

## Causes and Implications of Infertility on Reproductive and Wellbeing of Childbearing Age Women in Obajana, Kogi State

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**Abstract.** The study examines the causes and implications of infertility on reproductive wellbeing of child bearing age women in Obajana, Kogi State, Nigeria. Descriptive research design of survey type was used for the study; the population of the study comprises all infertile women attending infertility clinics and hospitals in Obajana, Kogi State. 200 respondents were sampled for the study. A researcher designed structured questionnaire of four Likert rating scale format was used for the study, the instrument was validated and tested for reliability, a reliability coefficient of 0.89r was obtained. The instrument was administered by the researcher and two trained research assistants. Four research hypotheses were formulated. The data collected was analyzed using inferential statistics of Pearson Product Moment Correlation 'r' at 0.05 level of significance. The findings reveal that: physiological condition of reproductive organs will be the cause of infertility of child bearing age women in Obajana, Kogi State because the calculated r of 0.610 is greater than the critical r of 0.116 at 0.05 level of significance. Sexually Transmitted Infections (STIs) will be the cause of infertility of child bearing age women in Obajana, Kogi State because calculated r of 0.819 is greater than the critical r of 0.116 at 0.05 level of significance. Infertility will have implication on mental health status of child bearing age women in Obajana, Kogi State because calculated r of 0.235 is greater than the critical r of 0.116 at 0.05 level of significance. Infertility will have implication on economic status of child bearing age women in Obajana, Kogi State because calculated r of 0.317 is greater than the critical r of 0.116 at 0.05 level of significance. Based on the findings of the study, the following recommendations were made: Women should guide against anything that will affect their reproductive organs, Women should guide themselves against the contact of sexual transmitted infection. Women with infertility should be

protected from mental stress that may come from it. Women of childbearing age that are affected by infertility should desist from unnecessary spending from their search for children.

**Keywords:** Infertility, reproductive, childbearing and wellbeing.

### 1. Introduction

The World Health Organization (2013) defined infertility as a disease of the reproductive system by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (and there is no other reason, such as breastfeeding or postpartum amenorrhea). Over the years, many countries of the World have experienced and are still experiencing the issue of infertility; this is to say that infertility is not a new but has always been with human beings right from creation. Primary infertility is infertility in a couple who have never had a child, secondary infertility is failure to conceive following a previous pregnancy, infertility may be caused by infection in the man or woman, but often there is no obvious underlying cause (WHO, 2013).

According to Khan, Gupta and Mires (2005), infertility is classified into primary and secondary. Couples with primary infertility have never been able to conceive while on the other hand, secondary infertility is difficulty conceiving a child after already having conceived (and either carried the pregnancy to term or had a miscarriage) (Khan et al., 2005). In some cultural settings, infertility could lead to stigmatization, as reported in matrilineal ethnic group in Mozambique; the consequences of infertility include exclusion of the infertile women from certain social activities and traditional ceremonies (Gerrits, 2007). It has been reported

among the Ekitis in south - western Nigeria, infertile women are treated as outcasts and their bodies are buried in the outskirts of the town with those of demented persons (Ademola, 2012).

Infertility is a stressful condition, having a strong impact on sexual life, relationship, sense of self-worth, and daily life. In the midst of testing and treatments, infertility may literally feel like it has become one's entire life, as one goes to and from doctor appointments. All of this stress can potentially contribute to the development of depression. Depression is more common among the fertility challenged who have a family history of depression, which experienced depression before their fertility struggles, or those who lack a support network. Infertility frequently causes feelings of shame, which may make it more difficult to talk to friends and family about their struggles. This isolation makes depression more likely. Some hormonal imbalances that cause infertility may also contribute to mood symptoms and vulnerability to depression, (Rachel, 2015).

According to Sherman (2009) in tertiary health institution, most women that come to see the doctors because of infertility problem were typically in their late 30s. Most of them tend to have some kind of ovulatory problem with egg quality because they are getting to menopause. This group observed that if you look at the population at large, the most common cause of infertility is some kind of tubal blockage which is caused by an infection in the fallopian tube gotten either from a sexually transmitted disease or from a prior pelvic surgery. The second leading cause of infertility is lack of ovulation called polycystic ovary syndrome (PCOS) in which women do not ovulate.

Marriage is basically a stable union and so when Nigerians marry, their expectation is usually, that the marriage will last. Just like every African women marriage, Nigerians also enter into marriage today to get children, thus, intimacy in marriage and bearing of children has remained life-long aspirations of couple especially in sub-Saharan African region (Isiugo-Abanihe, 2004, 2003; Adewuyi & Ogunjuyigbe, 2003; Togunde & Newman, 2005; Mayer & Trommsdorff, 2010). Nnabugwu (2014) stated that fertility is often seen as a great mystery of life, as a force that runs from one generation to the next. This demand for fertility puts a stress in marriage and can bring about a breakdown when it turns out not to be fruitful. Many families are not prepared to accept marital breakdown as a human reality, when all effort at its prevention fails. The

fact is that marital breakdown is on the increase today. Nnabugwu (2014) further stated that despite an apparent upsurge in the number of young people who are getting married, there is at the same time a frightening reality of the high percentage of marriages that are breaking up. It has been observed that over the past years in Nigeria, the society has witnessed a great increase in the rate of separation, divorce, marital disaffection and loss of affection between couples. This is not the same with saying that marriage in Nigeria today is in crisis (Nnabugwu, 2014).

Couples without children are rampant reaching 33 percent in Austria, 55 percent in Denmark and 36 percent in France (Hantrais, Philipov & Billari, 2005). Specific rates are difficult to establish for sub-Saharan African countries. Till date, Nigerians marry to have children and marriage has meaning only when a child is born and more often if the child survives. Marital fertility is thus essential, childlessness is often regarded as an aberration, and the victims are often pitied or stigmatized (Isiugo-Abanihe, 2004). There is general decline in marital stability and the number of times that people marry is increasing coupled with high rate of multiple partnerships in Nigeria like other traditional African countries (Omideyi, 2007; Isiugo-Abanihe, 2004, 2003).

Infertility is the inability of a couple to achieve a pregnancy after repeated intercourse without contraception for one year (Beers, Andrew, Jones & Porter, 2003). It is becoming increasingly common that people are waiting to marry and to have a child. The cause of infertility may be due to problems in the man, the woman, or both. Problems with sperm, ovulation, or the fallopian tubes each account for almost one third of infertility cases. In small percentage of cases, infertility is caused by problems with mucus in the cervix or by unidentified factors. Thus, the diagnosis of infertility problems requires a thorough assessment of both partners (Beers et al., 2003).

Child bearing is an expedient aspect of life all over the world. Infertility is considered a personal tragedy and a curse; it affects the entire family and can even affect the local community (Adewunmi, Etti, Tayo, Rabi, Akindele, Ottun & Akinlusi, 2012). Global research indicated that about 13-15 percent of couples worldwide are infertile (Kamel, 2010). World Health Organization (WHO) (2015) defined infertility as the inability to conceive a child after two years of unprotected sexual intercourse. This

means that a couple may be considered infertile if after two years of regular sexual intercourse the woman has not become pregnant (and there is no other reason, such as breastfeeding or postpartum amenorrhoea).

One in every four couples in developing countries had been found to be affected by infertility, when an evaluation of responses from women in Demographic and Health Surveys from 1990 was completed in collaboration with WHO in 2004. A WHO study, published at the end of 2012, has shown that the overall burden of infertility in women from 190 countries has remained similar in estimated levels and trends from 1990 to 2010. Infertility is a global public health concern and affects approximately a tenth of couples worldwide (Rep Health Outlook, 2002). In Nigeria, prevalence rates may be higher. A recent study reported that up to a third of women in a rural community were affected (Adetoro & Ebomoyi, 2011). It has been described as the most important reproductive health concern of Nigerian women (Okonofua, 2003), and accounts for between 60 and 70 percent of gynecological consultations in tertiary health institutions (Megafu, 2008). Female infertility is stigmatized in western as well as non-western cultures (Family Health International, 2003; Greil, 2007; Whiteford & Gonzalez, 2005). The notion of childbearing being a hallmark of womanhood, the high premium placed on children by extended families as well as difficulties in the procedure for legal or permanent adoption make stigmatizing attitudes experienced by infertile women particularly severe in non-western cultures.

Furthermore, aside from the stereotype that infertility is solely considered 'a woman's problem,' they also experience physical and psychological abuse. Earlier reports have documented psychosocial morbidity (marital instability, social ostracism, and economic deprivation) associated with female infertility (Ukpong & Orji, 2006; Orji, Kuti & Fasuba, 2002; Matsubayashi, Takashi, Schumichiro, Takahiro & Tsunelisa, 2001; Aghanwa, Dare & Ogunniyi, 2009). Infertility can be a stressful experience that affects several aspects of a woman's life; her religious faith, self-esteem, occupation, relationship with her partner, family and friends being notable examples. Common psychological symptoms reported among infertile women include depression, anxiety and suicidal ideation (Fido, 2004). These symptoms occur in a similar pattern and magnitude among patients with other medical disorders like cancer (Domar, Zuttermeister &

Friedman, 2003). Omoaregba, James, Lawani, Morakinyo and Olotu (2011) reported that women with infertility experience higher rates of psychological distress compared with their fertile counterparts. In developing countries, socio-cultural factors may aggravate this distress.

## 2. Statement of the Problem

It is observed that some married people in Obajana township do not have any children after a long period of their marriage despite that they did not use any contraceptive to prevent pregnancy. Infertility among married couple has led to broken homes, divorce, physical violence, stigmatization and discrimination especially to women, they are sometimes pushed out of their husband's house without granting them access to their husband's properties, most of women are sent back to their father's house where they are cajoled and mocked by their sister in laws and given them all sort of names just to destabilize them. Many of them have visited various health care centres to seek for medical intervention for their childlessness, some of the health centre visited include both orthodox and traditional home. Some of the modern health centres visited includes governmental and private hospitals. Some of them have spent huge amount of money during this process that made some of them to become retched.

Infertility has negative psychosocial consequences that do not limit or inhibit physical integrity but represent a crisis period for most couples. In many societies around the world, lack of pregnancy and the resulting childlessness are often highly stigmatizing, leading to profound social suffering for infertile couples. Infertility has been acknowledged as a serious public health problem globally and, especially in developing countries. In many societies around the globe, maternity provides a kind of social respectability for couples and lack of pregnancy is perceived as a humiliating condition. Infertility is considered a crisis with various biological, psychological, economic, ethical, and cultural consequences. As a result, infertility often leads to emotional stress, depression, anxiety, loss of self-esteem and security, increased sense of guilt and self-blame, and relationship problems with partner, family, and friends.

In African society, children are considered as assets and having many children is a symbol of high status. In the Nigerian context, giving birth is considered as a main purpose in life for couples. As children are

assumed to be God’s blessings, life is meaningless for couples who fail to have children. Fertility has thus a great value in Nigerian context. Infertility as a social and personal problem is almost ignored. Despite the existence of a high fertility rate in the country, infertility as a social and personal problem has many dimensions. In view of this, the researcher carried out a study on the causes and implications of infertility on reproductive wellbeing of childbearing age women in Obajana, Kogi State.

### 3. Research Hypotheses

The following hypotheses were formulated to guide this study.

- (i) Physiological condition of reproductive organs will not significantly be the cause of infertility among child bearing age women in Obajana, Kogi State.
- (ii) Sexually Transmitted Infections (STIs) will not significantly be the cause of infertility among child bearing age women in Obajana, Kogi State.
- (iii) Infertility will not significantly have any implication of mental health status among child bearing age women in Obajana, Kogi State?
- (iv) Infertility will not significantly have any implication on economic status among child bearing women age in Obajana, Kogi State.

### 4. Methodology

The research design that was adopted for this study was a descriptive research of survey type. The use of this method was considered appropriate because of its suitability for the study of this nature. The population for this study comprised all women of childbearing age attending infertility clinics and hospitals at obajana, Kogi State with an

approximately population of 400 patients. A multistage sampling technique was used to select 50% of women of childbearing age attending infertility clinics and hospitals, the study centers was stratified into four (4) areas that is, the existing four major health centers in the study area. Two hundred respondents were sampled for the study using simple random sampling technique of lucky dip (fish bowl).

The instrument used for this study was a structured questionnaire designed by the researcher. The instrument was validated by expert in the related field of study which include the supervisor and three other lecturers in the department of health promotion and environmental health Education University of Ilorin, Kwara State.

The reliability of the instrument was carried out at Federal Medical Centre Lokoja, Kogi State, a similar geographical location with the place of research work, using split half method cronbach-alpha statistical tools was used to obtain reliability result. A reliability coefficient of 0.89r was obtained. This shows that the instrument was reliable for the study.

The researcher together with two trained research assistants administered the instruments to the respondents. Respondents consent was sought for, to participate in the study. The content of the questionnaire was explained in detail to the respondents so as to rule out ambiguity or lack of understanding of the questionnaire that was used for the study. The instrument was retrieved immediately from the respondents to avoid the loss of the instrument. The data collected from the respondents was sorted, coded and subjected to appropriate statistical analysis. Inferential statistics of Pearson ‘r’ was used to test the null hypotheses set for the study at 0.05 alpha level as a criterion for either to reject or retain the stated hypotheses used for the study.

### 5. Result

**Hypothesis 1:** Physiological condition of reproductive organs will not significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.

**Table 1: Pearson ‘r’ showing Relationship Between Physiological Condition of Reproductive Organs as Cause of Infertility of Child Bearing Age Women in Obajana, Kogi State**

Variable	N	Mean	SD	Df	Calc. r-value	Critical r-vau	Decision
Infertility	200	13.7800	2.37	198	0.610*	0.116	Rejected
Physiological condition of reproductive organ	200	13.9350	1.84				

Table 1 show the Relationship between Physiological condition of reproductive organs and cause of infertility of child bearing age women in Obajana, Kogi State. Based on the analysis of the results, it indicated that the calculated r of 0.610 is greater than the critical r of 0.116 at 0.05 level of significance. Thus the hypothesis is hereby rejected. Meaning that, Physiological condition of reproductive organs will significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.

**Hypothesis 2:** Sexually Transmitted Infections (STIs) will not significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.

**Table 2: Pearson ‘r’ Showing Relationship between Sexually Transmitted Infections (STIs) and Cause of Infertility of Child Bearing Age Women in Obajana, Kogi State**

Variable	N	Mean	SD	Df	Calc. r-value	Critical r-vau	r-	Decision
Infertility	200	13.7800	2.37	198	0.819*	0.116		Rejected
STIs	200	13.7850	2.01					

Table 2 shows the Relationship between Sexually Transmitted Infections (STIs) and cause of infertility of child bearing age women in Obajana, Kogi State. Based on the analysis of the results, it indicated that the calculated r of 0.819 is greater than the critical r of 0.116 at 0.05 level of significance. Thus the hypothesis is hereby rejected. Meaning that, Sexually Transmitted Infections (STIs) will significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.

**Hypothesis 3:** Infertility will not significantly have any implication on mental health status of child bearing age women in Obajana, Kogi State.

**Table 3: Pearson ‘r’ showing Relationship between Infertility and its Implication on Mental Health Status of Child Bearing Age Women in Obajana, Kogi State**

Variable	N	Mean	SD	Df	Calc. r-value	Critical r-vau	Decision
Infertility	200	13.7800	2.37	198	0.235*	0.116	Rejected
Mental health status	200	13.7150	2.11				

Table 4 shows the Relationship between Infertility and it implication on mental health status of child bearing age women in Obajana, Kogi State. Based on the analysis of the results, it indicated that the calculated r of 0.235 is greater than the critical r of 0.116 at 0.05 level of significant. Thus the hypothesis is hereby rejected. Meaning that, infertility will significantly have any implication on mental health status of child bearing age women in Obajana, Kogi State.

**Hypothesis 4:** Infertility will not significantly have any implication on economic status of child bearing age women in Obajana, Kogi State.

**Table 4: Pearson ‘r’ Showing Relationship between Infertility and its Implication on Economic Status of Child Bearing Age Women in Obajana, Kogi State**

Variable	N	Mean	SD	Df	Calc. r-value	Critical r-vau	Decision
Infertility	200	13.7800	2.37	198	0.317*	0.116	Rejected
Economic status	200	13.7900	2.08				

Table 5 shows the relationship between Infertility and its implication on economic status of child bearing age women in Obajana, Kogi State. Based on the analysis of the results, it indicated that the calculated  $r$  of 0.317 is greater than the critical  $r$  of 0.116 at 0.05 level of significance. Thus the hypothesis is hereby rejected. Meaning that, infertility will significantly have implication on economic status of child bearing age women in Obajana, Kogi State.

## 6. Discussion of Findings

The hypothesis which stated that Physiological condition of reproductive organs will not significantly be the cause of infertility of child bearing age women in Obajana, Kogi State. The findings revealed that Physiological condition of reproductive organs will significantly be the cause of infertility of child bearing age women. This hypothesis was rejected and these findings support the view of Klock (2008) who affirmed that endometriosis is another important cause of infertility in women which affect the physiological nature of the women. This finding is also in line with Klock (2008) who observed that endometriosis is another important cause of infertility in women where endometrial lining is shifted into the area outside the uterus and expands with each menstrual cycle. It can further block the fallopian tubes restricting the egg to move from the ovaries and obstructs the release of the egg. And this further supports the view that Sexually transmitted diseases like Chlamydia infection is a very common cause of tubal infertility. The main reason of female infertility also can be pelvic inflammatory disease (PID), an infection in the pelvic area, especially around or at the site of fallopian tube. Other causes include sexually transmitted infections, unsafe abortions, appendix rupture, and pelvic tuberculosis.

Hypothesis two which stated Sexually Transmitted Infections (STIs) will not significantly be the cause of infertility of child bearing age women in Obajana, Kogi State. This finding revealed that Sexually Transmitted Infections (STIs) will significantly be the cause of infertility of child bearing age women. This hypothesis was rejected and this supports the

view of Hillis and Wasserheit (2010) who observed that prevalent of STIs especially gonorrhoea is one of the major causes of infertility of childbearing age women. Further observed that HIV infections are also increasing in the country, despite the active promotion of condom usage. Gonorrhoea primarily affects the vagina, cervix, uterus, and fallopian tubes in women and the urethra, epididymis and testes in men. The main long-term effect of gonorrhoea infection is the development of tubal damage (a cause of infertility) in women and, in men, can result in infection of the testes and surrounding tissues, a major infertility factor.

Hypothesis three which stated that Infertility will not significantly have any implication on mental health status of child bearing age women in Obajana, Kogi State. This finding revealed that Infertility will significantly have any implication on mental health status of child bearing age women. This hypothesis was rejected and these findings support the view of Greil (2010) who observed that greater amount of infertility has implication on the mental health status of the women on their mental status. This further supports the view of (Latifnejad, 2008) which stated that the dramatic advances in assisted reproductive technology have acted as a double-edged sword, itself causing mental, social, moral, financial, and legal concerns.

Hypothesis four which stated Infertility will not significantly have any implication on economic status of child bearing age women in Obajana, Kogi State. The findings revealed that Infertility will significantly have any implication on economic status of child bearing age women. This hypothesis was rejected and these findings are in support of Russel (2006) who confirmed that economic nature of the women has significant implication on the health of the women especially the infertile women. This is in line with (Russel, 2006) that Health economists have previously emphasized that willingness to pay does not imply ability to pay. Indeed it is the very act of willingness to pay for treatment that is unaffordable, which puts households at risk of catastrophic or impoverishing health costs.

## 7. Conclusions

Based on the findings from the study, the following conclusions were drawn:

- (i) Physiological condition of reproductive organs will significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.
- (ii) Sexually Transmitted Infections (STIs) will significantly be the cause of infertility of child bearing age women in Obajana, Kogi State.
- (iii) Infertility will significantly have implication on mental health status of child bearing age women in Obajana, Kogi State.
- (iv) Infertility will significantly have implication on economic status of child bearing age women in Obajana, Kogi State.

## 8. Recommendations

In order to ensure the reasons for Causes and implications of infertility on reproductive wellbeing of childbearing Age women in Kogi State, the following are recommended:

- Women should guide against anything that will affect their reproductive organs
- Women should guide themselves against the contact of sexual transmitted infection.
- Women with infertility should be protected from mental stress that may come from it.
- Women of childbearing age that are affected by infertility should desist from unnecessary spending from their search for children. They should be assisted by government and individual in the areas of fund when searching for children from different quarters.

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