

Perceived Causes of Infertility and Health Care Seeking Behaviour of Women of Child-Bearing-Age in North-Eastern Nigeria

Bala Yunusa Tilde, Msc¹, Oniyangi Shuaib Olanrewaju, PhD², Sa'idu Isah, PhD³, Adegoke Musa Olatunji, Msc⁴
^{1&3}Department of Physical and Health Education, School of Sciences, Aminu Saleh College of Education, Azare, Bauchi State, Nigeria

^{2&4}Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin, Kwara State, Nigeria

Abstract: - This paper designed to investigate the perceived causes of infertility and health care seeking behaviour of women of child-bearing-age in North-Eastern Nigeria. Infertility is viewed as the condition in which matured male and female partners could not achieve pregnancy after regular unprotected sexual intercourse for at least one year. It is now believed that some forms of women's infertilities are curable. There is significant health implications involved in wrong perceptions of the causes of infertility as it may hinder one from taking appropriate health seeking, thus, the benefits involved in prompt good health seeking behaviour would not be obtained. Research question and hypothesis were formulated to guide the study. Descriptive survey research design was adopted in the study. The population of the study consist of the entire childbearing women in North-eastern Nigeria. Multi-stage sampling of simple, purposive and systematic sampling techniques were used to select the sample of 384 respondents and are sufficiently enough for the study at 0.05 alpha level. The instrument for data collection in this study was researcher-developed questionnaire base on 5 points likert scale. It was concluded that there is no significant difference in birth order of women of child-bearing age in the perceive causes of infertility and health-care seeking behaviour in North-eastern Nigeria. It was recommended among others that advocacy on causes of infertility should be done to enlighten women of child bearing age in North-eastern Nigeria and health care services should be made affordable and accessible in nooks and the cranny of the region to improve healthcare seeking behaviour of the barren women regardless of their socio-economic status.

I. INTRODUCTION

Infertility is viewed as the condition in which matured male and female partners could not achieve pregnancy after regular unprotected sexual intercourse for at least one year (Adishi, 2011). The term infertility simply refers to incapability or unsuccessful in achieving pregnancy. It is also defined as the inability of a woman to conceive after a year of unprotected intercourse (Myles, 2015). Treatment-seeking behavioural patterns in this context refer to the type of an ultimate course of action taking in response to illness against the causes of infertility to avoid progression of the health condition. This problem of infertility may come from either of the couples, male or female, or both partners. But in this

context perceived causes of infertility refers to the strong feelings and beliefs about the cause that prevented a matured woman to conceive pregnancy after a regular unprotected sex for more than a year. Though that, studies have suggested factors associated with infertility to include cigarette smoking, alcohol consumption, sexual promiscuity, drug abuse, and sexually transmitted diseases. Central Nervous System (CNS) depressants and narcotic drugs are capable of causing erectile dysfunctions. Other diseases such as diabetes mellitus, renal failure, multiple sclerosis, spinal cord injury and cardiopulmonary disorders could be seen as causes capable of damaging the reproductive organs but the causes for female infertility are divided into functional and anatomical causes (WHO, 2016).

The functional causes of infertility include any defects or malfunctions of the hypothalamic-pituitary ovarian axis that alter the complex hormonal interactions which determine the normal functions of the reproductive tract. They are: Gonadotropin insufficiency caused by infections, neurological diseases or tumours of the hypothalamus or pituitary gland. Hypothyroidism, Endometrial adhesions, chronic cervicitis with abnormal mucus secretion while anatomical causes according to Marida and Hollos (2011) include;

- Ovarian Factor: Ovarian failure may be caused by premature menopause or ovarian dysgenesis.
- Uterine Factors: These include congenital absence of uterus, bi-cornuate or double uterus,
- Tubal Factors: such as are abnormal tubal transport mechanisms as seen in cases of uterustubal obstruction, uterine fibroids, etc.
- Cervical Factors: Abnormal or excessive production of thick cervical mucus which is impenetrable to sperm, thus making it difficult for the sperm to enter into the uterus.
- Psychological Factors: as a result of stress and emotional instability.

As it is all known, the main essence of marriage particularly in traditional African societies is Procreation, to produce children who will continue the heritage of the family and to guarantee the perpetuation of the lineage (Gyeke, 2016). Failure to have this, could lead to treatment seeking for either of the both partners or any of them to have somebody who will continue their heritage. However, Njodi and Sherriff (2009) stated that health belief model has helped confirm that the more susceptible individuals feel about a health condition, the more likely they are to take protective action. The issue of infertility is often obscured by the region's high fertility rate. However, Marida and Hollos (2011) reported that though it is problematic, particularly for women, but little is known about how different regions understand and respond to infertility or how coping mechanism differs. Studies have shown that individuals faced with infertility problems have experienced feeling of stigmatisation from their spouse, families or the community for being unable to bear children. Thus, the need for treatment seeking behaviour will arise.

As a result of these, different treatment patterns are being sought. Njodi and Sherriff (2009) reported that knowledge, attitude and perception of various health problems play an important role in avoiding or managing disease conditions. Similarly, Sherriff and Njodi (2011) revealed that people's beliefs do matter and behaviour strongly influences beliefs about health and illness which ultimately do not deter people from seeking treatment. It is against this background that this research is designed to investigate the perceived causes of infertility and Health care seeking behaviour of women of child-bearing-age in North-Eastern Nigeria.

Statement of the Problem

It is now believed that some forms of women's infertilities are curable. However, there is significant health implications involved in wrong perceptions of the causes of infertility as it may hinder one from taking appropriate health seeking, thus, the benefits involved in prompt good health seeking behaviour would not be obtained. From the vantage point of 21st century there is increase in research, mass literacy, massive awareness campaigns aimed at educating the general public in different channels of communication like radio, televisions, bill boards, Newspapers, Pamphlets nowadays; it is expected that women of child-bearing-age in North-Eastern Nigeria would be equipped with sound knowledge and become aware of the major causes of women infertility and adopt appropriate health care seeking behaviours. But studies have shown that some women of child-bearing-age embark on patronizing sorcerers, magician and witches for juju just to have an issue due to wrong perception of causes of infertility. It is against this background that this research is designed to investigate the perceived causes of infertility and Health care seeking behaviour of women of child-bearing-age in North-Eastern Nigeria.

Research Question

What is the relationship between perceived causes of infertility and treatment seeking behavioural pattern among women of child-bearing-age in North-Eastern Nigeria?

Hypothesis

There is no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and Health care seeking behaviour in North-Eastern Nigeria.

II. METHODOLOGY

Descriptive survey research design was used for the purpose of this study Descriptive survey is viewed as a study which is aimed at collecting data and describing it in a systematic manner the characteristics, features or facts about a given population (Njodi & Bwala, 2003; Arauoye, 2004; Asika, 2012). The population of this study were entire women of child-bearing-age in North-Eastern Nigeria. According to 2006 population census figure, North-Eastern states have a population of 18,971,965 (Nigerian Muse, 2018) and women of child-bearing-age account for (22%). Therefore, the population of the study is 4,173,832 women of child-bearing age in North-Eastern Nigeria. The sample of the study used was 384 women of child-bearing-age in North-Eastern Nigeria. According to Kreycie and Morgon (1971) in Emaiku (2008) reported that in a population of 100,000 and above a sample of 384 respondents is sufficiently enough to be used as a sample for the study at the alpha level of 0.05. Multi-stage sampling procedure: Simple random sampling, purposive sampling and Systematic random sampling techniques were used to select the sample for the study. This was done in following stages:-

Stage I- Three States out of the six in the North-Eastern Geo-Political zone were selected using simple random sampling by using written slips of papers carrying(Y) for selected and (N) for non-selected. The papers were folded, put in a small container and shook rigorously to mix, then, a representative of each of the state was given a chance to pick from the container. Those who picked 'Y' were part of the sample.

Stage II- The next stage after selecting representative states, was the selection of Local Government Areas, two LGAs from each selected three states in the North-Eastern Geo-Political zone was selected using simple random sampling again with a written slips of papers carrying (Y) for selected and (N) for non-selected as in the selection of states. The papers were folded and put in a small container and a representative of each of the local government was given a chance to pick from the container. Those who picked 'Y' were part of the sample.

Table 1: Selected Representative LGAs and their Respective States

States	LGAs
Bauchi	Dambam
	Ganjuwa
Gombe	Yamaltu Deba
	Kwami
Yobe	Potiskum
	Gashua

Stage III- The next stage after selecting Local Governments areas, was the selection of health facilities, two political wards from each of the six selected LGAs in the North-Eastern Geo-Political zone were selected using simple random sampling again with a written slips of papers carrying (Y) for selected and (N) for non-selected as in the selection of states and Local Government areas. The papers were folded and a representative of each of the political ward was asked to pick from the container. Those who picked ‘Y’ were part of the sample and those who picked ‘N’ were not.

Table 2: Selected Political wards for the Study and their Respective States

States	LGAs	Total
Bauchi	Dambam	2
	Ganjuwa	2
Gombe	Yamaltu Deba	2
	Kwami	2
Yobe	Potiskum	2
	Jakusko	2
Total		12

Stage IV- Purposive sampling technique was used to have equal representative in the selected political wards as contained in table 3.4.3:

Table 3: Distributions of the Women of Child-Bearing-Age that will be Selected

States	LGAs	Urban Respondents	Rural Respondents	Total
Bauchi	Dambam	32	32	64
	Ganjuwa	32	32	64
Gombe	Yamaltu Deba	32	32	64
	Kwami	32	32	64
Yobe	Potiskum	32	32	64
	Jakusko	32	32	64
Total	6	192	192	384

Stage V:- Finally, convenient sampling technique was used to select the respondents at the various selected health facilities during ante-natal care during visit.

The instrument for data collection in this study was researcher-developed questionnaire based on 5 point Likert

scale made up of 10 items on perceived causes of infertility and Health care seeking behaviour of women of child-bearing-age in North-Eastern Nigeria. The degrees of responses were ‘strongly agree’ which merits 5 Points; ‘agree’ merits 4 points; ‘Undecided’ merits 3 points; ‘disagree’ carry 2 points and ‘strongly disagree’ merits 1 point for section ‘B’. While in section ‘C’ the response mode were also keyed in a positive response. Therefore, the degrees of responses were ‘Always’ which merits 5 Points; ‘Almost always’ merits 4 points; ‘frequently’ merits 3 points ‘Sometimes’ merits 2 points and ‘Not at all’ merits 1 point. The basis for making decision was 3. Any score above 3 was considered positive and anything below 3 is regarded as negative in this study. The instrument was validated by three luminaries in the field of Health Education for validation. Corrections, suggestions and comments were incorporated in order to have a valid instrument. Split-half method of reliability test was used to estimate the reliability of the instrument from a single administration of a test. The test was administered to a group of testees and was then be sub-divided into two halves for scoring purpose. The procedure to be used for splitting was even numbered items and odd numbered items separately and the scores were correlated using Pearson Product Moment Correlation Co-efficient (PPMC). Spearman brown prophecy formula was applied to determine the level of reliability. Six (6) female trained research assistants were employed on the modalities of administering and retrieving the questionnaires, one from each of the six (6) selected LGAs in the zone. The administration and the retrieval of the instruments were done in one week time. Descriptive statistical technique of frequency count and percentage was used to organise the demographic characteristics of the respondents. The stated sub-hypothesis was analysed using t-test method. The results collected were correlated using Pearson product moment correlation coefficient all advanced at 0.05 level of significance.

III. RESULTS

Table 4: Information on Demographic Characteristics of the Respondents

Variables		Respondents	Percentage
States	Bauchi	121	34.38
	Gombe	117	33.24
	Yobe	114	32.39
	Total	342	100.0
Residential Location	Urban	164	46.59
	Rural	188	53.41
	Total	342	100.0
Educational Status	Formal Educated	217	61.65
	Non Formal Educated	135	38.35
	Total	342	100.0
Parity	Nulliparous	115	32.67
	Primiparous	114	32.39
	Multiparous	123	34.94
Total	342	100	

Table 4 shows the on the demographic information of the respondents. Three hundred and eighty four (384) Questionnaires were administered. Thirty two (32) questionnaires were administered in each of the twelve selected health facilities in the North-Eastern Geo-political Zone. But only data from 352 duly filled administered questionnaires were analysed. The respondents were selected from three states i.e Bauchi has 121 (34.38 %); Gombe which accounts for 117 (33.24%) and Yobe with 114 (32.39 %). With regard to the residential location of the respondents, 164 (46.59%) were drawn from urban areas while 188 (53.41%) were drawn from rural areas. Moreover, 217 (61.65 %) respondents had formal education and 135 respondents (38.35 %) had no any form of formal education. Similarly, regarding the number of children are Nulliparous 115 accounting for (32.67%), Primiparous has 114 (32.39%) while 123 are Multiparous which have (34.94%).

Hypothesis

There is no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and health care seeking behaviour in North-Eastern Nigeria.

Table 5: Summary of one-way Anova on the Influence of Birth Order of Women of Child-Bearing-age in the Perceived Causes of Infertility and Health Care Seeking Behaviour in North-Eastern Nigeria

	SS	DF	MS	f-ratio	Sig.
Between	.543	2	.272		
Within Group	118.406	349	.339	.800	.450
Total	118.949	351			

f-ratio = .800 at df 351; > sig .450 at 0.05 level of significance

Table 5 revealed the analysis of variance between the birth order of women of child-bearing-age in the perceived causes of infertility and health care seeking behaviour in North-Eastern Nigeria. The result of the F-ratio .800 indicated no significant difference between nulliparous, primiparous and multiparous women of child-bearing-age in the perceived causes of infertility and health care seeking behaviour in North-Eastern Nigeria. Therefore, the hypothesis which suggested no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and health care seeking behaviour in North-Eastern Nigeria is retained. This finding implies that there is no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and health care seeking behaviour in North-Eastern Nigeria.

IV. DISCUSSION

Parenthood is undeniably one of the most universally desired goals in adulthood, and most people have life plans that include children. However, not all couples who desire a pregnancy will achieve one spontaneously and a proportion of couples will need medical help to resolve underlying fertility problems. Infertility has been recognized as a public health

issue worldwide. These findings improve our understanding of the reproductive health needs of women suffering from couple infertility in Africa. There are 72.4 million women aged 20–44 and living in married or consensual relationships who have infertility defined as currently experiencing more than 12-months delay in conception while not using contraception. Of these women, 40 million are likely to seek health care and 32.6 million will not seek health care for the management of the infertility. If the lowest assumptions about prevalence and extent of non-treatment apply, there would be an estimated 40.2 million infertile women and only 12.0 million would be seeking treatment. The need for appropriate counselling of female and, most particularly, for education of the community is recognized. It is based on this, this study was carried out on the perceived causes of infertility and health care seeking behaviour of women of child-bearing-age in North-Eastern Nigeria.

Furthermore, the finding of this research indicated that there is no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and Health care seeking behaviour in North-Eastern Nigeria. This outcome is unexpected, it is not in consistent with Nyonator & Kutzin, (2015) which shows that parity determine the perceived causes of infertility and healthcare seeking behaviour. The outcome of this study is unexpected it is not in line with the finding of Bukar, et al. (2012) that nulliparous women tend to have wrong perception of causes of infertility which in turn affect the treatment seeking behaviour than primiparous and multiparous women.

V. CONCLUSION

Based on the findings, it is therefore concluded that there is no significant difference in the birth order of women of child-bearing-age in the perceived causes of infertility and Health care seeking behaviour in North-Eastern Nigeria.

VI. RECOMMENDATIONS

Based on the findings made, the following recommendations were offered:

- Advocacy on causes of infertility should be done to enlighten women of child bearing age in North-eastern Nigeria.
- Health care services should be made affordable and accessible in nooks and the cranny of the region to improve healthcare seeking behaviour of the barren women regardless of their socio-economic status.
- Delay in receiving care for health problems particularly infertility can be costly and dangerous, it is necessary to increase awareness and to health educate people on this problem regardless of their educational status and people’s confidence in public health facilities need to be improved and should be made more accessible to all Nigerians.

REFERENCES

- [1] Adishi, M. A. (2011). *A hands-on guide in fertility and remedies*. Abraka: DELSU Printing Press.
- [2] Arauye, M. O (2004). *Research Methodology with Statistics for Health and Social Sciences*. Nigeria, Ilorin. Nathadex Publishers.
- [3] Asika, N. (2012). *Research Methodology in Behavioural Science*. Learn Africa Plc. Ikeja.
- [4] Bukar, M., Audu, B.M, Usman, H.A & Massa, A.A (2012). Health Seeking Behavior of Infertile Woman in Gombe, North-Eastern Nigeria. *African Online Journal*. 7 (6) 14 – 24.
- [5] Emaiku, S.O. (2008). *Fundamentals of Educational Research Methods and Statistics*. Nigeria, Makurdi: Selfers Academic Press Limited.
- [6] Krejcie, R. V and Morgan, D. N (1971). Determining Sample Size for Research Activities. 30, 607 – 610.
- [7] Marida, Y. & Hollos, S. (2012). Health Seeking Practice of Infertile Women. *The Open Reproductive Science Journal*, 4 (6) 10 – 13.
- [8] Myles, B. (2015). *Introduction to Primary Health Care for Basic Student Nurses and Midwives, and Health Workers in Developing Countries*. Minna: Diamond Printing press.
- [9] Nigeria Muse (2018). Nigeria 2006 population Census Arrange by State. Retrieved on 20/06/2019 from http://www.en.wikipedia.org/wiki/list_of_nigeria_state_by_population.
- [10] Njodi, A. I and Bwala, D. W (2003). *Foundation and Principles of Research in Health Education*. Nigeria, Maiduguri, Compag Publicashers Ltd.
- [11] Njodi, I.A. and Sherriff, J.S (2011). Cues To Taking Action Against Diseases and Treatment seeking behavioural patterns of Academic and Non-Academic Staff in Tertiary Institutions In Taraba State, Nigeria. *Applied Psychology: Selected Readings* (9)17-21
- [12] Nyanto, A. & Kutzin, S. O (2015). Infertility Treatments and Counseling in the Context of Patriarchy among Ijebu, South-Western Nigeria. *East African Medical Journal* 74 (4) 510-518.
- [13] WHO. (2016). The infertility: mother or nothing. Bulletin of the World Health Organization. Retrieved from www.who.int/bulletin/volume/13/1/2015