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# **Original Research Article**

# Pattern of contraceptive use at a family planning clinic in Southern Nigeria

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# **ABSTRACT**

**Background:** Contraception is very important in preventing unwanted pregnancies thereby reducing maternal and child mortality as well as improving the lives of women and their families. This paper aims to determine the pattern of contraceptive usage, uptake rates of the contraceptives, the socio-demographic characteristics and sources of information on contraceptive use at the Rivers State University Teaching Hospital (RSUTH) during the study period. **Methods:** This was a retrospective study of clients' records in family planning clinic at RSUTH over a period of ten years. Their records were retrieved, reviewed; data extracted, coded and analyzed using the statistical package for social sciences (SPSS) IBM version 25.0.

**Results:** There were 1893 contraceptive acceptors attending family planning clinic between 1st January, 2008 and 31st December, 2017 in the centre. The uptake rate of the contraceptives throughout the study period was on the downward trend. Over half of the clients (60.7%) were within the age range of 30-39years and 6 (0.3%) were below 20 years. Age range for the study was 19-51years. Majority of the users (66.1%) were multipara. Modal parity was para 3 and 1862 clients (98.4%) had formal education. Most of the clients were married 1814 (95.8%) and of Christian religion 1813 (95.7%). Most preferred contraceptive method was the intrauterine contraceptive device (IUCD), 814 (43%). Clinical personnel were the commonest source of information accounting for 1425 (75.3%).

**Conclusions:** There was a downward trend in the use of contraceptives during the study period. Most clients were in their thirties, married, educated and multiparous.

Keywords: Acceptors, Contraceptives, Family planning, Pattern

# INTRODUCTION

Contraception is the prevention of pregnancy by methods other than abstinence from coitus.<sup>1,2</sup> There is no perfect method of contraception and each of them has its own advantages and disadvantages. Family planning helps individuals and couples to avoid unwanted pregnancies, bring about wanted births, spacing of childbirths and determine the number of children in the family.<sup>3,4</sup> The benefits of family planning are numerous but the main aim is to improve the quality of life of the populace.<sup>4,5</sup> It

also empowers as well as improving the lives of women and has been proven to be a cost effective health intervention.<sup>6-8</sup> A recent study estimated that contraception can reduce up to 32% maternal death and 10% childhood mortality if readily available.<sup>3,9</sup> It has also been reported that contraception has contributed to 50% reduction in the number of maternal deaths globally between 1990 and 2010.<sup>4,6</sup>

East Asia has made the highest advancement in preventing maternal mortality with contraceptive

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prevalence rate (CPR) of 84%. In contrast, sub-Saharan Africa has a CPR of 22% and the highest maternal mortality rate. 4.6 The current CPR in Nigeria is approximately 11% to 13%. This rate is very low in spite of high rate and widespread awareness of various methods of contraceptives among Nigerians and is due to social, economic, cultural and religious factors tending towards a large family. 9-11

This study is the first of its kind at the RSUTH, southern Nigeria. The aim was to determine the pattern of contraceptive use among the contraceptive acceptors at the family planning clinic of RSUTH. It also determined the socio-demographic characteristics of the acceptors, the reasons for contraceptive choices and sources of information on contraception.

#### **METHODS**

This retrospective study was carried out at the family planning clinic of the Rivers State University Teaching Hospital (RSUTH), Port Harcourt, and the capital of Rivers State in South-South geopolitical zone of Nigeria. The state has a population of more than 5 million people with different tribes and languages. The clinic gets its clients primarily from the postnatal, gynaecological and outpatient clinics. Also clients came from other towns in and outside the State. The family planning clinic has its own records section different from the hospital records and this makes it easy to retrieve the clients' case notes. The clinic runs from 8a.m to 4p.m on Mondays to Fridays.

At presentation, the clients were warmly welcomed by trained family planning nurses and physicians who also counseled them. The clients were allowed to make informed choice based on their needs and available contraceptives suitable for them. Thereafter medical history and clinical examination were done.

Urine analysis and pregnancy test were also done for the clients before the chosen contraceptives were administered to them. The contraceptive methods available at the family planning clinic during the study period included oral contraceptive pills (OCPs), depo medroxy progesterone acetate (DMPA), noristerat, jadelle, implanon, IUCD and condoms.

The record cards of all the clients that accepted the available contraceptives between 1st January, 2008 and 31st December, 2017 were retrieved and studied. The information extracted from the cards included the sociodemographic characteristics of the clients, indications for their use and source of information concerning contraception.

The data was analyzed with the statistical package for social sciences (SPSS) IBM version 25.0 (Armonk, NY) using frequency counts and percentages.

#### **RESULTS**

During the study period, there were 1893 contraceptive acceptors out of which 814 (43%), 308 (16.3%), 271 (14.3%), 253 (13.4%), 161 (8.5%), and 86 (4.5%) women accepted IUCD, implanon, DMPA, jadelle, noristerat and OCPs respectively.

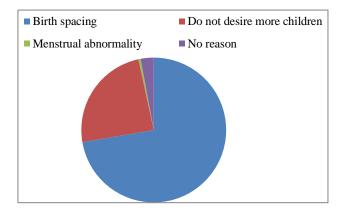


Figure 1: Indications for contraceptive use.

Table 1: Socio-demographic characteristics of the clients.

Variable	No.	Percentage (%)
Age		
<20	6	0.3
20-24	92	4.9
25-29	418	22.1
30-34	697	36.8
35-39	453	23.9
40-44	181	9.6
45-49	42	2.2
<u>&gt; 50</u>	4	0.2
<b>Educational status</b>		
No formal education	31	1.6
Primary	95	5.0
Secondary	1415	74.8
Tertiary	352	18.6
Religion		
Christianity	1813	95.7
Islam	37	2.0
Others	43	2.3
Parity		
Nullipara	22	1.2
Primipara	194	10.2
Multipara	1251	66.1
Grand multipara	426	22.5
Marital status		
Single	79	4.2
Married	1814	95.8

One thousand three hundred and sixty eight (72.3%) women used contraceptives for birth spacing, 459 (24.3%) have completed their family size and used it to

prevent further pregnancy and 10 (0.5%) women used OCP to correct menstrual abnormality. There was no reason for the use of contraceptives indicated in the cards of 56 (2.9%) clients (Figure 1).

The ages of the clients ranged from 15 to 51 years. Majority of the clients, 1568 (82.8%) were between the age range of 25 to 39 years. Only 6 (0.3%) teenagers used contraceptives during the study period. Four (0.2%) women were age 50 years and above. The mean age for the study was 32.1+5.4 years. Majority of the clients were multiparous women, 1251 (66.1%) and Christians 1813 (95.7%). The parity range was 0 to 12 and modal parity was para 3. Twenty two (1.2%) women were nullipara while 426 (22.5%) were grandmultipara. One thousand, eight hundred and sixty two (98.4%) of the clients had formal education out of which 1415 (74.8%) had secondary level of education while 352 (18.6%) and 95 (5.0%) had tertiary and primary levels of education respectively. Majority of the clients were married 1814 (95.8%) while 79 (4.2%) were single. The sociodemographic characteristics of the contraceptive acceptors are shown in table 1.

**Table 2: Sources of information on contraception.** 

Sources of Information	No. of clients	Percentage (%)
Clinical personnel	1425	75.3
Friends/relatives	200	10.6
Community Health Worker	85	4.5
Print Media	44	2.3
Radio/Television	45	2.4
Outreach	32	1.7
Others	62	3.2

Sources of information for all the contraceptive methods are shown in table 2. One thousand, four hundred and twenty five (75.3%) women obtained their information concerning contraception from clinical personnel, 200 (10.6%) from friends and relatives, 85 (4.5%) from community health workers and 44 (2.3%) from print and media. Radio/Television and outreach contributed 45 (2.4%) and 32 (1.7%) respectively.

Table 3: Yearly trend of acceptors of all the contraceptive methods.

Year	OCPs		IUCD		Impla	anon	Jade	lle	DMI	PA	Nori	sterat	Total no.
	No	%	no	%	no	%	No	%	no	%	No	%	Of users
2008	28	11.8	115	48.5	6	2.5	10	4.2	48	20.3	30	12.7	237
2009	2	0.9	148	67.3	0	0	0	0	51	23.2	19	8.6	220
2010	36	13.6	111	42.1	14	5.3	28	10.6	43	16.3	32	12.1	264
2011	0	0	85	49.4	15	8.7	20	11.6	23	13.4	29	16.9	172
2012	0	0	33	16.6	42	21.1	26	13.1	76	38.2	22	11.0	199
2013	4	2.4	104	61.2	17	10.0	14	8.2	12	7.0	19	11.2	170
2014	3	2.2	57	41.3	39	28.3	31	22.4	5	3.6	3	2.2	138
2015	3	1.7	46	26.3	56	32.0	62	35.4	6	3.4	2	1.1	175
2016	8	4.5	56	31.5	71	39.8	35	19.7	5	2.8	3	1.7	178
2017	2	1.4	59	42.1	48	34.3	27	19.3	2	1.4	2	1.4	140

Table 3 shows the yearly trend of acceptors of all the contraceptive methods. There is a downward trend of all the contraceptives during the study period. Most clients, 814 (43%) used IUCD followed by implanon, 308 (16.3%), DMPA, 271 (14.3%) and jadelle, 253 (13.4%) in that order. The least preferred methods were OCPs, 86 (4.5%) and noristerat, 161 (8.5%).

The use of condoms was not properly documented throughout the study period. Some of the women collected quite a number of condoms in addition to the method they were using.

The reason for this was not documented in their cards. The use of IUCD, jadelle and implanon fluctuated throughout the study period. There was visibly a decline in the use of OCPs, DMPA, and noristerat.

## **DISCUSSION**

Contraceptive uptake rate for IUCD was the highest during the study period. This is in keeping with other studies done in other centres in Nigeria but not in keeping with the study done in Sokoto and Ilorin where implanon and injectable contraceptives (DMPA and Noristerat) were the preferred contraceptives respectively. 8,12-17 In the Northern parts of Nigeria where moslems are dorminant, IUCD is no longer popular due to the method of administration. It requires exposure before insertion which is culturally unacceptable in a conservative moslem society. Oral contraceptive pills (OCPs) were the

least popular in our study and the study done in Sokoto.<sup>8</sup> This is possibly due to the burden of swallowing a tablet every day when one could choose from other more convenient methods. In our environment, most of these OCPs are easily purchased from the pharmacy or drug stores and there may not be any need for these women to come to the hospital for the pills. This may also be the reason why male condoms use was scanty and not properly documented. In United Kingdom, combined oral contraceptive pills (COCPs) are the most commonly used method of contraception with condom use as the second commonest.<sup>1,2</sup>

The age range of the women was 15-51 years. This is similar to a study done in Sokoto, Nigeria; though the mean age of our study was higher than 27.2 years got from the study done in Sokoto.8 Most users of the contraceptives were in the age group 30-34 years while the least was in age group less than 20 years. This is in keeping with the studies done in Ilorin, Port-Harcourt and Sokoto.<sup>8,17,18</sup> Six teenagers (0.3%) used contraceptives throughout the study period. This figure is less than the figures from studies in Sokoto, Kano and Nassarawa States where they practice early marriage. 8,11,19,20 The low usage among the adolescents is an issue of concern in Nigeria where more than 60% of teenagers are sexually active, accounting for 60% of 600,000 induced abortions in Nigeria.<sup>20</sup> These teenagers might be shying away from getting the contraceptives from the family planning clinic in order not to be tagged as being promiscuous. Therefore they resort to buying them from the pharmacy and drug shops. It could also be due to abstinence from sex which is preached at this age or they may be afraid of the side effects of the drugs. The attitudes of health care givers towards the teenagers might be discouraging therefore family planning clinics should be youth friendly and encourage teenagers and young unmarried women to visit the clinic for contraception.

Most of the women were multiparous and had formal education like in other studies.<sup>21,22</sup> It has been shown that the more educated a woman is, the more likely she is to use modern contraceptive methods.<sup>23</sup> Educated women tend to appreciate the importance of family planning in order to reduce the number of children they have and give them quality education.<sup>23</sup> Multiparous women formed the highest group that used the contraceptives and nulliparas were the least. This is similar to other studies. 18,21,22 Most women were Christians. This is not surprising because majority of the population in southern Nigeria are Christians and this finding is in keeping with other similar studies done in southern Nigeria. 18,21,22,24 There was no provision for the occupation and tribe of the clients in the family planning cards. Efforts should be made to correct this in subsequent printing of the cards.

Family planning programmes often target their services at young married women who would want to space their childbirths as seen in this study where 72.3% used contraceptives to space childbirths. Our study showed

that 22.5% of grandmultiparous women accepted to use contraceptives and 24.3% women with complete family size (most of them grandmultipara) also accepted to use contraceptives instead of sterilization. This is not surprising because in our environment, acceptance of sterilization is low due to cultural and religious believes therefore they would prefer to go for other contraceptive methods whose effectiveness rivals that of surgical sterilization. <sup>25,26</sup>

There is a downward trend in the use of contraceptives throughout the study period. Some of the reasons that would have contributed to this include irregular supply of the contraceptives from the clinic. It was noted that in some of the years under review, some contraceptives were not supplied to the clinic making it impossible for the clients to have access to them. Also medical workers embarked on strikes in some of the years during the study period. Some of the drugs are acquired at an expensive rate making it unaffordable and discouraging to the low socio-economic class. Unfortunately, commonly held rumors, misconceptions and lack of current scientific information have been identified as the biggest barrier to the acceptance and use of some of the contraceptives.<sup>27</sup> Other reasons adduced for the low contraceptive acceptance in Nigeria and other developing countries include ignorance, illiteracy, poverty, inadequate funding and poor organization of health care system. 27-29

Most of the women had their knowledge of family planning from clinic personnel. This is similar to what obtains in most parts of Nigeria and indeed Sub-Sahara Africa but in contrast to the study done in south western Nigeria where print and media played a very important role in the dissemination of information concerning contraception. <sup>14,21,22,27,30</sup>

The attitude of health providers towards a particular contraceptive method in developing countries has been shown to influence continuation rates among clients through the kind of information they give when interacting with clients. Therefore there is the need to evaluate the interaction between the contraceptive providers and the clients especially as the number of acceptors declined throughout the study period. Government should also train and retrain the providers as well as subsidizing the prices of the contraceptives especially the implants to make it more affordable thereby improving their uptake.

Print and media contributed to 2.3% of sources of information in our study. Hence to have an increase in the uptake rate of contraceptives, the source of information should go beyond the clinical personnel to the communities through NGOs and mass media as many women may not have the cause to go to the hospital for treatment. Therefore there should be intense accurate information dissemination to increase the uptake of all the contraceptives especially now that the uptake rate is reducing.

# **CONCLUSION**

There was a downward trend in the use of contraceptives in the family planning clinic of RSUTH. Most clients were young, married, educated and multiparous. Intrauterine contraceptive device (IUCD) was the most preferred contraceptive while OCPs were the least preferred method. Most information on contraceptives came from clinical personnel with a non-encouraging contribution from the print and media. Therefore there is a need to increase contraceptive awareness using various media to improve their uptake.

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