana, little is known about the health-seeking behaviours of men experiencing infertility.

**Objective:** The aim of this study was to explore the health-seeking behaviours of men experiencing infertility in the Accra Metropolis.

**Methods:** An exploratory, descriptive design was employed, and snowball and purposive sampling techniques were used to recruit 13 men diagnosed with and who self-reported to have infertility. In-depth face-to-face interviews were conducted using a semi-structured interview guide, each of which lasted between 45 and 60 minutes. The interviews were audio-recorded, transcribed verbatim, and analysed using content analysis.

**Results:** Two major themes emerged from the data: the attitude of men's health-seeking behaviour (attitude of men based on health workers' behaviour, attitude of men about the seriousness of infertility, attributing infertility to female ailment and reaction to diagnosis) and experiences of participants with infertility (personal beliefs about male infertility, beliefs of significant others, family influence and community influence). Participants were hesitant to seek healthcare due to negative healthcare provider attitudes. The negative impact of male infertility included the significant disruption to daily life activities and unproductivity at work. Men often denied infertility diagnoses, attributing them to female health problems.

**Conclusion:** The findings of this study indicate that men held unfavourable attitudes, as they attributed infertility solely to females. Hence, involving men in infertility discussions and treatments could help to increase awareness and engagement in fertility care. The findings of this study have implications for nursing practice, policy formulation, and infertility research.

**Keywords:** Behaviour, health-seeking, men, infertility, Ghana

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## INTRODUCTION

Infertility is a major public health concern affecting the psychological and social well-being of both males and females worldwide [1,2]. The World Health Organization and World Bank rank it as the fifth most serious disability among individuals [3]. It affects 25% of

couples in low- and middle-income countries and 15% in high-income countries, with 72.4 million couples globally experiencing infertility [3,4]. Primary infertility occurs without a prior pregnancy, while secondary follows a previous pregnancy [5]. Male factor infertility contributes 40%, female factor 40%, and combined factors 20% of cases. Approximately one in four to one in six couples experience infertility, impacting individual, family, and public health [6-8].

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Global surveys indicate high infertility rates in West, Central, and Southern Africa, with lower rates in North and East Africa [9]. A decade-old study in Ghana found infertility rates of 11.8% for women and 15.8% for men [10]. The Ghana Health Service reported rising male infertility in the Upper East Region, but data on the southern sector is limited. Addressing infertility, especially among men, could improve population health outcomes [11]. In high-income countries, male infertility rates are comparatively lower: 9% in Finland, 10.1% in the UK, and 12% in the USA [12]. In Sub-Saharan Africa, rates range from 9% to 30% [13]. Despite Ghana's high male infertility rate of 15%, it has received limited attention [10]. Attitudes towards medical conditions and associated management are significant contributors to health-seeking behaviour. In comparison with other health-related conditions, poorer health-seeking attitudes towards infertility have been recorded [14]. The attitudes of health workers also play a significant role in men experiencing infertility [15]. It is generally known that men attribute infertility to medical conditions affecting only female partners [16]. Some men experiencing infertility have reported that the condition affects all aspects of their lives, and they are willing to seek treatment for their medical diagnosis, although they are unwilling to disclose their status to others [17,18].

Conversely, some men are more inclined to use non-medical approaches in fertility-related healthcare [20,21,22]. For instance, in some African countries like Zimbabwe, men believe that infertility is a result of 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 [6]. Men only seek medical care when religious and traditional methods fail because they believe the cause is more spiritual than physical [6,23]. In Ghana, societal beliefs often support the notion that men cannot experience infertility, which makes men reluctant to seek healthcare [11]. It is mostly the women who seek assistance first, and the man is only contacted when the woman is considered fertile [19]. This means that issues of masculinity, culture and religion need to be explored for understanding the health-seeking behaviour of men with infertility.

Infertility in Ghana is a growing concern as female infertility is more frequently investigated than male infertility [24-25]. Despite the significant psychosocial burden on men, few studies in low- to middle-income countries focus on male participants [24]. Addressing male infertility can reduce the intensity and cost of interventions needed for couples to achieve pregnancy [26-27]. However, male infertility is often overlooked, which can lead to increased use of expensive assisted reproductive technologies and less effective infertility care [28]. Men experiencing infertility in Ghana are mostly coerced by their wives, neighbours, friends and other family members to seek health care [19,29,30]. Available evidence suggests that a central issue affecting access and use of healthcare

facilities for infertility care is health-seeking behaviour [31]. Nonetheless, men in low-to-middle-income countries who demonstrate positive fertility-related health-seeking behaviours are not able to access treatment due to limited access to fertility centres [4]. In Ghana, fertility clinics are privately owned and expensive to the average Ghanaian couple [50]. Literature on infertility in Ghana is scarce, hence the relevance of this study in seeking to explore the health-seeking behaviours of men with infertility in Southern Ghana.

## MATERIALS AND METHODS

### Study design and sites

A qualitative approach using an exploratory design was employed to elicit responses for health-seeking behaviour among men experiencing infertility. Thirteen (13) men with self-reported infertility were recruited. Participants recruited had been experiencing infertility for at least 12 months preceding the study, could express themselves in Asante Twi (a local dialect) or English, and were attending or receiving treatment from two health facilities within the Accra Metropolis. In a study by Hennink & Kaiser, it was stated that data can be saturated with a relatively small number, between 9 - 17 interviews [23]. The data got saturated on the 13th person interviewed.

Men who had female partners diagnosed with infertility and were undergoing treatment were excluded in the absence of evidence in support of their infertility status.

### Research Setting

This study was conducted in the Accra Metropolis, which has the largest population size in Ghana. It has most of the facilities for the treatment of individuals experiencing infertility. According to the local government structure, Accra Metropolis is divided into eleven (11) sub-metropolitan areas as follows: Ablekuma Central, Ayawaso West-Wuogon, Ablekuma North, Ablekuma South, Okaikoi South, Ashiedu Keteke, Ayawaso Central, Ayawaso East, La, Okaikoi North, and Osu Klottey. In terms of health facilities, there are a total of 28 government hospitals including Greater Accra Regional Hospital, 60 private hospitals, 130 health centres, and Korle-Bu Teaching Hospital (KBTH) which is a major referral centre, and the University of Ghana Medical Centre (UGMC) which is the first quaternary health facility in Ghana. The Greater Accra Regional Hospital caters for some referrals from the entire region.

According to the Fertility Society of Ghana (FERSOG), there are about fourteen (15) recognised fertility centres in Ghana, out of which 11 facilities are located in the Greater Accra region. Some of the hospitals within the Accra Metropolis that provide fertility services are Lister Hospital & Fertility Centre, Airport Women Hospital, Finney Hospital & Fertility Centre, Tantra Community Clinic Fertility Center, St. John's Hospital, Lapaz Community Hospital, Lighthouse Mission Hospital, Fertility &

specialist centre, Medifem Hospital and Del International Hospital. Two centres in the Metropolis were chosen because these facilities provide fertility services for both men and women experiencing infertility. Two centres in the Metropolis were chosen because of the range of services offered to individuals experiencing infertility.

### Data collection

A semi-structured interview guide was used to conduct an in-depth face-to-face interview with each participant. This allowed efficient probing of participants' responses and also redirected participants' responses that were out of context [32]. The interview guide captured the demographic characteristics of participants and health-seeking behaviour. The interview guide was developed by the researchers in accordance with the study objectives and gaps in previous literature.

Permission for data collection was obtained from the authorities of the chosen facilities after considering ethical clearance from the Noguchi Memorial Institute for Medical Research (NMIMR) (NMIMR-IRB CPN 029/19-20) and the Ghana Health Service Ethical Review Committee (GHS-ERC046/11/19). Multiple visits were made to the two (2) selected fertility centres within the Accra Metropolis to recruit participants, which helped establish rapport and build a trusting relationship between the researcher and participants. The nurses at the OPD and consulting rooms were first contacted, and the purpose of the study was explained to them to help identify potential participants through snowballing and purposive sampling techniques. Flyers were given to the nurses to post on their notice boards and to distribute to potential participants. The nurses introduced the first author to the gynaecologist and physicians who were directly involved in the care of the participants. During data collection, the gynaecologist and physicians attending to the patients recruited three participants from each facility through purposive sampling, adhering to the inclusion criteria and introducing them to the first author. Data saturation was achieved during the 13th interview; however, the researcher conducted three additional interviews, which did not yield any new information.

A date and time were scheduled to interview participants who voluntarily agreed to be interviewed at their places of convenience. Participants were made to sign the informed consent form to indicate their willingness to participate in the study after the study was explained to them in simple language. Participants were made aware that they could withdraw from the research if they wished. The in-depth interviews were conducted from December 2019 to March 2020. With permission from the participants, all interviews were audio-taped and transcribed verbatim. Prior to the interview, the interview guide was piloted among two men from different hospitals. Interviews were conducted in the English language or Asante Twi (a local dialect) based on the participants' preferences, which contained questions on the health-seeking behaviour of men with infertility. The

duration of the interview was approximately between 45 to 60 minutes. Arrangements were made with a clinical psychologist to attend to any emotional problems during the interviews. However, there was no need for any psychological intervention during the interviews.

### Data Analysis

Content analysis was conducted during the analysis of this study [33]. According to Stemler (2000), it involves immersing oneself in the data and unit of meaning, condensing the meanings, and categorising and forming themes. The next step was to find meaning; with this, several statements by respondents were replaced with a single idea without distorting the meaning. The next step condensed these words into meaningful codes, through which codes were shortened to a single idea identified. The codes were then categorised into themes and subthemes. The process helped the researchers organise and peruse all transcribed data into common themes, which provided a real presentation of the data [35]. The main themes and subthemes were constantly revised until they were appropriate for the presentation of the findings. Attention was given to participants' divergent views and minor responses to avoid any generalised conclusion [36]. In all, two themes and eight subthemes were identified.

### Methodological rigor

The participants' responses were reviewed at the conclusion of each interview session to ensure accuracy in data collection. Each interview was transcribed verbatim and analysed before subsequent interviews to aid the researcher in understanding the responses and content. Transferability was ensured by furnishing a comprehensive account of the methodology and interview procedures. To maintain dependability, there was adherence to the research methodology at every stage of the study. The study's setting, procedures, and steps were clearly delineated while maintaining a detailed audit trail. To ensure the validity of the research, a careful examination of interviewer perspectives and potential biases to prevent them from impacting the study's outcomes. Complete transcripts of audio recordings were created, and direct quotations were employed to bolster emerging themes. Additionally, a comprehensive audit trail, including field notes, feedback from participants, and summaries, was utilised to offer insights into the setting and context of the interview, thereby enriching the analysis process.

## RESULTS

### Demographic characteristics of participants

The participants' ages ranged from 32 to 42 years. The results suggest that participants' number of years of experience of infertility ranged from a year and a half to ten (10) years. The majority of the participants were Christians. The highest level of education among these participants was tertiary. Each participant was given a pseudonym to maintain confidentiality throughout the data collection, transcription and interpretation of findings.

### Theme 1: Attitude of men with infertility and health-seeking behaviour

Attitude refers to the participants' emotions, feelings or reactions towards infertility. All the participants were open and forthcoming to share their experiences during the interview. These men saw infertility as a problem for women rather than men. Some of the participants reported that infertility affected their role performance in society, which affected their attitude. The participants were of the view that their attitudes depended largely on the behaviour of health workers and described their attitude (whether good or bad) to be the consequence of the behaviour of staff, the seriousness of their infertility, their perceptions of male infertility, and their reactions to the diagnosis.

#### The attitude of Men based on the behaviour of healthcare workers

The study revealed that male patients experienced a variety of behaviours and emotions from healthcare workers when seeking infertility treatment, which led to their reluctance to seek healthcare services. A 40-year-old goldsmith who had been married for four years without a child disclosed as follows: "In Government hospitals, sometimes, the nurses do not respect you 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 do not want to go to infertility hospitals. Sometimes, you can be there, and some nurses will feel pompous. Some are good, and others will handle you in a way that will discourage you or won't make you go back" (John, 40 years).

Some men indicated that contradictory information from different medical doctors affected their attitude towards seeking health care. This is demonstrated by the following 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 problems, some are saying I should go for surgery and others are suggesting IVF (In Vitro fertilisation) and other alternative treatment. So, I do not know what I should even go in for" (Kwame, 32 years).

Others indicated that the inadequate level of knowledge and poor competency in the area of male infertility treatment also affected their attitude towards seeking health care. This is indicated by a 38-year-old banker who had been married for five years without a child, who said: "I think for now majority do guesswork, 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 guess by saying, "You should try this and see if this could be the issue" (Kofi, 38 years).

#### The attitude of men about the seriousness of infertility

This explains how men view infertility and whether it is worth seeking treatment or not. Several of the participants were of the opinion that it was a condition that affected their everyday life and productivity at their workplaces, therefore making it a serious medical condition. Participants reported that male infertility had reduced their level of confidence,

affected their social life and brought them pain and suffering, as clearly lamented by a 32-year-old agronomist who had been married for 5 years without a child: "Well, male infertility is serious because I have been married for over five years without a child. Now, male infertility is more serious than infertility in women or ladies. It puts you in a very uncomfortable situation, and it can negatively impact your health and social life. It also reduces your confidence at the same time and brings a lot of pain and trouble" (Ohene, 32 years).

Furthermore, a 32-year-old businessman who had been married for two years without a child pointed out how infertility 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 years). As a way of expressing the seriousness of infertility, the men explained the need to have a successor and avoid insults from friends and the public. Asare, a 39 - 39-year-old businessman who had been married for 10 years without a child, had this to say: "Oh, it's serious because if a married man cannot give birth, it's a serious issue...I have had a wife for so many years, and there is no child to inherit me. I need to have my own family. 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 things that will irritate you to do something you will regret later" (Asare, 39 years).

#### Attributing infertility as a female ailment

Attributing infertility solely to women is a misguided and incomplete perspective that overlooks the contribution of male factors to fertility. Nevertheless, the majority of the men in this study had this perspective. This was captured by a 41-year-old banker who had been married for four years without a child as follows: "We always have this perception that women are to be blamed when it comes to not having babies. So if there is no child in the marriage, we always think that the cause should be from the women" (Dan, 41 years). A 35-year-old marketing manager who had been married for five years without a child was of the opinion that: "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" (Kojo, 35 years).

#### Reaction to the diagnosis

The participant's reaction to the diagnosis were related to how they behaved when informed about their diagnosis. Several of the participants were in a state of denial and disbelief about the diagnosis. During the interviews, some participants were still in a state of disbelief as to whether they had 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 have this condition. For now, I cannot confirm that I have the condition or not" (Dan, 41 years).

Some of the participants doubted the authenticity of the machines used for the tests and, therefore, did not believe they had infertility. A 40-year-old teacher who had been married for 2 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 am infertile. I think the machine they used for the test may be faulty, and the results are wrong. This is because every man-made thing has some limitations, so I think the machines used were malfunctioning, and that is why I had those results. So, I can't trust that" (Charles, 40 years).

## Theme 2: Experiences with infertility

The men's experiences with infertility were based on their beliefs about infertility, and these beliefs were categorised into personal beliefs and beliefs of significant others. Also, family and community influences were described as part of their experiences.

### Personal beliefs about male infertility

Participants attributed the cause of their infertility to a medical cause rather than a spiritual one. A 37-year-old cashier married for three years without a child had this to say: "I have been married for three years, and I do not think male infertility is spiritual but rather a medical condition" (Kwesi, 37 years).

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 and our lifestyle sometimes can cause damage to our sperm. Maybe your diet, the food we eat, sometimes you wear things that are tight because they said our testis does not like heat. The work we do, 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" (Paapa, 39 years).

### Beliefs of significant others

Findings indicated that participants acknowledged being influenced by the beliefs of significant others in so many ways to seek health care. Nana, who had been married for two (2) years without a child, reported pressure from friends: "I do not have many friends, but the few I have do not know I am having such a problem, and this is to avoid embarrassment due to the sensitive nature of this condition. My friends believe that if you marry, you must give birth immediately, and when they don't see that, they will pass comments like, 'It's been a long since you married why have you not given birth?' This is what made me visit the hospital (Nana, 32 years).

The men who disclosed their condition to their friends reported different levels of mockery. A marketing manager recalled how his friends laughed at him and asked him to

prove that he was 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 a child" (Kojo, 35 years).

On the other hand, some participants indicated that their significant others encouraged them with scriptures and testimonies and convinced them to seek healthcare. A driver, married for eight (8) 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 10 years, 20 years. They share testimonies like how a 60-year-old woman gave birth just to encourage you. Then others also recommend a clinic to you" (Adjei, 39 years).

### Family influence

Almost all the participants encountered pressure from family members. In most cases, the mothers-in-law questioned the womanhood of their daughters-in-law when there was no pregnancy, a reason for their sons to marry another woman so they could have their grandchildren. Others reported how their wives pressured them to seek healthcare. Without knowing who is experiencing infertility, the in-laws are reported to be the greatest source of pressure for daughters-in-law. A teacher who had been married for six years testified that his mother and siblings were the main source of pressure on his wife. He shared his experience as follows: "They give my wife the pressure to bring forth a child. There is a little pressure from my in-laws' side" (Kwabena, 42 years).

An agronomist and a teacher shared their experiences on how they sought health care. They recounted as follows: "I have been married for a year and a half, 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 also had to go and check. The pressure that night was what prompted me to visit the hospital." (Ohene, 32 years). "There are a couple 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, and whenever she sees a child or delivers someone, she comes home moody, expecting that it should have been hers. This really puts pressure on me to find solutions to the problem" (Asare, 39 years).

### Community influence

These men described the lack of respect from people in their communities. According to a 37-year-old 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 opportunity even if you qualify, and sometimes, they even look down on you" (Kwesi, 37 years).

John, a 40-year-old goldsmith who had been married for four years, agreed with what Kwesi said: "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 them because they think if you do not have children, you cannot lead them. If you talk, they don't even take your ideas" (John, 40 years).

## DISCUSSION

Participants shared varied concerns about their health-seeking behaviour. Poor healthcare provider attitude was a contributory factor in this study, and this has also been established in previous literature and is a truly disturbing factor for many male clients with infertility [15,37]. The seriousness of infertility facilitated their health-seeking behaviour. Men who perceived infertility as serious sought care, but those who did not see it as serious were in denial. In our study, participants revealed that they delayed seeking treatment because they assumed that infertility was a female-related problem. This perception is what makes men reluctant to seek healthcare for infertility, and this is consistent with several other studies in Ghana and elsewhere [16,18,19,38,39]. This explains why men assume there is nothing wrong with them while they push their wives to seek treatment [19,20]. This could also be attributed to why wives are always blamed by the public when couples experience 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 [40,41]. Moreover, the finding that the men in the current study denied their infertility diagnosis contrasts with evidence which revealed that men in the UK diagnosed with infertility accepted their status [42]. Even though the views people have about others affect the way they behave and perform some actions, internal factors such as personal beliefs were 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 [43]. Due to the role personal perceptions play in seeking infertility health care, the need to understand the personal views of men experiencing infertility is essential [24], and strategies to improve the health outcome of men with infertility should be explored [43].

The men were influenced by significant 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 order to avoid negativity from significant others, disclosure of their infertility state to others was difficult to consider, and this was a behaviour reported by previous studies as well [45,46]. It is interesting to note that the family of the men exerted pressure on the wives of the men rather than the men for being 'responsible' for the couple's childlessness. This misperceived blame for infertility has been previously reported in Ghana and other countries [13,19,47,48]. It is suggested from our current finding, however, that the attribution of infertility to women is a deep-rooted Ghanaian notion requiring more male-oriented reproductive health education to uproot.

Another unique finding of this study was the role the community has to play concerning 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 contributed to their decision to seek health care or not, consistent with previous literature [13,16]. This finding is an indication that society has a significant role to play in the health-seeking behaviour of men experiencing infertility.

## Conclusion

The results of this study suggest that men's perception of infertility as a female issue is a concerning factor that may lead to negative health outcomes. It is imperative to raise awareness among men about the multifactorial nature of infertility and to encourage their involvement in seeking health care and treatment.

## DECLARATIONS

### Ethical considerations

Ethical approval was obtained from the Noguchi Memorial Institute for Medical Research (NMIMR-IRB CPN 029/19-20) and the Ghana Health Service Ethical Review Committee (GHS-ERC046/11/19) before the commencement of the study.

### Consent to publish

All authors agreed to the content of the final paper.

### Funding

None

### Competing Interest

No potential conflict of interest was reported by the authors.

### Author contributions

EO conceptualized the study. FN and EO prepared the initial draft of the manuscript. Data collection, analysis, management, and manuscript review, including the final

revisions, were collaboratively undertaken by JK, EO, FN, and MMB.

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### Availability of data

Data is available upon request to the corresponding author.

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