Original Article

Understanding the threats of infertility among women in Rural Northern Ghana

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Abstract

Having a biological child is an essential part of marriage in northern Ghana. Women who are unable to bear their own children therefore go through psychological and social trauma. However, there is paucity of studies on the psychological and social burden that infertility has on women in rural northern Ghana. The purpose of the study was to explore the threats that infertility poses to women. It is a qualitative research with an exploratory descriptive design. Fifteen women attending fertility clinic in a Mission Hospital in the Upper East Region were purposively sampled for the study. The data were collected by interviewing the women using a semi-structured interview guide. The interviews were audio recorded, transcribed verbatim and analysed using content analysis. The study revealed that the women suffered psychological threats such as anxiety, stress, and low mood. Social threats suffered by the women centered on marital instability, social pressure, social stigma and decreased social recognition. Women did not receive the needed support from their husbands and other members of the family in their struggle for conception. Health education on infertility should include husbands and others in the family.

Keywords:

Ghana; Infertility; Psychological threats; Social threats; Women

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Introduction

Infertility is the inability to attain a successful pregnancy after 12 months of unprotected sex, appropriately timed unprotected intercourse, or therapeutic donor insemination (American Society of Reproductive Medicine Practice Committee, 2013). From the epidemiological perspective, infertility is defined as inability of a woman of reproductive age who is at risk of pregnancy, to conceive despite continuous unprotected sexual intercourse for two years or more (World Health Organization (WHO), 2014a). Infertility is a global problem affecting between 50 million and 80 million people translating into 8% to 12% of couples worldwide (WHO, 2014b). The estimated prevalence of infertility is 30% in sub- Saharan Africa, 28% in South-Central Asia and 24% in South-East Asia (WHO, 2009).

A community-based survey using 2,179 randomly selected participants within the ages of 15 to 49 years indicates that the prevalence of infertility in rural Ghana is 11.8% among women and 15.8% among men (Geelhoed, Nayembil, Asare, Schagen van Leeuwen & Van Roosmalen, 2002). People of rural background and low income bracket find it difficult to get the needed medical attention to solve infertility related problems because of treatment cost, long duration of treatment, frequent visits to the hospital and long distances they have to travel for these services (Jajoo & Chandak, 2013; Oladokun et al., 2009).

Infertility places a huge psychological burden on the infertile couple, especially on the woman and it may lead to depression, suicidal tendencies and other psychological conditions (Cousineau & Domar, 2007; Dimkpa, 2010; Deka & Sarma, 2010; Naab, Brown & Heidrich, 2013). Infertility is a major cause of depression, grief, guilt, and social isolation among couples in Nigeria (Oladokun et al., 2009). In some cultural settings in Africa, childless couples are even not permitted to play leading roles in important family functions (Adewunim et al., 2012; Oladokun et al., 2009). Barden-O'Fallon (2005) also revealed that in Malawi, women with infertility are not respected in society.

Though the external family system is supposedly supportive in various aspects of life, in infertility, they rather worsen the plight of the infertile woman by making the issue of childlessness a family matter (Omoaregba et al., 2011). Eventually, infertile women are most likely to find themselves in polygamous marriages because husbands whose wives are unable to become pregnant are often encouraged by relatives to marry another wife or at least get children through another woman for the continuity of the family lineage (Omoaregba et al., 2011). In Iran, a qualitative study among 25 infertile women established that, infertility is the main cause of social stigma, loss of social status, domestic violence, marital instability and social isolation (Hasanpoor-azghdy, Simbar & Vedadhir, 2015). Again, a quantitative study in Nigeria showed that, 97 (41.6%) women suffered psychological torture, ridicule, physical abuse, verbal abuse and deprivation meted out to them by husbands and mothers-in-law as a result of their inability to deliver (Anozie, et al., 2007). Furthermore, a qualitative study conducted in the Upper West Region of Ghana revealed that the participants were not happy in their marriages because the primary aim was to have children but, in their case, it was not forthcoming (Tabong & Adongo, 2013). Some of the women reported that, mothers-in-law were their source of unhappiness by persistently demanding grandchildren (Tabong & Adongo, 2013).

Though the negative effects of infertility have been investigated in the southern Ghana (Naab et al., 2013; Donkor & Sandall, 2007; Donkor, 2008), there is paucity of such studies in the rural settings of northern Ghana. The purpose of this study was therefore to explore the threats that infertility poses to women in rural northern Ghana. This will add to the existing knowledge revealed by studies on infertility in Southern Ghana.

Design and methods

Research Design

This study employed exploratory qualitative approach. This design allows new insights or ideas to be generated, thus helping to more precisely understand a problem (Mustapha, 2011). This method was used because it allows exploration of participants' knowledge and experience. This method can also be seen as empowering and democratic since participants are given the opportunity to express themselves to the best of their knowledge.

Research Setting

The study was conducted in a Mission Hospital in the Upper East Region of Ghana. This facility was chosen because of the presence of a permanent obstetrician/gynaecologist.

Target population and Sampling Technique

The target population for the study consisted of women attending fertility clinic in the Mission Hospital who have been married for at least a year and engaged in unprotected sexual intercourse without contraceptive use yet are unable to conceive. Purposive sampling technique was used to select participants for the study. The sample size for this study was 15 women with infertility problems and this was based on data saturation.

Data Collection Tool

Data were collected using a semi-structured interview guide which was developed by the researchers based on the purpose of the study. The guiding questions were supplemented with probing questions and field notes were taken.

Procedure for Data Collection

Permission to collect data was obtained by formally writing a letter to the authorities of the Mission Hospital. In the field, two nurses who work in the consulting room of the obstetrician/gynaecologist acted as recruitment agents. Women who met the inclusion criteria and agreed to participate in the study signed or thumb printed a consent form before they were interviewed. Face-to-face interviews were conducted in an office of the hospital and each lasted 25- 30 minutes. Permission was sought from the participants to enable audio recording of the interviews and take field notes. A female research assistant was trained to conduct the interviews for participants who were not comfortable with the principal researcher who is a male. A counselor was arranged to intervene in case of emotional breakdown of participants during interviews. But the interview sessions were properly handled and there was no incident that warranted such intervention.

Data Processing and Analysis

Data were analysed using content analysis. Each interview was transcribed directly into a personal computer taking into account field notes and non-verbal cues observed during the interviews. The transcribed data were read severally to understand the perspective of the participants. The transcripts were coded and sorted into themes and subthemes based on how differently they were related. Data were analysed concurrently with data collection, allowing the researchers to refocus their lenses as the interviews progressed to ensure that the most essential information was elicited.

Ethical Clearance

Ethical clearance was obtained from the Ethics Review Committee of Noguchi Memorial Institute, University of Ghana, Legon. This study was conducted as part of a broader on-going study on factors influencing the practice of child adoption. The ethical principles of research involving human subjects which essentially centres on respect for human dignity, beneficence and justice (Polit & Beck, 2004) were followed. Anonymity was ensured by labeling each participant's information with an identification code. Before recruitment, each participant was given the consent form which also contained the general information on the study to read. For those that could not read, the general information was explained to them in Kusaal, Frafra or Mossi, all of which the principal researcher understands.

Results:

Socio-Demographic Characteristics of Participants

Fifteen (15) married women with ages ranging from twenty-four (24) to forty (40) years participated in this study. Four (4) of them were in a polygamous marriage and eleven (11) in monogamous marriage. The majority of them, ten (10), were Muslims and a minority group of five (5) Christians. With regard to the educational background, five (5) participants had no formal education, two (2) participants dropped out of primary school, one (1) participant had junior, one (1) had senior secondary education, and six (6) participants were educated up to the tertiary level. The participants were of four tribes: Five (5) were Mossi, five (5) were Kusaasi, three (3) were Busanga and two (2) Frafra. Out of the fifteen participants, nine (9) were having primary infertility and the remaining six (6) had secondary infertility. The table below is a summary of the demographic characteristics. The thematic findings are described subsequently

Table one: Socio-Demographic Characteristics of Participants

Pseudo-nym	Age	Educational Level	Years of Marriage	No. of children	Occupa-tion	Religion	Tribe	No. of wives of husband
FW1	28	None	13	2	Housewife	Muslim	Mossi	1
FW2	40	None	16	None	Farming	Muslim	Mossi	2
FW3	29	None	10	2	Trading	Muslim	Mossi	1
FW4	26	Tertiary	5	None	Teacher	Muslim	Kusaasi	1
FW5	34	Primary	12	None	Trader	Muslim	Mossi	2
FW6	30	Senior Secondary	7	1	Trader	Christian	Kusaasi	1
FW7	24	Tertiary	1.5	None	Teacher	Muslim	Busanga	1
FW8	25	Tertiary	2	None	Teacher	Muslim	Busanga	2
FW9	31	None	4	None	Housewife	Muslim	Kusaasi	1
FW10	30	Primary	5	None	Housewife	Muslim	Kusaasi	1
FW11	27	Tertiary	6	1	Nursing	Christian	Frafra	1
FW12	37	Tertiary	9	None	Civil servant	Christian	Busanga	1
FW13	34	Junior Secondary	7	1	Housewife	Muslim	Mossi	2
FW14	31	None	5	None	Civil servant	Christian	Kusaasi	1
FW15	28	Tertiary	6	1	Nursing	Christian	Frafra	1

Psychological Threats

Psychological threats are consequences of infertility that pertain to the mind of the affected persons. The findings of the study indicated that the inability to conceive puts a huge psychological burden on women. Psychological threats were expressed in the form of anxiety, stress and low mood.

Anxiety

The women's description of anxiety was centred on worry, not feeling comfortable, doubt regarding when they could become pregnant, fear and feeling of insecurity.

Some of the women were anxious about the situation of infertility hence describing it as worrying.

> *"It worries me that I am not getting pregnant. Because when I had my wedding, that same month I became pregnant and gave birth. The second born was also easy but this one I don't know why it has taken this long. I have been struggling for the past 6 years but no solution yet"* **(FW3).**

Some women explained how they kept looking forward to becoming pregnant. Their expectation was centred on missing a monthly menstrual bleeding as a sign of conception.

> "*Every month I just pray that my menses don't come. Any time, I see my menses I get worried because I know that it did not work. Some-*

times, people will be asking me if I am sick because my face is not good but I know it is all because of the childbirth problem" **(FW10).**

As the number of years of marriage keeps increasing, some of the women are beginning to doubt if they will become pregnant.

"If I see somebody with a kid the way they play with the kid I admire it and wish that child is mine. Sometimes, I wonder when I will get my own because the years are increasing. Someone will just marry and get pregnant and give birth and you will still be there" **(FW4).**

A woman who has been married for 9 years but has no child stated that her childbirth has delayed because her younger sisters have all delivered.

"I am the eldest of three girls born to my mother and now that we speak they all got married after me but they have their own children. I am still there without a child. I just don't know how long I am going to wait" **(FW12).**

A participant who is a mother of one and a health professional reported a feeling of fear and insecurity of having one child.

"When we were young when you see a child that is the only child of the parents we use to think that the child is privileged. But now I understand that you the parent you leave in constant fear because if something happens to that child what will you do? When my child is sick I panic. When he does something negative I panic because I fear he might grow up with this negative behaviour meanwhile that is my only child. Now, I understand what you go through if you have only one child. I have a feeling of insecurity because of the one child" **(FW15).**

Stress

Stress was another form of psychological threat that women in this study reported to have gone through as a result of the infertility. Their expression of stress centred on difficulties in life, sleeplessness, too much thinking, forgetfulness and lack of concentration. One participant explained that, her rival causes her a lot of problems in the marital home by making it look like she has been searching for a child for many years.

"Actually it is not easy. I'm the second wife of my husband. The first one has three children and you know how we women behave. Even when the person has problems with the man, she talks as if you are the cause. She thinks the man is giving me everything that I need so she will be saying things like "these are your children so you should take care of them but not to be looking after someone who cannot give you children". I have been married for only two years but my rival makes it feel like I have searched for a child for many years. She makes life even difficult so I can't rest because of this problem" **(FW8).**

In an attempt to become pregnant, some of the women seek treatment from diverse sources and this result in stress.

"It is not easy. We have gone to so many places seeking for treatment and that alone has not been easy. We started with local treatment and that has taken us to many villages" **(FW9).**

Stress was expressed by some women as constant thinking about their inability to conceive. Stress was even made worse by participants' comparison with other women whose age were less. As a result of the thinking, they also have headaches and sleeplessness. Below are typical quotes expressing these concerns:

"I think about it always and sometimes I even have headache. All my sisters have delivered without any problem so I don't understand. I can't even take my mind off this problem. The worse of it is in the night. I find it difficult to sleep" **(FW14).**

*"I think a lot about it because sometimes I wonder what has gone wrong with me because I have a child already so why can't I deliver again when am still young like this."***(FW1).**

Sleeplessness was another way some participants expressed their stressful experiences.

"It is not easy at all because marrying for five years without a child you can't even sleep. You sleep for just thirty minutes and you wake up. The tension in you is not easy. Your "heart is not at rest" because you are just thinking about why you are not getting pregnant" **(FW4).**

"I also suffer some difficulty sleeping sometimes because am just thinking about this problem. Inability to become pregnant is like carrying a heavy load and cannot put it down" **(FW12).**

Another participant described her stress as lack of concentration. She explained that, because of this problem she experiences absent mindedness even when she is in the market doing her business.

"You can't rest because your mind is not at peace. Sometimes, even in the market someone can come to buy my things and will call me several times before I hear the person. When I am alone, my mind easily goes to this problem and I will just be sitting there" **(FW5).**

Low mood

Low mood is yet another psychological threat of infertility suffered by the women in this study. Their explanation of a state of depression was centred on crying, feeling sad, being quiet, unhappiness and inability to eat.

Regarding crying as an expression of low mood below is a typical quote from a participant:

"My rival's children remind me. Sometimes they will do something and I will go to the room and cry. When you even send my rival's child, she is not happy and it only makes me sad that I don't have my own child that is why all this is happening to me. I pray that as God has given her, He will give me too. I have cried a lot and am tired. If my crying can talk it will talk for me" **(FW2).**

Some participants described their low mood as sadness.

"I feel sad most of the time but I give everything to God because it is God who gives children. I can sometimes become quite and people will be asking if I am sick but it is all because of the childbirth problem. I try to understand why it is so but I don't get it" **(FW4).**

Some participants explained their low mood as a change in mood which is normally manifested in quietness, difficulty in eating and unhappiness.

"I feel unhappy because I have waited for all this while and still there is no sign of the second child coming. It spoils my mood easily and I can be quiet from morning to evening. Sometimes, I even find it difficult to eat" **(FW6).**

"Life is not easy in this situation. I am unhappy deep down my heart. Sometimes, my husband himself will look at me and ask if I am sick but I know that deep within me the main problem is this childbirth. Married for 9 years without a child, what could be more worrying than this?" **(FW1).**

Social Threats

Social threats are the consequences of infertility that affected the public image of the infertile women. These threats spell out what the women go through in their marriages and family lives. Social threats of infertility were centred on marital instability, decreased social recognition, social pressure and social stigma.

Marital Instability

Marital instability which is a social threat was expressed by participants in various ways. Most cases of marital instability were centered on decreased love from husbands, unhealthy marital relationships, some husbands marrying second wives, and lack of support from husbands in finding solution to the problem of infertility. They explained that, they were not treated well by their husbands and there was lack of effective communication in their marital homes.

"*My husband does not treat me like he used to do. He is a driver so at first when he is returning from Kumasi he will buy a lot of things for me but now he has stopped. It is all because he is no longer happy with me. His behaviour shows that he does not love me any longer. Even when the doctor advised on when we should meet as husband and wife (have sexual intercourse) he does not follow so I just pray (tears falling). I don't know why he is doing that"* **(FW10).**

"He is not like before. The truth is, my husband's love for me is decreasing. How we used to sit and discuss things, it is no longer like that. When you are talking to him and he is doing like you are disturbing him. He is not having time for me" **(FW6).**

The women stated that, their husbands do not cater for them any longer and their relationship is equally not good. Some also explained that their inability to conceive has caused their husbands to go in for second wives.

"Because I have not been able to become pregnant and give birth to my own children, my husband does not take care of me. He ignores me and our relationship is not good" **(FW2).**

"It is not good for me. It has caused a lot of problems in my marriage. It has even made my husband to marry a second wife because I cannot get a child for him. Now my rival has delivered twice for my husband so he thinks she is more important to him than me" **(FW12).**

Decreased Social Recognition

Decreased social recognition is a social threat of infertility that some of the women explained they are passing through in their various communities. Central to their experiences is not being respected by colleagues who have their own children, inability to contribute to conversations that has to do with childbirth, and not being involved in women's activities organized in the community.

As reflected by FW10 assertion:

"If you have no child, it is disturbing because people do not even respect you especially those you are older than and they have been lucky to deliver. They even talk like they got children by some hard work. It is hard to be in this situation because your colleague women will be talking about childbirth yet you can't contribute anything" **(FW10).**

A participant reported being left out by her colleagues without any tangible explanation.

"It is not easy to be in this kind of problem. Even the women that stay in the same house and community with me they sometimes don't want to involve me in social activities. There was a time they even had a meeting without my notice and agreed to buy cloths that will be used for social events such as naming and marriage ceremonies. When I heard and was asking them no one told me anything. I just feel that because I have no child they think I should not be part of them" **(FW13).**

Social Pressure

These women who unfortunately are struggling to conceive suffer a great deal of pressure which is centred on lack of support from family and community members.

Unsupportive family as a source of social pressure was discovered among most participants. In this regard, participants viewed their husband's families as not helpful in convincing their spouses to support them in seeking treatment. Families were seen as rather encouraging men to go for second wives.

"They are not helping. They know that my husband has no time for me but no one will say anything. They will not talk to him to come to hospital with me. They have rather encouraged him to marry another wife" **(FW13).**

"My father-in-law is the one I know is better but the rest are no longer happy with me. They are thinking it is entirely my fault. I know because we are muslims if I am not able to conceive, they will let him marry a second wife. They don't talk about him coming to hospital with me not alone asking what the doctor is saying" **(FW10).**

Some women also indicated that mothers-in-law were sources of pressure by constantly requesting grandchildren.

"The others have not said anything against me except my mother-in-law who will be asking for grandchildren because my husband is her only son. She will ask me what the doctor is saying and what will he do next. Just the same questions all the time" **(FW14).**

"They are expecting that by now I should have delivered so now that it is not coming they are just wondering. When I call my mother-in-law

on phone to greet her she will sometimes ask if she is coming anytime soon? By this, she is asking me if I am pregnant so that she will prepare and come for a naming ceremony. She is always disappointed that I am not pregnant" **(FW15).**

Social Stigma

The women also reported social stigma as one of the significant social threats they suffer. Some participants reported that, they are actually being accused of refusing to conceive. They are accused of using family planning methods to delay childbirth. This supposedly increases their frustrations since the women themselves are struggling to achieve pregnancy. Below are quotes from participants that explain their position.

> *"My own mother thinks I am doing family planning and insists that it is time I stopped. They think because I am a health professional, I have control over my childbirth"* **(FW15).**

> *"They ask a lot of questions with some suspecting that I am doing family planning so that I can go to school. You know most of them are Muslims, so when we attend a naming ceremony together they will say my child's naming ceremony is next"* **(FW11).**

Discussion

The study revealed that some of the women suffered psychological effects of infertility which centered on anxiety, stress and low mood. Several studies have found that infertility is associated with psychological consequences such as stress, depression and anxiety (Cousineau & Domar, 2007; Deka & Sarma, 2010; Naab et al., 2013). However, the previous studies used quantitative approach and the current study which is qualitative is adding up to the issues that were already identified.

Childbirth is seen as a way of securing marriages in typical northern Ghanaian society hence failure to become pregnant made the women doubtful about the long-term sustainability of their marriages. Poor treatment from some husbands of infertile women was an indication that their marriages could break. Their anxiety was even made worse when they compared themselves with others who just got married later and have already delivered their own children. Another source of worry was that the women in this study kept looking forward to missing their menses so each month it comes they felt they had lost another opportunity to become pregnant. This finding agrees with that of Naab (2014) which also indicated that infertile African women become more psychologically distressed each time they experience their menstruation.

A study in Nigeria established that decreased spousal support leads to increases in the level of stress among women with infertility (Upkong & Orji, 2006). The present study also found that, the women reported unsupportive husbands and this could compound the already existing stress associated with childlessness. Though the scope of the present study did not include assessing the relationship between spousal support and level of stress, it can be reasonably construed that women who have supportive husbands and family will have lower stress than those with unsupportive husbands and family. This is because the pressure from unsupportive husbands and family in itself can contribute to increased levels of stress. To buttress the importance of the good marital relationship, a study in Nigeria established that infertility is a main cause of depression, grief, guilt and social isolation among couples (Oladokun et al., 2009). This study also established that the women experienced low mood as manifested by sadness, crying and inability to eat. All these manifestations by the women in the present study depicted how important childbirth is to married women. This gives credence to a study by Minucci (2013) which established that having biological children is a very important event in the lives of married couple.

The study revealed that marital instability gradually sets in following a decrease or loss of hope to conceive, indicative of a failure to adjust appropriately to the situation. There was evidence that husbands initially showed love and supported their wives but this gradually faded when the periods of waiting were becoming longer than expected. In Ghana, stigma and marital instability are identified as some of the key social consequences suffered by women with infertility (Fledderjohann, 2012). The present study also found that some of the women were stigmatized by being falsely accused of using family planning methods to delay childbirth. This form of accusation is meted out to women who are literates with the notion that they could be consciously delaying childbirth to

allow them further their education.

The study also established that the women suffered from social pressure which mostly came from mothers-in-law and other family members. The high premium placed on biological children was a major factor behind the pressure put on these married women. Elderly women in a typical northern Ghanaian society take pride in having grandchildren. As a result, mothers-in-law eagerly look forward to the fulfillment of this expectation when their sons get married. In consonance, a study by Tabong and Adongo (2013) in Upper West Region of Ghana revealed that infertile couples reported unsupportiveness from some family members especially mothers-in-law who kept demanding grandchildren.

Some women in the present study also reported that their husbands were encouraged to marry second wives because of their inability to conceive. This concurs with that of Omoaregba et al. (2011) which established that husbands of infertile women are often encouraged to marry another wife. The study findings also suggested that the women suffered decreased social recognition. They reported being disrespected by colleagues and even left out in some communal social events. This finding is in consonance with a study in Malawi which revealed that infertile women are not respected in society (Barden-O'Fallen, 2005).
Implication for Nursing and Midwifery Practice.

Having established the psychosocial burden of infertility on women in this study, husbands and family members should be educated to appreciate the consequences of their actions and inactions on the health of their infertile wives. They should be educated to understand the psychological and social effects that the pressure they put on infertile women causes. They ought to be made aware of how important their support for the women could greatly minimise the effect of social marginalisation and stigmatisation. Also, the curriculum for nursing and midwifery education should include management of infertility especially psychosocial support.

Limitations of the Study

The non-involvement of husbands of the women did not allow for an investigation into the male perspective of the issue. This does not allow for description of the results as representing the views of husbands and wives as a unitary entity.

Conclusion

The study established that the high premium placed on biological parenting puts infertile women through a huge psychological/emotional trauma. Childless women lack the needed support from husbands, family and society in general and marriages barely thrive without children. The women are almost the only ones who are actively engaged in the search for a child which in itself is a hefty task that demands the collective efforts of both husband and wife.

Conflict of Interest

The authors declare that there was no conflict of interest.

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