

Original Article

Patterns of contraceptive usage at family planning clinics in Ilorin, Nigeria

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Abstract

This study was carried out to evaluate the pattern of contraceptive usage in family planning clinics of public hospitals within Ilorin metropolis, Nigeria. It was a retrospective study carried out between January 2010 and December 2012 involving a total of 10,002 contraceptive users attended family planning clinics in the centers within this period. Over a half of the clients (56.6%) were within the age bracket of 30-39 years, and 1.4% were less than 20 years. Majority (79.8%) of the users had two or more children while 0.9% were nulliparas. The most preferred contraceptive method was the hormonal injectable (59.5%); the percentage of users of oral contraceptive pills was 9.6% and utilization of the male condoms was 6.9%. The user rate for intrauterine contraceptive device was 17.3% while it was 6.6% for hormonal implant. Surgical sterilization was utilized by 0.1%. The commonest source of information was from healthcare personnel accounting for 41.9% followed by the mass media (21.6%). There was a low level of acceptance amongst teenagers; the level of acceptance of surgical sterilization methods was also low. There is need to improve on information dissemination regarding contraceptive use, via the internet and social media for teenagers who tend to be more internet-savvy. The number and age of clients were statistically significant factors for patterns of contraceptive usage at various family planning clinics in Ilorin metropolis.

Key words: Contraceptive usage, family planning, Nigeria

Introduction

The desire to control our fertility dates back to ancient times and contraception has been used in one form or another for

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thousands of years.^{1,2} The 20th century ushered in the modern era of family planning by all segments of the population.¹

Contraception is the prevention of conception by methods other than abstinence from coitus.³ While there is no perfect method of contraception; each method has its own advantages and disadvantages. The characteristics of the ideal contraceptive method are high level of effectiveness, absence of side effects & cheap. Its use should be independent of intercourse and require no regular action on the part of the user. There are non-contraceptive benefits. Its should be acceptable to all culture and religions and easily distributed and administered by non-healthcare personnel.²

Modern methods of contraception may be divided into hormonal methods and the non-hormonal methods.^{3,4} The hormonal methods are available in oral formulations and parenteral formulations. Oral contraceptives include the combined oral pills, sequential pills and progesterone only pills.

Countries with increased contraceptive usage have experienced gradual but demonstrable decrease in abortion rate.^{4,5} Contraceptive prevalence is low in most African countries, including Nigeria.⁶⁻⁸ Nigeria has an estimated population of over 170 million, with population growth rate increasing to 2.55% in 2010. In Nigeria, 70% of population live below the poverty line.⁹ Nigerian women in the reproductive age group are about 30 million and contraceptive prevalence rate is only 15%. Total fertility rate is 5.38 and 600,000 unsafe abortions occur annually.^{10,11} Ilorin is the official capital of Kwara state of Nigeria, the city has a population estimate of over 850,000 that is influenced by a confluence of multi-ethnic cultures.²¹ The predominant religion being Islam and Christianity is second to it. It has hospitals at the primary, secondary and tertiary levels providing family planning services, hence, a good setting to assess pattern of contraceptive usage. Recently, various coordinated and intensive campaigns have been made worldwide to raise awareness about family planning and contraceptive use for maternal and child survival and as economic improvement strategies.

The aim of the study was to determine the pattern of contraceptive use among women of child-bearing age in Ilorin metropolis. The specific objectives were to determine the socio-demographic characteristics of contraceptive users in Ilorin metropolis, reasons for contraceptive choices and the contraceptive methods commonly adopted.

Methods

The case records of all the contraceptive users and the records at the family planning clinics at the teaching hospital, the state specialist hospital, three general hospitals and a primary health care center that were involved in family planning services were reviewed and analyzed. The study period under review was between January 2010 and December 2012. They are Adewole Cottage Hospital (ACH), Adeta Primary Healthcare Center (APC), University of Ilorin Teaching Hospital(UITH), Kwara Civil Service Hospital (KCSH), Kwara State Specialist Hospital(KSSH) and Kwara Women and Children Hospital (KWCH).

The socio-demographic characteristics of the clients were analyzed including number of living children, desire to limit or space children and contraception history. The data analysis was done using SPSS version 20.

Results

A total of 12,455 case folders were retrieved but only 10,002 cases that had sufficient data were analyzed. The percentage of case notes analyzed was 80.3%.

The highest number of clients was seen at a general hospital with a total of 3,663 clients accounting for 36.6% (Figure-I). The least number of clients were seen at the primary health care center accounting for 3.7%. The number of clients seen at the teaching hospital was 1,320(13.2%).

The age range was 18 to 52 years. Majority (32.6%) of

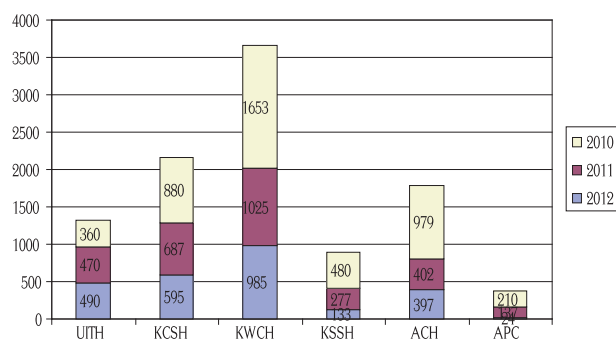


Figure-1: Yearly distribution of clients in the various health centers.

clients were within the age group of 30-34years, 207 clients were within the age bracket of 50-54 years, accounting for 2.07%. (Table-I)

A total of 407 of the clients had no formal education accounting for 4.1% of the total clients analyzed, while 5,190 clients (51.9%) had secondary level of education. Information on the level of education was not obtained in 3.8% of the clients analyzed. (Table-I)

Majority of the clients 6,208(62.1%) of the studied population were muslims. The majority of clients (6,838)68.4% were multiparous women and their parity ranged between 2-4. The grand multiparous women were 12.1% of the clients studied. (Table-I)

A total of 3,705 women (37.1%) expressed a desire for more children while 46.9 %(4,694) did not desire to have more children. However, 16 %(1,603) were not decided. (Table-I)

Table-I: Socio-demographic variables of women attending family planning clinics in Ilorin

Variables	Frequency (%)	Variables	Frequency (%)
Education		Age(years)	
None	407(4.1)	<20	116(1.2)
Primary	3,379(33.8)	20-34	5561(55.6)
Secondary	5,190(51.9)	35-44	3,341(33.4)
Tertiary	1,026(10.3)	45-54	984(9.8)
Religion		Desire for more children	
Islam	6,208(62.1)	Yes	3705(37.1)
Christianity	3,655(36.5)	No	4,694(46.9)
Not stated	139(1.4)	Undecided	1,603(16)
Parity		Educational level	
0	95(0.9)	No Formal	407(4.1)
1	1,853(18.5)	Primary	3,379(33.8)
2-4	6,840(68.4)	Secondary	5,190(51.8)
≥ 5	1,214(12.1)	Tertiary	1,026(10.3)

A total of 4,186(41.9%) of the clients got the information about family planning from hospital based health-care personnel, 2,162(21.6%) of the clients got their information from mass media. (Table-II)

Table - II: Source of information for contraceptive use

	UITH N(%)	KCSH N(%)	KWCH N(%)	KSSH N(%)	ACH N(%)	APC N(%)	Total N(%)
CP	880 (66.9)	886 (41)	1432(39.1)	391(44.1)	447(28)	150 (40.4)	4,186(41.9)
SW	107 (8.1)	254(11.6)	294 (8.5)	60(6.7)	311(19.5)	32 (8.6)	1,058(10.6)
MM	179 (13.3)	425(18.7)	949 (24.8)	154(17.4)	402(25.2)	53(14.4)	2,162(21.6)
CHEW	57 (4.3)	197(9.1)	254 (6.9)	65 (6.7)	205(12.9)	38(10.2)	816(8.2)
MS	82(6.2)	369(18.3)	702(20)	164(19.9)	220(13.7)	20 (5.4)	1,557(15.6)
NS	15 (1.2)	31(1.3)	32 (0.7)	56(5.2)	11 (0.7)	78 (21)	223(2.2)

CHEW-Community Health Extension Worker, CP-Clinic Personnel, NS-Not Stated, MM-Mass Media, MS-Multiple Sources

A total of 5,563(55.6%) clients had used a type of contraceptive agent before and 3,900(39%) had not used any form of contraception. (Figure-2)

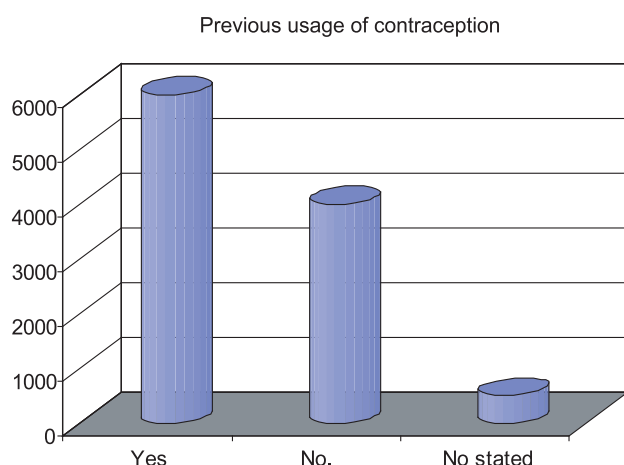


Figure - 2: Previous contraception usage

A total of 5,563 clients had used a form of contraception before, in 39% of cases, there had not been prior use of contraception. The commonest type of contraceptive used in the past by the clients was the medroxy progesterone acetate injection (Depoprovera) in 1,882(33.2%) clients. Oral contraceptive pills were used by 1,116(19.7%) clients. The intrauterine contraceptive device was used by 1,119(19.8%). The number of clients that utilized nor-ethisterone(Noristerat) injectable was 936(16.5%) , while, 510(0.9%)clients used the male condom as a form of contraceptive. (Table-III)

Majority of the clients, 3,847(38.5%), chose the medroxy progesterone acetate as a form of contraceptive again. Norethisterone injectable was used in 20.9% (2,093) of the patients. A total of 1,723(17.2%) clients chose the intra-uterine contraceptive device as a form of contraception , the oral contraceptive pills were use by 951 clients accounting for 9.5% of the clients that were studied. (Table-III)

Other methods utilized were the male condoms (7.1%), Implanon® (3.4%), Jadelle® (2.6%). Bilateral tubal ligation was done in 6 clients accounting for 0.06%. (Table-III)

Table - III: Contraception used in the past and at present

Contraception (past)	Frequency (%)	Contraception(present)	Frequency (%)
IUCD	1,119(20.1)	IUCD	1720(17.2)
Oral Contraceptive Pills	1,116(20.1)	Oral Contraceptive Pills	950(9.5)
Depo-provera	1,882(33.8)	Depo-provera	3844(38.44)
Noristerat	936(16.8)	Noristerat	2090(20.9)
Condoms	510(9.2)	Condoms	710(7.1)
-		Implanon	380(3.8)
-		Jadelle	300(3)
-		Bilateral tubal ligation	6(0.06)
Total	5,563(100)	Total	10,002(100)

There is a significant difference when the age of clients was compared with frequency of contraceptive use. (X^2 -value is 23.956 and $P = 0.002$). This implies that there is significant difference in the number of clients who have different patterns of contraceptive usage based on age at family planning clinics in Ilorin metropolis. (Table-IV).

There is significant difference between patterns of contraceptive usage and choice of methods of contraception at family planning clinics in Ilorin metropolis. (Table-V)

Table-IV: Comparison of age of clients with frequency of contraceptive use

Age(years)		Usage			
		Always	Often	Occasionally	Never
Less than 20	Observed	1199	742	205	298
	Expected	(1192.3)	(743.5)	(216.7)	(291.5)
20-34	Observed	1008	657	192	202
	Expected	(1004.5)	(626.4)	(182.6)	(245.6)
35-44	Observed	1283	820	226	302
	Expected	(1388)	(800.4)	(233.3)	(313.8)
45-54	Observed	1390	824	264	391
	Expected	(1398.7)	(872.6)	(254.4)	(342.1)

$P \leq 0.05$

Table V: Comparison of contraceptive usage with Method of Contraception

Contraception Method		Usage			
		Always	Often	Occasionally	Never
IUCD	Observed	633	458	101	122
	Expected	(640.9)	(401.0)	(114.6)	(157.5)
Oral Contraceptive Pills	Observed	2223	1415	317	557
	Expected	(2200.7)	(1377)	(393.4)	(540.9)
Depo-provera	Observed	823	448	107	251
	Expected	(794.5)	(497.1)	(142)	(195.3)
Noristerat	Observed	559	334	116	101
	Expected	(541.4)	(338.7)	(96.8)	(133.1)
Condoms	Observed	595	369	223	157
	Expected	(655.5)	(410.2)	(117.2)	(161.1)

Critical level of significance = 0.05

Discussion

Analysis showed that the highest numbers of clients were seen at a general hospital within the metropolis, accounting for 36.6% of the study population. A total of 8,311 (83.1%), of the clients were seen at the general hospitals. This may be due to the fact that the hospitals are closer to the populace and more readily accessible to them.

The highest frequency of users was in the age group 30 to 34 years, while the least frequency was in age group less than 20 years (1.4%). The low usage among the adolescents is an issue of concern in a country where more than 60% of teenagers are sexually active and of the 600,000 induced abortions in Nigeria, 60% are attributed to young persons.⁶ The reasons for this low figure could be that most of the young people

shy away from obtaining contraceptives from public health facilities for fear of being tagged as promiscuous; they therefore prefer to procure their contraceptives such as condoms and pills from pharmacy shops/ chemist and drug peddlers.^{7,8} Other reasons why young people do not use contraceptives includes ignorance about their fertility, fear of side effects, and attitude of health care providers towards teenagers seeking information and contraceptives.⁸

Educated women adopted modern contraception more than non educated women in this study. Educated women tend to appreciate the importance and benefits of family planning such as reduce family size and improved quality of living.¹² This was similar to findings of Tawiah in Ghana where the use of contraception correlated with the educational level of the women and their husbands.²²

Multiparous clients with 2-4 children formed the highest group that sought family planning services, they accounted for 69.8% of the total number analyzed. However, there were 95(0.95%) nulliparous clients that sought contraceptive use to avoid unwanted pregnancy. When compared with other reasons for contraception, a larger percentage of the clients (46.9%) indicated no desire for more children, 37.1% wanted more children, hence needed to space their children, while 16% were not decided at the time of clinic visit.

Islam was the religion of most of the women attending the family planning clinics in the centers used, they accounted for 62.1% compared to 36.5% that are Christians. In 1.4% of cases their religion was not stated. This is reflective of the religious affiliations of the inhabitants of the urban setting, signifying that the faith of the inhabitants did not contradict contraception.

The injectable, hormonal contraceptive agents, medroxyprogesterone acetate [Depo-provera] and nor-ethisterone enanthate [Noristerat] were the most common form of contraceptive agents used accounting for 59.34% . This was similar to a study done in southeastern Nigeria 71.8% of the clients utilized the injectable hormonal contraceptives.^{13,14} This is however contrary to a community based study of contraceptive behavior in Nigeria.¹⁵ In the United Kingdom, combined oral contraceptive pill is the most commonly used method of contraception with condom use as the second commonest.^{2,16} Acceptance of intrauterine contraceptive device was high at the teaching hospital,(41.1%) and this was similar to the findings done in Ghana.¹⁴ However, the acceptance was low at the general hospitals and primary healthcare center recorded no client opting for it. This factor made the overall acceptance of the intrauterine contraceptive device to be 17.2%.

The use of bilateral tubal ligation was quite unpopular, it was used by only six clients, accounting for 0.06%, this was

similar to cross-sectional studies done in Nigeria where it accounted for 0.4% among urban respondents,¹⁶ but contrary to reports from United Kingdom.¹⁶ This may reflect the aversion to sterility, in the typical African society.

The use of hormonal implant contraceptive agents was not very popular, 3.4% of the clients used Implanon, while Jadelle was used in 2.6% of the clients. The reason for the low utilization rate may be inadequate skilled manpower and the relative non-availability of the commodities in some family planning clinics in Ilorin.

A significant number of clients chose male condoms, it may be due to greater awareness and the advantage it confers against transmission of human immunodeficiency virus (HIV).¹⁷

The health personnel comprising of doctors and nurses/midwives were the most important sources of information for these women as 41.9% of the acceptors knew about family planning services, through the health personnel. This was similar to findings in studies done both in Nigeria and some Netherlands.^{15,18} This was observed particularly among the multiparous women who probably had attended antenatal classes during previous pregnancies and were adequately informed about contraception. The mass media (print media, radio and television) were the source of information in 21.6%, this was contrary to a cross-sectional study done in united states where 70% of respondents obtained information from the media.¹⁹

The limitation of this study was that some information in the patients' case files and clinic records were not available; the study was also hospital based thereby excluding information on community based contraceptive usage. We need studies to evaluate the contraceptive usage within the communities and the roles of pharmacists and patent drug sellers in family planning services.

The choice of contraception and age were important determinants of patterns of contraceptive usage in this study. Hormonal injectable was the most common method in the family planning clinics at Ilorin, followed by intrauterine contraceptive device. Surgical contraception had the lowest user rate.

The utilization rate of contraception at family planning clinics was low for teenagers in this series. The number of people that obtained information about family planning services from the mass media was substantial. Our clinics should be more youth friendly so as to encourage teenagers, young and unmarried women on contraceptive usage.

The social media can also be used by healthcare providers to disseminate information to the younger and internet-savvy generation. This will create the anonymity needed for information seeking on contraceptives and the usage. Training and re-training should be done periodically to improve on skills and capacity of the health-care providers.

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