

Experience with Intrauterine Contraceptive Device (IUCD) at University of Maiduguri Teaching Hospital

B. Isa, AG Mairiga

ABSTRACT:

Background: Intrauterine contraceptive device is effective, reversible and long term contraceptive method that is widely used in our environment with high acceptability and continuation rate. **Objective:** To determine the socio-demographic characteristics of acceptors and their experience with Intrauterine contraceptive device [IUCD] in University of Maiduguri Teaching Hospital [UMTH]. **Methodology:** This was a retrospective study of acceptors of intrauterine contraceptive device (IUCD) at the family planning unit of the University of Maiduguri Teaching Hospital during the period 1st January 2008 to 31st December 2008. **Results:** A total of 1273 new contraceptive acceptors were seen at the family planning clinic during the study period, of which 710 (55.77%) women accepted and were given IUCD as a contraceptive method. Women aged 20-29 years comprised 45.8% of the acceptors and 96% of them were married. Grandmultiparous women constituted 43.24% and over 32% of the women had no formal education. Up to 70.98% of the acceptor used IUCD for child spacing and the commonest reason for discontinuation was the desire for pregnancy (5.21%). After a year, the continuation rate was 61.7% and the failure rate was 1.3% and all the pregnancies were intrauterine. In conclusion, the socio-demographic characteristics of IUCD acceptors are similar to previous studies but the level of education of the clients is lower. It is an effective contraceptive with high acceptability and continuation rate.

Key Words: IUCD, failure, contraception.

INTRODUCTION

Intrauterine contraceptive device are widely available in most countries that offer family planning services. The new models available offer almost complete protection from pregnancy, and are effective for long term used¹. Because modern intrauterine contraceptive devices prevent pregnancy more effectively, they may avert many maternal deaths. Intrauterine contraceptive devices can be inserted safely at any time during the menstrual cycle, as long as pregnancy is ruled out; postpartum contraception is also safe¹.

It is estimated that there are about 85 million women world- wide using intrauterine contraceptive devices to prevent unwanted pregnancy; with 60 million in China and another

11 million in developed countries². In Nigeria IUCD acceptance ranges from 47% to 66% in different family planning centres³. Major concerns over safety of this contraceptive (abdominal pain, irregular vaginal bleeding, genital tract infections and ectopic pregnancy) have been expressed. However a study done in clients using this device showed no increase in these adverse effects⁴.

Nigeria's population growth rate is 2.7% and the total fertility rate of 6.3 indicates that this absolute number will continue to increase at a very substantial rate⁵. There is need to lower the population growth rates, through reduction of birth rate by voluntary fertility regulation in consonance with the attainment of economic and social goals of the nation.

Of the different methods of contraception, the intrauterine contraceptive device is one of the most widely accepted and useful^{5,6}. This study therefore aims to determine the socio-demographic characteristics of the acceptors and their experience with IUCD in UMTH.

Department of Obstetrics and Gynaecology, University of Maiduguri Teaching Hospital, Maiduguri, Nigeria.

Correspondence Dr. Bilkisu Isa
Department of Obstetrics and Gynaecology University of Maiduguri Teaching Hospital, Nigeria.
Email: Bilkisuisa23@yahoo.com

MATERIALS AND METHODS

This was a retrospective study of the acceptors of intrauterine contraceptive device at the family planning unit of the University of Maiduguri Teaching Hospital over a one year period [1st January 2008 to 31st December 2008]. It reports the first segment insertions performed during the period. The clinic offered counseling on all contraceptive methods available and before the administration of contraception, a full medical history was taken and the general physical, breasts, abdominal and pelvic examination of the client were performed. TCu380A was the IUCD used, while withdrawal technique was the method used for IUCD insertion.

The client's case notes were studied for socio demographic characteristics, previous contraceptive used, and reason for starting family planning, time of insertion, side effects, and reason for discontinuation of the IUCD.

The first segment is the interval from the first insertion to the first termination or to the cut-off date of the study whichever is earlier. Calculated rate of events at 1 year were based on the net cumulative event. Acceptability of the contraceptive method is measured as a rate of continued use, while effectiveness is expressed as a number of pregnancies per hundred women years in child bearing age.

RESULTS

A total of 1273 new contraceptive acceptors were seen at the family planning clinic during the period of study, of which 710 (55.77%) were 1st segment IUCD acceptors.

Table I shows the socio-demographic characteristic of the acceptors. The study group comprised 710 women aged 15-44 years. Teenage clients constituted 3.8% (27), while 7.2% (51) women were above 40 years. Women aged 20-39 were in the majority. Forty three point four per cent (307) of the acceptors were grandmultiparae, while 4.23% (30) were nulliparae. About 96% (682) of the women were married, 2.81 % (20) divorced and 1.13 % (8) single. Only about 40% (282) had at least secondary education.

Most insertions (77.89%) were performed during menstruation, with the rest performed in women with lactational amenorrhoea at varying periods of 3 to 8 months post delivery. Most of the clients had never used any contraceptive

methods: 61.69% (438), and had 3 or more living children. Only 1.12% (8) had no living child.

Up to 70.99 % (504) of the acceptors used IUCD in order to space their children; 23.23% (165) accepted the IUCD as a form of terminal contraception, while 4.6% (33) resorted to family planning because of economic constraints as detailed in Table II.

The terminal status of acceptors at the end of the period of the observation were; 61.7 % (438) continuers, 23.24 % (165) discontinuers and 15.07 % (107) were lost to follow up.

Medical problems were the commonest event occurring in 4.22% (30) of the acceptors. Accidental pregnancy occurred in 1.3% (9) and expulsion was reported by 5.6% (40). All pregnancies were intrauterine [Table III].

TABLE I: Socio- demographic characteristic of IUCD acceptors (n=710)

AGE	Number	%
<19	27	3.80
20-29	325	45.77
30-39	306	43.09
>40	51	7.18
PARITY		
0	30	4.23
1-4	373	52.54
5-8	280	39.44
0>9	27	3.80
MARITAL STATUS		
Single	8	1.13
Married	682	96.06
Divorced	20	2.82
EDUCATIONAL LEVEL		
None	230	32.39
Primary	198	27.89
Secondary	174	24.50
Post secondary	108	15.21
NUMBER OF LIVING CHILDREN		
0	8	1.13
1-2	141	19.86
3-4	240	33.8
5	321	45.21

Table II: Reason For Using IUCD

Reason	Number	%
Birth spacing	504	70.99
Completed family	165	23.24
Economic condition	33	4.65
Schooling	8	1.13
Total	710	100

Table III: Events and Reason for Removal among IUCD Acceptors

1-Type of Termination	Number	%
Accidental pregnancy	9	1.27
Expulsion	40	5.63
2-Removal	Number	%
Medical reasons	30	4.22
Planning pregnancy	37	5.21
Other personal reason	39	5.49

DISCUSSION

Intrauterine contraceptive device was the commonest contraceptive method used among women in this study. This is in agreement with previous studies.^{7, 8, 9}. The high acceptability of the IUCD may be a result of its safety, efficacy, cost effectiveness and the fact that regular visits to health care provider is not required^{7,10}.

In keeping with previous studies, the age range of 20-39 years made up the majority of IUCD acceptors^{9,10}. The parity distribution is also similar to previous studies^{9, 10, 11}. This can be explained by the suitability of the IUCD for the multiparae. The fact that majority of the acceptors are married only reflects the socio-cultural belief of the community. Similar findings have been reported earlier.¹² Only 40% of acceptors in our study had at least secondary education. This is lower than 72.8% reported by Abasiattai et al¹². This is because girl child education is not accorded priority in this area. Only 8(1.13%) of acceptors had no living child. This is because the other methods were not suitable for them despite the fact that the IUCD is also not suitable for nullipara. All 8 nulliparae who had IUCD were single. The “hidden nature” of the IUCD might have influenced the choice over other more suitable methods. The profile of the IUCD acceptors in our study were young age, multiparae, married, of low educational status and having more than five living children. This compares favourably with a previous study¹² as regard to young age and multiparity but is in contrast to the high educational status reported in that study. Aisien⁹ also reported high level of education among his clients.

Most clients, 77.9% had insertion during menstruation. This is lower than 93.5% reported from an earlier study¹². The lower number of insertions during menstruation in our study may be explained by those with lactational

amenorrhoea who chose the IUCD. The IUCD is an ideal contraceptive method for lactating mothers as it has no effect on quality or quantity of breast milk¹³. The commonest indication for IUCD insertion in our study was for birth spacing which is in agreement with an earlier study¹¹. The high continuation rate of 61.7% after one year in our study is in keeping with 61.4% reported by Olatinwo et al¹⁰ and others^{8, 9}. The discontinuation rate of 10.1% reported by Okunlola⁸ is lower than 23.2% found in this study. The commonest reason for discontinuation, which is desire for pregnancy is however similar in both studies and also reported by others^{9, 11}. The accidental pregnancy rate with IUCD is generally low. The rate of 1.3% found in this study is similar to 1.3% reported by Olatinwo¹⁰ but lower than 0.3% reported by Adegbola¹¹. Expulsion rate of 5.6% found in our study is lower than 2.5 reported by Aisien⁹ but in consonance with 5.1% reported by Olatinwo¹⁰. The events leading to termination in our study ranged from medical reasons, planning a pregnancy to other personal reasons. Similar reasons have been proffered by previous authors^{10, 11}.

In conclusion, the socio-demographic characteristics of IUCD acceptors are similar to previous studies but the level of education of the clients is lower. It is an effective contraceptive with high acceptability and continuation rate..

REFERENCE

1. Mutihir J T, Ujah I. A. O. Attitude of reproductive health care providers to the postpartum intra-uterine contraceptive device (PPIUC) in Jos Nigeria. *Trop J Obstet Gynaecol*, 2004; 21(2): 91-94.
2. Mairiga A G, Kyari O, Audu B, Kawuwa B M. Socio-clinical characteristics of modern contraceptives users at the University of Maiduguri Teaching Hospital. *Nig J Clin Pract*, 2007;10(2):152-155.
3. Okpere E. Contraception and family planning. In: *Clinical gynaecology*. Okpere E (ed). UniBen press, Benin; 2005:244-274.
4. Esimai G.O. Situation analysis of certain indicators of quality of care at the family planning services delivery points (SDPS) of Anambra State of Nigeria. *Trop J Obstet Gynaecol*, 1996; 13(1): 10-14.
5. The Federal Republic of Nigeria. Detail report of the census 2006. Federal Republic of Nigeria official gazette, notice No.3. SIno 5, 2007:47-53.
6. Geidam AD, Audu BM, Kullima AA, Kawuwa MB. Contraceptive practices and determinants of current contraceptive use in Borno State, Nigeria. *BOMJ*, 2007; 4(2):12-18.
7. Tinelli A, Tinelli R, Malvasi A, Cavallotti C, Tinelli

- FG. The intrauterine device in modern contraception: Still an actuality? *Eur J Contracept Reprod Health Care.*2006;11(3):197-201
8. Okunlola MA, Owonikoko KM, Roberts OA, Morhason- Bello IO. Discontinuation pattern among IUCD users at the family planning clinic, University College hospital Ibadan. *J Obstet Gynaecol.*2006; 26(2):152-6
 9. Aisien AO. Intrauterine contraceptive device (IUCD): Acceptability and effectiveness in a tertiary institution. *Afr J Med Med Sci.*2007 36(3):193-200
 10. Olatinwo AW, Anate M, Balogun OR, Alao MO. Intrauterine contraceptive device (IUCD): sociodemographic characteristics of acceptors, acceptability and effectiveness in a teaching hospital in Nigeria. *Niger J Med.* 2001; 10(1):14-7
 11. Adegbola O, Ogedengbe OK. The acceptance rate of intrauterine contraceptive device amongst family planning clinic users in Lagos university teaching hospital (LUTH). *Nig Q J Hosp Med.* 2008; 18(4): 175-80
 12. Abasiattai AM, Bassey EA, Udoma EJ. Profile of intrauterine contraceptive device acceptors at the university of Uyo teaching hospital, Uyo, Nigeria. *Ann Afr Med.*2008; 7(1):1-5
 13. Tatum H.J., Beltran R.S., Ramos R., Van-Kets H., Sivin I., Schmidt F.H. Immediate post placental insertion of Gynae T. 380 and Gynae T 380 post partum intra-uterine contraceptive devices, randomised study. *Trop J Obstet Gynaecol,* 1996; 175(5): 131-135.

Cite this article as: Isa, B. Mairiga, AG. Experience with Intrauterine Contraceptive Device (IUCD) at University of Maiduguri Teaching Hospital *Bo Med J* 2012;9(2) 34 - 37