

ORIGINAL ARTICLE

PROFILE OF INTRAUTERINE CONTRACEPTIVE DEVICE ACCEPTORS AT THE UNIVERSITY OF UYO TEACHING HOSPITAL, UYO, NIGERIA

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Abstract

Background: Use of modern contraceptive methods has been shown to reduce unwanted pregnancy, high parity and maternal mortality. Intrauterine contraceptive devices which are among the safest and most effective reversible contraceptives available, are particularly suitable for women in developing countries as they are affordable, convenient to use, do not require re-supply visits and are very cost-effective. The aim of this study is to determine the socio-demographic characteristics of intrauterine contraceptive device acceptors, the pattern of insertions and complications at the University of Uyo Teaching hospital, Uyo.

Method: The record cards of all clients who had intrauterine contraceptive device inserted at the family planning clinic over a six-year period were reviewed.

Results: During the study period, there were 852 new contraceptive acceptors out of which 39.7% accepted the intrauterine contraceptive device. The modal age group of the clients was 25-29 years (32.5%). Acceptance of intrauterine contraceptive device was most common among multiparous clients (65.1%). Majority of the acceptors were married (90.0%), Christians (98.8%) and 72.8% had at least secondary school education. Clinic personnel (65.7%) and friends/relatives (21.3%) were the most common sources of information on contraception. Most (93.5%) of the clients had their intrauterine contraceptive devices inserted within 7 days of menstruation. Lower abdominal pain (5.5%) and vulval/vaginal itching (5.3%) were the most common complications.

Conclusion: The acceptors of intrauterine contraceptive devices in our center were young, multiparous and educated women. Increasing mass media involvement in the dissemination of accurate information about intrauterine contraceptive devices to the general populace, the introduction of postpartum and post-abortion intrauterine contraceptive device insertions and the encouragement of our grandmultiparous women to accept intrauterine contraceptive device would lead to an increase in its acceptance and use.

Key words: Acceptors, IUCD

Résumé

Arrière plan: Les méthodes modernes de contraception en usage ont été présentées en vue de réduire l'avortement imprévu, le haut degré de parité et la mortalité maternelle. Les méthodes artificielles courantes qui comprennent des substances médicamenteuses destinées à être introduites dans le vagin. Ces méthodes sont les plus efficaces et plus réversibles particulièrement convénables pour les femmes dans les pays en voie de développement. Étant donné que ces substances médicamenteuses sont moins chères et accessibles et qu'elles n'exigent pas une surveillance médicale parce qu'elles n'ont pas des

contre-indications. L'objet de cette recherche est de déterminer la caractéristique socio-démographique de la substance médicamenteuse artificielle aux patients modes d'insertions et complications au centre-hospitalo-universitaire d'Uyo.

Méthode: Les fiches de tous les patients qui ont subi ce traitement médicamenteux artificiel physique dans le planning familial au-delà de six mois ont été ré-examinées.

Résultats: Au cours de la période d'étude, il y avait 852 d'accepteurs en général d'ont on a pu relever 39,7% qui ont vraiment accepté l'usage de cette nouvelle contraception. L'âge modal des patients était de 25 à 29 ans (32,5%), son usage était plus fréquent parmi les patients multipares 65,1%. Beaucoup d'accepteurs étaient mariés (90, 0%) les chrétiens (98,8%) et (72,8%) sont celles qui ont reçu une éducation secondaire, le personnel de clinique (65,7%) les amis et les proches (21,3%). Toutes ces personnes ont été les sources authentiques d'informations sur la contraception. Beaucoup de patients (93,5%) ont reçu l'application de cette nouvelle méthode de contraception sous différentes manières en sept jours de menstruation. Le mauvais ressenti dans le vagin était de 5,5% et la démangeaison du vagin 5,3% étaient les complications les plus remarquables.

Conclusion: Les accepteurs de la contraception de substances médicamenteuses dans notre centre hospitalo-universitaire étaient des jeunes, des multipares et les femmes éduquées. La multiplication des médias, et la dissémination d'informations concrètes concernant l'usage des méthodes de substances médicamenteuses physiques, l'introduction de l'usage de cette contraception lors de la période post-partum période qui suit un accouchement et la période qui attend un accouchement.

Mots clés: *Accepteurs, IUCD*

Introduction

The high maternal mortality rate (MMR) in developing countries particularly Sub-Saharan Africa has attracted increasing attention over the last two decades.¹ Despite the launching of the safe motherhood initiative in Kenya in 1987 and the prevention of maternal mortality program sponsored by the Carnegie Corporation of New York, maternal mortality in the sub-region has continued to rise.² Currently, Nigeria records one of the highest MMRs in the world as reports indicate that 1 in 13 women continue to die from pregnancy related causes.³

Several reports have associated unwanted pregnancy, high fertility rates and high parity with the high MMR in Nigeria.^{4,5} Fortunately, contraception when accepted and used by majority of women in any given community has been shown to reduce unwanted pregnancy, high parity and consequently maternal mortality (MM).⁶ However, rates of contraceptive use are very low in Nigeria.⁷ Recent reports indicate that contraceptive prevalence which reached 12% among Nigerian women in 1995 is now as low as 6%.⁷

Intrauterine contraceptive devices (IUCDs) are among the safest and most effective forms of contraceptives available.^{8,9} Currently, with an estimated 128 million users worldwide, they are the most widely used reversible contraceptive method.^{9,10} They are particularly suitable for women in developing countries as they are affordable, convenient to use, do not require re-supply visits, require little action on the part of the user and are very cost-effective.⁹ In addition, they have a service life of 10-12 years and produce very few side effects.¹¹ Since the introduction of the IUCD into our

family planning unit in 1999, there has been no recorded study evaluating its use. This study was carried out to determine the socio-demographic characteristics of IUCD acceptors in our center, the pattern of insertions and complications and subsequently suggest measures that would improve its acceptance and use among our women.

Materials and Methods

This retrospective study was carried out at the maternity unit of the University of Uyo Teaching Hospital (UUTH), a newly established teaching hospital located in Uyo, the capital of Akwa Ibom State, in south-south Nigeria. From the family planning register, the registration numbers of all clients who had IUCD inserted between 1st January 2000 and 31st December 2005 were obtained. With the numbers, the clients' record cards were retrieved for in-depth study.

Information abstracted included the socio-demographic characteristics of the clients, period of insertion of the IUCD, source of referral, history of previous contraceptive use and complications following insertions. The data were analyzed using tables and percentages and the results obtained formed the basis of the discussion.

Results

During the study period, there were 852 new contraceptive acceptors out of which 338 accepted IUCD resulting in an acceptance rate of 39.7% (Table 1).

Table 1. Contraceptive choice of 852 clients

Type of contraceptive	No. (%)
Intrauterine contraceptive device	338 (39.7)
Injectables	260 (30.5)
Oral contraceptives	214 (24.9)
Natural family planning	16 (1.9)
Bilateral tubal ligation	14 (1.6)
Barrier methods	10 (1.2)

Table 2. Socio-demographic characteristics of 338 intrauterine contraceptive device acceptors

Variable	No. (%)
Age (years)	
15 – 19	28 (8.3)
20 – 24	64 (18.9)
25 – 29	110 (32.5)
30 – 34	68 (30.1)
35 – 39	50 (14.8)
≥40	14 (4.1)
Not stated	4 (1.2)
Parity	
0	16 (4.7)
1 - 4	220 (65.1)
≥5	192 (30.2)
Occupation	
Civil servant	88 (26.0)
Trader	52 (15.4)
Professional	48 (14.2)
Student	38 (11.2)
Artisan	34 (10.1)
Housewife	24 (7.1)
Farmer	22 (6.5)
Unemployed	16 (4.7)
Not stated	16 (4.7)
Educational level	
No formal education	2 (0.6)
Primary education	84 (24.9)
Secondary education	106 (31.4)
Tertiary education	140 (41.4)
Not stated	6 (1.8)
Marital status	
Married	304 (90.0)
Single	16 (4.7)
Widow	12 (3.6)
Not stated	6 (1.8)

The socio-demographic characteristics of the IUCD acceptors are shown in Table 2. Their ages ranged from 15-48 with the modal age group being 25-29 years (32.5%). Acceptance of IUCD was most common among multiparous clients 220 (65.1%), when compared to nulliparous 16 (4.7%) and grandmultiparous 102 (30.2%) clients. Majority of the clients were Christians 334 (98.8%), married 304

(90.0%) and had at least secondary school education 246 (72.8%). Civil servants 88 (26.0%), traders 52 (15.4%) and professionals 48 (14.2%) constituted majority of the IUCD acceptors.

The sources of information of the clients concerning contraception are shown in Table 3. Two hundred and twenty two (65.7%) of the clients derived their information from clinic personnel while 12 (3.6%) derived their information from the television, outreach personnel, and other clinics respectively.

One hundred (29.6%) clients had previous history of contraceptive use out of which 50 (50.0%) had used IUCDs previously. Three hundred and sixteen (93.5%) clients had their IUCDs inserted within 7 days of menstruation, while 22 (6.5%) had theirs inserted as interval procedures 6 weeks after childbirth. There were no post-coital, post-abortion or postpartum insertions.

Table 3. Source of information on contraception among the clients

Source of information	No. (%)
Clinic personnel	222 (65.7)
Friends/relatives	72 (21.3)
Radio	32 (9.5)
Television	4 (1.2)
Outreach personnel	4 (1.2)
Other clinics	4 (1.2)

Table 4. Complications following IUCD insertion in 338 clients

Complications	No (%)
Lower abdominal pain	38 (11.2)
Abnormal vaginal discharge	22 (6.5)
Vulval/vaginal itching	18 (5.3)
Menorrhagia	16 (4.7)
Inter-menstrual bleeding	8 (2.4)
Dislodgement of the IUCD	4 (1.2)
Dysuria	4 (1.2)
Dysmenorrhea	2 (0.6)
Expulsion of the IUCD	2 (0.6)

IUCD: Intrauterine contraceptive device

The various complications following IUCD insertion are shown in Table 4. Lower abdominal pain 38 (11.2%), abnormal vaginal discharge 18 (5.5%) and vulval/vaginal itching 18 (5.3%) were the most common complications, while dysmenorrhoea 2 (0.6%) and expulsion of the device 2 (0.6%) were the least common. There were no accidental pregnancies recorded in this study. All the IUCDs inserted were the Copper T 380A (Cu T 380A) variety.

Discussion

The results of this study reveal that the IUCD is the most commonly accepted method of contraception in our center. This is similar to what obtains in other centers in this country.¹²⁻¹⁶ Also, recent reports have indicated increasing acceptance of this contraceptive method among women since its introduction in Nigeria.¹⁵ In our center, the CuT 380A was the only IUCD that was available and was thus inserted. Given its low pregnancy rates, long term effectiveness, and lower risk of expulsion, the CuT 380A is now the first choice IUCD globally and also the gold standard.^{9,10}

In our study, acceptance of IUCD was highest among clients aged between 25-34 years (52.7%). This represents the peak period of their reproductive life. However, its acceptance was very low among teenagers. This may be due to the fact that the family planning clinics in our Government hospitals are primarily directed toward mature females in stable relationships.¹⁷ It may also be due to the existing cultural and religious restrictions on premarital sex and the general misconception that associates adolescent contraception with sexual permissiveness.¹⁷ Several studies have shown higher risk of expulsion of IUCDs and also pelvic inflammatory disease among teenagers and nulliparous women.⁹ Hence, generally, IUCDs may not be first choice contraceptives in this group of clients. In contrast to other studies in this country where majority of the IUCD acceptors were grandmultiparous,^{14,15,18} in our study, only 30.2% of grandmultiparous clients accepted IUCD. In an environment like ours where acceptance of sterilization due to cultural reasons is very low,¹³ the CuT380A whose pregnancy rates have been shown to be consistently below 1% and whose effectiveness rivals that of surgical sterilization,¹⁰ would be an excellent contraceptive option for these group of women.

Our finding of a greater proportion of the acceptors being educated is in agreement with the observation and prediction by experts that well educated African couples are more likely to accept modern methods of contraception than the less educated ones.^{14,19}

In contrast to most other studies where the mass media played an important role in the dissemination of information concerning contraception,^{5,20} in our study only 10.7% of the clients derived their source of information from them. Unfortunately, commonly held rumors, myths, misconceptions and lack of current scientific information have been identified as the biggest barrier to IUCD use and acceptance and they are currently strongly contributing to its declining use in many countries.^{21,22} Thus, involvement of our mass media in the provision of accurate and precise information about the use of

the IUCD to all members of our communities should definitely result in an increase in its acceptance.

In this study, majority of the IUCD insertions were done within seven days of onset of menstruation. This is probably because at this time insertions are associated with less discomfort and are generally easier to perform as the cervical canal is dilated. In addition, there is reasonable assurance that the client is not pregnant and insertion related bleeding is masked. IUCDs can also be inserted immediately postpartum (within 10 minutes of placental delivery but not greater than 48 hours after delivery) and post abortion and these have been found to be safe, convenient with no increased risk of bleeding and infection.⁹ In our environment, this has the distinct advantage that women who usually come in contact with health staff only during pregnancy, childbirth or after an abortion and whose chances of returning for contraceptive advice is remote or uncertain can have effective contraception. However in our study there were no post-abortion or postpartum insertions. This may be because the providers did not have the special training required for insertions during these periods.

Though majority of the clients did not have any complications, abdominal pain, and abnormal vaginal discharge were the most common complications recorded. This is similar to what obtains in other centers.^{15,23} The complication rate following IUCD insertions is dependent on the skill and experience of the health care provider who performed the insertions and the type of IUCD used.⁹ Currently, the Levonorgestrel releasing intrauterine system (LNG-IUCD) that has been described as one of the most significant developments in gynecological practice in the twentieth century has been developed and is licensed for five years of use in the developed world.²⁴ It has an exceptionally low pregnancy rate (Pearl index 0.11), and substantially reduces the amount and duration of menstrual bleeding, dysmenorrhoea, has very low expulsion rates and has several non contraceptive benefits including beneficial effects on pelvic inflammatory disease, fibroids, ectopic pregnancy, premenstrual syndrome and avoidance of progestogenic side effects on hormone replacement therapy users.^{10,24} Unfortunately, it is not available in Nigeria and its presence is eagerly awaited in our center. The lack of accidental pregnancies in attests to the effectiveness of CuT380A as a method of contraception.

Acceptors of IUCD in our setting were young, multiparous and educated women. Increasing mass media involvement in dissemination of accurate information about IUCDs, introduction of postpartum and post-abortion IUCD insertions and encouragement of grandmultiparous women to accept IUCDs would increase acceptance and use.

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