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Research Paper

Perceived Psychological Impact Of Infertility Amongst Infertile Couples Attending Gynaecological Clinic In Juth And Kauna Specialist Hospital Jos

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ABSTRACT : *The psychological consequences of infertility can be related to various factors, including the lack of respect, rejection from family members, a couple might observe some abnormal treatments from family, friends, and colleagues. This lack of respect often pushes the couple to withdraw unto itself, leading to emotional pains and depression. Empirical evidence or literature on the effects of infertility on marital relationships in Nigeria is scarce. This study investigates the psychological impact of infertility on couples attending gynecological clinics in Jos, Nigeria. The research aims to understand the effects of infertility on marital life, depression, and psychological well-being. A cross-sectional descriptive survey of 110 respondents was conducted, and the data was analyzed using descriptive statistics and Chi-square tests. The findings reveal that infertility causes significant psychological distress, including depression, and affects marital life. The study also identifies coping strategies and highlights the influence of religious and cultural beliefs on the utilization of assisted reproductive technology (ART) services. The results show a significant association between depression and psychological conditions among infertile couples. The study concludes that infertility treatment is a source of psychological suffering and recommends interventions to address guilt, promote optimism, and reduce feelings of isolation.*

KEYWORDS: *Infertility, Depression, Psychological Problem and Assisted Reproduction*

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I. INTRODUCTION

The psychological consequences of infertility can be related to various factors, including the lack of respect, rejection from family members, a couple might observe some abnormal treatments from family, friends, and colleagues. This lack of respect often pushes the couple to withdraw unto itself, leading to emotional pains and depression. Women are usually the identified patients seeking help in fertility centers irrespective of which couple is actually dealing with the health crisis, it is almost always the case that it is the woman that is at least initially pushed to seek treatment for infertility or the perception of it. This approach to tackling the fertility crisis is rooted in the patriarchal belief that man is perfect and faultless. This is contrary to the actual reality. Ikechebelu et al (2003) find that in some cases, such as in Southeast Nigeria, infertility among men is more than among women.

Due to these social pressures and expectations from couples, it is usually the woman that makes the most effort to unraveling why she and her husband are not having any child. Women almost by default presuppose that something is wrong with them. Often, it is usually after repeated tests have been conducted in varying facilities and results all coming out showing nothing wrong with them, that some thought is dedicated to considerations of what could be wrong with the man.

Empirical evidence or literature on the effects of infertility on marital relationships in Nigeria is scarce. This study will seek to examine the impact of infertility on the marital relationships of the couple attending gynecological Clinic with JUTH. The desire to be parents and the value placed on the ability of reproduction is high globally but varies between cultures, believe systems and human civilizations. This is seen in the desire and extend to which couples are willing to go to conceive and deliver a healthy child. While in some civilized societies, it is socially accepted to remain voluntarily childless. The African cultures see having a child very crucial for a couple's personal identity both socially, morally and culturally. Orji (2002) found that marriages that do not produce children often end in divorce, and it is women that suffer more even before the divorce occurs. Not surprisingly, Orji (2002) state that: "The conclusion and operational implication of our findings are that women suffering from infertility should be considered an important group of often desperate patients with poor reproductive health who deserve attention and care in their own right".

There are multiple probable motivations for these behaviors. On the one hand, it can be said that it is evolutionary factors at work, in our species' evolution, given our innate need to survive through procreation, the desire to have our bloodline sustained push us to want the joy and assurances that come from the birth of a new child into the immediate and extended family, as the case might be.

On the other hand, there is the historical factor synonymous with feudal societies. It was highly desired that the nuclear and extended families procreate widely so as to have as many children who are the workers as possible. Hence, with the birth of each new child, the survival of the family in terms of its productive capacity as well as its social status in terms of expansion and then the ability to protect itself through raising a sort of house army becomes celebrated and therefore, regarded as a remarkable achievement. This aspiration has significantly influenced the prescriptions regarding procreativity in the Abrahamic faiths of Judaism, Christianity, and Islam.

Furthermore, infertility is seriously frowned at because it is associated with weakness and tedium. A house that never produces children is guaranteed no moments of festivity since the most important ceremonies of the cycle of life include the birth/naming ceremonies, the wedding ceremonies etc. All these are not possible unless there is a child to be named and eventually married out.

Attached to this need for revelry is the need for kinship expansion. Through marrying off children to members of other families and/or communities, a family is able to form useful military, political, social, and economic ties. These affiliations can be the ultimate guarantee of a family's survival, its transition into higher social classes, or the achievement of political power.

When a couple is unable to bear children, some level of pressure will be expected from their immediate families. However, there is another level of the challenges a couple might experience with themselves. A husband and wife that experience what is called infertility often undergo depression and might find that their affection for each other become tested. As a result, there may be constant conflict amongst them which may eventually lead to seeking help in a medical or spiritual facility. While some visit their religious leaders for possible solutions, others resort to traditional medicine men and women, while other simply utilizes modern medicine. It is this latter group that constitutes the focus of this study. Consequently, it becomes reasonable to expect that part of the issues troubling a woman dealing with a crisis of infertility would be the question of why she is singled out for these repeated tests, with many men never getting tested at all. As Ikechebelu et al (2003) find, in most cases, even when the men are eventually invited to the clinic to be tested, they fail to show up. Part of the problem would invariably be that, it seems to be a default assumption that once a man has erection abilities and can undergo insertion, and invitro orgasm, it is assumed that he is certified fertile. Hence infertility is given a widespread treatment as a women's problem, and as Iliyasu et al (2018) find, sometimes these women experience intimate partner violence as a result of the perception or reality of their infertility. Hence, this study focuses on the experiences of couples. It seeks to investigate what psychological issues women dealing with infertility crisis undergo.

The general aim of this study is to investigate the perceived psychological experiences of women dealing with infertility problems and undergoing treatment at the gynecological clinic in Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital Jos. Specifically, the study seeks to:

1. To assess the level of depression in infertile females in JUTH
2. To assess the psychological condition experienced by women with infertility in JUTH
3. To assess the coping strategies utilized by women experiencing psychological stress due to infertility.
4. To assess the willingness of infertile couple to access ART
5. To identify the factors responsible for poor utilization of ART services by infertile couple

To address the research objective, the research hypothesis is formulated

HO: There is no significant relationship between duration of infertile and depression among infertile women in JUTH.

This paper is organized into five sections. Following this introduction, a review of the relevant literature on infertility and its psychological impact is presented. The methodology used to collect and analyze

the data is then described. The results of the study are presented, followed by a discussion of the findings. Finally, the conclusion and recommendations are presented.

1.1 Significant of the study and Contribution to Knowledge

The significance of this study is drawn from the fact that this study is significant and timely because it seeks to understand the magnitude of psychological pressure infertile couples face within the society. The study shall also devise better measures of managing such psychological pressures to affected couples. Therefore, the study is significant to the general public, particularly those couple suffering from infertility, and the health sector of the country. The study is also relevance as it would be used as a reference material for those willing to undertake related study. Although, infertile couples consult gynaecologists for treatment, but, the first care provider who comes in contact with the couples is a nurse midwife. Nurse midwives are responsible to provide holistic care to the couples having infertility problems. Hence, it is important that they should know their role while taking care of infertile couples. This study contributes to the existing literature on the impact of infertility among couples in general. The study assessed the level of depression in infertile females and also assess the psychological condition experienced by women with infertility. The coping strategies utilized by women experiencing psychological stress due to infertility was also discussed.

II. LITERATURE REVIEW

There have been various studies conducted by researchers in the past on infertility in Nigeria. Literature review is an integral part of any research work. It is simply the careful and critical examination of publication related and relevant to the problem under investigation. The range of literatures reviewed includes literatures on sociological problems of infertility, psychological problem of infertility, infertility related topics, and those on assisted reproductive health. Infertility is a critical life experience that brings emotional, social and psychological problems to the individual experiencing it. Infertility is sometimes seen in the context of socio-cultural belief and perceived according to ones' geographical areas, culture and event religious system. It is therefore safe to say that, despite the fact that infertility means inability to conceive after at least a year of unprotected intercourse, it signifies different things to different people. The prevalence of infertility according to the article is higher in developing countries than in developed Nations. Child bearing is seen as a way of enhancing one's worth in such societies and infertility is blamed on the women in most cases within developing Emsocieties. Infertility in itself may not be seen as a disease, but its effect can cause depression, stress, and anxiety which lead to loss of one's self worth. Despite the claim by this article that the infertility related issues are influenced by the socio-cultural context in which the infertile person lives, it is important to point that other factor other than the socio-cultural context such as religion and the attitude of the affected person also play a key role on how infertility affect patients. The article does not study changes and other recent discoveries in the area of infertility which hitherto did not exist in the year the article was published. This study looks into other new discoveries in the area of infertility and shall arrive at a more robust comprehensive conclusion. At the end of the study.

Greil (1997) in his article infertility and psychological distress, viewed infertility from gender perspective and assert that infertility has more devastating effect on women than on men, he further stress that infertility has both causes and consequences and maintaining that such causes and consequences are higher on women. While, this study agrees with the author of the article in part, particularly on the hypothesis that stress may be a causal factor of infertility. However, maintain a contrary opinion on the gender claim. This is due to the fact that other factors that greatly influence the impact of infertility such as geographical, religious and even level of education seem not to be considered before arriving at position the article took. The impact of infertility is also directly affecting men as well as women.

Bakhtiyar K. 2019 in an article titled *an investigation of the effects of infertility on Women's quality of life* said infertility may present a regrettable emotional experience to the victim. It sometimes led to psychological challenge which include stress, anxiety, depression, diminished self-esteem, declined sexual satisfaction, and reduced quality of life. Consequently, such psychosocial issues affect the female gender more severely than the male partner especially in under develop societies where prejudices against women is almost a norm. Women with fertility impairment exhibit high level of frustration, anger and mood swings which in turn affect their relationship with the family, friends and even the society at large. Infertile women are more likely to develop mental illnesses, marital dissatisfaction, and impaired quality of life compared to the individuals of fertile group. According to WHO, quality of life is a concept used to describe development, growth, and well-being which reflects individuals' perceptions of their position in the community as well as their goals, expectations, standards, and priorities. Attitudes toward women's infertility are often influenced by ethnic and cultural groups. While it is true that women are at the centre of infertility issues, their male counterpart may not be totally free from such psychological impacts as seen in this article. The current work will look beyond just the woman and will study other challenges associated with infertility. Another gap in the literature under review

is the attitude of infertile couples to seeking medical assistance which will be carefully considered in the current study.

The first reaction to infertility by many couples is surprise. This is because of the assumption that pregnancy will naturally occur after having unprotected sexual intercourse for some months or at best a year. This leads to a careful reassessment of live style of both couples, to understand why they have not been able to conceive. They also examine the timing, frequency, and sometimes the technique of intercourse all in search for answers to why they have not been able to conceive. Delayed conception or lack of it is usually accompanied by couples seeking solutions and advices from experienced couples who might have passed through such delays. To most couples, the word is always just relaxed don't be pressured, keep trying it will come when you less expect it.

Failure to achieve success after preliminary attempts through different sex position and ovulation tracking, couples sometimes resort to self-examination of their past lives in case there may be some habits in that past that has necessitated their present condition of infertility. The tendency for women to naturally assume they may be blamed for infertility is high. Women who may have had sexually transmitted disease, previous abortion or have had several sexual partners may entertain guilt and fear of being the cause of infertility. It is always unlikely for the man to suspect if a past medical condition, quality of sperm, or anti-social habit may account for their infertility. This is because the society places more demands on the female gender when it comes to reproduction.

Depression is one of the emotional reactions of infertile couples. The occurrence of depression within infertile couples is possible. It may be cyclical and coincide with phases of the trail cycle, or it may be acute and precipitated by a specific event, such as a family reunion, birth or appearance of pregnancy in other couples who probably try getting pregnant after them. Fortunately, the infertile couples may withdraw and communicate less or argue more with each other, experience drastic decline in optimal performance at work, or have severe anxiety and agitation.

Infertile couples may feel intense anger and feel life has treated them unfairly particularly when they see other couples achieve a pregnancy with little or no effort and in good time. This display of anger may be more pronounced when they see pregnant woman display disgust or unhappiness with her pregnancy.

A study of the quality of life among infertile couples reveals an alarming situation that health authorities are focusing on and spend a great deal of effort to help the infertile couples in one way or another. There are already a few studies on the quality of life among infertile women in Nigeria although those are largely descriptive and just follow a cross-sectional method which lacks a comparison group to analyze the impact of infertility on different aspects of life. Most of these studies have been conducted using the quality-of-life assessment questionnaire which evaluates the physical aspects of life quality. There are multiple ethnic groups in the country which requires researchers to run further studies in different regions as well. This study basically aimed to investigate the psychological impact of infertility on infertile couples within Jos.

III. MATERIAL AND METHODS:

In this section, the method and procedure to be used in obtaining data for analysis was considered. Therefore, this section is designed to describe the statistical tool that will be used to determine the psychological impact of infertility amongst couples attending Gynaecological Clinic in Plateau State case study of Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital, Jos Plateau state north central Nigeria.

3.2 Research Design

A research design is a framework or blueprint for conducting a research work with detailed procedures necessary for obtaining information needed to structure or solve a research problem. This study made use of a descriptive cross-sectional design in the Obstetrics and Gynaecological Departments of the Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital, Jos. The study comprised of females with primary infertility at the time of their visit to infertility specialist, as well as forming a control group coming for routine gynaecological examination in those health facilities. The following measures will be utilized in the study:

Consent form: This form was structured in English language and was administered to all participants participating in this study.

Socio-demographic Profile: The profile of each participant in the study was documented. This included the bio-data or confounders together with questions to identify and address various issues relating to infertility among couples attending gynaecological clinic in Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital, Jos.

Clinical Profile: This was collected from each participant, and shall include the history of infertility, menstrual cycle obstetric and sexual history.

Ethical consideration: The study got approval from the Research Review Board of the Department in the University; and the Ethical Committee of the Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital, Jos. An informed consent shall be sought from the subjects prior to participation in the study.

Inclusion Criteria: All patients within reproductive age of 20 – 50 years of primary infertility attending Gynaecology Clinic and IVF centers in the various health facilities under study were included.

Exclusion Criteria: All patients with primary infertility and prior psychological abnormalities, depression or psychiatric disorders was excluded.

3.3 Population of The Study

According to Toluchi (2001), research population refers to a group of people or objects that the researcher is taking as a case study. Eguzoikpe (2008) also defined research population as the totality of the collection of individual object or measurement whose properties are under investigation. The targeted population for this study was all patients with infertility challenges attending Gynaecological Clinic and IVF centers in Jos University Teaching Hospital (JUTH) and Kauna Specialist Hospital, Jos. This research work intends to obtain data from female patients between the reproductive ages of 15-45 years with infertility challenges.

3.4 Sampling Technique

The researcher used simple random sampling. This simple random sampling was selected because it ensures that each member of the population has an equal chance of being chosen from the population. The simple random sampling technique avoids subjective bias arising from personal choice of sampling units. The choice technique is believed to be appropriate representation of the whole population under study. The population of the study would comprise of 103 for Jos University Teaching Hospital and 37 for Kauna Specialist Hospital, Jos. This sums up to 140 infertile patients as population of the study.

3.5 Sample Size

It was difficult to get every patient having infertility challenges in all the gynaecological clinics and IVF centers spread across various hospitals in Plateau State due to time and financial constraints. Consequently, the need for selecting a sample from the population becomes very imperative. The population of the study area is 140 infertile patients.

The sample size for this study was estimated from using Yamane's formula for sample size determination Yamane's (1967)

$$n = \frac{N}{1+N(e)2}$$

Where n = Minimum sample size

e = level of significant 5% = 0.05

N = population size,

$$n = \frac{140}{1+140(0.05)2} = 103$$

Adding 10% attrition for none respond rate, the new sample size for the study would approximately 103+ 10= 113 participants.

3.6 Method of Data Collection

The instruments used for data collection for this research work is a questionnaire and an interview with proper observation in line with professional medical procedures to obtain the requisite data for analysis. The data to be used in this research work is primary data and it will be collected through observation and appropriate medical procedures.

3.7 Statistical Techniques

In this study, descriptive and inferential statistics will be used. The data was be collected, analyzed, presented and interpreted using the simple frequency distribution table. The data collected was analyzed using frequency tables and percentages with statistical packages for social sciences (SPSS) computer application software.

Chi-square (χ^2) statistics was also used to test for significant associations. A p-value < 0.05 would be considered statistically significant.

The Chi-square (χ^2) statistics formula is shown below:

$$\chi^2 = \sum_i \frac{(Oi-ei)^2}{e_i}$$

Where: $x^2 =$ Chi-square
$\sum_i$ = summation of all items
O_i = observed frequency
e_i = expected frequency

IV. RESULT AND DISCUSSION

This section dealt with presentation of results. A total of 113 questionnaires was administered to the respondents to assess their level of knowledge on psychological impact of infertility amongst infertile couples attending Gynae clinic and IVF centre of Jos University Teaching Hospital and Kauna specialist hospital. 110 questionnaires were properly filled and returned and was used for this analysis.

Table 1: Socio Demographic Variables of Respondents

Socio demographics	Frequency	Percentage (%)
Age category		
20-30	18	16.4
31-40	57	51.8
41-50	25	22.7
Total	**110**	**100**
Educational background		
Primary	23	20.9
Secondary	30	27.3
Tertiary	57	51.8
Total	**110**	**100**
Occupation		
Housewife	23	20.9
Civil servant	30	27.3
Farmer	6	5.5
Trading/business	41	37.3
Others	10	9.1
Total	**110**	**100**
Duration of infertility		
1 -3 years	72	65.5
4 - 6 years	17	15.5
7 – 10 years	12	10.9
11 – 14 years	9	8.2
15 years and above	2	1.8
Total	**110**	**100**
Been evaluated for infertility		
Yes	110	100.0
No	0	0.0
Total	**110**	**100**
Treatment option offered		
Myomectomy	15	13.6
Ovulation induction	13	11.8
Salpingectomy	29	26.4
IVF/ICSI fertilization	43	39.1
IUI intra uterine insemination	10	9.1
Total	**110**	**100**
Time to assess treatment		
Between 1 years	84	76.4
6 – 10 years	23	20.9
11 – 15 years	3	2.7
16 years and above	0	0.0
Total	**110**	**100**

The result in table 1 shows that 57(51.8%) of the respondents were aged between 31-40 years, 25(22.7%) of the respondents were between 41-50 years, 18(16.4%), of the respondents were between 2- - 30 years. This shows that most of the respondents are child bearing age and should be bearing children.

Educationally, 57(51.8%) had completed their tertiary education while 30(27.3%) had completed their secondary education, 23(20.9%) disclosed that they have completed only their primary education. This also show that most of the respondents are educated enough to understand the concept of infertility and how to handle it in their marital home.

Form the table above, it was further revealed that in terms of the occupation of the respondents, 41(37.3%) of the respondents disclosed that they are traders/business women while 30(27.3%) of the respondents said they are civil servants. Also, it was observed that 23(28.9%) of the respondents are housewives while 6(5.5%) of the respondents said they are farmers and only 10(9.1%) of the respondents had other occupation.

With regards to the duration of infertility of the respondents, it was observed that majority 72(65.5%) of the respondents disclosed that they have being infertile for 1 – 3 years while 17(15.5%) of the respondents said for between 4 – 6 years. Also, 12(10.9%) of the respondents disclosed that they have experienced infertility for 7 – 10 years and 9(8.2%) of the respondents disclosed that they have been infertile for 11 – 14 year and only 2(1.8%) of the respondents said they have been infertile for over 15 years.

The table for reveal the if the respondents have been evaluated or treated for infertility and it's disclosed that all the respondents say they have been evaluated of which 43(39.1%) of the respondents choose IVF/ICSI fertilization as a treatment option used while 29(26.4%) of the respondents' said salpingectomy is the treatment option used by them. Also 15(13.6%) of the respondents disclosed that the treatment option they used was myomectomy while 13(11.8%) of the respondents preferred ovulation induction and only 10(9.1%) of the respondents used IUI intra uterine insemination.

The table finally revealed the period of time it took the respondents to access the treatment, it was disclosed that 84(76.4%) of the respondents accessed their treatment within one year while 23(20.9%) took between 2 – 5 years to access their treatment. Also, 3(2.7%) of the respondents took 6 – 10 years to have access to treatment. This shows that all the respondents are involved in one method of infertility treatment as disclosed from the table above.

4.2 Analysis of Research Questions

Table 2: Percentage responses of the respondent on if they face negative reaction from the society due to infertility

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	13	11.8
Agreed	73	66.4
Disagreed	10	9.1
Strongly disagreed	11	10.0
Don't know	3	2.7
Total	**110**	**100**

The table 2. above shows that 73(66.4%) of the respondents agreed that they do face negative reaction from the society due to infertility while 13(11.8%) of the respondents strongly agreed that they do face negative reaction from the society due to infertility. However, 11(10.0%) of the respondents strongly disagreed that they do face negative reaction from the society due to infertility while 10(9.1%) of the respondents disagreed that they do face negative reaction from the society due to infertility and only 3(2.7%) of the respondents had no idea on the issue. This implies that the majority of the respondents have being facing negative reaction due to the inability to conceive.

Table 3: Percentage responses of the respondent on if their spouse is happy with them and support them

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	20	18.1
Agreed	43	39.1
Disagreed	21	19.1
Strongly disagreed	16	14.5
Don't know	10	9.1
Total	**110**	**100**

Table 3 disclosed that 43(39.1%) of the respondents agreed that their spouse is happy with them and support them while 21(19.1%) of the respondents disagreed that their spouse is not happy with them nor support them. Also, 20(18.1%) of the respondents strongly agreed to the question while 16(14.5%) of the respondents strongly disagreed that their spouse is happy with them and 10(9.1%) of the respondents had no idea on how their spouse feel about them. This implies that the majority of the respondents are facing some of the pressures of infertility at home.

Table 4: Percentage responses of the respondent on if they feel bad about themselves due to their infertility issue

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	28	25.5
Agreed	51	46.4
Disagreed	13	11.8
Strongly disagreed	11	10.0
Don't know	7	6.4
Total	**110**	**100**

With regards to if the respondents feel bad about themselves about being a failure in life due to their infertility issues, it was observed that 51(46.4%) of the respondents agreed while 28(25.5%) of the respondents strongly agreed and 13(11.8%) of the respondents disagreed while 11(10.0%) of the respondents strongly disagreed and only 7(6.4%) of the respondents had no idea on the issue. This shows that most of the respondents are already feeling bad about themselves which is one of the symptoms of depression.

Table 5: Percentage responses of the respondent on if they had bilateral tubal blockage.

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	13	11.8
Agreed	73	66.4
Disagreed	10	9.1
Strongly disagreed	11	10.0
Don't know	3	2.7
Total	**110**	**100**

The table 5 above shows that 73(66.4%) of the respondents agreed that they do face negative reaction from the society due to infertility while 13(11.8%) of the respondents strongly agreed that they do face negative reaction from the society due to infertility. However, 11(10.0%) of the respondents strongly disagreed that they do face negative reaction from the society due to infertility while 10(9.1%) of the respondents disagreed that they do face negative reaction from the society due to infertility and only 3(2.7%) of the respondents had no idea on the issue. This implies that the majority of the respondents have being facing negative reaction due to the inability to conceive.

Table 6: Percentage responses of the respondent on if they do experience little interest or pleasure in doing things

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	10	9.1
Agreed	38	34.5
Disagreed	41	37.3
Strongly disagreed	19	17.3
Don't know	2	1.8
Total	**110**	**100**

From table 6 above, it was disclosed that 41(37.3%) of the respondents disagreed that they do not experience little interest or pleasure in doing things as a result of their infertility issues while 38(34.5%) of the respondents agreed. Furthermore, 19(17.3%) of the respondents strongly disagreed and 10(9.1%) of the respondents strongly agreed and only 2(1.8%) of the respondents had no idea on the issue. This implies that the majority of the respondents are not experiencing little interest or pleasure in doing things though the margin was minimal as disclosed from the table above.

Table 7: Percentage responses of the respondent on if they are facing challenges from their family members due to infertility

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	13	11.8
Agreed	29	26.4
Disagreed	43	39.1
Strongly disagreed	15	13.6
Don't know	10	9.1
Total	**110**	**100**

The table 7 above shows that 43(39.1%) of the respondents disagreed that they are not facing challenges from their family members due to infertility while 29(26.4%) of the respondents agreed that they do face challenges from their family members due to infertility. However, 15(13.6%) of the respondents strongly disagreed while 13(11.8%) of the respondents strongly agreed and 10(9.1%) of the respondents had no idea on the issue.

Table 8: Percentage responses of the respondent on if they have experienced depression due to infertility

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	16	14.5
Agreed	46	41.8
Disagreed	38	34.5
Strongly disagreed	7	6.4
Don't know	3	2.7
Total	**110**	**100**

From the table 8 above, it was discovered that 46(41.8%) of the respondents agreed that they have experienced depression due to infertility while 38(34.5%) of the respondents disagreed that they have experienced lack of sleep due to infertility. However, 16(14.5%) of the respondents strongly agreed that they have experienced depression due to infertility while 7(6.4%) of the respondents strongly disagreed that they have experienced depression due to infertility and only 3(2.7%) of the respondents did not know if they have experienced depression or not.

Table 9: Percentage responses of the respondent on infertility is associated with stigmatization and leads to social withdrawal and self-devaluation

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	54	49.1
Agreed	41	37.3
Disagreed	10	9.1
Strongly disagreed	4	3.6
Don't know	2	1.8
Total	**110**	**100**

54(49.1%) of the respondents strongly agreed that infertility is associated with stigmatization and leads to social withdrawal and self-devaluation while 41(37.3%) of the respondents only agreed that infertility is associated with stigmatization and leads to social withdrawal and self-devaluation. However, 10(9.1%) of the respondents thought otherwise, as they disagreed that infertility is associated with stigmatization and leads to social withdrawal and self-devaluation while 4(3.6%) of the respondents strongly disagreed that infertility is associated with stigmatization and leads to social withdrawal and self-devaluation and 2(1.8%) of the respondents had no response to give. This shows that most of the respondents are of the opinion that infertility is associated with stigmatization and leads to social withdrawal and self-devaluation.

Table 10: Percentage responses of the respondent on if family stigmatization and society stigmatization affect them psychologically

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	37	33.6
Agreed	41	37.3
Disagreed	23	20.9
Strongly disagreed	13	11.8
Don't know	6	5.4
Total	**110**	**100**

From the table 10 above, it was discovered that 41(37.3%) of the respondents agreed that family stigmatization and society stigmatization affect them psychologically while 37(33.6%) of the respondents strongly agreed that family stigmatization and society stigmatization affect them psychologically, it was further revealed from the table that 23(20.9%) of the respondents disagreed that family stigmatization and society stigmatization affect them psychologically while 13(11.8%) of the respondents strongly disagreed that family stigmatization and society stigmatization affect them psychologically. 6(5.4%) of the respondents did not know what to answer. This shows that family stigmatization and society stigmatization affect them psychologically as disclosed by the majority of the respondents.

Table 11: Percentage responses of the respondent on if they experience poor appetite in eating when they think about their infertility issue

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	39	35.4
Agreed	47	42.7
Disagreed	20	18.2
Strongly disagreed	3	2.7
Don't know	1	0.9
Total	**110**	**100**

Table 11 disclosed that 47(42.7%) of the respondents agreed that they experience poor appetite in eating when they think about their infertility issue while 39(35.4%) of the respondents disagreed that they experience poor appetite in eating when they think about their infertility issue. Also, the table further disclosed that 20(18.2%) of the respondents disagreed that they experience poor appetite in eating when they think about

their infertility issue while 3(2.7%) of the respondents strongly disagreed that they experience poor appetite in eating when they think about their infertility issue. only 1(0.9%) of the respondent had no idea on the question. This concludes that majority of the respondents do experience poor appetite in eating when they think about their infertility issue.

Table 12: Percentage responses of the respondent on if sometimes they feel tired or having little energy due to over thinking

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	28	25.4
Agreed	53	48.2
Disagreed	19	17.3
Strongly disagreed	7	6.4
Don't know	3	2.7
Total	**110**	**100**

From the table 12 above, it was discovered that 46(41.8%) of the respondents agreed that they have experienced depression due to infertility while 38(34.5%) of the respondents disagreed that they have experienced depression due to infertility. However, 16(14.5%) of the respondents strongly agreed that they have experienced depression due to infertility while 7(6.4%) of the respondents strongly disagreed that they have experienced depression due to infertility and only 3(2.7%) of the respondents did not know if they have experienced depression or not.

Table 13: Percentage responses of the respondent on if they have trouble falling asleep as a result of constant worry

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	30	27.3
Agreed	50	45.5
Disagreed	20	18.2
Strongly disagreed	7	6.4
Don't know	3	2.7
Total	**110**	**100**

From the table 13 above, it was discovered that 50(45.5%) of the respondents agreed that they have trouble falling asleep as a result of constant worry while 30(27.3%) of the respondents agreed that they have trouble falling asleep as a result of constant worry. However, 20(18.2%) of the respondents disagreed that they have trouble falling asleep as a result of constant worry while 7(6.4%) of the respondents strongly disagreed that they have trouble falling asleep as a result of constant worry. Only 3(2.7%) of the respondents where indifferent. This implies that most of the respondents are affected psychosocially due to the fact that they are having troubles sleeping.

Table 14: Percentage responses of the respondent on if counselling in the gynaecological clinic helps to deal with psychological stress

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	25	22.7
Agreed	53	48.2
Disagreed	13	11.8
Strongly disagreed	11	10.0
Don't know	8	7.3
Total	**110**	**100**

The table 14 above disclosed that 53(48.2%) of the respondents agreed that counselling in the gynaecological clinic helps to deal with psychological stress while 25(22.7%) of the respondents agreed that counselling in the gynaecological clinic helps to deal with psychological stress. However, 13(11.8%) of the respondents disagreed that counselling in the gynaecological clinic helps to deal with psychological stress while 11(10.0%) of the respondents strongly disagreed that counselling in the gynaecological clinic helps to deal with psychological stress and only 8(7.3%) of the respondents had no idea. This shows that in coping with psychological stress, most of the respondent's relay on counselling in the gynaecological clinic as disclosed from the table above.

Table 15: Percentage responses of the respondent on if support group helps them to cope with psychological stress

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	27	24.5
Agreed	49	44.5
Disagreed	17	15.5
Strongly disagreed	13	11.8
Don't know	4	3.6
Total	**110**	**100**

From the table 15 above, it was discovered that 49(44.5%) of the respondents agreed that support group helps them to cope with psychological stress while 27(24.5%) of the respondents strongly agreed that support group helps them to cope with psychological stress. However, 17(15.5%) of the respondents disagreed that support group helps them to cope with psychological stress while 13(11.8%) of the respondents strongly disagreed that support group helps them to cope with psychological stress and only 4(3.6%) of the respondents did not know what to say.

Table 16: Percentage responses of the respondent on if seeking medical treatment is a coping strategy of dealing with psychological stress

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	43	39.0
Agreed	48	43.6
Disagreed	10	9.1
Strongly disagreed	5	4.5
Don't know	4	3.6
Total	**110**	**100**

Table 16 above disclosed that 48(43.6%) of the respondents agreed that seeking medical treatment is a coping strategy of dealing with psychological stress while 43(39.0%) of the respondents strongly agreed that seeking medical treatment is a coping strategy of dealing with psychological stress. However, 10(9.1%) of the respondents disagreed that seeking medical treatment is a coping strategy of dealing with psychological stress while 5(4.5%) of the respondents strongly disagreed that seeking medical treatment is a coping strategy of dealing with psychological stress and only 4(3.6%) of the respondents were indifferent.

Table 17: Percentage responses of the respondent on if enrolling for ART is a coping strategy utilized to cope with psychological stress

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	31	28.2
Agreed	63	57.3
Disagreed	13	11.8
Strongly disagreed	2	1.8
Don't know	1	0.9
Total	**110**	**100**

With respect to if seeking medical treatment is a coping strategy of dealing with psychological stress, it was discovered that 63(57.3%) of the respondents agreed that seeking medical treatment is a coping strategy of dealing with psychological stress while 31(28.2%) of the respondents strongly agreed that seeking medical treatment is a coping strategy of dealing with psychological stress. 13(11.8%) of the respondents disagreed that seeking medical treatment is a coping strategy of dealing with psychological stress while 2(1.8%) of the respondents strongly disagreed and only 1(0.9%) of the respondents had nothing to say.

Table 18: Percentage responses of the respondent on if depending on God is a coping strategy for dealing with psychological stress

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	19	17.3
Agreed	28	25.5
Disagreed	43	39.1
Strongly disagreed	14	12.7
Don't know	6	5.5
Total	**110**	**100**

From the table 18 above, it was discovered that 43(39.1%) of the respondents disagreed that depending on God is a coping strategy for dealing with psychological stress while 28(25.5%) of the respondents agreed that depending on God is a coping strategy for dealing with psychological stress. Furthermore, the table disclosed that 19(17.3%) of the respondents strongly agreed that depending on God is a coping strategy for dealing with psychological stress while 14(12.7%) of the respondents strongly disagreed that depending on God is a coping

strategy for dealing with psychological stress and 6(5.5%) of the respondents did not know if depending on God is a coping strategy for dealing with psychological stress or not.

Table 19: Percentage responses of the respondent on if most infertile couples are willing to access ART

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	20	18.2
Agreed	43	39.1
Disagreed	21	19.1
Strongly disagreed	18	16.4
Don't know	8	7.3
Total	**110**	**100**

From the table 19 above, it was discovered that 43(39.1%) of the respondents agreed that most infertile couples are willing to access ART while 21(19.1%) of the respondents disagreed that most infertile couples are willing to access ART. 20(18.2%) of the respondents strongly agreed that most infertile couples are willing to access ART while 18(16.4%) of the respondents strongly disagreed that most infertile couples are willing to access ART and 8(7.3%) of the respondents had no idea on the question. This shows that with the proper awareness, most infertile couples are willing to go for the ART as disclosed from the table above.

Table 20: Percentage responses of the respondent on if mass media campaign/awareness help in the willingness of seeking ART

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	10	9.1
Agreed	71	64.5
Disagreed	9	8.2
Strongly disagreed	7	6.4
Don't know	13	11.8
Total	**110**	**100**

From the table 20 above, it was discovered that 71(64.5%) of the respondents agreed that mass media campaign/awareness help in the willingness of seeking ART while 10(9.1%) of the respondents strongly agreed that mass media campaign/awareness help in the willingness of seeking ART. However, 9(8.2%) of the respondents disagreed that mass media campaign/awareness help in the willingness of seeking ART while 7(6.4%) of the respondents strongly disagreed that mass media campaign/awareness help in the willingness of seeking ART and 13(11.8%) of the respondents were indifferent.

Table 21: Percentage responses of the respondent on if inclusion of ART treatment in national health insurance scheme helps couple assess ART

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	26	23.6
Agreed	55	50.0
Disagreed	16	14.5
Strongly disagreed	10	9.1
Don't know	3	2.7
Total	**110**	**100**

From the table 21 above, it was discovered that 55(50.0%) of the respondents agreed that inclusion of ART treatment in national health insurance scheme would help couple assess ART while 26(23.6%) of the respondents strongly agreed that inclusion of ART treatment in national health insurance scheme would help couple assess ART. 16(14.5%) of the respondents disagreed that inclusion of ART treatment in national health insurance scheme would help couple assess ART while 10(9.1%) of the respondents strongly disagreed that inclusion of ART treatment in national health insurance scheme would help couple assess ART. 3(2.7%) of the respondents had no idea.

Table 22: Percentage responses of the respondent on if follow up visit would help clients to willingly assess ART

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	38	34.5
Agreed	46	41.8
Disagreed	16	14.5
Strongly disagreed	9	8.2
Don't know	1	0.9
Total	**110**	**100**

From the table 22 above, it was discovered that 6(41.8%) of the respondents agreed that follow up visit would help clients to willingly assess ART while 38(34.5%) of the respondents strongly agreed that follow up visit would help clients to willingly assess ART. Also, it was discovered that 16(14.5%) of the respondents disagreed that follow up visit would help clients to willingly assess ART while 9(8.2%) of the respondents strongly disagreed that follow up visit would help clients to willingly assess ART and 1(0.9%) of the respondents did not know what to answer.

Table 23: Percentage responses of the respondent on if subsidy of ART fee would encourage women to seek ART

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	31	28.2
Agreed	53	48.2
Disagreed	17	15.5
Strongly disagreed	6	5.5
Don't know	3	2.7
Total	**110**	**100**

From the table 23 above, it was discovered that 53(48.2%) of the respondents agreed that subsidy of ART fee would encourage women to seek ART while 31(28.2%) of the respondents strongly agreed that subsidy of ART fee would encourage women to seek ART. However, 17(15.5%) of the respondents disagreed that subsidy of ART fee would encourage women to seek ART while 6(5.5%) of the respondents strongly disagreed that subsidy of ART fee would encourage women to seek ART and 3(2.7%) of the respondents were indifferent.

Table 24: Percentage responses of the respondent on if respondents would be willing to continue the process of ART again if it is not successful initially

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	19	17.3
Agreed	43	39.1
Disagreed	28	25.5
Strongly disagreed	11	10.0
Don't know	9	8.2
Total	**110**	**100**

From the table 24 above, it was discovered that 43(39.1%) of the respondents agreed that they would be willing to continue the process of ART again if it is not successful initially while 28(25.5%) of the respondents disagreed that they would be willing to continue the process of ART again if it is not successful initially. 19(17.3%) of the respondents strongly agreed that they would be willing to continue the process of ART again if it is not successful initially while 11(10.0%) of the respondents strongly disagreed that they would be willing to continue the process of ART again if it is not successful initially and 9(8.2%) of the respondents did not know.

Table 25: Percentage responses of the respondent on if high cost of ART affects the utilization of ART by infertile couples

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	34	30.9
Agreed	70	63.6
Disagreed	3	2.7
Strongly disagreed	2	1.8
Don't know	1	0.9
Total	**110**	**100**

The table 25 above, disclosed that 70(63.6%) of the respondents agreed that high cost of ART affects the utilization of ART by infertile couples while 34(30.9%) of the respondents strongly agreed that high cost of ART affects the utilization of ART by infertile couples. 3(2.7%) of the respondents disagreed that high cost of ART affects the utilization of ART by infertile couples while 2(1.8%) of the respondents strongly disagreed that high cost of ART affects the utilization of ART by infertile couples and only 1(0.9%) of the respondents had no idea.

Table 26: Percentage responses of the respondent on if stigmatization affect the utilization of ART by infertile couples

OPTION	FREQUENCY	PERCENTAGE (%)
Strongly agreed	14	12.7
Agreed	63	57.3
Disagreed	22	20.0

Strongly disagreed	11	10.0
Don't know	0	0.0
Total	**110**	**100**

From the table 26 above, it was discovered that 63(57.3%) of the respondents agreed that stigmatization affect the utilization of ART by infertile couples while 22(20.0%) of the respondents disagreed that stigmatization affect the utilization of ART by infertile couples. 14(12.7%) of the respondents strongly agreed that stigmatization affect the utilization of ART by infertile couples while 11(10.0%) of the respondents strongly disagreed that stigmatization affect the utilization of ART by infertile couples.

Table 27: Percentage responses of the respondent on if religion belief prevent infertile couples from accessing ART

OPTION	**FREQUENCY**	**PERCENTAGE (%)**
Strongly agreed	73	66.4
Agreed	15	13.6
Disagreed	10	9.1
Strongly disagreed	9	8.2
Don't know	3	2.7
Total	**110**	**100**

With respect to if religion belief prevents infertile couples from accessing ART, it was observed that 73(66.4%) of the respondents strongly agreed that religion belief prevent infertile couples from accessing ART while 13(13.6%) of the respondents agreed that religion belief prevent infertile couples from accessing ART. However, the table showed that 10(9.1%) of the respondents disagreed that religion belief prevents infertile couples from accessing ART while 9(8.2%) of the respondents strongly disagreed that religion belief prevents infertile couples from accessing ART and only 3(2.7%) of the respondents did not have an answer.

Table 28: Percentage responses of the respondent on if cultural belief stops infertile couples from accessing ART

OPTION	**FREQUENCY**	**PERCENTAGE (%)**
Strongly agreed	15	13.6
Agreed	61	55.5
Disagreed	21	19.1
Strongly disagreed	10	9.1
Don't know	3	2.7
Total	**110**	**100**

From the table 28 above, it was discovered that 61(55.5%) of the respondents agreed that cultural belief stop infertile couples from accessing ART while 21(19.1%) of the respondents disagreed that cultural belief stop infertile couples from accessing ART. Also, 15(13.6%) of the respondents strongly agreed that cultural belief stop infertile couples from accessing ART while 10(9.1%) of the respondents strongly disagreed that cultural belief stop infertile couples from accessing ART and only 3(2.7%) of the respondents said they don't know if cultural belief stop infertile couples from accessing ART or not.

4.2 Test of Hypotheses

The following hypothesis is to be tested in this study and chi-square method will be used to test the hypotheses.

HO: There is no significant relationship between duration of infertile and depression among infertile women in JUTH

NULL HYPOTHESIS: There is no significant relationship between duration of infertile and depression among infertile women in JUTH

ALTERNATIVE HYPOTHESIS: There is a significant relationship between duration of infertile and depression among infertile women in JUTH

TABLE 29: Chi-square calculation of the relationship between duration of infertility and depression among infertile women and among women

Variable	**N**	**df**	**Mean**	**Std. Dev**	**X^2 cal value**	**X^2 tab value**
Depression	100	16	106.750	1.070		
					43.890	26.296
Psychological condition	100		85.100	0.860		

Data from table 1 and table 8 were used to test the hypothesis. The analysis showed that the calculated chi-square value of 43.890 is higher than the chi-square tabulated value of 26.296 at 0.05 level of significant and 16 degrees of freedom indicating the existence of positive association between duration of infertility and depression among infertile woman. The test was significant at 0.01 level of significant and this led to the rejection of the null hypothesis and therefore accepting the alternative hypothesis which states that there is a significant relationship between duration of infertile and depression among infertile women in JUTH

4.3 Discussion of Major Findings

The major findings from the study were discussed with respect to the specific objectives and research questions set for the study. The discussion was done under the objectives for better understanding.

Demographic Variables of the Respondents

The result shows that, majority of the respondents were in the age grade of 31-40 years. This shows that all the respondents were within reproductive age but yet find it difficult to produce children. A greater number of respondents had tertiary education indicated by 51.8% of the total respondents. Also most of the respondents indicated that they are into trading/business as their occupation. All of the respondents (100%) of the respondents also disclosed that they have being evaluated or treated for infertility which makes them the perfect candidate for the research. Furthermore, most of the respondents disclosed that IVF/ICSI fertilization is the treatment option used by them and it took them 1 year to access the treatment option.

Cases of depression among infertile women

The data analyzed revealed that 66.4% of the respondents agreed that they do face negative reaction from the society due to infertility, with only 39.1% of the respondents agreed that their spouse is happy and support them always. From the findings also, 46.4% of the respondents agreed that they feel bad about themselves and feel like a failure due to their case of infertility. Furthermore, 34.5% of them indicated that they do experience little interest of pleasure in doing things and 39.1% of the total respondents disclosed that they are facing challenges from their family members due to the case of infertility. Finally, majority (41.8%) of the respondents said they have experienced depression due to infertility cases. This shows that due to the case of infertility, most of the respondents are facing challenges in their marital life which on the long run has led to them experiencing depression in their life. This study is supported by Maroufizadeh et al (2015). Who disclosed that child bearing is seen as a way of enhancing one's worth in such societies and infertility is blamed on the women in most cases within developing societies. Infertility in itself may not be seen as a disease, but its effect can cause depression, stress, and anxiety can lead to loss of one's self worth.

Psychological condition experienced by women with infertility

The findings from the study revealed that 49.1% of the respondents opined that infertility is associated with stigmatization and lead to social withdrawal and self-devaluation. It was further revealed that 37.3% of the total respondents agreed that family stigmatization and society stigmatization affect them psychologically. The study also revealed that most (42.7%) of the respondents believed that they experience poor appetite in eating when they think about their infertility also, in the same vein 48.2% of the respondents also agreed that they do sometimes feel tired or have little energy due to constant thinking and 45.5% of the respondents said they sometime have trouble falling asleep as a result of constant worry. From the findings, it could be seen that most of the respondents are experiencing psychological condition due to the infertility.

It has affected their mode of feeding, sleeping and thinking. This finding is in line with (Golombok, 2012) who suggested that whilst anxiety appears to be the major psychological consequence during the process of infertility treatment, couples whose treatment was unsuccessful are at risk for depression. In this regard, careful pre-treatment screening should assess vulnerability. Studies comparing psychopathology between fertile and infertile groups generally find no differences. However, when measures of stress and self-esteem are used then significant differences emerge (Greil, 2017). For women, both pregnancy and motherhood are significant developmental milestones which are highly emphasized in our culture (Kainz, 2011). Whilst most research concludes that the experience of infertility is more stressful for women than men (Greil, 2017), it has been found that infertility is stressful for both men and women with one study finding women more likely to experience depression and men more likely to experience repressed anxiety placing them at greater risk for psychosomatic complaints (Tarlatzis, 2013). Psychological problems appear to occur in both partners, irrespective of which partner the aetiological problem was found in (Greil, 2017, and Tarlatzis, 2013). Whilst the levels of psychological distress generally fall short of severe emotional disturbance (Tarlatzis, 2013), it has been found that the psychological symptoms of infertile women are comparable to those experienced in women with other serious medical conditions such as hypertension and cancer as well as women undergoing cardiac rehabilitation (Domar, 2013).

Strategies been utilized by women experiencing psychological stress

The findings from the table disclosed that 48.2% of the respondents agreed that counselling in the gynecological clinic help to deal with psychological stress. However, 44.5% of the respondents also opined that support group helps them to cope with psychological stress. The findings also revealed that most (43.6%) of the respondents disclosed that seeking medical treatment is a coping strategy utilized by them in dealing with psychological stress. Also 57.3% of them agreed that enrolling for ART is a coping strategy utilized to help deal with psychosocial stress. This finding shows that there are many copings strategy in dealing with psychological stress result from infertility among couples and from the table, it could be observed that most respondents chooses a strategy that best suit them. From this finding, Sezgin et al (2016) opined that for the couples defining their infertility experience as "the most distressing life event," overcoming their current condition can only be possible by coping the stress and adapt into the current situation. Individuals diagnosed with infertility are forced to counteract a condition not solvable with the available coping strategies. In stress management, personal capacity, past experiences, and support from immediate social circle are very critical. Also, Vallone (2018) suggested that failure to reproduce fuels both familial and environmental pressures among couples while also igniting stress and tension at home. If failure to reproduce were perceived as if it were a crime and if it forced the individual to feel like a loser in community, infertile couples would then choose to be isolated from their close circle. As spouses become more discreet toward one another, their marriage life may also be adversely altered.

Willingness of infertile couples to access ART

From the findings, it was discovered that 39.1% of the respondents believed that most infertile couple are willing to access ART and it was further discovered that the mass media campaign/awareness would help in the willingness of seeking ART as agreed by majority of the respondents. It was further disclosed that in a way of helping couples access ART, most (50.0%) of the respondents agreed that ART treatment should be included in the national health insurance scheme. However, it was also revealed that follow up visit will go a long way in helping the clients to willingly assess ART as disclosed by majority of the respondents. 48.2% of the respondents also believed that subsidy in ART would also encourage couples to seek ART. This shows that there are many factors that affect the willingness to access ART by infertile couples such as awareness level from the mass media, inclusion in the national insurance scheme and subsidy of the ART. This study is in line with Olugbenga-Bello et al (2014) who also suggested that as affected couples seek treatment options, they are faced with other serious challenges such as limited treatment facilities, low awareness creation, and the exorbitant cost of treatment in Nigeria. According to him, this has hindered that willingness of couples to access ART and most couples prefers to go for adoption. (Olugbenga-Bello et al, 2014)

Factors responsible for poor utilization of ART services by infertile couples

The findings revealed that due to the seriousness of the matter at hand as it had to do with infertility, majority of the respondents agreed that they would be willing to continue with the process again if the present one is not successful. Although, 63.6% of the respondents believed that high cost of ART affects the utilization of ART by infertile couples. Furthermore, 57.3% of the respondents also agreed that stigmatization also affects the utilization of ART by infertile couples. It was also disclosed from the findings that most of the respondents agreed that religious belief prevents infertile couples from accessing ART and also 55.5% of the respondents also agreed that cultural belief also stop infertile couples from accessing ART. This implies that there are many factors responsible for the poor utilization of ART by infertile couples as observed from the findings, religious and cultural belief plays in important role in the poor utilization of ART services by infertile couples.

The test of hypothesis disclosed that there is a significant relationship between duration of infertile and depression among infertile women in JUTH. This finding is supported by another study carried out by Kirca, and Pasinoglu (2013). In this study, it was identified that the more the duration of infertility, the more worrisome and depressed the woman would be. They also disclosed that when a married couple fails to reproduce for long time despite desiring to have a baby, they feel like not fulfilling the role of "being family." Failure to accomplish reproduction function leads the couples to feel like a loser and idler. By negatively affecting social life, mood, marriage life, sexual life, future plans, self-respect, body image, and life quality of couples, infertility then turns into a complex life crisis. For the couples, the common emotions for not having a baby are frustration and missing mother-father roles valued in society. (Kirca, and Pasinoglu. (2013)

V. CONCLUSION

When a married couple fails to reproduce despite desiring to have a baby, they feel like not fulfilling the role of "being family." Failure to accomplish reproduction function leads the couples to feel like a loser and idler. By negatively affecting social life, mood, marriage life, sexual life, future plans, self-respect, body image, and life quality of couples, infertility then turns into a complex life crisis (Kirca and Pasinoglu, 2013). For the

couples, the common emotions for not having a baby are frustration and missing mother-father roles valued in society. For a woman, childlessness is associated with infertility (functional disorder), loss of control (my body rebelling against my will), psychological void (unfulfilled maternal instinct), feeling outcast from female community, feeling worthless, loneliness (lack of emotional support of the child), absence of social security (nobody to look after them in old age), unmet social role (mother, pregnant woman, postpartum period, mother-in-law), and lower self-esteem (Karlidere, 2017).

For a man, childlessness is associated with failure to impregnate a woman (weak functioning of manhood), psychological void (unfulfilled paternal instinct), loneliness (in old age), failure to continue the lineage, unmet social role (father, father-in-law), and diminished social security (Zurlo et al, 2018)

This study showed that the infertility and its treatment process for infertile women is a source of psychological suffering with devastating effects on psychological well-being of infertile couples. The results also showed that one of the major causes of psychological distress is the social pressure by family members. According to the results, while the religious and cultural belief is dominant in the poor utilization of ART. As infertility is more common among people from the low social classes who do not have the ability to afford psychological counseling costs and social determinants play an important role in creating the psychological consequences of infertility.

To conclude, it can be stated that infertility is a life crisis that brings with itself a number of psychological problems. Taking preventive measures upon calculating psychological problems that could affect treatment success is a critical issue to observe in providing healthcare services. During the infertility treatment process, to have some awareness on the psychological problems experienced by individuals not only helps in the adaptation of infertile individuals to infertility diagnosis and treatment procedure, but it could also lower the intensity of reactions against infertility.

Despite the justification for this study and the many gains associated with it, it is not without some limitations. The first limitation is the necessity of conducting the study focusing on female patients alone, since initial examination has indicated that there are far more female patients receiving treatment of infertility than men. In addition to this problem of an unbalanced ratio, there is the attendant issue that men might be more difficult to get engaged in infertility research when they themselves are the patient (Turner 2020). Likewise, the expected duration for the study is likely to be challenging due to the new regulations as a result of the COVID 19 pandemic. This has limited the regularity of patient's visits to clinics, and reduced the size of groups. The researcher shall however, endeavor to obtain adequate information to be able to interact with subjects and groups remotely as may be necessary and possible. One of the most important limitations to this work is the expensive nature of assisted reproductive clinical sessions which limit the number of infertile couples attending IVF in JUTH. Because many couples cannot afford it, they shy away from the process and hence the difficulty in interacting with many of them. Nevertheless, initial indications have led the researcher to project that sufficient number of patients shall be available to meet the target population of the study. Thus, form the outcome of this study, we drive the following recommendations.

i. Analysis of infertile couples or individuals within the context of psychological indicators and findings should be integral to an entire infertility treatment protocol.
ii. Having professionally trained social workers as complementary medical interventions in the infertility clinics is central to manage the issue of infertility in all aspects. This profession assistance not only meets the needs of infertile people but also the needs of the social system in which infertile people are living. In this view, social workers can support the rights and needs of infertile people as a means to development planning by policy-makers so that the infertility can be looked upon as a biopsychic social phenomenon.
iii. Whilst the treatment of infertility is dominated by technical, medical approaches there appears to be an important role for psychological interventions. As the demand for infertility treatment grows, so too will the need for appropriately informed and skilled mental health professionals.
iv. Interventions should aim to diminish guilt associated with past sexual activities, sexually transmitted diseases or abortions and allow for catharsis within an empathic milieu that also seeks to promote optimism and decrease feelings of isolation and loneliness
v. It is recommended that the National association of medical practitioners of Nigeria take deliberate collaborative efforts with the commission responsible for civic education to create awareness and educate rural dwellers on the negative cultural perceptions about infertility and infertile couples leaving amongst them.
vi. It is important to create help groups by couples diagnosed of infertility to encourage each other and share experiences on curbing societal discrimination as a result of infertility.
vii. Medical facilities should create unit with the sole responsibility of counseling and providing support services to infertile couples. The unit should compose of psychosocial social experts, clinical psychologist, medical doctors and nurses with specialties in fertility issues

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CONFLICT OF INTEREST

The authors of this study declare that they have no conflicts of interest, whether financial, personal, or professional, that could have influenced the design, implementation, or interpretation of this research. All authors have made a full disclosure of any potential conflicts of interest, and none were identified. This study was conducted independently, and the authors received no funding or other forms of support that could have influenced the outcome of the research.

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