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Original Research Article

A 5-year review of contraceptive uptake among women attending family planning clinic at Dalhatu Araf Specialist Hospital, Lafia, North-Central Nigeria

Lucky C. Lohnan^{1*}, Oluwaseye F. Oyeniran¹, Francis C. Opara¹, Makshwar L. Kahansim², Meshi E. Cobson¹, Mary C. Momoh¹, Caleb E. Odonye³

¹Department of Obstetrics and Gynecology, Dalhatu Araf Specialist Hospital, Lafia, Nasarawa State, Nigeria

²Department of Obstetrics and Gynecology, Jos University Teaching Hospital, Plateau State, Nigeria

³Department of Community Health, Dalhatu Araf Specialist Hospital, Lafia, Nasarawa State, Nigeria

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***Correspondence:**

Dr. Lucky C. Lohnan,

E-mail: llohnan@gmail.com

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ABSTRACT

Background: Rapidly rising population in Africa is of great concern, most especially in Nigeria because of its impact on social stability. Family planning is an indispensable tool for population control and also in preventing unwanted pregnancy and its complications. Women and men at any given point in their lifetime should be able to choose the most appropriate contraceptive methods from many available options, as this is an important contributor to the successful use of contraception. Aim of the study was to determine the uptake and trend in contraceptive use from 2014-2018 in the family planning unit of a specialist hospital in the North central, Nigeria.

Methods: It is a retrospective, descriptive study of contraceptive uptake of women attending family planning clinic of Dalhatu Araf Specialist Hospital (DASH), Lafia, Nasarawa State, Nigeria from 2014 to 2018.

Results: Of the 5448 women accessing family planning services in the hospital within the study period, 5277 folders were retrieved with complete data. A vast majority of the women were married (99.6%) with the mean age of the subjects being 28.8±6.0 years. Contraceptive uptake was 43.2% of deliveries in the hospital. Implants (65.4%) remained the preferred contraceptive choice, followed by injectables (20.7%) and intrauterine devices (IUDs) (10.3%). Less popular were bilateral tubal ligation (BTL) (0.2%), Sayana press (0.1%) and Standard Days Methods (SDM) (0.0%). Implants, injectables and IUDs consistently remained the preferred contraceptive choices yearly throughout the studied years.

Conclusions: Implants is the most popular contraception in DASH. Contraceptive uptake is relatively high among the women but there is still need to increase access to effective contraception and if possible make them freely available at all levels of health care.

Keywords: Contraceptive, Contraceptive-uptake, Family planning, Lafia

INTRODUCTION

The global population has risen from 1 billion in 1800 to 7.9 billion in 2020.¹ The United Nations projected persistent rise in the population and estimates have put the total population at 8.6 billion by mid-2030, 9.8 billion by

mid-2050 and 11.2 billion by 2100.² Much of this growth comes from developing nations in Africa. Among them is Nigeria where fertility rate is high and where resources are already stretched to the limit.³ The contraceptive prevalence rate is inversely related to the maternal mortality rate; nations with low contraceptive preference

rates have one of the key steps in reducing population growth while ensuring pregnancies are planned and wanted high maternal mortality rates.^{4,5} Access to effective contraception is one of the key steps in reducing population growth while ensuring pregnancies are planned and wanted.⁴ The contraceptive prevalence rate is inversely related to the maternal mortality rate; nations with low contraceptive prevalence rates have high mortality rates.⁵ There are wide range of different modern contraceptive products including oral contraceptive pills, injectables, implants, intrauterine devices, barrier methods, and permanent surgical methods.

Despite the huge investment of the Nigerian government and major international donors in family planning services provision, the contraceptive prevalence in Nigeria still remains low especially in the northern part of the country.⁶ Many elements need to be considered by women, men or couples at any given point in their lifetime when choosing the most appropriate contraceptive methods as this is an important contributor to the successful use of the contraceptive method. A review of women accessing family planning services in a specialist hospital in Nasarawa state has recorded a contraceptive prevalent rate of 32.6%, while contraceptive preferences were 40.5%, 40% and 0.5% for implants, injectables and condoms respectively.⁷ However, this study was limited to a year (2013) and didn't look at the trend/variation in contraceptive choices over years among women accessing family planning clinic. Also, the recent introduction and availability of some contraceptive options into the facility such as Sayana press makes it necessary to determine the current contraceptive preference and trend in the hospital.

The objectives of this study are to determine the contraceptive preference, its trend over 5-year period and also the effect of age and parity on contraceptive choices among women attending family planning clinic in Dalhatu Araf Specialist Hospital (DASH), Lafia, Nasarawa State, Nigeria.

METHODS

This was a hospital based retrospective descriptive study carried out on 5277 women who attended the family planning clinic of the Dalhatu Araf Specialist Hospital, Lafia between 1st January, 2014 and 31st December, 2018. The hospital is the only tertiary hospital in the state capital, rendering services to patients from other parts of the state and parts of neighbouring states including Plateau, Kaduna, Abuja, Benue, and Taraba. The family planning unit offers education and counselling on contraception to clients who come there and also to postnatal women. Several options of modern contraceptive methods (Condoms, oral contraceptive pills (OCP), Injectable progestins (Noristerat and Depo provera), Sayana press, intrauterine contraceptive device; usually Copper-T), implants (Implanon and Jadelle) and bilateral tubal ligation (BTL) are offered to these women.

Information regarding the socio-demographic characteristics of the women and contraceptive methods used were retrieved from the patients' folders and the theatre records using a structured proforma. Analysis of data obtained was done using IBM SPSS Version 23. Pearson Chi-square to compare and compute frequencies of bivariate categorical variables while a p-value <0.05 was considered statistically significant.

RESULTS

Within the study period, 5448 women accessed the family planning services. However, only 5350 folders were retrieved out of which 73 had incomplete data. The total number of deliveries within this period was 12,611 giving a contraceptive prevalence of 43.2%. The mean age of the subjects was 28.8±6.0 years with a range of 15-52 years. Women within the age bracket 20-29 years (49.4%) were more active in the use of modern contraceptives as compare to other age group brackets. Majority of the women (54.7%) were multipara (para 2-4). Only thirty women (0.6%) were nullipara. Fifty percent of the women either had primary education or no formal education. The characteristics of the women are as shown (Table 1).

Table 1: Socio-demographic variable table showing the characteristics of respondents.

Variable	Frequency (n)	Percentage (%)
Age (years)		
≤19	136	2.6
20-29	2607	49.4
30-39	2191	41.5
40-49	333	6.3
50-59	10	0.2
Total	5277	100.0
Parity		
Nullipara	30	0.6
1	461	8.7
2-4	2886	54.7
5-9	1846	35
≥10	54	1.0
Total	5277	100.0
Education		
No formal education	2029	38.4
Primary	614	11.6
Secondary	1480	28.0
Tertiary	1154	21.9
Total	5277	100.0
Marital Status		
Single	10	0.2
Married	5256	99.6
Divorced/ separated/ widowed	11	0.2
Total	5277	100.0

The preferred contraceptive options among these women were centered on long acting contraceptives with 3449 (65.4%) women preferring the implants.

One thousand and ninety (20.7%) of the clients opted for injectables, followed by IUDs (10.3%) and daily pills (2.1%). Only a total number of 56 (1.1%) and 13 (0.2%) chose male and female condoms, respectively. Less popular were BTL (0.2%), Sayana press (0.1%) and standard days methods (0.0%) (Table 2).

The most preferred contraceptive for all age groups was implant at 70.6%, 64.5% and 66.6% for those women ≤ 19 years, 20-29 years and 30-39 years respectively. Similarly, 62.5% and 40.0% of those within the age groups of 40-49 and 50-59 years respectively preferred the use of implant as a form of contraception (Table 3).

Implants consistently remained the preferred choice of contraception followed by injectables and then IUDs throughout the years (Table 4).

Table 2: Contraceptive preference among women.

Contraception	Frequency	Percentage
Implants	3449	65.4
Injectables	1090	20.7
IUD	541	10.3
Daily pills	109	2.1
Male condoms	56	1.1
Female condoms	13	0.2
BTL	10	0.2
Sayana press	7	0.1
Standard days method	2	0.0
Total	5277	100.0

Table 3: Contraceptive preference in different age groups.

	Implants	Injectables	IUDs	Daily pills	Male condoms	Female condoms	Sayana press	SDM	BTL	Total
Age ≤ 19										
n	96	29	11	0	0	0	0	0	0	136
%	70.6	21.3	8.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0
20-29										
n	1681	611	202	69	29	9	4	1	1	2607
%	64.5	23.4	7.7	2.6	1.1	0.3	0.2	0.0	0.0	100.0
30-39										
n	1460	400	260	35	25	3	3	1	4	2191
%	66.6	18.3	11.9	1.6	1.1	0.1	0.1	0.0	0.2	100.0
40-49										
n	208	49	65	3	2	1	0	0	5	333
%	62.5	14.7	19.5	0.9	0.6	0.3	0.0	0.0	1.5	100.0
50-59										
n	4	1	3	2	0	0	0	1	0	10
%	40.0	10.0	30.0	20.0	0.0	0.0	0.0	0.1	0.0	100.0

Table 4: Yearly trend in contraceptive preference over the studied years.

	Implants	Injectables	IUDs	Daily pills	Male condoms	Female condoms	Sayana press	SDM	BTL	Total
2014										
Count(n)	509	348	93	30	5	4	1	0	0	990
% within year	51.4	35.2	9.4	3.0	0.5	0.4	0.1	0.0	0.0	100.0
2015										
Count(n)	1128	279	154	40	17	9	4	0	1	1632
% within year	69.1	17.1	9.4	2.5	1.0	0.6	0.2	0.0	0.1	100.0
2016										
Count(n)	499	109	59	12	3	0	1	0	9	692
% within year	72.1	15.8	8.5	1.7	0.4	0.0	0.1	0.0	1.3	100.0
2017										
Count(n)	870	220	112	18	14	0	1	1	0	1236
% within year	70.4	17.8	9.1	1.5	1.1	0.0	0.1	0.1	0.0	100.0
2018										
Count(n)	443	134	123	9	17	0	0	1	0	727
% within year	60.9	18.4	16.9	1.2	2.3	0.0	0.0	0.1	0.0	100.0

DISCUSSION

A relatively high prevalence of contraceptive use (43.2%) was obtained in this study. This is similar to 36.8% reported in Bayelsa State.⁸ However, a lower value of 13.2% had been reported in Ile-Ife.⁹ The difference in the findings in this study might be due to the fact that Ijarotimi et al used the total number of women attending general out-patient gynaecological clinic as the denominator while our study used total number of deliveries within the study period.⁹

Women within 20-29 years age group are more actively involved in the use of modern contraceptives as opposed to those outside the group. This finding is in keeping with previous study done.⁷ However, other study recorded a higher age group of 30-39 years.⁹ The difference in this finding might be due to the differences in the geographical location of the women as the women in this study were from the northern part of the country where most women get married at an early age hence the tendency to make use of contraception at an early age as compare to those in the south who might delay marriage in pursue for career and education.⁹ Women at the extreme age groups (≤ 19 years and 50-59 years) contributed 2.6% and 0.2% of the study population respectively. This is similar to the 1.9% reported for those less than 20 years of age in the previous study done in Ogbomoso.¹⁰ This may not be unconnected to the fact that women less than 20 years are less likely to use contraception because they are more likely to be desirous of pregnancy while those within 50-59 years age group are mostly post-menopausal.

Women with parity of 2 to 4 are more active in the practice of modern contraceptives during the study period when compared to those outside this parity group. This was contrary to what was obtained in other studies which found those with parity of 5 and above to be more active in the use of modern contraceptives.^{7,11} The increase use of modern contraceptives among women with lower parity (P2-4) in this study could be due to increase awareness on contraception among women following the earlier findings from previous study done in the our facility.⁷

The preferred contraceptive options among these women were centered on long acting contraceptives with 3449 (65.4%) women preferring the Implants. One thousand and ninety (20.7%) of the clients opted for injectables, followed by IUDs (10.3%) and daily pills (2.1%). Only a total number of 56 (1.1%) and 13 (0.2%) chose male and female condoms respectively. Less popular were BTL (0.2%), Sayana press (0.1%) and standard days methods (0.0%). This finding was similar to previous study that found implant as the most preferred contraceptives followed by injectables and IUDs.⁷ However, this was in contrast to what was obtained in Egede et al study and Ukegbu et al which reported condoms as the most preferred, satisfactory and used contraceptives.^{11,12} The variation in these findings might be due to the fact that a vast majority of the clients in Ukegbu's study were mostly

single/never married (66.4%) as compared to 0.2% in our study, a factor that could have made them prefer to use contraceptive with dual protection (protect against sexually transmitted infections and prevent pregnancies).¹² Similarly, the fear of side effects of medications or hormonal could have also influenced their choice of condoms as compared to other methods.^{13,14} Another study done in Ogbomoso found progesterone only injectables (POI) (36.2%) as the most preferred contraceptive choice as opposed to finding of Implants (65.4%) in our study.¹⁰ This may be as a result of ease of administration of POI, being less invasive and possibility of providers' bias during counselling in the facility's family clinic.¹⁰

The choice of BTL as a form of contraception is extremely low (0.2%) in this study. This is consistent with findings from other studies.^{9, 11, 12} The reason for this might be due to fear of the surgical procedure and the higher cost of BTL procedure as compared to other modern methods.¹⁵

The trend in contraceptive preference over the studied years (2014-2018) in this study revealed that implants consistently remained the preferred choice of contraception followed by injectables and then IUDs. While women made use of female condoms in the first 2 years under study (2014 and 2015), no woman opted for female condom as a means of contraception in the last 3 years under study (2016-2018). This may be due to the fact that there were other more convenient, non user dependent modern contraceptives available in the facility. Even though some clients chose BTL as their contraceptive option in 2015 and 2016, it lost its popularity towards the last 2 years of study as no client considered it as a preferred option of choice. This may be due to recent upward review in the costs of all surgical procedures in our hospital.

CONCLUSION

Modern contraceptive prevalence among women in Dalhatu Araf Specialist Hospital is relatively high. The implants, injectables and IUDs consistently remained the most preferred choices of contraception yearly for a period of 5 years under study. There is need to improve access, availability and delivery of family planning services to all women of reproductive age group and their partners not only in Nasarawa State, but also in the entire nation.

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