UTILIZATION OF FAMILY PLANNING SERVICES IN A NIGERIAN TERTIARY HOSPITAL: A SIX YEAR REVIEW

Atinuke O. Olaleye[1], Akinyemi A. Akintayo[2], Yemisi O. Adewoyin[3], Akinyemi O. Olaleye[4]

[1]Department of Obstetrics and Gynaecology, Babcock University Teaching Hospital, Ilishan-Remo, Nigeria.
[2]Department of Obstetrics and Gynaecology, Ekiti State University Teaching Hospital, Ado-Ekiti, Nigeria.
[3]Family Planning Clinic, Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria.
[4]Department of Obstetrics and Gynaecology, The Premier Specialists' Medical Centre, Victoria Island, Nigeria.

ABSTRACT

Context: Family planning is an integral part of maternal health as its uptake is a significant factor in the reduction of maternal mortality and in ensuring positive child health outcomes.

Objectives: To describe prevalence and pattern of contraceptive use, and identify reasons for discontinuation among women accessing family planning facilities.

Study design: A six year retrospective review of hospital records of new family planning clinic clients at the teaching hospital was conducted. Data was obtained from the client cards and proportions expressed as simple percentages.

Results: A total of 1,284 clients accepted a family planning method during the period. Contraceptive prevalence rate in relation to hospital deliveries was 18·1%. Modal age group of clients was 31–40(50.4%), while modal parity was Para 2-3 (43·4%). A third of the clients sought contraception within 6 months of delivery. Intrauterine contraceptive device was the most common method (65.0%). Information on family planning was mainly from nurses (66.7%). Contraceptive discontinuation rate was 21.2%, mainly due to desire for another pregnancy (62%). Menstrual irregularity and husband's decision were some other reasons.

Conclusion: There is an identified need for promotion of uptake of family planning methods. Involvement of men in contraception counselling and services is essential to improve its uptake and continuity.

Keywords: Family planning, contraceptives, Ile-Ife, Nigeria

INTRODUCTION

Contraception is a way of preventing pregnancy by interrupting the chain of events between the male and female gametes that leads to fertilization. Contraceptives are employed in pregnancy prevention as a method of delaying, spacing or limiting pregnancies.

Correspondence: Akinyemi A. Akintayo
Department of Obstetrics and Gynaecology,
Ekiti State University Teaching Hospital,
Ado-Ekiti,
Ekiti state, Nigeria.
Tel: +2348033767542

Nigeria has one of the highest maternal mortality ratios worldwide[1], and ranks as the country with the second highest number of maternal deaths in the world[2], with illegal and unsafe abortions contributing 20%–40% of about 60,000 maternal deaths that occur yearly in Nigeria.[3-5] Contraceptive prevalence rates have correlated with maternal mortality and it has been shown that countries with low contraceptive prevalence rates are also countries with very high maternal mortality ratios.[6,7]

Similarly, the rate of induced abortions is a fair indicator of the current state of medical care and family planning in any country. Among Nigerian women of reproductive age, one in seven have tried to have an abortion, and one in 10 have actually ended an unwanted pregnancy, suggesting up to 760,000 induced abortions annually.[8] Effective contraception would prevent unwanted pregnancies, abortion-related complications and deaths and it would also reduce the hazards of too frequent or too many pregnancies. Family planning therefore, promotes the health of the woman and welfare of the family, which would result in economic gains and social development of the country.

Unexpected or unplanned pregnancy poses a major public health challenge in women of reproductive age, especially in developing countries. It is estimated that about 1.5million unplanned pregnancies occur annually in Nigeria.[9] Many women in developing countries would like to delay their next pregnancy or even stop bearing children altogether, but many of them still rely on traditional and less effective methods of contraception or use no method at all. Those who do not use any contraceptive method may lack access or face barriers to using contraception. These barriers include lack of awareness, lack of access, cultural factors, religion, opposition to use by partners or family members, and fear of health risks and side effects of contraceptives.[10-12]

In recent years worldwide, there has been an intensive campaign to raise awareness about family planning. Despite the widespread attempts at awareness and availability made by both government and non-governmental organizations, studies within communities in Nigeria have shown that the acceptance and use of modern family planning methods is less than satisfactory in Nigeria.[13,14] Evidence suggests that only 11-13 percent of sexually active Nigerians use effective contraception.[15] National data states a contraceptive prevalence rate of 10% for modern methods and an additional 5% for traditional methods among married women. The unmet need for contraception is about 16% (12% for spacing, 4% for limiting) and despite a population of about 170 million, total fertility rate is as high as 5.5.[9]

The optimum use of reproductive health services are encouraged among women to improve maternal health which is one of the United Nations' Millennium Development Goals. An increase in the uptake of family planning is a major determinant to the reduction of maternal mortality and ensuring positive newborn and child health outcomes. The Federal Ministry of Health started supplying free contraceptive commodities to the public family planning clinics in August 2011 in order to reduce the unmet need of reproductive health services most especially among the poor and the vulnerable groups.

This study was therefore carried out to determine the rate of uptake of modern contraception among women assessing maternity care, to examine the trends in pattern of contraceptive

usage among women attending the family planning unit of Obafemi Awolowo University Teaching Hospitals Complex, South-west, Nigeria to serve as a baseline for subsequent assessment of the impact of this new policy, as well as to identify client characteristics that may influence demand for these services. The patients who had maternity care in this centre are routinely counseled in the postnatal clinic about modern contraception and subsequently referred to the family planning clinic for more information and choice. No recent hospital based assessment of uptake of family planning methods has been published from OAUTHC, to the best knowledge of the authors. The findings from this study would provide a basis for improvement in the delivery of family planning services.

MATERIALS AND METHODS

A retrospective review of the hospital records of all family planning clinic attendees over a six-year period (January 2006 to December 2011) was done. Theatre records of surgical sterilization over the same study period were also obtained. Data on the socio-demographic characteristics, obstetric history, breastfeeding status, previous contraceptive use, source of family planning information, method chosen at the visit as well as reason for discontinuation where applicable was obtained from the Client cards at the family planning clinic of the teaching hospital.

The information obtained was analysed with SPSS 16.0. Proportions were expressed as simple percentages and compared using Chi square. Trend analysis was expressed as line graphs. The confidence level was set at 95% (i.e. $p<0.05$). The contraceptive prevalence rate was determined as a proportion of women using a method of contraception relative to the total live births in OAUTHC, Ile-Ife.

Ethical approval of the research and ethics committee of OAUTHC was obtained prior to the commencement of the study.

RESULTS

A total of 1,180 new clients were registered at the family planning clinic over the period of review and there were 104 bilateral tubal ligations, making a total of 1284 clients accepting contraception. There were a total of 7078 deliveries at the facility during the study period, giving a contraceptive prevalence rate of 18.1%.

About half of the clients (50.4%) were aged 31-40 years, most of them were married (96.6%) and had tertiary education (45.8%) (table 1). The study population were predominantly Christians (85.7%). The modal parity was Para 2-3, being 43.4% of the study population. Most of the clients were not breastfeeding at the time of visit and majority of them also desired to have more children in future (59.3%). However, a few clients (4.6%) were uncertain about having more children. About a third of the family planning acceptors had delivered within the six months prior to the clinic visit while 14.6% had their last delivery more than 24months prior to the visit. The mean interval between the last pregnancy and the commencement of a family planning method was 17.2 months, with a range of 0 – 282 months.

A tenth of the clients had used no form of contraception prior to their family planning clinic visit, the intrauterine contraceptive device (IUCD) and barrier method (male condom) had been used by about 40% and 25% of the clients respectively in the past. Following counselling at the clinic, the method most frequently chosen

at the current visit was the IUCD (65.0%), followed by the injectable i.e. depot medroxyprogesterone acetate(11.5%), while the barrier method was the least chosen (4.5%) (table 2).

The clients had obtained information about family planning from health personnel (71.2%), family and friends (12%), mass media (9.2%), seminars/lectures (4.4%) and other sources (3.1%). Although majority of the clients had obtained information on family planning from doctors and nurses, 21.5% discontinued the contraceptive method chosen. The main reason for contraceptive discontinuation was the desire for another pregnancy (62%). Menopausal symptoms, menstrual irregularity and complications of the IUCD, such as displacement and expulsion were also reasons for discontinuation. There was method failure in six (1.8%) of the clients, one of which resulted in ectopic pregnancy, and four in intra-uterine pregnancy (table 3).

The age and parity of the clients were significantly related to likelihood of discontinuation at p-values of <0.001 for both variables. Level of education, religion and marital status were however not significantly associated with the discontinuation of contraception(table 4).

Over the six-year period, there was an initial surge of client demand for the IUCD between 2007 and 2008. This was however followed by a progressive decline in the demand for the IUCD, despite the fact that it was still the most frequently chosen method. Conversely, the use of injectables and barrier methods increased significantly in last year of review, while the demand for OCPs and implants remained fairly constant. (figure 1)

In addition, women with tertiary level of education constituted the bulk of the clients over the period of review. However, a significant and sustained increase in the number of women with secondary school education was observed between 2010 and 2011. The number of clients having less than 6years of formal education (primary/no formal) was low and fairly constant during the period of review.

The number of family planning acceptors has been on the latter four years of the study was higher than in the earlier two years. This noted increase in number however, does not translate to the contraceptive prevalence rate which has been on the decline when the total number of live birth is considered, reaching a nadir, 11%, in 2011. (table 5)

DISCUSSION

The findings from this study show that contraceptive practice is still low among women accessing maternity care in OAUTHC, Ile-Ife, with a prevalence of 18.1% . This situation is a cause for concern, as the prevalence observed in this study is similar to the 18.8% and 12.8% reported by previous authors in researches carried out about a decade earlier in a similar environment.[10,16] There is thus still a significant level of unmet need for contraception, particularly in postpartum women.[17] Though awareness about contraception has increased significantly in recent times[10,18], this knowledge is yet to be backed up by a corresponding increase in practice. Therefore, there is a need to amplify efforts at ensuring increased uptake of contraception among the populace.

Most of the women in our study were Christians, a finding similar to a previous study in Ile-Ife.[10] The peak age of the family planning acceptors found in this study was 31-40years, which is similar to that reported by Udigwe et al in Nnewi,

Nigeria.[16] Most of the clients were Para 2-3 (43.4%), a lower parity than that reported by workers in Nnewi, a south-eastern community in Nigeria. This may be a reflection of cultural practices, as women with many children are accorded a higher social status in south-eastern Nigeria. Thus, the desire for large families plays a big role in discouraging contraception in such areas.[16]

It has been suggested that the level of education affects a woman's awareness about her fertility which can, in turn, affect the use and choice of contraception.[10,19] About 80% of the clients had at least secondary level of education; this may be indicative of a motivation for delaying pregnancy i.e. academic or career advancement, as reported by Shapiro et al[20] in a study evaluating the impact of women's education and employment on contraceptive use. Research by Adeyemi et al[17] reported no significant influence of education on contraceptive usage, we found that the woman's level of education was also not significantly associated with discontinuation of contraceptive use in this study ($p>0.05$), a finding also reported by Orji in Ile-Ife.[10]

The most common contraceptive method chosen in this study was the intrauterine contraceptive device (IUCD), which is similar to reports of previous authors in Nigeria.[10,16] It thus appears that the IUCD is the contraceptive method of choice in clinic- based services in Nigeria. Though this preponderance may be due to the simplicity and convenience of the IUCD for the users, it could also be due to provider bias as well as the confidentiality of the method once inserted. The decline in demand for IUCD in the latter years of this review with a concomitant increase in demand for injectable and barrier methods of contraception may be indicative of a need for shorter pregnancy spacing intervals among the clients, or may be due to a greater availability of the other methods. In some countries such as Malawi, Italy and Sweden, the oral contraceptive pill is the most popular method.[21-23]

The discontinuation rate of 21.5% found in this study is also significant, the major reason being desire for more children (62%). The high rate of discontinuation for further pregnancy is not surprising in this population in which 59.3% of the clients as at the time of uptake of modern contraception expressed desire for future fertility. This reason for discontinuation is similar to findings by Rizvi in Pakistan[24]. About 10% of these were due to side effects of the methods chosen, some of which could have been avoided with adequate counselling of the clients on what to expect. It is also essential for family planning providers to ensure that alternative contraceptive methods are available for clients who discontinue a method for reasons other than desire for another pregnancy.

The age and parity of the patients were found to be significantly related to discontinuation of chosen method of contraception. This may be because women of younger age and lower parity are more interested in spacing, rather than limiting their family size. This is corroborated with the fact that most of the clients desired more children.

In contrast to many previous studies where the mass media played an important role in the dissemination of information concerning contraception[5,20] in our study only 9.2% of the clients derived their source of information from them, a finding corroborated by Abassiattai et al.[25] Unfortunately, commonly held rumours, myths, misconceptions and lack of current scientific information have been identified as the biggest barriers to IUCD use and acceptance

and they are currently strongly contributing to its declining use in many countries.

The records of male contraception could not be assessed, due to the fact that no vasectomy was recorded during the period of review, while male condom records were essentially those given to the female clients on request. This is because obtaining the male condom at the clinic requires documentation of the client's details, while it could be easily purchased anonymously at many patent stores in the study area. Thus, it appears that the men preferred the latter option.

In conclusion, this study has shown that contraceptive practice is still low in our environment, while the discontinuation rate of even the methods chosen is high. Capacity building of family planning counsellors and providers is essential to ensure the development of counselling and technical skills for the provision of a wider range of contraceptive options to clients, thereby also improving uptake and reducing discontinuation. Further enlightenment of the populace, with emphasis on men, young women and uneducated women, through various community and mass media programmes are also advocated, so as to increase women's access to contraception.

ACKNOWLEDGEMENT

We are grateful to the head of the Obstetrics and Gynaecology department and the family planning unit of the Obafemi Awolowo University Teaching Hospital, Ife for their permission to conduct this research. We also appreciate the medical interns who helped with the data collection for this work.

Table 1: Socio-Demographic Details

Variable	Frequency[%] N=1284
Age [years]	
=20	9 (0.7)
21-30	416 (32.4)
31-40	647 (50.4)
>40	212 (16.5)
Parity	
0-1	216 (16.8)
2-3	557 (43.4)
4-5	385 (30.0)
>5	126 (9.8)
Educational level	
Tertiary	588 (45.8)
Secondary	499 (35.0)
Primary/no formal	247 (19.2)
Religion	
Christianity	1101 (85.7)
Islam	174 (13.6)
Other	9 (0.7)
Marital status	
Single	26 (2.0)
Married	1240 (96.6)
Separated/Divorced	14 (1.1)
Widowed	4 (0.3)

Table 2: Current Contraceptive Use

Method	Frequency [%] N=1284
Barrier	55 (4.3)
IUCD	835 (65.0)
Injectables	148 (11.5)
Implants	61 (4.8)
OCP	69 (5.4)
Natural methods	12 (0.9)
Tubal sterilization	104 (8.1)
Total	1284 (100)

Table 3: Reason For Discontinuation Of Contraception

Reason stated	Frequency (%) [N=276]
Pregnancy desire	171 (62.0)
Menstrual irregularity	14 (5.1)
Pelvic pain/infection	14 (5.1)
Weight changes	7 (2.5)
Displaced IUCD	5 (1.8)
Method failure	5 (1.8)
Others*	60 (21.7)
Total	276 (100%)

*Menopause, husband's decision, non-compliance, breast cancer, anti-convulsant drugs, suspicious cervix

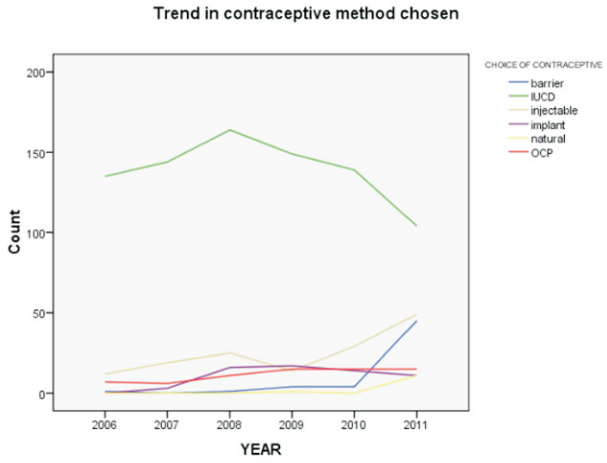
Table 4: Sociodemographic Factors Affecting Discontinuation Of Contraception

Variable	Discontinue N=276	X^2	p-value
Age			
=20	1		
21-30	123	24.74	**<.001**
31-40	110		
>40	42		
Parity			
0-1	73		
2-3	129	35.65	**<0.001**
4-5	53		
>5	21		
Marital Status			
Married	265		
Single	7	0.49	0.920
Divorced/Separated	3		
Widow	1		
Education			
Tertiary	129		
Secondary	84	5.35	0.148
Primary/ none	62		
Religion			
Christianity	239		
Islam	34	1.171	0.557
Others	3		

Table 5: Trends In Contraceptive Prevalence Rate

	Year						
Variable	2006	2007	2008	2009	2010	2011	Total
FP clients	166	189	236	218	219	256	1284
Total deliveries	856	845	1056	1099	1094	2128	7078
CPR (%)	19.4	22.4	22.3	19.8	20.0	12.0	18.1

Figure 1:



REFERENCES

1. Abe E, Omo-Aghoja LO. Maternal mortality at the central hospital, Benin. Afr J Reprod Health 2008;12(3):17-26.
2. World Health Organization (WHO). Maternal mortality ratio in 2005: Estimates by UNICEF, WHO, UNFPA, World Bank. Geneva. WHO; 2005. Available from: http://www.who.int/reproductivehealth/publications/maternal_mortality_2005/index.html.[Accessed 17 May, 2011]
3. Abiodun OM, Balogun OR. Sexual activity and contraceptive use among young female students of tertiary educational institution in Ilorin, Nigeria. Contraception 2009;79(2):146–149.
4. Oye-Adeniran BA, Adewole IF, Umoh AV, et al. Community-based survey of unwanted pregnancy in Southwestern Nigeria. Afr J

Reprod Health 2004;8(3):103–115.

5. Oriji VK, Jeremiah I, Kasso T. Induced abortion amongst undergraduate students of university of Port Harcourt. Nig J Med 2009;18(2):199–202.
6. Stover J, Ross J. How increased contraceptive use has reduced maternal mortality. Matern Child Health J 2010;14(5):687-695.
7. Okonofua F. Need to intensify safe motherhood interventions in Africa. Afr J Reprod Health 2003;7(3):7–12.
8. Bankole A, Oye-Adeniran BA, Singh S, et al. Unwanted Pregnancy and Induced Abortion in Nigeria: Causes and consequences. New York, NY: The Alan Guttmacher Institute; 2006 http://www.guttmacher.org/pubs/2006/08/08/Nigeria-UP-IA.pdf. [Accessed 21 July 2012]
9. National Population Commission [Nigeria] and ICF International. 2014. Nigeria Demographic and Health Survey (NDHS) 2013: Key Findings. http://www.measuredhs.com [accessed 4 August 2014]
10. Orji EO, Onwudiegwu U. Prevalence and determinants of contraceptive practices in a defined Nigerian Population. J Obstet Gynaecol 2002;22(5):540-543.
11. Ozumba BC, Obi SN, Ijioma NN. Knowledge, attitude and practice of modern contraception among single women in a rural community in SE Nigeria. J Obstet Gynaecol 2005: 25(3): 292-295.
12. Oloide VE, Orosanya F, Okonufua FE. Why Nigerian adolescents seek abortion rather than contraception: Evidence from focus group discussion. Int Fam Plan Perspect 2001; 27(2): 77-81.
13. Sudhinaraset M, Reducing unsafe abortion in Nigeria. In brief, New York: Guttmacher Institute, 2008 series, No. 3.
14. Omo-Aghoja LO, Omo-Aghoja VW, Aghoja CO, Okonofua FE, Aghedo O, Umueri C, et al. Factors associated with the knowledge, practice and perceptions of contraception in rural southern Nigeria. Ghana Med J. 2009;43(3):115–21.
15. Monjok E, Smesny A, Ekabua JE, Essien EJ. Contraceptive practices in Nigeria: Literature review and recommendation for future policy decisions. Open access journal of contraception 2010;1(1):9-22 [DOI: http://dx.doi.org/10.2147/OAJCS9281]
16. Udigwe GO, Udigwe BI, Ikechebelu JI. Contraceptive practice in a teaching hospital in south-east Nigeria. J Obstet Gynaecol 2002;22(3):308-311.
17. Adeyemi AB, Ijadunola KT, Orji EO, Kuti O, Alabi MM. The unmet need for contraception among Nigerian women in the first year postpartum. Eur J Contracept Reprod Health 2005;10(4):229-234.
18. Oye-Adeniran BA, Adewole IF, Odeyemi KA, Ekanem EE, Umoh AV. Contraceptive prevalence among young women in Nigeria. J Obstet Gynaecol 2005;25(2):182 – 185
19. Ezechi OC, Fasubaa OB, Dare FO. Abortion related deaths in South Western Nigeria. Niger J Med 1999;8:112–114.
20. Shapiro D, Tambashe OB. The Impact of Women's Employment and Education on Contraceptive use and Abortion in Kinshasa, Zaire. Stud Fam Plann 1994;25(2):96-110.
21. Lema VM, Mtimavalye LA, Gondwe EE. Utilization of family planning practices at the teaching hospital in Blantyre Malawi. East Afr Med J 1994;71:703–711.
22. Lindell ME, Olsson HM, Sjödén PO. Choice

of contraceptive method of birth control and attitudes towards abortion in Swedish women ages 23–29. Health Care for Women International 1995;16(1):75–84. [DOI:10.1080/07399339509516158]

23. Oddens BJ. Contraceptive use and attitudes in Italy 1993. Hum Reprod 1996;11(3): 533–539.

24. Rizvi F, Irfan G. Reason for discontinuation of contraceptive methods among couples with different family size and educational status. J Ayub Med Coll Abbottabad. 2012; 24(1): 101-4.

25. Abasiattai AM, Bassey EA, Udoma EJ. Profile of Intrauterine Contraceptive Device Acceptors at the University of Uyo Teaching Hospital, Uyo, Nigeria. Annals Afr Med 2008;7(1):1-5.