

*Full Length Research Paper*

# Women's Perception towards Male Factor Infertility at Irrua, South South, Nigeria

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## Abstract

Infertility is a world-wide issue in reproductive health, and is growing more in developing countries. Men are very often not seen as causes of infertility especially in the rural societies owing to misconceptions about the causes of infertility thus predisposing women to greater physical and social stigma in comparison to men. This was a questionnaire based study conducted in the Obstetric and Gynaecological clinic of Irrua Specialist Teaching Hospital between October 1<sup>st</sup> 2013 and December 31<sup>st</sup> 2013. Majority, 225 (70.1%) say that infertility is due to both male and female factors combined. However, 163 (50.8%) believe that females contribute more to the cause of infertility than males (7.8%) and both combined (41.4%). Eighty four point one percent believe that men never admit that they contribute to infertility. The study showed that only 106 (33%) were aware of the duration it takes before a couple is said to be infertile and 254 (70.1%) know some of the causes of infertility. The result showed that 57.2% of the respondents were unaware of the common causes of male infertility while only 9.5% have good knowledge of causes of male infertility. Infertility has a serious impact on a couple's personal relations and on their physical and mental health. Every attempt should therefore be made at making the public not to see infertility as purely a woman's lot but rather, educational programmes should be embarked upon to enable the populace appreciate the combined role of male and female factors in infertility.

**Keywords:** Infertility, Male, Perception.

## INTRODUCTION

Infertility has a serious impact on a couple's personal relations and on their physical and mental health. It is a world-wide issue in reproductive health, and is growing more in developing countries, especially in parts of Sub-Saharan Africa (Okonofua, 1997). Infertility and childlessness are considered social stigma with associated emotional and marital instability sometimes ending in divorce or suicide (Otubu, 1995; Bergstrom, 2001). In the general population, conception is expected to occur in 84% of women within 12 months and in 92% within 24 months (Bhattacharya, 2007). It affects 10–15% of couples in the western world (Bhattacharya, 2007; Sharma et al., 2009; Sperroff et al., 1999; Otubu, 2006). It is reported to be common between the ages of 20-44 years (Larsen, 2000). By convention, infertility is

commonly divided into five major categories on the basis of aetiopathology, results of investigations and prognosis (Bhattacharya, 2007). These include an ovulation, male factor, tubal factor, endometriosis and unexplained infertility. The proportion of couples in each group varies from population to population depending on environmental factors and referral patterns. In general terms, the likelihood of spontaneous live birth in infertile couples is strongly influenced by female age, duration of infertility, previous pregnancies, and cause of infertility. Unexplained infertility has the best outcome (Bhattacharya, 2007). Previous pregnancy, shorter duration of infertility and age below 30 years all enhance a woman's chances of live birth, while male factor problems, tubal disease and endometriosis halve them (Bhattacharya, 2007).

Known causes of male infertility include varicocele, idiopathic oligozoospermia, accessory gland infection, idiopathic teratozoospermia, idiopathic asthenozoospermia, isolated seminal plasma abnormalities, suspected immunological infertility, congenital abnormalities, systemic

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diseases sexual inadequacy obstructive azoospermia, idiopathic necrozoospermia ejaculatory inadequacy, hyperprolactinaemia iatrogenic causes, karyotype abnormalities, partial obstruction to ejaculatory duct retrograde ejaculation immotilecilia syndrome pituitary lesions, gonadotrophin deficiency (Siladitya, 2007). Most often the causes of reduced semen quality and other disturbances of male reproductive function are unknown (Siladitya, 2007). Men are more prone to the effects of environmental toxicants than women and are more exposed because of the nature of their job – industrial and agricultural workers, miners, foundry workers etc. Men also tend to use tobacco products more than women. The testis is more sensitive to radiation and radiant heat than any other tissue in the body thus predisposing males to infertility. Some chemicals can impair human fecundity at exposures which do not produce detectable changes in rat spermatogenesis. The reserve capacity of sperm production-which can be destroyed without impairment of fecundity – is probably limited in humans compared with many other species

The general aim of this study is to determine the perception of women about male infertility.

The specific objectives are:

- 1) To determine the knowledge women have about male infertility.
- 2) To increase the level of awareness of male factor infertility amongst women in particular and the society in general.
- 3) To erase the belief in society that infertility is due to female factor only.

## MATERIALS AND METHODS

This was a questionnaire based study.

A structured questionnaire was distributed to women attending the obstetric and gynaecological clinic of ISTH between October 1<sup>st</sup>, 2013 and December 31<sup>st</sup>, 2013. Pre-testing of the questionnaires was done with 20 questionnaires to check for any ambiguity in the questions and time required to completely fill the questionnaire. These were not included as part of the final result. Women attending the obstetric and gynaecological clinic were studied because majority of them are of the reproductive age group and will have had knowledge about fertility.

### Study Setting

The study was conducted in the Obstetric and Gynaecological clinic of Irrua Specialist Teaching Hospital, Irrua, Edo state. It is a tertiary care hospital and a referral centre for parts of Edo, Delta, Kogi and Ondo States. The hospital has 42 gynaecological beds and has about 700 gynaecological admissions annually. It

also has 48 obstetric beds and undertakes an average of 1,200 deliveries annually. The hospital has an average of 600 women attending antenatal clinic monthly and 120 women attending gynaecological clinic monthly. It therefore attends to an average of 4320 women over a 6 month period.

### Sample Size

A sample size of 360 women was picked based on the formula:

$$nf = \frac{n}{1 + (n)/(N)}. \text{ (Araoye, 2003)}$$

Where: nf = the desired sample size when the population is less than 10, 000.

n = the desired sample size when the population is more than 10,000 (400)

N = the estimated population size (4320 over a 6 month period).

### Ethical Consideration

Approval for the study was obtained from the ethical Committee of the Irrua Specialist Teaching Hospital. The study was carefully explained to the respondents and their informed consent obtained before being administered with the questionnaires.

### Data Analysis

Data was analyzed using SPSS 16 statistical package.

## RESULTS

A total of 360 questionnaires were distributed. Twenty three (23) questionnaires could not be retrieved, 16 questionnaires were inadequately completed and were excluded, leaving a total of 321 questionnaires (89.17%) for analysis.

The age of the study population ranged between 22 and 42 years with a mean age of  $29 \pm 4.0$  years. More than half (53%) were aged between 25 – 29 years, while only 12 (3.7%) were aged 40 years and above. Forty two point seven percent of respondents were Esan and 286 (89.1%) were Christians. Majority of the respondents were married (95%) and those that were single represented only 2.2%. Forty four point five percent had secondary level of education and 213 (66.4%) were employed, 14.6% did not have any child previously, 2.2% had more than 5 children and only 18 (5.6%) have not been pregnant previously. All the respondents have heard of infertility with the majority getting information from schools (30.5%). Table 1.

Of the 303 (94.4%) who had been previously pregnant, 47 (15.5%) had delay before getting pregnant

Table 1. Sociodemographic Characteristics of Respondents

<b>VARIABLE</b>	<b>NUMBER</b>	<b>PERCENTAGE</b>
<b>AGE GROUP(YEARS)</b>		
20-24	31	9.7
25-29	170	53.0
30-34	99	30.8
35-39	9	2.8
≥40	12	3.7
Total	321	100
<b>LEVEL OF EDUCATION</b>		
PRIMARY	52	16.2
SECONDARY	143	44.5
TERTIARY	118	36.8
POST-TERTIARY	8	100
Total	321	100
<b>TRIBE</b>		
ESAN	137	42.7
ETSAKO	69	21.5
OWAN	51	15.9
IGBO	32	10.0
URHOBO	10	3.1
UZEBE	9	2.8
BINI	9	2.8
IKA	4	1.2
Total	321	100
<b>OCCUPATION</b>		
EMPLOYED	213	66.4
UMEMPLOYED	96	29.9
STUDENT	12	3.7
Total	321	100
<b>RELIGION</b>		
CHRISTIAN	286	89.1
MOSLEM	35	10.9
Total	321	100
<b>NUMBER OF CHILDREN</b>		
0-2	142	44.2
3-5	172	53.6
>5	7	2.2
Total	321	100

Table 2. Awareness and Clinical Correlates

<b>VARIABLE</b>	<b>NUMBER</b>	<b>PERCENTAGE</b>
<b>AWARENESS OF INFERTILITY CAUSES</b>		
MELE ALONE	14	4.4
FEMALE ALONE	78	24.3
BOTH MALE/FEMALE	225	70.1
UNKNOWN	4	1.2
Total	321	100
<b>MOST CONTRIBUTOR TO INFERTILITY</b>		
MEN	25	7.8
FEMALE	163	50.8
BOTH	133	41.4

Table 2. Continue

Total	321	100
<b>IF MEN ADMIT THEY CONTRIBUTE TO INFERTILITY</b>		
YES	51	15.9
NO	270	84.1
Total	321	100
<b>AWARENESS OF INFERTILITY DURATION</b>		
6 MONTHS	6	1.9
1 YEAR	106	33.0
2 YEARS	155	48.3
5 YEARS	46	14.3
>5 YEARS	8	2.5
Total	321	100

Table 3. Fertility Profile of Respondents

VARIABLE	NUMBER	PERCENTAGE
<b>PREGNANT BEFORE</b>	303	94.4
YES	18	5.6
NO	321	100
Total		
<b>DELAY BEFOR GETTING PREGNANT</b>		
YES	47	15.5
NO	256	84.5
Total	303	100
<b>IF DELAYED, HOW LONG</b>		
1 YEAR		
1-2 YEARS	3	6.4
>2 YEARS	18	38.3
Total	26	55.3
	47	100
<b>PREVIOUS TREATMENT FOR INFERTILITY</b>		
YES	33	10.3
NO	288	89.7
Total	321	100
<b>OUTCOME OF TREATMENT</b>		
STILL ON TREATMENT		
NOW HAVE CHILDREN	20	60.6
Total	13	39.4
	33	100

for >2 years (55.3%) in the majority of them, with 22 (46.8%) having had to use fertility medications before getting pregnant. Among the respondents, 33(10.3%) have been treated for infertility with 20 (60.6%) still on treatment while 13 (39.4%) now have children. (Table 3).

Majority, 225 (70.1%) say that infertility is due to both male and female factors combined. However, 163 (50.8%) believe that females contribute more to the cause of infertility than males (7.8%) and both combined

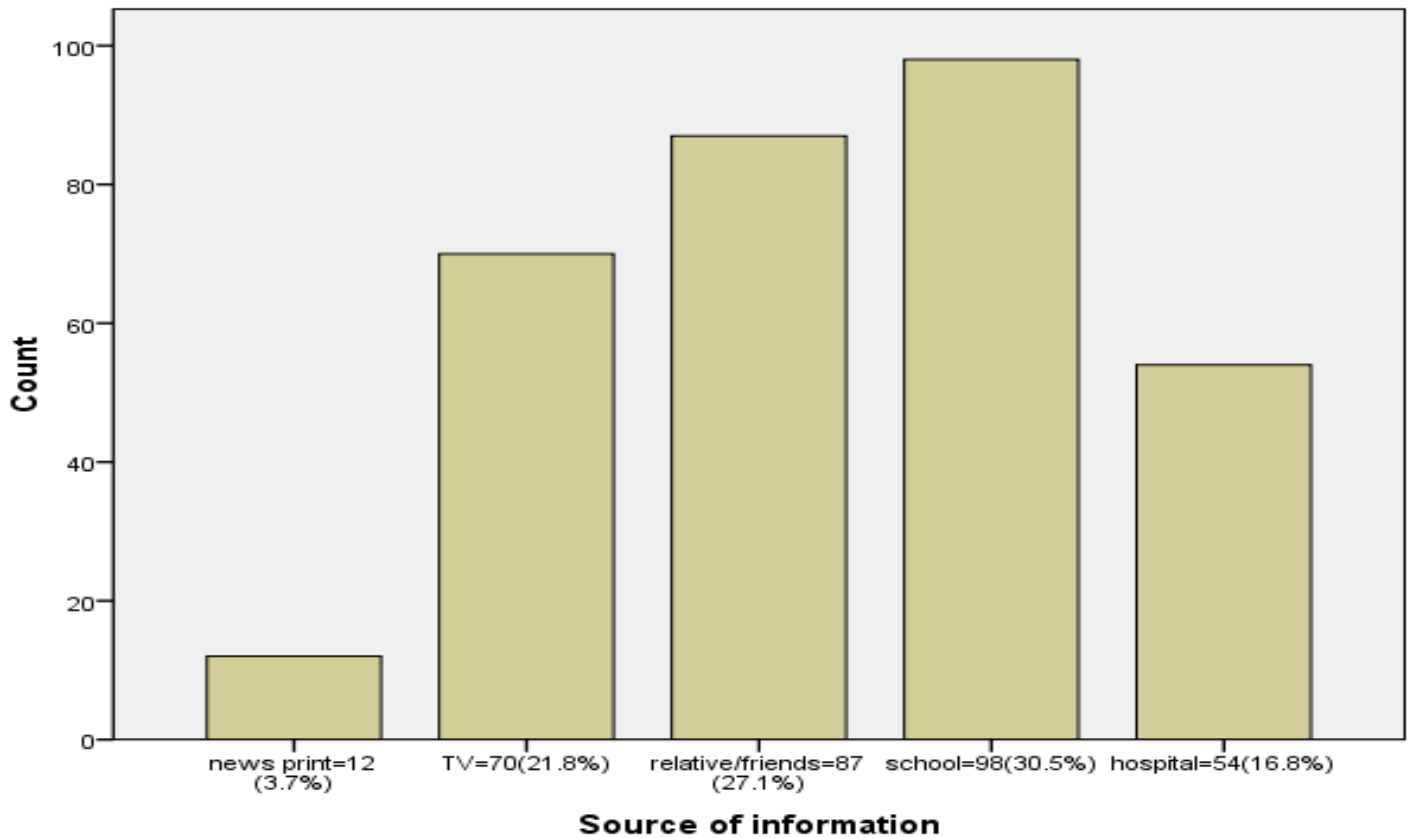
(41.4%). Eighty four point one percent believe that men never admit that they contribute to infertility. (Table 2). The study showed that only 106 (33%) were aware of the duration it takes before a couple is said to be infertile and 254 (79.1%) know some of the causes of infertility. (Table 4). While all the respondents agree that infertility is stigmatizing to a couple, 211(65.7%) feel that women suffer more from stigmatization than men. (Table 5).

**Table 4.** Relationship Between Education of Respondents and Knowledge of Causes of Infertility

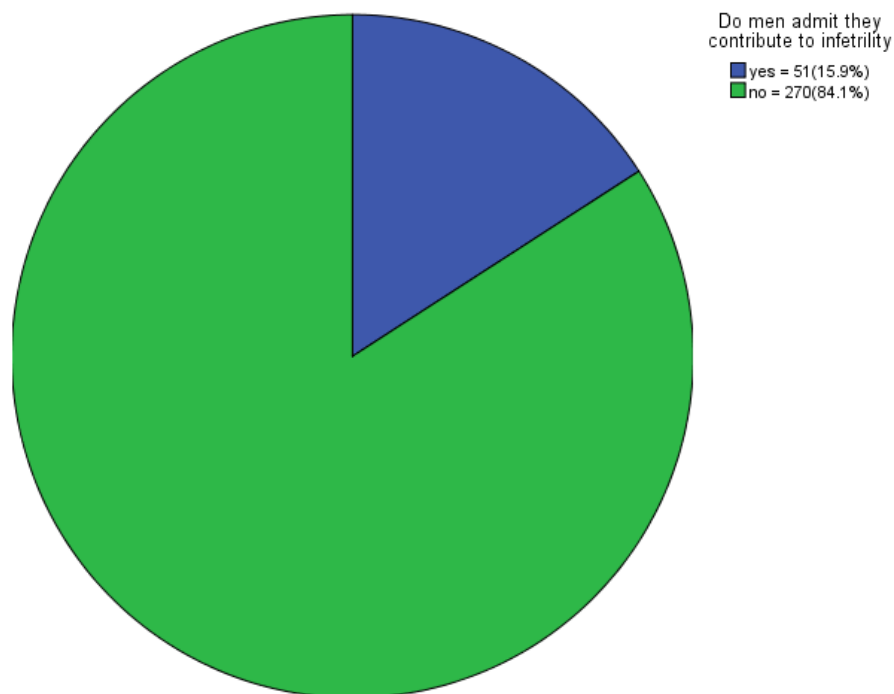
		Knowledge of causes of infertility		
		Yes	No	Total
Education level of respondents	Primary	<b>38 (73.1%)</b>	14 (26.9%)	52 (100%)
	Secondary	<b>111 (77.6%)</b>	32 (22.4%)	143 (100%)
	tertiary	<b>97 (82.2%)</b>	21 (17.8%)	118 (100%)
	Post graduate	<b>8 (100.0%)</b>	0 (0%)	8 (100%)
Total count		<b>254 (79.1%)</b>	67 (20.9%)	321 (100%)

**Table 5.** Relationship Between Education Of Respondents And Person(S) Most Affected By Stigmatization

		PERSON(S) MOST AFFECTED BY STIGMATIZATION			Total
		male	Female	Both	
Education level of respondents	Primary	1 (1.9%)	32 (61.5%)	19(36.5%)	52 (100%)
	Secondary	1 (0.7%)	96 (67.1%)	46(32.2%)	143 (100%)
	Tertiary	0 (0%)	78 (66.15)	40(33.9%)	118 (100%)
	post graduate	0 (0%)	5 (62.5%)	3(37.5%)	8 (100%)
Total Count		2 (0.6%)	211(65.7%)	108(33.6%)	321 (100%)



**Figure 1.** Bar Chart Showing Source of Information of Knowledge of Male Infertility by Respondents



**Figure 2.** Pie Chart Showing if Men Admit they Contribute to Infertility

## DISCUSSION

Infertility has a serious impact on a couple's personal relations and on their physical and mental health. Its prevalence is particularly high in sub-Saharan African varying from 20-46% in some parts of West Africa where up to 65% of gynaecological consultations are for infertility (Orhue and Aziken, 2008; Audu et al., 2003; Audu et al., 2003). The age range of respondents in this study was between 22-42 years and majorities were between 25-29 years (53%). This was not surprising as the study was conducted among women of reproductive age group. This is the age group most likely to be affected by fertility problems. Majority of the respondents were Esan and Christians. This is due to the fact that Irrua is an Esan speaking town with Christian majority.

Two hundred and seventy three (85%) respondents know at least one person/couple that is/are being managed for infertility and the general knowledge of the causes of infertility increased with increasing level of education. The finding from this study is similar to that done by Okonofua et al. 1997. In Ilorin, Nigeria showed that most people are quite forthcoming with their opinions about societal beliefs of infertility and had anecdotes of relatives who experienced infertility. It also showed that there was a correlation between general level of education and the accuracy of responses, and that educated participants gave more biologically correct explanations of causes, and subscribed to the 'Western' aetiologies for infertility. When respondents were asked the length of time that passes before a couple is

considered to be infertile, the answers ranged from six month to greater than five years, with the most frequent answer being about two years. The finding was at variance with the work done by Okonofua et al. 1997.

The result showed that 57.2% of the respondents were unaware of the common causes of male infertility while only 9.5% have good knowledge of causes of male infertility. A study done in Britain showed that more than 2.5 million men may be suffering from fertility problems, with high rates of smoking, stress and drinking believed to be contributory factors. Many men however are in denial about the risk of infertility and tend to believe that problems in conceiving are more likely to be the "fault" of the woman. A recent survey of GP's and male patients found that while doctors were worried about the extent of the problem, many men were unaware that they could have problems fathering a child. More than 30 per cent of the GP's said they were concerned about the decline in male fertility. More than a quarter said that low male fertility could have a detrimental impact on the population, unless men changed their lifestyles. Asked to name the biggest causes of male infertility, GP's listed smoking, excess alcohol consumption and stress. Research for the survey also suggested that 9 per cent of the male population in Britain could be suffering from low fertility. The quality and number of sperm that men produce has declined in the past 30 years, with male infertility accounting for about a third of couples' problems conceiving. But when almost 1,000 men were questioned for the report, only 12 per cent said they were concerned about their own fertility, and only 5 per-

cent were aware that they could be suffering from a low sperm count. More than half 59 percent believed women were more likely to suffer from fertility problems. One in three men believe their partners will be able to conceive within two months of trying, while three-quarters of GP's said they expect an average couple to take between three and six months to achieve a pregnancy. Despite the lack of awareness, 12 per cent of men who had children said it had taken longer than they anticipated for their partners to conceive.

This study showed that majority, 225(70.1%) of respondents say that infertility can be due to both male and female factors combined, 163(50.8%) however believe that females contribute more to the cause of infertility when compared to males (7.8%) and both female and male factor combined (41.4%). Eighty four point one percent believe that men never admit that they contribute to infertility. Male partners were not spontaneously mentioned by focus-group participants as a cause of infertility (Okonofua et al., 1997). However, when prompted, participants agreed that male disorders could be responsible for infertility. Many people, especially the male participants in the study, seemed to think that ability to have an erection and sexual intercourse meant that the male would be fertile.

Another major finding from the study is that while all the respondents agreed that infertility is stigmatizing for affected couples, 211(65.7%) respondents say females suffer the most from the social and psychological stigma of infertility. Again, owing to misconceptions about the causes of infertility, women appear to bear the greater stigma in comparison to men. In addition, by depriving them of their decision making powers and their rights to inheritance, infertility is source of disempowerment for affected women (Snow et al., 1995). Thus, it is clear that infertility in a woman increases the possibility that her human rights will be violated even when the aetiology of the problem is not directly attributable to her. Clearly, women's health advocates and development planners should begin to accord great priority to infertility and its antecedents in the development and reproductive health agenda of women in developing countries; such an approach will provide additional impetus and legitimacy to current efforts to promote their reproductive health. Available evidence suggests that the social consequences of infertility are particularly profound for African women as compared to men (Inhorn, 1994). Regardless of the medical cause of infertility, women receive the major blame for the reproductive setback and they suffer personal grief and frustration, social stigma, ostracism and serious economic deprivations. In Cameroon, Feldman-Savelsberg 1994 reports that infertility is a ground for divorce among the Bangangte tribe causing a woman to lose her access to land distributed by her husband. Where she is able to avoid divorce; an infertile woman receives fewer gifts from her husband and is abandoned in old age with no child to till the land for her. In Egypt, women go through a

complicated ritual known as kabsa (a form of fertility-producing, polluting boundary violation) in efforts to overcome infertility (Inhorn, 1994). Among the Ekiti of southwestern Nigeria, Ademola 1982 reports that infertile women are treated as outcasts and their bodies are buried on the outskirts of the town with those of demented persons.

## CONCLUSION

Infertility has a serious impact on a couple's personal relations and on their physical and mental health. Every attempt should therefore be made at making the public not to think infertility is purely a woman's lot but rather, educational programmes should be embarked upon to enable the populace appreciate the combined role of male and female factors in infertility. Clearly, women's health advocates and development planners should begin to accord great priority to infertility and its antecedents in the development and reproductive health agenda of women in developing countries.

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