



Perceived Causes of Infertility Among Married Adults in Kwara State, Nigeria

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Abstract

Infertility is one of the major causes of marital discord with damaging condition that exposes couple to emotional, physical and financial stress. Therefore, this study aimed at investigating the perceived causes of infertility of married adults in Kwara State. The research design adopted for this study is descriptive survey method. The population of this study is all married adults in Kwara State while the target population comprised married adults in the seven selected Local Governments Areas from the three senatorial districts of Kwara State. 420 respondents were selected as the sample for the study. Proportional and simple random sampling techniques were employed by the authors to select the sample for this study. The instrument (questionnaire) used for this study was designed by the authors. Content validity of the instrument was ascertained, and the reliability of the instrument was established using test-retest method. The correlation of the two sets of scores using Pearson's Product Moment Correlation yielded a co-efficient $R=0.81$. The data collected was analysed using *t*-test and Analysis of Variance at 0.05 level of significance. The findings revealed that there were no significant differences on the perceived causes of infertility among married adults in Kwara state on the basis of age and gender. This study, therefore, recommended that Modern and assisted methods of conception such as intra-uterine insemination (IUT), In vitro fertilisation and embryo transfer (IVF/ET), gamete intra fallopian transfer (GIFT) should be encouraged by medical personnel and implemented by couples suffering from infertility. Counselling services should be organised regularly for couples to alleviate the impacts of infertility on the well-being of the couple.

Key words: Reproduction, Infertility, Perceived Causes, Married Adults

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Introduction

Human existence from one generation to another is strongly rooted in the concept of reproduction. Reproduction is a process by which living organisms produce offspring. Reproduction is one of the essential characteristics of plants, animals, single cell organisms and it is necessary for the preservation of species. According to Mishra and Dubey (2014), reproduction is the ability of the human male to impregnate a female and/or conceive a baby through heterosexual intercourse. Human reproduction formally and legitimately takes place after marriage in a rational society where factors such as religion, social-economic and cultural background are highly considered.

Naturally, marriage is an institution ordained by God. It is widely adopted by most religions; notably, in the Islamic Holy Book

(Al-Quran) and the Christian Holy Book (The Bible).

"And among His Signs is this that He created for you mates from among yourselves, that ye may dwell in tranquillity with them, and He has put love and mercy between your (hearts): Verily in that are Signs for those who reflect" (Al-Room, 30:21)

Similarly, the Holy Bible says: *"...Be fruitful and multiply, replenish the earth and subdue it"* (Genesis 1 verse 28). These Holy Books quotation show that marriage is Gods' ordained practise on man.

Girgis, George and Anderson (2010) described marriage as the union of a man and a woman who makes a permanent and exclusive commitment to each other of the type that is naturally fulfilled by bearing and rearing children together. Parker (2000) added that



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marriage is a natural progression into adulthood and a means of independence from parents and kin. Essentially, it is regarded as the socially approved pattern of relationship whereby two persons establish a family. Marriage is a contract between families since an individual did not exist as a separate person without family identification. Waite and Gallagher (2001) described it as a union of love between an adult male and female, a rite that affirms love, provides a source of social recognition and a gateway to legal protection, responsibilities, and benefits. The essence of marriage includes companionship, procreation, protection, pleasure/sexual gratification, consolidation of wealth among others.

Ombelet, Cooke, Dyer, Serour and Devroey (2008) observed that in many cultures, having children is an essential part of marriage while infertility is seen as a personal tragedy, with the potential to impact the entire family or community. While there is no universal definition of infertility, a couple is considered to be infertile when pregnancy has not occurred after at least twelve months of regular unprotected sexual activity (Alli, Sophie, Imam, Khan, Shaikh & Farid-ul-Hasnain, 2011). Infertility is defined as the inability to establish a pregnancy within a specified period, usually one year, in a couple having regular unprotected sexual intercourse (Harzif, Santawi, and Wijaya 2019; Bayu, Egata, Kefale & Jemere, 2020). Araoyo (2003) defined infertility as a health problem with devastating psychosocial consequences on the couples. Infertility means failure to get conceived after at least one year of unprotected intercourse, regularly, usually two to three times a week.

Basically, there are three types of infertility namely: primary infertility, secondary infertility and unexplained infertility. The primary infertility is a situation that a couple had never conceived after several attempts of continuous sexual cohabitation. Alli et. al (2011) defined primary infertility as the failure of the woman to conceive after a year of having regular sexual intercourse. Hollos and Larsen (2008) asserted that primary infertility is the state of couples who cannot have babies at all and is usually measured by failure to achieve pregnancy after years of trying. It is a condition in which a woman is unable to have a child, as a result of inability

to become pregnant or the incapacity to carry a pregnancy to a live birth.

The secondary infertility is the most common type of infertility across the globe (Inhorn & Patrizio, 2012). It is often due to reproductive tract infections (RTIs), which if left untreated, damages a woman's fallopian tubes and causing irreversible tubal blockages. Secondary infertility arises when couple is unable to have another child, either due to infection or inability to carry another pregnancy to live birth after previous birth. Although, the findings of Deshpande and Gupta (2019) accounted that primary infertility is more prevalent than secondary infertility. Unexplained infertility is the inability to find the cause of the infertility. In some cases, the medical profession would conduct physical and laboratory examination on couples that find it difficult to achieve pregnancy and communicate to them that, there was nothing wrong with them. The result may be positive, and it is expected that they will achieve pregnancy shortly after being diagnosed of being free of infection or anatomical malfunction. This could be termed unexplained infertility since no cause is identified.

Infertility is a very damaging condition that does not only affects couple but also exposes them to emotional, physical and financially stress. Fido (2004) asserted that infertility is a source of distress for couples as societal norms and perceived religious dictums may equate infertility with failure on a personal, interpersonal, emotional, or social level. Women bear the brunt of these societal perceptions in most of the cases. Ramezanzadeh et. al (2004) stated that during the first three years of married life, infertility is accomplished with the symptoms of depression, anxiety, lack of self-esteem, sexual impotency, and marriage maladjustment. It is obvious that infertility is a crisis that leads to a psychological imbalance, especially when a possible and quick solution is not found.

Psychologically, infertility displays significant consequences in the form of tension, hostility, anxiety, depression, self-blame, and suicide idea. Alli et. al (2011) reported that in Latin America, strong social stigma attached to infertility causes couple to blame themselves for infertility. While in



Mozambique, infertile women are excluded from certain social activities and traditional ceremonies. Likewise, the social stigma of infertility is common across South Asia. For instance, Alli et. al (2011) mentioned that in Andhra Pradesh and India 70% of women experiencing infertility were being punished with physical violence. Some were verbally or physically maltreated, deprived of inheritance, sent back to parents, disliked, looked down upon, or have the marriage terminated.

Causes of infertility among married adults varied based on cultural and environmental factors. According to Lindsay and Vitrikas (2015) the factors that mostly contribute to infertility among women are problems in ovulation, blocked or scarred fallopian tubes, and uterine abnormalities. Likewise, Olooto, Amballi and Banjo (2012) attributed the causes of infertility to pelvic inflammatory disease, uterine fibroids, ovulation problem and uterine problems. Bharadwaj, 2000; Van, Balen and Gerrits, 2001; Bolvin, Bunting, Collins, Negro (2007) opined that the causes of infertility in developing countries may be linked to an act of God, punishment for sins of the past, prolonged use of contraceptive, distinct dietary habits, and the handiwork of witchcraft whereas some people in developed countries viewed infertility as caused by biological, medical and other related factors. Infertility may likely be caused by an underlying medical condition that may damage the fallopian tubes, interferes with ovulation, or causes hormonal complications. These medical conditions include pelvic inflammatory disease, endometriosis, polycystic ovarian syndrome, premature ovarian failure, uterine fibroids and environmental factors. Other causes of infertility in females include ovulation problems, tubal blockage, age-related factors, uterine problems and hormone imbalance while the main cause of male infertility is poor semen quality. In the opinion of Elhussein, Ahmed, Suliman and Adam (2019), infertility is basically caused by male factor and female factor. In the view of Jimoh (2004), the abnormalities in women that accounted for female infertility include ovulation problems or disorders, blocked or damaged fallopian tubes, hostile cervical mucus/uterine causes, fibroid tumor,

endometriosis, excess weight, sexually transmitted infections (STIs), certain medications, age, smoking, environmental factors and repeated induced abortions. Likewise, Nwajiaku, Mbachu and Ikeako (2012) affirmed that some abnormalities or conditions in the male organ can consequently lead to infertility.

Statement of Problem

Infertility is a major cause of marital disharmony in Nigeria because of the importance placed on childbearing and unfortunately, the blame is on the woman in most times. Infertility complicates marital affairs, sometimes leading to marital instability, divorce or separation. Infertile couples are usually stigmatised, isolated, neglected and sometimes experience domestic violence. The society does not accord respect to people without children. Specifically, childless couple could be vulnerable in old age; they might be susceptible to dangerous and hazardous environmental condition. The economic and financial needs in later life may be constrained. Childlessness poses great problem to a relationship and the Nigerian culture frowns at infertility, it does not tolerate the family without children. Therefore, it is against this background that this study aimed to investigate the perceived causes of infertility of married adults in Kwara State.

Research Question

The following research question guided the study:

1. What are the perceived causes of infertility of married Adults in Kwara State?

Research Hypotheses

The following null hypotheses formulated were tested at $P \leq 0.05$ significant level:

1. There is no significant difference in the perceived causes of infertility of married adults in Kwara State on the basis of age.
2. There is no significant difference in the perceived causes of infertility of married adults in Kwara State on the basis of gender.



Methodology

The research design adopted for this study is descriptive survey method. The population of this study is all married adults in Kwara State. It was estimated that there are 755,783 married adults (Bureau of Statistics, Kwara State) in the state. The sample comprised 420 married adults in the selected seven Local Governments Areas from the three senatorial districts of Kwara State. The Research Advisor (2006) was cross referenced with the figure at 95% confidence level and margin error of 5% recommended a sample size of 384 but the researchers employed 420 respondents for the study in order to cater for attrition at 10% rate. The three senatorial districts in Kwara State and their various local government areas are Kwara North (Baruten, Edu, Patigi, Kaiama and Moro), Kwara Central (Asa, Offa, Ilorin East, Ilorin South and Ilorin West) and Kwara South (Ekiti, Ifelodun, isin, Oyun, Irepodun and Oke-Ero). Proportional sampling technique was adopted to select seven local governments from the three senatorial districts in the ratio 2:2:3, since the local government areas of each district are not evenly distributed. The respondents for this study were selected from Baruten, Edu, Ilorin South, Ilorin West, Ifelodun, Oyun and Irepodun local government areas. Simple random sampling procedure was also employed to select married adults in each local government from Local Government secretariats, religious gatherings and Ministries.

The research instrument entitled “Perceived causes of infertility” designed by the authors was used to elicit responses from the married Adults within the three senatorial districts in Kwara State. The instrument consisted of three sections. Section A constituted the demographic information of the respondents while section B were items on perceived causes of infertility using the four-point Likert-type rating scale format of Strongly Agree 4 points, agree 3 points, disagree 2

points, and Strongly Disagree 1 point. In order to ascertain the validity of the questionnaire, the instrument was given to seven lecturers in the Department of Counsellor Education, Faculty of Education, University of Ilorin for content validation. This validity implies that the items structured by the authors were given to the lecturers to check if the items measure what it purports to measure. It also meant to ensure that there are no ambiguities in the items of the questionnaire. The corrections were taken into consideration in the final draft of the questionnaire.

The reliability of the instrument was established using test-retest method. Twenty questionnaire forms were administered twice on the same group of respondents who were not part of the sample used at an interval of four weeks. The correlation of the two sets of scores using Pearson’s Product Moment Correlation, yielded a co-efficient $R=0.81$.

The authors administered the questionnaire to the selected respondents. The respondents were given adequate time to respond to the questionnaire independently and were encouraged to give sincere, honest responses to the items. The highest score for an item is 4, while the least score a respondent can get is 1. The average point = $1+2+3+4 = 10/4 = 2.5$. Therefore, average mean score is 2.5. A total of 420 questionnaires were administered, 396 were correctly and completely filled, thus, 396 copies were computed for the data analysis. The data was analysed with both descriptive and inferential statistics at 0.05 level of significance.

Results

The results of this study are presented according to the research question:

Research Question

What are the perceived causes of infertility among married Adults in Kwara State?



Table 1: Perceived Causes of Infertility of Married Adults in Kwara State

causes of infertility among married adults include :	Agreed (%)	Disagree (%)
lack of regular ovulation (the monthly release of an egg)	338(83.5)	58(14.3)
alcoholism / drug addition	298(73.6)	98(24.2)
irregular sexual intercourse	236(58.2)	159(39.3)
mumps during childhood (segede)	179(44.2)	214(52.8)
late marriage	221(54.6)	172(42.5)
family history of infertility	270(66.7)	122(30.1)
habitual smoking	235(58.0)	161(39.8)
the use of contraceptives or family planning	278(68.7)	118(29.1)
chronic diseases like hypertension	233(57.5)	163(40.3)
reduced libido	224(55.3)	169(41.7)
lack of ejaculation	270(66.7)	128(31.7)
previous cancer treatment	240(59.2)	151(37.3)
dropping out of sperm after intercourse	244(60.3)	153(37.7)
scar from previous operation	188(46.4)	205(50.6)
multiple sexual partners	173(42.7)	224(55.3)

Table 1 revealed the causes of infertility among married adults as perceived by sampled married adults in kwara State. It showed that, 83.5% respondents agreed that, lack of regular ovulation (the monthly release of an egg) causes infertility. 73.6% of the respondents agreed that alcoholism / drug addition, 68.7% agreed that, it is caused by the use of contraceptives or family planning. On the other hand, 55.3% disagreed that its caused by multiple sexual partners, 52.8% disagreed that, infertility is caused by mumps

during childhood (segede), and 50.6% disagreed that scar from previous operation causes infertility. This therefore implies that, the causes of infertility among married adults are lack of regular ovulation, alcoholism / drug addition, the use of contraceptives or family planning among others.

Hypotheses Testing

There is no significant difference in the perceived causes of infertility of married Adults in Kwara State on the basis of age.

Table 2: ANOVA Showing Perceived Causes of Infertility Among Married Adults in Kwara State on the Basis of Age

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	71.733	2	45.867	1.22	.332
Within Groups	14630.795	390	37.514		
Total	14702.528	392			

*NS at $p \leq 0.05$ level of significance

Tables 2 shows the result of the one-way between-groups analysis of variance which was conducted to explore the perception of married adults on the perceived causes of infertility among married adults in Kwara State. This was analysed on the bases of categorizing the respondents age into three groups: 20 - 29, 30-39 as well as 40 years and

above. There was no statistically significant difference at $p > .05$ level of significance in the perception respondents across the three groups: $F(2, 390) = 1.22, p = .332$.

There is no significant difference in the perceived causes of infertility among married adults in Kwara State on the basis of gender.

Table 3: T-test on the Perceived Causes of Infertility Among Married Adults in Kwara State on the Basis of Gender

Availability	N	Mean	Std. Deviation	t	Df	Sig. (2-tailed)
Female	244	40.00	6.523			
Male	149	41.86	6.364	1.22	391	.222



Table 3 shows a calculated t-value of 1.22 and a p-value of .222 testing at an alpha level of 0.05. There was no significant difference in the perception of respondents on the perceived causes of infertility among married adults in Kwara State; female ($M = 40.00$, $SD = 6.523$) and male ($M = 40.86$, $SD = 6.364$; $t(391) = 1.22$, $p = .222$ (two-tailed).

Discussion

The causes of infertility as perceived by Kwara State married adults include lack of regular ovulation, alcoholism/drug addition, previous cancer treatment, reduced libido, family history of infertility, dropping out of sperm after intercourse, lack of ejaculation, late marriage, habitual smoking, the use of contraceptives or family planning and irregular sexual intercourse. This finding corroborates Olooto, Ambali and Banjo (2012) that infertility may be caused by an underlying medical condition that may damage the fallopian tubes, interferes with ovulation, or causes hormonal complications, tubal blockage, age-related factors, uterine problems, previous tubal ligation and hormone imbalance. The finding agrees with Isah, Yahaya, Panti, Abubakar, Shehu, Bello and Abdulaziz (2018) which found that blocked tubes and previous use of contraceptives are causes of infertility. This is because child bearing is highly valued in the society and childlessness is attributed with negative feelings such as stigmatisation, physical abuse, psychological trauma, social withdrawal and shame.

The result of hypothesis one showed that there was no significant difference in the perceived causes of infertility based on age. This finding contradicted Deshpande and Gupta (2019) who found that causes of infertility is based on the age of the couple. This could be explained that the respondents might not have adequate knowledge of the causes of infertility and awareness on the causes of infertility may be low.

Hypothesis two indicated that there was no significant difference in the perceived causes of infertility on the basis of gender. Related studies Tabong and Adongo (2013); Deribe, Anberbir, Regassa, Belachew and Biadgilign (2007) agreed that male and female married

adults accepted that infertility could be caused by factors such as use of contraceptives, sexually transmitted infections and previous abortions. The reason adduced for this finding is that infertility is a life-threatening condition which couples do not pray for as it exposes couple to danger and psychosocial problems. Some of these causes were mentioned to the couple whenever they visit hospital or medical centre for treatment.

Recommendations

This study recommended that regular enlightenment programme should be organised for couple on the risk factors of infertility. The section should include means of managing various stress and challenges associated with infertility. In addition, sensitisation should be provided on preventable ways of addressing infertility such as reduced smoking and consumption of alcohol. Modern and assisted methods of conception such as intra-uterine insemination (IUT), Invitro fertilisation and embryo transfer (IVF/ET), gamete intra fallopian transfer (GIFT) and some others should be encouraged by medical personnel and implemented by couples suffering from infertility. Improvement of medical facilities in the hospitals which can improve reproductive and fertility scheme should also be encouraged. Counselling services should be organised regularly for couples to alleviate the impacts of infertility on the well-being of the couple.

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