Annals of Health Research
Volume 1 Issue 1
June 2015

ORIGINAL RESEARCH

Perceptions and health care-seeking behaviours for infertility in Sagamu, Nigeria

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Abstract
Background: Infertility is a reproductive health morbidity and a major public health issue in many developing countries.
Objective: To assess the perception and health care seeking behaviours of married individuals for infertility in Sagamu Local Government Area (LGA), southwest Nigeria.
Methods: The study was a cross-sectional survey conducted over a three-week period between May and April, 2013 in Sagamu LGA of Ogun State, Nigeria using a multi-stage sampling technique. Data was collected by trained interviewers using a semi-structured questionnaire.
Results: A total of 500 participants were surveyed. Majority, 73.8% believed that sexually transmitted infections cause infertility while 90.5% opined that previous abortion causes infertility whereas 86.1% believed that unsafe abortion is related to infertility. Some (11.0%) believed that infertility is mainly spiritual. The prevalence of infertility in the population was 16.8%. Among those with infertility, 44.6% have sought help from the spiritualists.
Conclusion: This study showed that about half of the people with infertility have sought help from the spiritualist as a treatment option. Couples should be encouraged to visit hospitals for proper medical management of infertility problems.

Key words: *Abortion, Couples, Infertility, Perception, Prevention practices, Sagamu.*

Introduction

Infertility is a reproductive health morbidity which attracts stigmatization in the society hence, it is a major public health issue in Nigeria and other developing countries. The public health importance lies in its high prevalence and its serious social implications. The social import reflects the highly passionate premium which the African society puts on procreation in the family setting. [1] Myths, ignorance and misconceptions about the causes and perceptions can generate prejudice, stigmatization and fear, towards those affected. [2] The childless couples suffer from the conflux of personal, interpersonal, social, and religious expectations thus creating a sense of failure. In some cultural settings in Africa, infertile couples are not even allowed to take lead role in important societal functions and events. [3] However, these challenges are not only restricted to the developing world. (3)

In most developing countries where there is no social security system, older people are completely dependent on their children. [4] Many families in the low-income countries depend on children for economic survival. Therefore, beyond the medical concerns, childlessness and having fewer children than the number identified as appropriate, are social and public health matters. [5]

The belief in supernatural causes of infertility is widespread in Africa. It has been documented that the belief in witchcraft and sorcery as it affects

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fertility and procreation extends from the illiterate up to the most educated and elite members of society. [6] Community members accord great significance to child-bearing, but they have incorrect knowledge of the causes and appropriate treatment of infertility.[6] Several traditional beliefs regarding the causes of infertility have given rise to a variety of traditional and religious methods for its treatment. [7] Many affected couples use these traditional methods of treatment, sometimes singly but most often in combination with orthodox treatments. Orthodox treatments are less often used because of perceptions of the causes of infertility and lack of confidentiality at the treatment centres. [7]

This study was therefore designed to assess the perception and health care-seeking practices of married individuals in Sagamu LGA, southwest Nigeria for infertility. This has implications in the development of policies that will enhance better health care-seeking behaviours and reduce the incidence of complications of unorthodox treatment.

Method

Study Location

The study was carried out in Sagamu Local Government Area (LGA) of Ogun State, Nigeria. Sagamu LGA, one of the twenty LGAs in Ogun State, has 15 wards. It has a land mass of 640.04sq.km and an estimated population of 253,416 people as at 2006 using a 2.74% growth rate over 1999 population census. Sagamu is bounded in the North by Ikenne LGA, in the West by Obafemi Owode LGA and in the East by Ikorodu LGA in Lagos state.

Study Design

A cross-sectional survey was conducted between April and May, 2013

Study Population

The respondents were married individuals residing in Sagamu LGA The participants were approached by the research team members in their respective residential places in the community. Individuals who were younger than 18 years were excluded from the survey.

Sampling Technique

The sampling technique used was multi-stage sampling technique. Out of the fifteen (15) wards in Sagamu LGA, two (2) wards were selected by simple random sampling technique with one being urban, and the other being rural. The selected urban ward was Ward 5 (Sabo) while the rural ward was Ward 9 (Ode-Lemo).

Sabo has four (4) enumeration areas. Two (2) enumeration areas were selected by simple random sampling technique. Two (2) streets were selected from each enumeration area by simple random sampling technique. Every house selected was sampled. At Ode-Lemo, the questionnaires were administered from house to house until the desired sample size was reached. This was done because there was no information on the number of enumeration areas, streets and houses available.

The sample size was determined using the statistical formula: $N= Z^2pq/d^2$. The calculated sample size was 233 but a total of 500 participants were recruited into the study.

Data collection

The questionnaire was pretested among 20 selected respondents in Ikenne LGA, a nearby local government to the study area. Appropriate adjustments were then made to the questionnaire to improve its internal validity.

Participants in the study were interviewed using a semi-structured questionnaire, which was administered by trained interviewers. The interview was conducted using a semi-structured questionnaire and each session lasted between 5 and 10 minutes. The interviewers were medical students rotating through the Community Medicine and Primary Health Care (CMPC) department of the Olabisi Onabanjo University Teaching Hospital (OOUTH) during the period of the study and one resident doctor in the same department.

The questionnaire was initially designed by the research team on the basis of previously published literature on infertility. The questionnaire was divided into three subsections; the first section obtained information on the demography of the respondents, the second section assessed the participants' perceptions about infertility and the final section investigated the health care-seeking and preventive practices associated with infertility.

Data Analysis

The data were analysed using the Statistical Package for Social Sciences (SPSS) version 17.0.

Percentages or means and standard deviation were computed for baseline characteristics of the respondents. The data analysis focused on univariate frequency table.

Ethical Considerations

The research protocol was reviewed and approved by the Ethics Review Committee at the Local Government level. Courtesy visit to the community leaders and health care providers in both study sites was done during community entry. Written informed consent was also obtained from each participant prior to the interview.

Results

Socio-demographic characteristics

A total of 500 married people participated in the study. The mean age of the participants was 39.67 ± 9.88 years and their mean duration of marriage was 13.37 ± 9.72 years. Majority, 82.8% were married in a monogamous setting while 17.2% were polygamous. There were 26% male respondents and 74% female respondents. Most of the respondents, (71.2%) were Christians from the Yoruba tribe (88.6%) with formal education (94.7%). There were 49.4% professionals, 21.0% skilled workers, 9.9% semi-skilled workers, 25.5% unskilled workers and 3.4% were unemployed as shown in Table I.

Table I: The socio-demographic characteristics of the respondents

Charactersitic	*Frequency*	*Percentage*
Age (Years)		
21-30	90	18.0
31-40	215	43.0
41-50	129	25.7
51-60	48	9.7
61-70	18	3.6
Gender		
Male	131	25.7
Female	369	73.3
Religion		
Christian	356	71.2
Muslim	137	27.2
Traditional	8	1.6
Tribe		
Yoruba	442	88.6
Hausa	7	1.4
Igbo	30	5.9
Others	21	4.1
Marriage		
Monogamous	413	82.8
Polygamous	87	17.2
Educational Status		
No formal education	27	5.3
Primary schol education	64	12.7
Secondary school education	121	24.2
Tertiary education	288	57.7
Occupation		
Professional	247	49.4
Skilled	59	11.8
Semi-skilled	49	9.9
Unskilled	127	25.5
Unemployed	17	3.4

Perception of participants on Infertility

Table II shows that majority, 73.8%, believed that sexually transmitted infections can cause infertility while 90.5% opined that previous abortion causes infertility. In addition, 86.1% believed that unsafe abortion is related to infertility. Over half of the respondents, (57.5%) believed that smoking and alcohol can cause infertility and 49.6% believed that certain kinds of jobs can cause infertility. Furthermore, 46.6% believed that consumption of sugar can cause infertility and 41.2% believed that low back pain can cause infertility.

Three-quarters (75.4%) believed that erectile dysfunction can cause infertility but 42.9% agreed that sexual prowess is related to infertility. Only 37.6% believed that wearing of tight nylon under wears can cause infertility and 80.7% knew that a previously fertile person can later become infertile. Most of the respondents (74.6%) believed that certain family planning methods can cause infertility while 75.5% knew that the awareness of safe and fertile period is important when couples are trying to achieve a pregnancy. Close to three-quarter (74.3%) believed that infertility is preventable and 93.5% knew that infertility can be treated.

Some 11.0% felt that infertility is mainly spiritual.Only 2.4% believed that infertility occurs only among females while 7.7% felt that males do not need to go to the hospital on account of infertility. Majority (62.2%) felt that infertility can affect social acceptance and 2.2% believed that infertile women are witches. Other perceived causes and solutions to the problem of infertility are depicted in Table II.

Table II: Perception of respondents about infertility

Perceptions	Agreed	Disagreed	Did not know
Infertility is always spiritual	11.0%	81.6%)	7.4%
Infertility occurs only in females	2.4%	96.0%	1.6%
Males do not need to go to hospital	7.7%	90.5%	1.8%
Infertility can affect ones social acceptance	62.2%	31.6%	6.2%
Infertile women are witches	2.2%	93.6%	4.2%
All infertile women have had abortions in the past	4.0%	90.4%	5.6%
The size of the penis can cause infertility	6.3%	77.8%	15.7%
It is impossible to know the cause of infertility	24.4%	68.0%	7.6%
Infertile couples should be left to fate	10.9%	86.2%	2.6%
Taking of herbs alone can cure infertility	19.4%	71.9%	8.6%
Gaining weight in under-weight persons and losing weight in over-weight persons can help promote fertility.	24.4%	48.1%	27.5%
Increased frequency of sexual intercourse can affect the chances of conception	42.1%	42.3%	15.7%
Child adoption is an option for infertile couple	50.6%	42.5%	6.9%
Fertility drugs are socially unacceptable	15.3%	74.0%	10.6%
Infertility can later affect a woman's sex life	51.9%	30.6%	17.5%
Infertility is a ground for polygamy	54.9%	34.2%	10.9%
Infertility is a ground for divorce	47.6%	48.8%	3.6%
Extra-marital sexual contact can help solve Infertility	30.2%	62.8%	7.0%

Health care seeking behaviours for infertility

The prevalence of infertility in the population studied was 16.8%. Among the respondents with infertility, 21.5% had a history of sexually transmitted infections, 2.7% had history of mumps infection, 37.0% had menstrual irregularities while 3.8% voluntered the history of erectile dysfunction. Among those with infertility, 77.5% had sought help from orthodox hospital while 44.6% had sought help from spiritualists. While 61.1% of the respondents were not on any treatment for infertility, 5.6% were taking herbal concoctions, 32.5% took drugs and 0.8% employed other methods to treat infertility. Indeed, 16.9% had a history of sexual difficulty, 15% had uterine fibroid while 8% had undergone a gynaecological surgery in the past.

Discussion

This study shows the perceptions and beliefs of respondents on infertility. Most of the respondents felt that infertility can affect social acceptability. Although there is a wide body of literature exploring the psychological impact of infertility on the individual (largely the woman), studies have shown that the experience of infertility places a lot of stress on marriage, and can negatively impact marital satisfaction and social acceptance.[8,10] Therefore, in order to understand the impact of infertility on the social relationship, it is important to understand the interaction of social support with the need to maintain privacy in relationships.[11,13]

Some of the participants felt that infertile couples should be left to fate. Research indicates that many infertile couples go through a series of reactions similar to those found in other grief and crisis experiences causing them to resign to fate.[14,16] The experience can stress a couple's personal relationship, diminish sexual satisfaction, deplete financial resources, threaten perceptions of masculinity and femininity and cause psychological stress.

A significant number of the participants reported strong beliefs that infertility may be the consequence of witchcraft while about one quarter of the respondents felt that it is impossible to know the cause of infertility. Infertility is often attributed to supernatural causes. [17] This belief justifies the attempt to ostracize these women, and to expel them from their households. Any subsequent misfortune of the woman or family which would ordinarily be taken in isolation may be attributed to her state of infertility and/or witchcraft.

The study shows that 21.5% of the respondents with infertility had history of sexually transmitted infections. Several studies have reported abortion, and promiscuity or 'waywardness' during youth as causes of infertility. It is widely believed that abortions and gynaecological procedures such as dilatation and curettage can cause infertility when performed by quacks. In addition, abortions are

often associated with 'waywardness' which is believed to be responsible for infertility rather than the abortions *per se*. A common cause of infertility in African women is infection arising from puerperal sepsis. [18] This is due to the fact that trained health care providers attend to very few pregnant women in many African countries at the time of delivery. Traditional birth centres and churches where non-sterile delivery procedures are rife are frequently utilized. The result will be a high rate of pelvic infections. In addition, prolonged obstructed labour is a frequent complication of pregnancy in the developing world. Prolonged labour is often complicated by pelvic infections and can result in either maternal death or severe tubal damage. Child marriage and underage pregnancies, which often lead to complications of labour and the puerperium, as well as labour and delivery in unhygienic circumstances, predispose to secondary infertility and other sexually transmitted diseases.

About half of the respondents with infertility (44.6%) had sought help from the spiritualists. Similar observations had earlier been made in several studies. [2,18] The spread of the responses of the infertile respondents with regards to their choice of treatment outlets such as orthodox treatment outlet, spiritualists, traditional herbalists, traditional birth attendants and medicine sellers raises a lot of important issues. That a significant percentage of respondents chose faith-healers was not unexpected. The services of the faith-healing treatment outlets have been reported among both the rich and the poor. [18] Indeed, it has been widely reported that the importance of faith-healing in the Nigerian health care system is growing.[18,20] Moreover, the choice of a particular treatment outlet depends on the perceived cause of the infertility, not only by the infertile men and women but also by the family members.

Conclusion

This study shows that about half of the respondents with infertility had sought help from the spiritualist as a prevention practice and treatment option. Therefore, couples should be encouraged to visit hospitals for proper management of their infertility problems and discourage choice of other unorthodox treatment outlets.

Acknowledgements: We hereby acknowledge all the research assistants for their participation, encouragement and motivation during the design and conduct of the study.

Authors' contributions

AOE conceived the study theme, participated in the study design, supervised data collection and prepared the final manuscript. AV pariticipated in the study design, data collection and analysis. OAAA and SOO participated in the study design and conducted data collection. All the authors read and approved the final manuscript.

Competing interests: None declared
Source of funds: Self-funded

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