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CONTRACEPTIVE CHOICES OF WOMEN IN RURAL SOUTHEASTERN NIGERIA

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ABSTRACT

Objective: To evaluate the contraceptive choices and usage of women in rural Aba, Southeastern Nigeria, and identify factors influencing their choice and usage of modern contraceptive methods.

Methods The records of new and old acceptors of family planning methods between 1 November 2005 and 31 October 2007 at the reproductive health clinic of a primary health care center in Osisioma Ngwa local government area in the suburb of Aba, were reviewed and analyzed. Qualitative data was collected by in-depth interviews (IDIs) of 88 out of 188 clients whose records were analyzed.

Results: Majority of the clients (71.8%) accepted injectable hormonal contraceptives followed by the intrauterine contraceptive devices (IUDs) (14.4%). Sub-dermal contraceptive implants were accepted by 6.9% of the women and female sterilization by 3.2%. The oral contraceptive pills and the male condom were the least accepted by the clients. Only 2.1% of the contraceptive acceptors were adolescents. The modal age of the acceptors was 30 years and the average age 33.4 years while the age range was 18-51 years. The average parity was 4.7 while the modal parity was 5. The indication for contraception was child spacing in 30% of the clients and permanent limitation of the family size in 70% of the clients. Attitude of the women to the various methods of contraception was an important factor influencing contraceptive choices of the women interviewed.

Conclusion: The study has shown that the most commonly used contraceptive method in rural Southeastern Nigeria is the injectable hormonal contraceptives. Strategies to increase contraceptive use in rural Nigeria must include improving delivery of correct and adequate information about the available contraceptive methods.

Key Words: Contraceptive choice, rural Southeastern Nigeria *(Accepted 3 June 2009)*

INTRODUCTION

The value of the effective use of contraceptive methods in preventing unwanted pregnancy in our community has been highlighted in a previous study [1]. The high level of contraceptive awareness and low level of usage is also established [2]. Various reasons have been advanced for these findings, ranging from cultural barriers, religion, cost, low literacy level, husband's/partner's refusal, availability, accessibility, fear of side effects, and desire for large family size [3]. Contraceptive choices of our women may be affected by these factors too since they vary from one part of Nigeria to another. Intrauterine contraceptive devices are commonly used in Western Nigeria for example while in Northern Nigeria the trend over the last 20 years is towards Norplant and the injectable contraceptives [4, 5]. There is paucity of data on the contraceptive choices of rural women in Aba, Southeastern Nigeria, hence the need for this study.

METHODS

The records of 188 old and new acceptors of family planning between 1 November 2005 and 31 October 2007 at the reproductive health clinic of a primary health care center in Osisioma Ngwa local government area in the suburb of Aba, Southeastern Nigeria were reviewed and analyzed. Qualitative data was collected by in-depth interviews (IDIs). By simple random sampling, one out of every two consenting clients (old/new) seeking family planning services at the clinic were interviewed over the period 2nd October 2007 to 31st October 2007. The interview was a face to face interview lasting a period of 10 minutes. In all, 88 in-depth interviews were conducted and these clients were part of the 188 clients whose records were analyzed. An in-depth interview guide was developed to conduct the interviews. While quantitative data focused on the demographic characteristics of the clients, their contraceptive choices, documented side effects experienced, and continuation and failure rates; qualitative data focused on reasons for their choices and their source of awareness on contraceptives. Data analysis included descriptive statistics for demographic data and content analysis for interview data. Statistical comparison was done with chi-square test. $P<0.05$ was considered significant. Ethical considerations including informed consent for the study participants interviewed and issues of confidentiality were observed.

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RESULTS

Contraceptive choices of the women

Table 4 shows the contraceptive methods accepted by the 188 clients during the study period. Majority of the clients (71.8%) accepted injectable hormonal contraceptives indicating that the injectable contraceptives ranked highest in the demand ladder followed by the intrauterine contraceptive devices (IUDs) (14.4%). Sub-dermal contraceptive implants were accepted by 6.9% of the women and female sterilization by 3.2%. The oral contraceptive pills and the male condom were the least accepted by the clients. The Cu T 380A IUD was the only type of intrauterine contraceptive device provided at the health facility. All the female sterilization procedures were post partum bilateral tubal ligation through a mini laparotomy and using the Pomeroy operation.

Age and parity distribution of the acceptors

As shown in table V, only 2.1% of the contraceptive acceptors were adolescents. The modal age of the acceptors was 30 years and the average age 33.4 years while the age range was 18-51 years. Majority of the women were multiparous. The average parity was 4.7 while the modal parity was 5. The indication for contraception was child spacing in 30% of the clients and permanent limitation of the family size in 70% of the clients.

Side effects, continuation rates, and accidental pregnancies

Menstrual disturbances were the main complications reported by the acceptors of the injectable hormonal contraceptives, the intrauterine contraceptive devices and the sub-dermal implants but were not always associated with discontinuation (Table 6). Some of the clients had more than one side-effect. Some clients who accepted bilateral tubal ligation also experienced menstrual disturbances. The cumulative continuation rate in 24 months was highest with the implants (92.3%), compared with 63% in the acceptors of intrauterine contraceptive devices, and 47.2% with the injectables. Voluntary discontinuation without any specific reason occurred in 10.4% of clients using injectable contraceptives, and 7.4% of clients using intrauterine contraceptive devices. Prolonged menstrual period was the most reported reason for discontinuation of the injectable contraceptives (30.6%), and the IUD (22.2%). One client on Jadelle discontinued its use after one year because of prolonged and irregular menses and subsequently became pregnant. Ten clients switched method to another type of contraception during the study period. There were three reported cases of accidental pregnancies during the study period. Two of these subjects were on injectable contraceptives while one was on IUD. Two of the subjects terminated the pregnancies while the third had a spontaneous abortion. All three subjects subsequently discontinued the methods of contraception.

Results of In-Depth Interviews

Source of awareness of the methods of contraception

Amongst the 88 clients interviewed, friends were the leading source of initial information (48.2%), followed by health care personnel (28.4%), radio drama (15.5%), and relatives (7.9%).

Reasons for the choice of method of contraception

Majority (66 out of 88) of the respondents had chosen the injectable contraceptives and the most commonly cited advantage (50 out of 88) of the injectable methods of contraception was being non-coitus related, with two to three-monthly spacing of injections. A commonly mentioned advantage (25 out of 88) of certain methods (IUDs, Implants, Depo) was that there was little or no risk of failure due to having forgotten to take the method. Amongst clients who did not have the support of their partners in seeking contraception (32 out of 88), 80% indicated the ability to avoid detection by their spouses as a key factor influencing their choice of the injectable methods.

Reasons for dislike of certain methods of contraception

Nearly half (43 out of 88) of the respondents named fear of surgical operation as a reason for their dislike of tubal ligation. Many respondents (30 out of 88), believed the IUDs could be displaced by the penis during coitus and perforate the womb, whilst others (20 out of 88) cited rumors of high failure rate with the IUDs as reasons for dislike of the IUDs.

Table 2 shows that fear of side effects of contraceptive methods was significantly associated with choice of contraception. Indication for contraception (Table 1) and partner's support (Table 3), had no significant associations with the women's contraceptive choices.

Table 1: **Influence of Indication for Contraception on the Choice of Method in the 88 Respondents of In-Depth Interviews.**

Indication	Accepted injectables	Accepted Other methods	χ value	p value
Child spacing	32	8	0.55	0.46ns
Permanent limitation	34	14		

Ns: not significant

Table 2: **Influence of Attitude to Method of Contraception on Choice of Method in the 88 Respondents of In-Depth Interviews.**

Attitude	Accepted injectables	Accepted Other methods	χ value	p value
Afraid of method	50	9	7.56	<0.05*
Not afraid	16	13		

***** Significant

Table 3: **Influence of Partner's Support on the Contraceptive Choices of the 88 Respondents of In-Depth Interviews.**

Partner's Support	Accepted injectables	Accepted Other methods	χ value	p value
Lacked support	26	6	0.59	0.44ns
Had support	40	16		

Ns: not significant

Table 4: **Contraceptive Choices of 188 Old and New Acceptors between November 2005 and October 2007.**

Contraceptive choice	N (%)
Injectable	
Depo-Provera	80(42.6)
Noristerat	55(29.3)
Intrauterine contraceptive device (CuT380A)	27(14.4)
Implants (Jadelle / Implanon)	13(6.9)
Female sterilization	6(3,2)
Oral contraceptive pills	5(2.7)
Male condom	2(1.1)

Table 5: **Age and Parity Distribution of the Acceptors.**

Variable	N (%)
Age (years)	
15-19	4(2.1)
20-24	16(8.5)
25-29	33(17.6)
30-34	60(31.9)
35-39	41(21.8)
40-44	28(14.9)
45-49	6(3.2)
Parity	
0,1	13(6.9)
2,3	47(25.0)
4,5	66(35.1)
6,7	42(22.3)
8 and above	20(10.6)

Average age: 33.4 years; modal age 30 years. Average parity: 4.7; modal parity 5.

Table 6: **Side Effects Experienced By the Clients.**

Complications	Injectables (N =135)	IUDs (N=27)	Implants (N=13)	BTL (N=6)
Menstrual Disturbances				
Secondary amenorrhoea	33.3%	3.7%	46.2%	
Prolonged menstrual periods	25.2%	14.8%	23.1%	16.7%
Inter-menstrual bleeding	18.5%	18.5%	53.8%	
Irregular menstrual periods	6.7%	7.4%	53.8%	33.3%
Other Side Effects				
Headache	7.4%	3.7%	23.1%	50.0%
Weight gain	2.7%	3.7%	15.4%	
Abdominal pain/waist pain	0.7%	44.4%	7.7%	33.3%
Weight loss	0.7%	7.4%	7.7%	33.3%

Side effects were not recorded in the acceptors of Condoms (n = 2) and Oral Contraceptive Pills (n = 5)

DISCUSSION

This study has demonstrated that the injectable method of contraception was the most accepted by women in rural Aba, Southeastern Nigeria in recent years. In-depth interviews of the clients indicated that its convenience for them resided in being non-coitus related, with two to three-monthly spacing of injections. Clients who did not have the support of their partners in seeking contraception cited the ability to avoid detection by their spouses as a factor which influenced their choice of injectable contraception. Its efficacy, demonstrated by the low accidental pregnancy rates and its provision as non-reusable injection systems such as SoloShot or Uniject with increased safety and the accuracy of the dose may have helped in increasing its level of acceptance to the women.

The average age and parity in this review are similar to that of previous studies in Lagos, Southwestern Nigeria and Port Harcourt, Southsouth Nigeria[6, 7] suggesting popularity and use for terminal contraception in older Nigerian women of high parity who should have aimed for sterilization. Acceptance of bilateral tubal ligation was low in this study and has been found to be low even among Nigerian women with formal education[4]. The clients in this study reported fear of a surgical operation and fear of anaesthesia as reasons for their dislike of tubal ligation. It is possible that rumors and myths about sterilization may bias attitudes such that many women who might benefit from it never accept it. On the other hand, more couples in the United States of America rely on sterilization to avoid conception than any other method[8]. Approximately 90 000 women are sterilized in the United Kingdom each year[9]. Adequate counseling and sufficient information about the operation of sterilization may improve the women's attitude towards sterilization in this part of Nigeria.

More women in this study chose the sub-dermal contraceptive implants than did choose sterilization and cumulative continuation rate in 24 months was

highest with the implants compared to the injectables and IUDs. There is therefore the need to ensure sustainability of the implants as a method of contraception in Nigeria.

Acceptance of the intrauterine contraceptive devices (IUD) was low in this study. This may be due to the belief by some of the women interviewed, that the IUD can be displaced by their partner's penis during coitus and could in the process perforate the uterus. Others cited rumors of accidental pregnancies with IUD as indicating that intrauterine devices have a high failure rate. These findings suggest that information and counseling on the various types of contraceptive methods in rural parts of Nigeria are likely to be inadequate. Majority of the women interviewed in this study (48.2%) got their initial information on contraceptive methods through friends. However, information obtained through friends might be either incomplete or incorrect. This result corroborates the findings in previous studies in Nigeria[1,10]. Strategies to increase contraceptive use in rural Nigeria must therefore, include improving delivery of correct and adequate information about choices and usage.

Oral contraceptives and condoms were not commonly sought for in the Family Planning Clinic by the women in this study. A previous study in Nigeria revealed that majority of women obtained their oral contraceptives and condoms from chemists in the private sector[10]. This pattern is similar to that found in the 2003 Nigeria Demographic and Health Survey[11]. Studies in Ghana and Kenya have also shown that these commodities are obtained mainly from the private sector[12,13]. In Zimbabwe and Tanzania, however, the majority of the users obtained oral contraceptives and condoms from the public sector[14, 15] and this was a reflection of strong government involvement in the provision of family planning services.

Whereas there is a high prevalence of undesired pregnancies, unsafe abortions and hence, high abortion-related morbidity and mortality among adolescents and young people in Nigeria[16], adolescents were the least represented in this study. Lack of confidentiality, negative attitudes of health providers within the formal health care system, lack of information, and fear of parental retribution[17], have been suggested to be the factors responsible for the inadequate pattern of health-seeking behavior by young people for reproductive healthcare.

Menstrual disturbances were the most frequent side effects reported by the users of the injectables, the IUDs, the implants and by those who were sterilized in this study. Other side effects included headache, abdominal pain and pelvic pain. Menstrual disorders have always been the commonest side effects of progestin-only contraceptives due to the effect of progestogens on endometrial angiogenesis. With proper counseling majority of the acceptors of progestin-only contraceptives endeavor to tolerate such side effects [6, 7]. However, the effect of sterilization on menstrual function has always been open to debate. An increase in menstrual loss and spotting and an increase in pelvic pain have been reported by several researchers [18, 19]. It would seem however, that women who have been sterilized have a greater willingness to seek advice about menstrual problems than women who have never been sterilized.

CONCLUSION AND RECOMMENDATION

The study has shown that the most commonly used contraceptive method in rural Southeastern Nigeria is the injectable hormonal contraceptives. The women's acceptance of the IUD, implants, sterilization, oral contraceptives and condoms was low. Inadequate information as shown by the source of initial information on contraceptive methods may be a factor militating against the choice and usage of contraceptive methods by these women. Strategies to increase contraceptive use in rural Nigeria must include improving delivery of correct and adequate information about the available contraceptive methods. There is the need to update the operational guidelines and the standards of practice (SOP) for the service providers. Well-informed and supportive counseling during initiation of contraception and reinforcement during the follow-up visits can do much to promote satisfaction and hence continuation of the chosen method of contraception. There is also a need to encourage the establishment of youth-friendly centers where young persons can go for counseling as well as to obtain contraceptive methods.

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