Knowledge, Perceptions and Practices of Infertile Women Towards Infertility at the University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt

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Abstract
Introduction: Infertility is the commonest presenting complaint in our gynaecological clinics and can be psychologically, socially, physically and financially devastating. There is a need therefore to evaluate not only the level of awareness of the causes and treatment of infertility by our patients but also the social, financial and psychological impact it has made to their lives.
Objectives: To assess knowledge, perceptions and practices relating to infertility among subfertile women at the University of Port Harcourt Teaching Hospital (UPTH)
Methodology; A cross sectional survey of 300 randomly selected sub fertile women.
Results: A sample size of 296 at 95% confidence level was calculated from the infertile population of 1500. The response rate was 295/300 (98.3%). The mean age of respondents and duration of infertility were 28.3 ± 6 and 3.2 years respectively. Knowledge of the causes of infertility was high. Few respondents were knowledgeable of investigations and 90% perceived prayer to be a treatment modality. Effects of infertility included marital disharmony, depression and anger. Divorce rate was low (2.7%)
Conclusion: There is a need to improve the knowledge of infertility among women in Port Harcourt. Prevention of infertility not treatment should be the aim. Counseling and psychotherapy are recommended for infertile couples.
Key Words: Infertility, Knowledge, Perceptions, Practices [Trop J Obstet Gynaecol, 2006, 23:114-117]

Introduction
Conception, pregnancy and childbirth are among the most meaningful parts of our lives and arouse the strongest of feelings. It is not surprising that these areas so highly charged with emotions are themselves sensitive to the effects of stress. The link between emotion and infertility has been appreciated since Biblical times, as exemplified by Sarah, Hannah and Elizabeth.[1]

The desire to reproduce is an intensely motivating human force as it is through our children we attain some measures of immortality. Therefore because of its personal nature, couples may experience strong religious, cultural and societal pressures to conceive; hence infertility is taken as a life-threatening crisis. Reproductive failure has very far social implications in Nigeria where the main reason for marriage is to have children irrespective of whether or not the couple is in love. [2]

Infertility which is defined by WHO as, "the inability of a couple of childbearing age to conceive over twelve months of exposure to regular unprotected sexual intercourse",[3] is a problem of reproductive health importance in Nigeria and many parts of Sub -Saharan Africa. This is not only because of the high prevalence but also due to the important social effects on affected couples and families.[4]

Infertility is common worldwide. On the average, about 8 to 15% of couples experience sub fertility or infertility during their reproductive lives.[3, 5] The prevalence is much higher in Africa where reported rates range between 15 and 46%, compared to between 5 and 10% in the western world.[4, 6] In Nigeria, over 800,000 couples are said to have difficulty in achieving desired pregnancy and in actual fact, more than half of the gynaecological consultations in our environment are for infertility. [7,8]

Most infertile couples in the developing world are unaware of the variety of investigative tools used in the diagnosis of the definitive cause of their infertility.[9] Treatment options also range from simple procedures to assisted reproductive techniques, which could be financially and emotionally taxing to infertile couples.[10,11] In Africa, several adverse consequences of infertility are now being increasingly recognized and these include marital disharmony, social discrimination, ostracization and physical violence.

The focus of infertility has been on the medical and clinical concepts not on the social and psychological sequelae despite the fact that infertility can be psychologically, socially, physically and financially devastating. This study, therefore sought to find out not only the level of awareness of the causes and treatment of infertility by our patients but also the social, financial and psychological impact it has had on their lives.

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Materials and Methods

This was a cross-sectional survey conducted between 1st April and 31st July, 2003. Three hundred sub-fertile women attending the gynaecological clinic of the University of Port Harcourt Teaching Hospital in Southern Nigeria were interviewed.

Adequate sample size was calculated based on infertility prevalence rate of 15 to 19% [12]. The total number of women attending the gynaecology clinic of the UPTH approximates 1,500 annually. Using Epi-Info version 3.01®, sample size totaled 296 at 95% confidence level.

The respondents were interviewed using self administered structured questionnaires. The questionnaires were initially pre-tested on 20 women attending the gynaecology clinic and subsequently modified based on their understanding and responses. Informed consent was obtained from the women who were all assured of confidentiality. Collation and data entry was with SPSS Version 11.0 for Windows statistical software.

Results

The response rate was 98.3%. The mean age of women involved in infertile relationships in this study was 28.3 ± 6.1 and the mean duration of infertility was 3.2 years. Majority (72%) of the women had secondary and 28% primary infertility. Two hundred and thirty respondents received treatment before presenting at the UPTH.

The perceived causes of infertility are shown in Figure 1. Of proven causes, pelvic infections were reported by 72% of respondents. Other known causes reported include male factor (55%), tubal blockage (56%) and uterine fibroids (58%). Other perceived causes included promiscuity (25%), witchcraft (48%), spiritual attacks (1%) and traditional medicines (1%).

Ultrasound was reported by 68% of respondents as being an important investigation for infertility. Knowledge of other investigations was poor with a significant proportion being unaware of their role in the management of infertility. Ignorance of hysterosalpingography was demonstrated by 61%, hormonal assay by 66%, semen analysis by 51% and laparoscopy and dye test by 90% of respondents. Their knowledge of investigations for infertility is shown in Table 1.

Majority of the respondents 266 (90.1%) perceived prayer to be a treatment modality for infertility. Other treatment modalities reported included drugs by 218 (73.8%), surgery by 127 (43%) and traditional remedies by 112 (37.9%) of respondents. These are illustrated in Figure 2. Traditional remedies they were aware of included oral herbs, vaginal inserts, incisions and incantations in decreasing order. Twenty-two (3%) respondents also reported abdominal massage as a treatment modality.

In search of a solution, 78% had received previous treatment before presenting at the UPTH. Thirty-five percent had received traditional treatment, 4% surgical treatment, 25% medical treatment, 8% spiritual healing and 1% abdominal massage. Forty-three percent consulted medical doctors, 7% nurses, 32% traditional birth attendants, 8% native doctors and 9% consulted priests and ministers. These results are illustrated in Figure 3.

In further research on the extent the women would go in their quest for a child, their views and willingness to use assisted reproductive technology were tested. Fifty-three percent claimed knowledge of in-vitro fertilisation but only 23% were willing to use it. Other methods included artificial insemination and surrogacy. Most of the respondents (78%) were aware of adoption but only 6% were willing to adopt a child. Reasons for not accepting adoption included unknown parental background, fear of abnormal behaviour and negative societal traits in the child.

Table 2 shows the common effects of infertility on respondents. Sadness occurred in 88 (29.8%), anger in 89 (30%), regrets in 18 (6%), frequent quarrels 89 (30%), anxiety/depression 68 (22.7%), insomnia in 47 (15.9%) low self esteem 30 (10.1%), jealousy/envy 18 (6.1%), divorce 8 (2.7%), loneliness 59 (20%), job loss 4 (1.4%), hypertension 11 (3.7%), loss of life savings 4 (1.4%), lack of concentration 22 (7.5%), and weight loss from anorexia 8 (2.7%). Even about 3% felt suicidal.

Figure 1. Perceived Causes of Infertility

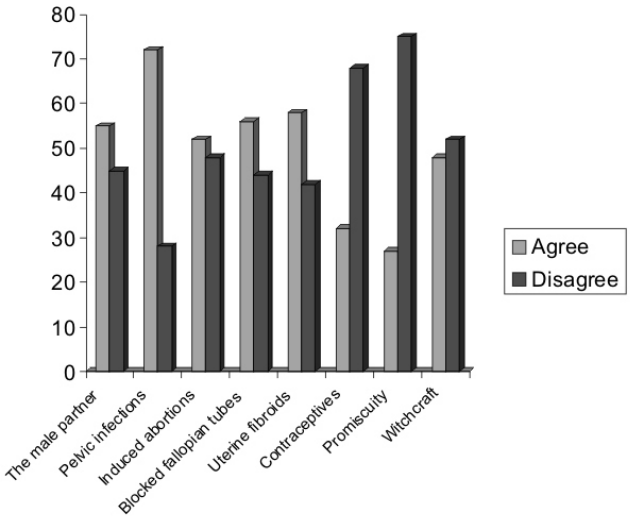

Table 1:
Knowledge of Investigations for Infertility

Investigations	Response rates in percentages	
	Aware	Not aware
Ultrasound scan	68	32
Hysterosalpingogram	39	61
Hormonal assay	34	66
Semen analysis	49	51
Laparoscopy and dye test	10	90
High vaginal swab	41	59
Post coital test	6	94

Figure 2

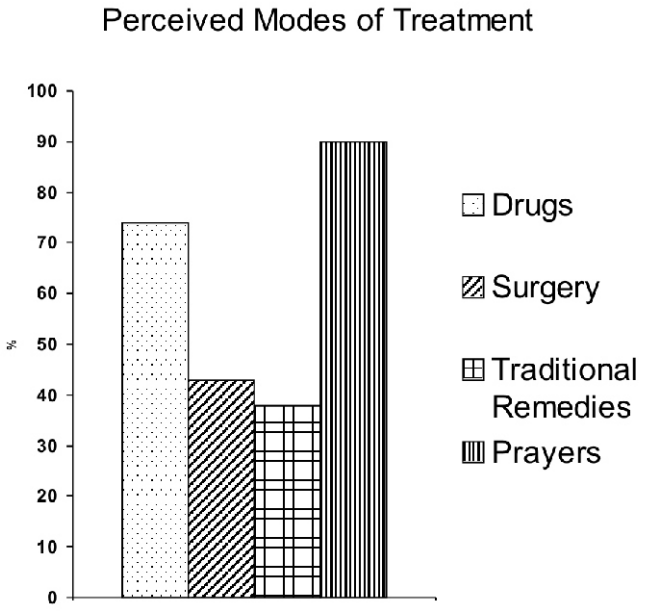

Figure 3

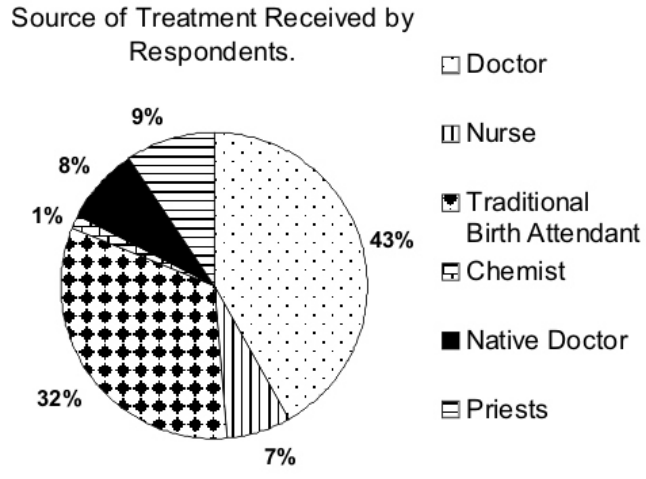

Table 2. Effects of Infertility on Respondents

Effects	Frequency	(%)
Psychological		
•Depression	203	68.9
•Low esteem	30	10.1
•Anger	89	301
Others		
•Job loss	4	1.4
•Hypertension	11	3.7
•Loss of life savings	4	1.4
•Lack of concentration	118	40
•Anorexia/weight loss	6	2
•Divorce	8	2.7
•Quarrels	89	30.1
•Loneliness	59	20

Discussion

Most cultures place a high social value on fertility particularly as a demonstration of the consummation of the marriage and an expression of the couple's social role. Apart from the sheer size of the problem, it is now known that infertility in African countries has severe negative consequences for women's reproductive health, as evidenced by this study. It often poses serious social problems for couples. Women are more severely affected than men, even when the infertility is due to a male factor often leading to divorce, social ostracisation and sometimes physical abuse of women[13].

This was a pilot study, the first of its kind in UPTH. It is not representative of the whole of Port Harcourt. The mean age of the women involved in infertile relationships in this study of 28.3 ± 6.1 was similar to reports from other studies in Nigeria. [9,14] It is well documented that age of the female followed by duration of infertility are the most powerful prognostic indices of treatment. [3,4 ,5.] There is also is a continuous decline in reproductive potential and reduced success rates from assisted conception with advancing age especially beyond 35 years of age.[15]

The mean duration of infertility in this study was found to be 3.2 years. Similar results were obtained in a study carried out in urban Pakistan that showed most women already seeking treatment less than 2 years of marriage.[16] This is however at variance with a study in Gambia which found that women present much later after they would have sought unorthodox treatment at homes of traditional care givers, spiritualist and churches long before presenting for orthodox treatment at advanced ages [17]. The majority (72%) of women in this study had secondary infertility and 28% had primary infertility. This pattern is similar to other studies in Nigeria and Sub-Saharan Africa. [9,14,18,] It is not

surprising in our environment where infections produce irreversible reproductive tract damage in men and women. However, studies done in many western societies showed a greater incidence of primary infertility than secondary [19].

Adequate knowledge is required to seek appropriate health care in any condition. Infertile women in this study were aware of the main causes of infertility but also exhibited superstitious beliefs. This may have been influenced by socio cultural factors. Many patients seek remedies from traditional doctors and faith healers because of their belief in these underlying causes, and because of perceived lack of privacy in orthodox health facilities. Some of the herbs and concoctions used by these alternative practitioners are not subjected to scientific analysis and are potentially harmful. The use of these methods could also cause delay in seeking appropriate care with adverse consequences.

As with their perceptions on causes of infertility, a significant number (37.9%) of the respondents mentioned traditional remedies as being useful in the treatment of infertility. Their poor knowledge of management options probably influenced their choice of unorthodox treatment. Studies done in South-Western Nigeria showed the extent of involvement of traditional birth attendants (TBAS) and Christian faith healers in treatment of infertility. Both healers believe infertility is due to past life of the women, physical problems related to the womb or to male potency and incompatibility between the men and women. [20]

Infertility also had adverse psychological effects on affected women including depressive illness, financial loss and marital disharmony leading to divorce in some cases. Divorce is amongst the most prominent consequences of infertility and this has been demonstrated by various studies. [10, 21] This was also confirmed in this study with 57% of respondents perceiving divorce as a marital problem and 2.7% actually divorced as a result of infertility.

Limitations of conventional treatment options have been well documented leading to the evolvement of Assisted Reproductive Techniques (ART). From the study, there was paucity of knowledge of the various techniques of assisted reproduction. Fifty-three percent claimed knowledge of in vitro fertilisation but only 23% were willing to use it while 1% had actually used it. These views are contrary to that experienced by some authors in Enugu where both donor and husband insemination seemed acceptable to couples after long periods of waiting.[2] Also most couples there would have little aversion to IVF but for the cost involved.

There is a need to improve the knowledge of infertility among women. Prevention of infertility not treatment should be the aim. Ideally, an infertility specialist should be involved in the management of the infertile couple. Counseling and psychotherapy are recommended for them. A community survey of the knowledge, attitudes and practices of infertile couples in our environment is advocated.

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