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Original Article

Factors responsible for discontinuation of long-term reversible contraceptives in a tertiary facility in Northeastern Nigeria

Muhammad Baffah Aminu, Lamaran Makama Dattijo, Abubakar Muhammad Shehu, Saidu Abubakar Kadas, Calvin Melaya Chama

Department of Obstetrics and Gynaecology, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria

Abstract

Background: The emergence of long-term reversible contraceptives (LARC) has helped in reaffirming the concept of Family Planning (FP) 2020. LARC is one of the safest and most effective methods covering both hormonal implants and intrauterine devices (IUDs). However, despite their acceptability and wide usage, they are associated with undesired effects limiting their use ranging from personal to device-related or both.

Aim: This study is aimed at determining the reasons for the discontinuation of LARCs among women accessing FP services in Bauchi.

Methods: The study was for 1-year period. It was a retrospective survey of 335 clients that presented to the FP unit of a tertiary institution in Northeastern Nigeria for removal of implants. Data were inputted into and analysed using SPSS version 21 and results presented in tables and charts.

Results: A total of 1069 clients had one method of contraception or the other over the study periods. About 335 (31.3%) clients had removal of LARCs (53.4%, 18.2% and 28.4%, for Implanon, Jadelle and IUDs, respectively). The mean parities of the clients were 3 +_ 0.55. The most common indications for removal of implants observed in the study included, the desire for pregnancy (38.5%), expired implants and untolerable side effects (24.5%) each.

Conclusions: LARCs were the most common form of contraceptives used by women during the study period. The most common reason for removal of LARCs implants discovered was for feature pregnancy, undesired effects and implants expiry.

Keywords: Contraception, discontinuation, implants, intrauterine devices

Address for correspondence: Dr. Muhammad Baffah Aminu, Department of Obstetrics and Gynaecology, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria.
E-mail: aminubaffahmuhammad@gmail.com

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INTRODUCTION

Globally, the contraceptive implants are the most effective form used by women to prevent undesired pregnancies.[1] This is because of the improvement in accessibility and availability, as a result of donor funding and also the additional advantages they offer to clients when in use.[2,3] The long-acting reversible contraceptives are becoming increasingly acceptable even across Africa and other

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developing nations.[1] In Sub-Saharan Africa for example, where the unmet needs are high,[4] they are widely accepted in Senegal and Ethiopia.[5] The situation in Nigeria is not the same since only <1% of women use contraceptive implants.[6,7] In comparison to most countries globally, Nigeria has very low contraceptive prevalence[3] and high fertility rate.[8] Currently, the contraceptive prevalence rate (CPR) in Nigeria is 16% for all contraceptives and 10%[3,9] for modern methods, and the unmet needs for contraception are generally high. Similarly, the geographical region where the client resides in the country also affect the contraceptive use, with the northern part of Nigeria having lower uptake than the South, and even with this variation, the uptake of contraceptives is still lower in Northeastern Nigeria, with only 2.1% CPR for Bauchi State.

Despite the variation, the access and acceptability of this form of contraceptive method have not been much affected in the region. LARC in Nigeria, particularly the intrauterine devices (IUDs) are readily available and has wide usage, but general knowledge about them is poor.[10] Various studies have been done on LARC which have shown its acceptability and effectiveness in providing maximum protection against pregnancy and narrowing the gaps for the unmet need.[11] To this end, the insertion and removal of LARC which was hitherto the responsibility of midwives have now been task shifted to the lower cadre of service providers such as the community health extension workers.[12]

The national council on health had in 2018 targeted an improvement in CPR to 36% through task shifting for LARC. It was hoped that it will not only increase utilisation but also the contraceptive prevalence which has remained below 10%. This task shifting has the advantage of providing same quality family planning (FP) services at a cheaper rate and equally allows free time for the higher cadre health workers to provide services requiring a higher level of technical proficiency.[3]

Projected estimate for implants removal according to FP 2020 for 69 countries was to be about 5.8 million[13] for clients in 2018. However, this figure may not have been realised since the majority of the facilities offering insertion of LARC do not provide removal services.[13] A study observed that, in more than three-quarters of facilities that provide implants insertion in Kenya, only a few above halves equally provide removal services.[14] So long as the client has the right to freely decide implant as a method of contraception, the same applies for removal, otherwise that right and choice have been violated. Some of the reasons for removal of implants observe by other researchers include bleeding,[15,16] headaches,[15] weight gain or intended pregnancy.[17,18]

Despite the wide acceptability and uptake of LARC in Nigeria,[19] quite a number of women still present for removal. This study aimed to determine the reasons for discontinuation of long-term contraceptive implants in Bauchi, Northeast Nigeria, and this will update the knowledge of service providers, especially during pre-insertion counselling to clients on some of the possible reasons for removal and how to prevent or overcome them.

METHODS

This was a retrospective study of all clients attending the FP Units of the Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH), Bauchi, between 1 January and 31 December, 2018. We used a retrospective study design to evaluate the uptake of LARC (intrauterine contraceptive devices and implants). All available client records of women that attended the FP clinic from 1 January, 2018 to 31 December, 2018 were retrieved. A total number of clients requesting for all forms of contraceptives were noted, clients who presented for removal of implants were identified and their biodata, parity, type of implants, duration of insertion, the reason for removal and side effects were obtained and analysed using IBM SPSS version 21 (IBM Corporation, Armonk, NY, USA). The results were presented in tables and charts.

Ethical approval was sought and obtained from the Research and Ethics Committee of the ATBUTH, Bauchi. Clients whose records were missing were excluded from the study.

RESULTS

There were a total of 1069 clients that had one method of contraception or the other over the study periods. The study participants were between the age range of 20 and 49 years with the mean (+ standard deviation) age of 28.6 ± 5.8 years. More than two-third of the clients (329 [98.2%]) were married. Two hundred and twenty-two and 184 clients had Implanon and Jadelle implant inserted, respectively, while 171 had IUD within the review period indicating the acceptance rate for the method. About 335 clients had removal of these LARCs (53.4%, 18.2% and 28.4%, for Implanon, Jadelle and IUD, respectively) [Table 1]. The mean parities of the clients were 3 + 1.2. The main reason for the removal of LARC observed in the study was for future pregnancy accounting for about 38.5% (129) for both implants [Table 2]. Untoward effects and expired implants account

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for 24.5% each as the reason for discontinuation, then while two (0.6%) clients had positive B human chorionic gonadotropin and four (1.2%) had a missing string as the indication for removal.

Table 3 shows the duration of insertion while Table 4 shows the side effects which were reasons for implant removal. Figure 1 is a pie chart indicating reasons for implant removal.

DISCUSSION

The study observed that LARC are exclusively reserved for multigravida, particularly the IUDs with about 54% of the clients seeking contraceptives vying for that form, it equally noted the discontinuation rates of 1.1%, 1.1% and 2.1% at 6, 12 and 24 months for the implants and 0.6%, 3.2% and 5.2% for the IUDs, respectively. This is closely related to the findings of a study by Chigbu *et al.* in Southeastern Nigeria,[18] but lower than the figure from a study in Enugu, Nigeria 2011.[19] The most common contraceptive implant removed is the Implanon, accounting for more than half (53.4%) of all the implants removed during the study period [Table 1], and this might not be unconnected with its availability and acceptability in view of its possible perceived lower side effects when compared to the others. This is in contrast to a South African study were the side effects of Implanon was among the most common reason for its discontinuation.[15]

Women of low parity were more likely to discontinue LARC compared with those of high parity as observed in the study, where more than 61% of the clients were of para 2 and 3. The simple interpretation for this finding is that women in our region of practice would want to complete family size early or at a tender age. Similar to the study in Northwest and Southeastern Nigeria, this study discovered that the most common reason given for discontinuation among users of LARC was the desire for conception accounting for 129 (38.5%), and close to a quarter (24.5%) were for the side effects and expired implants.[20] The number of women desiring to remove implants was more than those for IUDs with 93 (72%) and 36 (28%), respectively, though the study in Northcentral was only for Jadelle implants.[21]

The most common reason given for discontinuation among users of LARC was the desire for conception accounting for 129 (38.5%) [Table 2 and Figure 1]. About 15% of the clients discontinued the LARC because of irregular bleeding; this is the second largest reason for the discontinuation following the desire for pregnancy

Table 1: Percentage of implants removed

Contraceptive	Frequency (%)
Implanon	179 (53.4)
Jadelle	61 (18.2)
IUCD	95 (28.4)
Total	335 (100.0)

IUCD: Intrauterine contraceptive device

Table 2: Reason for implants removal

	Frequency (%)
Side effect	82 (24.5)
Expired	82 (24.5)
Divorced	6 (1.8)
For conception	129 (38.5)
To change	18 (5.4)
BPs	11 (3.3)
PV discharge	4 (1.2)
Pain	3 (0.9)
Total	335 (100.0)

BPs: Blood pressure, PV: Per vaginal

Table 3: Duration of insertion

Parity	Duration of insertion			Total
	6 months	1 year	>2 years	
0	0	1	0	1
1	8	16	16	40
2	17	37	43	97
3	11	26	34	71
4	3	15	43	61
5	5	7	16	28
6	1	1	13	15
7	1	1	4	6
8	1	2	4	7
9	0	3	1	4
10	0	0	2	2
11	0	0	1	1
12	0	0	1	1
13	0	0	0	1
Total	47	109	178	335

Table 4: Side effects as reasons for implants removal

Side effect	Frequency (%)
None	247 (73.7)
Headache	12 (3.6)
Pain	7 (2.1)
Bleeding	52 (15.5)
Weight gain	10 (3.0)
Bloating	3 (0.9)
PV discharge	4 (1.2)
Total	335 (100.0)

PV: Per Vaginal

[Table 4]. Some of the reasons given were for its interference with the client's comfort, prayers and fasting. This is not surprising since more than >70% of the clients that accessed these services during the period under review were Muslims.

The 38.7% uptake of LARC found in this study is high when compared to that of the 2013 Nigerian Health and Demographic Survey; similarly, another study using

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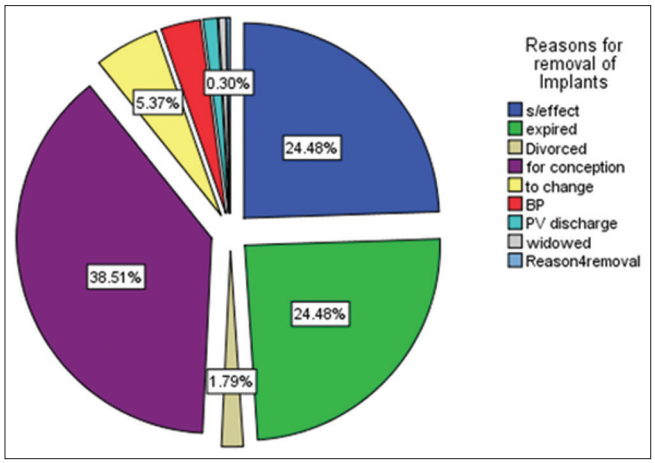

Figure 1: Pie chart indicating reasons for implants removal

secondary data across seven states of Nigeria gave an uptake of 14.8%.[22] The Copper T non-hormonal IUD is the commonly used device in our environment; thus, it is not surprising that the most common indication for its removal was because of bleeding (menorrhagia) [Table 4]; a usual side effect that mostly affects its uptake.[23]

Clients with lower parity were noted among the highest group of women removing implants before the specified period, and this is likely to be because they are young and still desired to get pregnant, as a result of the premium attached to childbearing in Africa [Table 3]. Little wonder that few of the clients had lost their babies months earlier, thus the reason for removal. This was also corroborated by a study in Northwest Nigeria were similar groups were noted to likely remove LARC earlier.[24] Another study had also indicated the increased rate of IUD removal among nulliparous and young women.[25]

Multivariate analysis had shown that women of high parities and with a greater number of living children were more likely to use LARC than their counterpart.[22] In addition, age and low parity were not of significance in the choice of LARC as demonstrated by the study. Other studies had equally demonstrated the insignificant role of age as a factor in LARC use.[26,27] It is believed that LARC is safe for use by all women, including teenagers.[28] There is the local believe that with an increasing number of children, women will usually adopt the long-term contraceptive method.[29]

Like other studies, most of the clients presenting for removal were married, and this is not surprising since previous studies have shown that married clients are about five times more likely to use LARC than their unmarried counterparts.[22,29-31]

Limitations of the study

The retrospective nature of the study is a barrier, as some of the information was not charted properly. This, however, will help us address the gaps in the knowledge, but overall, the study has updated our knowledge on the reasons for the removal of LARC.

CONCLUSIONS

The women in Bauchi using LARCs were satisfied with this form of contraceptives with the majority using it beyond 2 years. The most common reason for removal of LARCs implants discovered was for feature pregnancy and implants expiry.

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Conflicts of interest

There are no conflicts of interest.

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