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Infertility: a sociological analysis of problems of infertility among women in a rural community in Nigeria

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Summary

This study highlighted the problems of infertility among women in Ilora rural community. The result revealed that in spite of high fertility rate and high rate of pregnancy wastage, 8.7% out of the 400 women studied were found to be infertile. It is interesting to note that in a strictly polygamous environment, almost half of the women suffering from infertility were found to be the only wife of their respective husbands. The African concept as to the solution to the problems was also discussed, and highlighted in relation to awareness of possible hospital treatment of their conditions.

Keywords: *Infertility, rural community, treatment awareness.*

Résumé

Cette étude souligne les problèmes d'infertilité parmi les femmes de la communauté rurale de Ilora. Le résultat révèle qu'en dépit du taux élevé de fertilité et un taux élevé de perte de grossesse, 8,7% sur les 400 femmes étudiées étaient infertiles. Il est intéressant de noter que dans un environnement strictement polygamique, à peu près la moitié des femmes uniques de leurs époux respectifs. Le concept africain de la solution à ces problèmes a aussi été discuté, et, souligné en relation à la prise de conscience du traitement possible par les hôpitaux de leur condition.

Introduction

Marriage, in the traditional African concept, is essentially an arrangement of social structure. Through marriage, there is social order; and new social relations are created between the families of both husband and wife who are not only interested in the marriage, but in the children that are expected to result from it.

Procreation, in the African context, is the chief goal of marriage. This is often regarded as the basis for conformity to the social process, and it is regulated by custom and arrangement of persons in institutionalized relationship [1]. Hence, childlessness is an accepted ground for divorce in the native law courts [2]. Barenness in women is a world-wide phenomena, but in African and other third world countries where polygamy is practiced, it has a serious dimension.

In African countries, the status of a woman depends on how many children she could bear and most especially, the number of sons she has brought into the world. In a strictly polygamous set up, women often rely on their fertility to win the esteem of their husbands and their husbands' family. An infertile woman runs the risk of being repudiated and this happens frequently [3,4,5]. Children are valued and accepted in African communities regardless of the social-economic background of the parents [6]. Consequently, in a

community where there is general high fertility rate, high infant mortality rate and high rate of pregnancy wastage as revealed by several scientists [7,8,9], it is important to study the infertile group. Also, the 1991 Nigerian population census figure revealed the fact that 80% of Nigerian population live in rural communities and almost half of this population were women [10].

The important role of infections in infertility had been well established. At least two-thirds of female infertility in Africa, Nigeria inclusive, has been attributed to tuba factors from infections [11]. Though, considerable progress had been made in the management of infertility through assisted reproduction, yet the activities are largely urban based and the cost far beyond the rural majority. Several studies on the role of traditional and faith healers on treatment of infertility had also been well-documented [12-13]. Along with the use of herbs, treatment procedure includes sacrifices, divination and among spiritualist, prayer and fasting [14-16]

Above all, infertility is perceived as being caused by past experiences of the women such as induced abortions, multiple sexual partners, womb problems, curses, including bewitchment [17].

No known studies have ever been reported on the knowledge, attitude and practices of women suffering from infertility to these various available treatment especially from the rural community, most especially their beliefs and practices on preferences for these categories of treatment.

Obviously, this study constitutes baseline data to reach for the neglected rural majority. The study was therefore designed to investigate beliefs, attitudes and practices to health care system of these group of women as regards orthodox health care systems. The objective is to formulate policy that could assist these categories of women.

Materials and method

This study was carried out at Ilora, a rural community about 30 kilometers to Ibadan city. It is a community of 60,000 people according to the 1991 census [16]. The rural community has basic amenities such as electricity, pipe borne water and a Health Center, under the former Department of Preventive and Social Medicine, University Teaching Hospital, Ibadan. The inhabitants are mostly farmers and artisans, some of them engaged in petty trading and other small-scale businesses for survival. The village is surrounded by small hamlets and farmlands.

Majority of the inhabitants commune daily between farmland and their home in Ilora, while about 20% of them come home either at weekends or once in a month to attend social functions such as marriages or special festivals.

This study is essentially descriptive. In this study, a universal definition of "infertility" was adopted, that is, absence of pregnancy in a woman despite regular intercourse for a period of 12 months or more.

A combination of multistage, stratified and simple random sampling techniques were used. Ilora town was first

stratified into four major wards and the systematic sampling technique was used to select households where eligible respondents of 400 women of child bearing age were chosen for the administration of the questionnaires, which was conducted on house to house basis. Information obtained included socio-economic demographic characteristics of the women, age, education, religion, occupation, marital status, position among the wives in a polygamous setting, place of living in villages outside Ilora township. Data related to fertility and sexuality and treatment adopted as a solution to infertility related problems were also collected.

However, because of the sensitivity of the study in terms of sexual intercourse, semi-structured modifications were made, the modified questionnaires were used as a survey instrument to interview all women consecutively selected.

Statistical method employed

Chi-square significant test was used to find the social factors related to infertility.

Results

A Socio-economic characteristics of the women

From Table 1 72.5% of the women interviewed were illiterate, 17.2% had primary education, 9.1% had secondary education while 1.2% had Arabic training. About 97.7% of the women were married, 1.9% had either being divorced or separated from their husbands, the proportion of those single divorced or widowed were similar 0.2% in each case. Seventy-nine percent of the women were Christian, 15.7% Moslem and the rest 4.7% practiced traditional religion. Also 72.3% of the women lived in Ilora

Table 1: Socio-demographic characteristics of the respondents by religion, education and marital status.

Religion	Number	Percentage
Christians	316	79.0
Moslem	63	15.7
Traditionalist	19	4.7
Other unknown	2	0.6
Education		
Illiterate	288	72.2
Primary	69	17.2
Post primary	38	9.1
Arabic	5	1.2
Marital status		
Single	1	0.2
Married	391	97.7
Separated	6	1.7
Divorced	1	0.2
Widowed	1	0.2
Place of residence		
Ilora Township	269	72.3
Farm	94	23.5
Oyo Town	11	2.7
Unknown	6	1.5
Total	400	100

Forty percent of those professed to be married, had undergone divorce at least once and had since remarried

rural township, 23.30% lived in farms or villages outside Ilora while the rest lived in the adjacent town of Oyo.

B Fertility history of the women

The survey revealed that at least 8.75% of the women had never been pregnant at least once in their life time in spite of regular exposure to intercourse at the time of the interview. The highest pregnancy rate was found among the women in age group 30-34 (5.2%) and among ages 15-19 (4.6%). Also high pregnancy wastage of 6.7% was observed, while child mortality rate stood at 25.7% (Table 2).

Table 2: Pregnancy history of the respondents

Age	No. of women		No of women living		No of Dean children	Still birth	Abor tions	No	Mean of Pregnancy
	No	%	No	Rate					
15-19	45	11.25	121	2.63	83	1	5	210	4.6
25-29	80	20.0	272	3.4	39	4	14	329	4.1
30-34	56	14.0	230	4.1	56	3	7	296	5.3
35-39	41	10.25	55	1.34	25	4	15	99	2.7
40-44	27	6.75	18	0.6	24	2	16	60	2.2
45+	9	2.15	15	1.6	10	1	1	26	2.8
Unknown (Inapplicable)	16	4.0	4	0.25	7	2	-	34	3.4
Total	400	100	963	2.4	334	19	74	1390	3.5

<i>Xi: Average children per woman</i>	=	2.4
<i>Xi: Average pregnancy per woman</i>	=	3.5
<i>Child mortality rate</i>	=	25.7%
<i>Pregnancy waste in percentage</i>	=	6.7%

C Length of infertility

Over half of the women (54.3%) had been suffering from infertility for a period of 2-5 years. A total of 25.7% under two years, and the remaining 20% for over five years (Table 3).

Table 3: Socio-economic characteristics of women suffering from infertility and Chi Square Test.

Age	No.	%	Chi-square test
15-19	2	5.7	$X^2 = 0.78$ $D = 2$ $P = 0.6776.79$
20-24	9	25.7	
25-29	10	28.6	
30-34	11	31.4	
40+	2	5.7	
45+	1	2.9	
Education			$X^2 = 13.38$ $D = 2$ $P = 0.001255$
Illiterate	17	85.5	
Arabic	4	11.4	
Primary	13	37.1	
Secondary	1	2.8	
Marital status			$X^2 = 0.03$ $P = 0.861864$
Polygamous	18	51.4	
Monogamous	17	48.0	
Religion			$X^2 = 4.56$ $P = 0.032679$
Christians	25	71.4	
Moslems	10	28.6	
Length of Marriage			$X^2 = 7.07$ $D = 2$ $P = 0.029133$
Under 2 years	9	25.7	
Under 2-5 years	19	54.3	
Under 5 and above	7	2.0	
Total	35	100	

- D **Infertility and age**
In all 31.4% of the women suffering from infertility were between ages 30 and 34, 28.6% were ages of 25-29, while 25.7% were ages 20-24 (Table 3).
- E **Infertility and marital status**
About 51.4% of the women suffering from infertility were from polygamous homes whilst 48.6% were found to be the only wife of their respective husbands. (Table 3).
- F **Infertility and education**
A total of 48.6% of the women suffering from infertility were illiterates, 37.1% have first primary education, 11.4% had Arabic education and 2.8% had secondary education (Table 3).
- G **Infertility and religion**
In all 71.4% of the women were Christians, 20.6% were Moslem. (Table 3).

Chi-square significance

A strong association was observed between infertility and education ($P \leq 0.001$) religion $P \leq 0.033$ and length of marriage $P \leq 0.0029$ (Table 3).

Table 4: Coping strategies adopted for the infertility

	No	%
1. Traditional healers	15	42.8
2. Hospital treatment	7	20.0
3. Chemists	2	5.8
4. None	11	31.4
Traditional treatment adopted		
1. Consulting Ife oracle	12	37
2. Palm reading, sacrifices etc.	5	15
3. Predicting pending affliction after prayer	20	57.4
4. Use of plants	15	43
Respondents agreement gradient		
1. Fasting and prayer	35	100
2. Use of pants	25	71.4
3. Consulting Ifa oracle	23	65.7
4. Palm reading	16	45.7
5. Hospital treatment	5	14.5

Infertility treatment method proffered

Only 20% of the women confessed to receiving hospital treatment; 47.8% used traditional means, and almost a third of the population (31.4%) did not. The rest 5.9% consult chemists (Table 4). Those receiving traditional treatment, following analysis was observed:

1. Thirty-seven percent adopted the solving of their problems through Ifa oracle.
2. Other methods mentioned are the use of preparation from plants, animal parts and inanimate objects like stones. The belief about these materials is that they possess both occultic or spiritual and chemical properties which could be harnessed for use in the treatment of afflictions. Forty-three percent of the respondents were in favour of these methods.
3. *Prayers:* It is believed that with faith, all afflictions could be cured with prayers. This method is commonly used by the spiritual healers; 57.4% stated to be using this method.

4. *Sacrifices:* These are also offered to gods and ancestors to enhance the efficiency of other medicinal preparations being used and in some cases this may be the only remedy prescribed for the affliction. Fifteen percent confessed to the use of this method as a solution to their problems.

However, further gradient attitude analysis revealed that almost all the respondents agreed on fasting and prayer as a solution to the problems of infertility (100%). Above 71.4% agreed on the use of plants, 65.7% on consulting Ifa oracles, 45.7% palm reading and only 14.5% agreed on hospital treatment alone.

On awareness of hospital treatment for the infertility

Half of the illiterate population 57.8% were not aware, while those with primary and secondary education were quite aware that they could seek hospital treatment for their problems.

Could the husband be responsible?

Only 8.5% of the women said yes whilst 57.4% of the respondents had no idea, 40% said No. (Table V).

Table 5: Knowledge of the respondents on whether the husband could be the cause of the infertility.

Could husband be responsible?	No	%
Yes	3	8.5
No	14	40.2
No idea	18	51.4
<i>Reasons for not utilizing the health care services.</i>		
1. Because respondent thought the centre only cater for pregnant women	20	57.2
2. Lack of money	10	28.4
3. Prefer treatment mean	4	11.4
4. No idea	1	3
Total	35	100

Respondents use of health services

Above 42.8 were making use of modern health services while 57.2% were not utilizing the service. Respondents (28.4%), reasons for non-utilization of the modern health care services rested mainly on money, 57.2% did not utilize the service because they thought health care centres were mainly for pregnant women and nursing mothers, 3% gave no reason while the rest 11.4%, said they preferred traditional methods.

Discussion

Education, no doubt, often played an important factor in the ability of a woman suffering from infertility to adjust to social norms. Since the majority of the women suffering from infertility in this study were illiterate, it is not surprising then that they favored traditional means as a solution to their infertility, leading to low utilization of the available health care services available at the maternity center that could adequately cater for their problems. The fact that 42.8% of the women agreed to native therapy is not surprising, especially in a community where issues of reproduction are taken with all seriousness and male factors in infertility had been stated to be between 20 and 30% while that of the female were put between 70%-80% [17-18]. Consequently, it is very important and essential to concentrate

further research on causes of infertility among the rural women. Above all, in Nigeria, when it comes to problems of infertility men often present late in the hospital because the women are always held responsible while potency is regarded as synonymous with fertility in male [19-21]. Some studies had shown that hospital treatments are often refused once fees are introduced, because they are perceived as expensive [22].

It is therefore important that the free health services being propagated by the new democratic government includes free treatment of both male and female infertility within the Nigeria environment. In addition it is important to have a programme for the infertility group (just like the Maternal and Child Health Services) well-integrated in the primary health care system.

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