

Pattern of Contraceptive Uptake and the Factors Influencing it among Women in the Family Planning Clinic of ESUT Teaching Hospital, ENUGU: A Three Year Review

Onyekpa IJ*, Okafor II, Odugu BU, Ugwu AI and Onah LN

Department of Obstetrics and Gynaecology, Enugu State University of Science and Technology Teaching Hospital/College of Medicine, Enugu, Nigeria

Correspondence should be addressed to Onyekpa IJ, ifeanyionyekpa@gmail.com

Received: 25 January 2021; Accepted: 12 February 2021; Published: 19 February 2021

Copyright © 2021 Onyekpa IJ et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

BACKGROUND

Contraceptives are methods or devices used to prevent pregnancy. It is one of the determinants of pregnancy and birth rates in the world. In Nigeria, contraceptive prevalence was reported at 15% in 2013; hence the need to increase awareness and availability of modern family planning services so as to reduce the unmet contraceptive need. This will go a long way to reducing unwanted and unplanned pregnancies and their untoward outcomes especially on the woman in particular and the family in general.

AIMS/OBJECTIVES

To determine the pattern of contraceptive uptake and the socio-demographic determinants among women attending the family planning clinic at ESUTTHP, Enugu.

Specific Objectives: The objectives of the study were to determine:

- The contraceptive prevalence.
- The pattern of contraceptive uptake.
- The influence of socio-demographic determinants on the pattern of contraceptive uptake among women attending the family planning clinic at ESUTTHP, Enugu.

METHOD

This was a descriptive, retrospective study of women who sought contraceptive services at the family planning clinic over a 3 year period from 1st January, 2014 to 31st December, 2016. Relevant information was extracted from the case records of the women. Data was analyzed using SPSS version 20.0 and then represented as tables, percentages and charts.

RESULT

A total of 879 family planning records were reviewed and a total of 3838 women between the ages of 15 years to 49 years were seen in the gynaecological clinic over the 3 years period under review. Therefore, prevalence of contraceptive in ESUTH was 22.90%. In all, 325(37%) used IUCD, 9(1.0%) used male condom whereas 3(0.3%) only used female condom. Combined oral contraceptive pills was used by 39(4.4%), 11(1.9%) used progesterone only pills, 2(7.1%) used Depo-Provera and 18(2%) used Noristerat. Majority of the clients, 357(40.6%) used Implanon and 55(6.3%) used Jardelle.

The result showed that only 1(0.1%) client under the age of 20 years was seen in the clinic for contraceptive purposes over the period under review, 47(5.3%) were between 20 years - 24 years, 200(22.8%) fell under 25 years - 29 years, majority of the clients 311(35.4%) were between 30 years - 34 years. Those between 35 years - 39 years were 211(24%), and those above 39 years were 109(12.4%).

A total of 18(2%) had no formal education, 76(8.6%) had primary education, 336(38.2%) had secondary education and 449(51.1%) had tertiary education

A total of 862(98.3%) of the women were Christians, 12(1.5%) were Muslims and 2(0.2) were not from either religion.

Based on parity, 18(2%) of the women were nulliparous, 58(6.6%) were primiparous, 517(58.8%) were multiparous and 285(32.4%) were grand multiparous.

Also, of all the women sampled 20(2.3%) had no living child, 176(20.0%) had 1-2 children, 406(46.2%) had 3-4 children and 277(31%) had more than 4 children.

RECOMMENDATION

Since most of our women prefer the implants as the contraceptive option of choice, their supply should be increased. Secondly, family planning should be made more adolescent friendly. More awareness should also be done on the benefits of contraceptive to the woman, the couple and the community at large to increase contraceptive uptake and reduce the unmet need.

CONCLUSION

In conclusion, the majority of the women in this study used the injectable hormonal contraceptives and followed by the IUCDs. The condoms were the least subscribed. The age, religion, parity and the number of living children were significant determining factors in the pattern of contraceptive uptake. The level of education was not a significant factor.

KEYWORDS

Contraceptive uptake; Factors influencing; Enugu; Nigeria

1. INTRODUCTION

Family planning refers to the provision of methods or devices used to prevent pregnancy [1]. It allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through the use of contraceptive methods

and the treatment of infertility [2]. Contemporary studies show that, out of a list of eight reasons for having sex, having baby is the least frequent motivator for most people [3].

In fact, family planning has always been practiced, even in societies dominated by social, political, or religious codes that require people to be 'fruitful and multiply' [1,3]. History is filled with the origin and evolution of many methods of contraception from continuous abstinence, withdrawal method, fertility awareness methods, hormonal methods, lactational amenorrhoea, barrier methods, intrauterine devices, and more permanent/surgical methods such as tubal ligation [2].

According to the World Health Organisation (WHO), an estimated 222 million women in developing countries would like to delay or stop child bearing but are not using any form of contraceptive [4]. Contraceptive use has increased in many parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa. The proportion of reproductive age married women who use modern or traditional contraceptive method rose from 55% to 63% between 1990 and 2010 according to a global analysis [5]. Most of the increase was due to a 10% point rise in contraceptive prevalence in the developing world, although contraceptive use also increased in developed countries. The proportion of married women with unmet need for family planning declined from 15% to 12% worldwide, but remained above 25% in 42 countries, most of them in Africa [6]. While another analysis showed a slight rise in modern contraceptive use from 54% in 1990 to 57% in 2012 globally. Regionally, the proportion of women aged 15 years - 49 years reporting the use of a modern contraceptive method has risen minimally or plateaued between 2008 and 2012 [7,8]. In Nigeria, the contraceptive prevalence among women aged 15 years - 49 years was previously reported at 14.6% in 2008 [7]. The fertility rate was 5.6% and the unmet need for contraception was put at 20 and 20.2% by 2013 Nigeria Demographic and Health Survey (NDHS) and the World Bank, respectively [7,8].

The most recent survey by NDHS in 2013 found that only 15% of married women of reproductive age use contraceptives in Nigeria [7], which is an increase of just two percentage points from the 2003 NDHS [9]. In 2015 the United Nations Department of Economics and Social Affairs, Population Division, showed two long-term methods, female sterilization (19%) and the intrauterine devices (IUDs), (14%) are the most common method used by married and in-union women worldwide. It also showed that short term methods were less common: 9 percent used pills 8 percent used condoms and 5 percent used injectables. Only 6 percent used rhythm or withdrawal method globally [10].

Maternal mortality is usually associated with pregnancy. Family planning is therefore, an indispensable tool in reducing maternal mortality and morbidity [2]. Family planning offers good value for investment because it cuts across and impacts nearly all the millennium development goals (MDGs), including reduction of poverty and hunger, increasing universal education, promotion of gender equality, reduction in maternal and child death, reduction in HIV/AIDS and environmental sustainability [11].

Teenage pregnancy is high with more than 20% of girls between 15 years - 19 years reporting ever having been pregnant [12,13]. These pregnancies and their complications can be prevented with family planning. Other benefits of family planning apart from spacing or stopping childbearing include preventing pregnancy-related health risks in women, reducing infant mortality, helping to prevent HIV/AIDS, empowering people and enhancing education, reducing adolescent pregnancies, and slowing population [2,3,10].

This retrospective study therefore, was conducted at ESUTTHP Enugu, to determine the pattern of contraceptive use and the socio-demographic determinants. The result from the study showed the contraceptive methods that are most frequently used in our centre and this could help in counselling of women and advising the government and other donor agencies on the type of contraceptive to be provided the more. It could also help to make recommendations to address identified barriers to uptake of contraceptives generally.

Aims

To determine the pattern of contraceptive uptake and the socio-demographic determinants among women in the family planning clinic of ESUTTHP, Enugu

Specific Objectives: The aims of this study were to determine:

- The prevalence of contraceptive.
- The pattern of contraceptive uptake.
- The influence of socio-demographic determinants on the pattern of contraceptive uptake among women attending the family planning clinic of ESUTTHP, Enugu.

2. SETTING

ESUTTHP is a state owned teaching hospital in Enugu, the capital of Enugu State. It is located in the centre of the metropolis within Enugu-North local government area. It is essentially populated by Igbos, predominantly Christians. The family planning clinic of the hospital runs from Mondays to Fridays between 8:00 am to 4:00 pm. A consultant obstetrician & gynaecologist, and four trained nurses direct the activities in this specialist clinic. Medical and nursing students, resident doctors in obstetrics and gynaecology are posted to the clinic. The services provided in the clinic include family planning counselling, same day provision of chosen method to clients, teaching, and research, training of students and medical records documentations.

Group family planning counselling is undertaken at intervals in the antenatal and immunization clinics, antenatal and post-natal wards to create demands for various family planning services/methods.

The contraceptive methods commonly available in the clinic include: IUCDs (CuT380A & Hormone releasing IUS), Implants (Implanon and Jadelle), and injectables (Noristerat and Depo-Provera). Others are combined oral contraceptives, progestogen only pills, male and female condoms and diaphragm. These are provided freely by the Enugu state ministry of health and offered at no cost.

3. MATERIALS & METHOD

The study is a retrospective review of all the women who sought contraceptive services at the family planning clinic of ESUTTHP Enugu, South-East, Nigeria between January 1st, 2014 to December, 31st 2016. The clients who had visited the family planning clinic for contraceptive services during the period under review were identified from the clinic register. Their case notes were retrieved and relevant data extracted from both documents with the use of a standardized proforma. Eight hundred and seventy nine (879) case notes were available and suitable for analysis. The number of women ages 15 to 49 years attending the gynaecological clinic over the period was found to be 3838 from the clinic registers. Data was analyzed using

SPSS version 20.0. Pearson Chi-square test and student's t-test were used as a test of significance for categorical and continuous variables respectively and a P value <0.05 was considered statistically significant.

Table 1: Relationship between age and uptake of contraceptives.

Age (Years)	IUCD	Male Condom	Female Condom	COCP	POP	Depo-Provera	Noristst	Implants	Total
<20	1 (0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.00%)
20-24	15 (1.7%)	0 (0%)	1 (0.1%)	4 (0.5%)	2 (0.2%)	1 (0.1%)	2 (0.2%)	22 (2.5%)	47 (5.3%)
25-29	76 (8.6%)	1 (0.1%)	2 (0.2%)	10 (1.1%)	5 (0.5%)	7(0.8%)	2 (0.2%)	97 (11%)	200 (22.8%)
30-34	100 (11.4%)	5 (0.6%)	0 (0%)	17 (1.9%)	2 (0.2%)	17 (1.9%)	9 (1%)	161 (18.3%)	311 (35.4%)
35-39	82 (9.3%)	2 (0.2%)	0 (0%)	6 (0.7%)	2 (0.2%)	19 (2.2%)	4 (0.5%)	96 (10.9%)	211 (24.0%)
>39	51 (5.8%)	1 (0.1%)	0 (0%)	2 (0.2%)	0 (0%)	18 (2%)	1 (0.1%)	36 (4.1%)	109 (12.4%)
Total	325 (37%)	9 (1%)	3 (0.3%)	39 (4.4%)	11 (1.3%)	62 (7.1%)	18 (2%)	412 (46.9%)	879 (100%)

Pearson students T-Test: P (0.000)

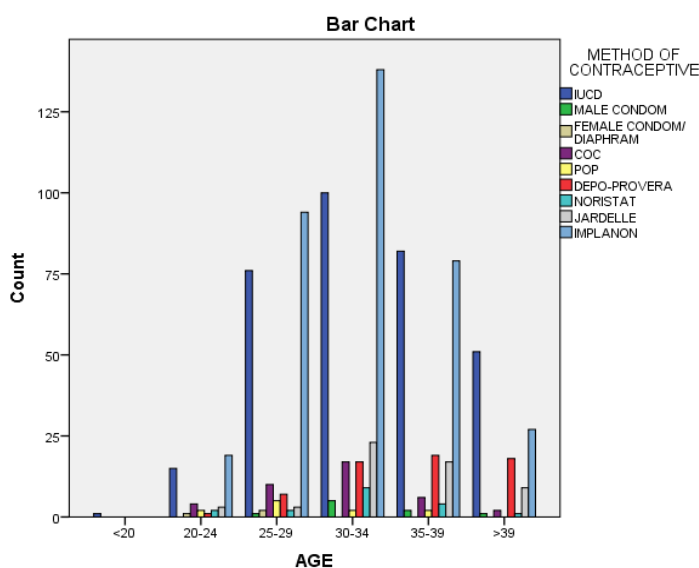


Figure 1: These show the relationship of age on pattern of contraceptive uptake. Of all the women sampled only 1(0.1%) client under the age of 20 years was seen in the clinic for contraceptive purposes over the period under review, 47 (5.3%) were between 20 years - 24 years, 200 (22.8%) fell under 25 years - 29 years, majority of the clients 311 (35.4%) were between 30 years - 34 years. Those between 35 years - 39 years were 211(24%), and those above 39 years were 109(12.4%). The P(0.000) was less than 0.05, hence, age has a significant influence on the pattern of contraceptive uptake from the study.

Table 2: Relationship between educational qualification and uptake of contraceptives.

Education	IUCD	Male Condom	Female Condom	COCP	POP	Depo-Provera	Noristst	Implants	Total
None	6 (0.7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0.2%)	1 (0.1%)	9 (1%)	18 (2%)
Primary	28 (3.2%)	0 (0%)	1 (0.1%)	3 (0.3%)	0 (0%)	9 (1%)	0 (0%)	35 (3.9%)	76 (8.7%)
Secondary	105 (11.9%)	6 (0.7%)	0 (0%)	10 (1.1%)	6 (0.7%)	23 (2.6%)	8 (0.9%)	178 (21.3%)	336 (38.2%)
Tertiary	186 (21.2%)	3 (0.3%)	2 (0.2%)	26 (3%)	5 (0.6%)	28 (3.2%)	9 (1%)	190 (21.6%)	449 (51.1%)
Total	325 (37%)	9 (1%)	3 (0.3%)	39 (4.4%)	11 (1.3%)	62 (7.1%)	18 (2%)	412 (46.9%)	879 (100%)

Pearson Chi-square Test: P (0.016)

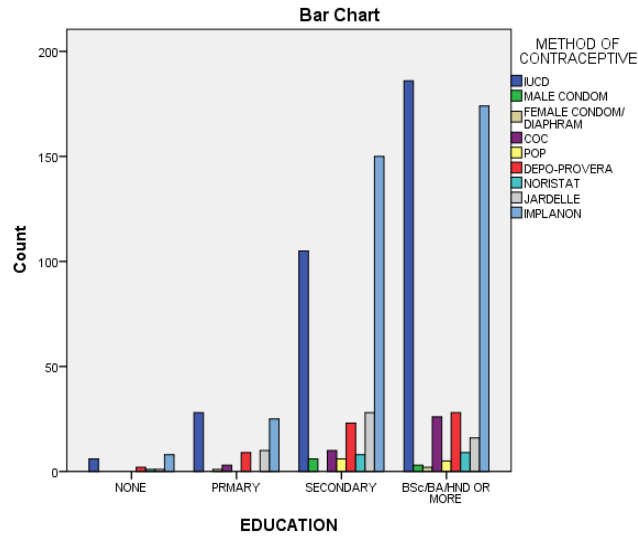


Figure 2: These show the relationship between educational qualification and pattern of contraceptive uptake. In all a total of 18(2%) women had no formal education, 76(8.6%) had primary education, 336(38.2%) had secondary education and 449(51.1%) had tertiary education. The P(0.016) showed that educational status has no significant influence.

Table 3: Relationship between religion and uptake of contraceptives.

Religion	IUCD	Male Condom	Female Condom	COCP	POP	Depo-Provera	Noristat	Implants	Total
Christian	323 (36.7%)	7 (0.8%)	3 (0.3%)	37 (4.2%)	11 (1.3%)	61 (6.9%)	18 (2%)	403 (45.8%)	863 (98.2%)
Muslim	1 (0.1%)	2 (0.5%)	0 (0%)	2 (0.1%)	0 (0%)	1 (0.1%)	0 (0%)	8 (0.9%)	14 (1.6%)
Others	1 (0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.1%)	2 (0.2%)
Total	325 (37%)	9 (1.3%)	3 (0.3%)	39 (4.3%)	11 (1.2%)	62 (7.1%)	18 (2%)	412 (46.9%)	879 (100%)

Pearson Chi-square Test: P (0.000)

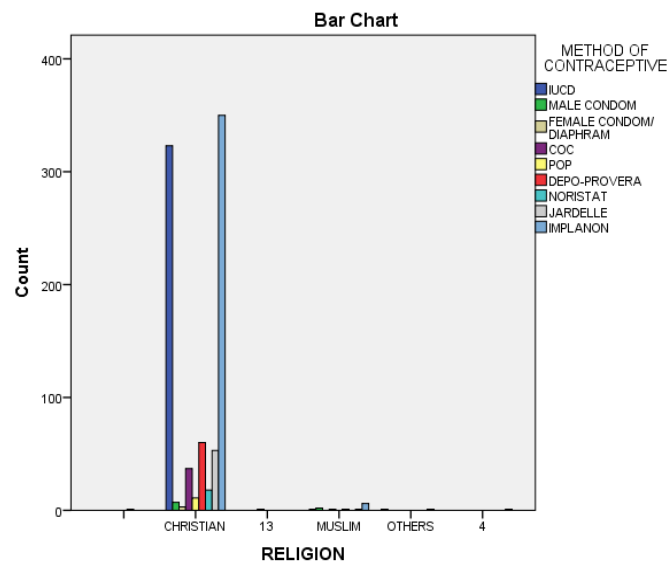


Figure 3: Show the relationship between religion and pattern of contraceptive uptake. These show that a total of 862(98.3%) of the women were Christians, 12(1.5%) were Muslims and 2(0.2%) were from other religions. The P(0.000) showed that religion has a significant influence.

Table 4: Relationship between parity and uptake of contraceptives.

Parity	IUCD	Male Condom	Female Condom	COCP	POP	Depo-Provera	Noristat	Implants	Total
Nullipara	8 (0.9%)	0 (0%)	0 (0%)	4 (0.5%)	1 (0.1%)	0 (0%)	1 (0.1%)	6 (0.7%)	20 (2%)
Primipara	28 (3.2%)	0 (0%)	0 (0%)	3 (0.3)	1 (0.1%)	2 (0.2%)	1 (0.1%)	23 (2.6%)	58 (6.6%)
Multipara	203 (23.1%)	4 (0.5%)	2 (0.2%)	19 (2.2%)	8 (0.9%)	32 (3.6%)	12 (1.4%)	237 (27%)	517 (58.8%)
Grand-Multipara	86 (9.8%)	5 (0.6%)	1 (0.1%)	13 (1.5%)	1 (0.2%)	28 (3.2%)	4 (0.5%)	146 (16.6%)	284 (32.4%)
Total	325 (36.9%)	9 (1%)	3 (0.3%)	39 (4.4%)	11 (1.4%)	62 (7.1%)	18 (2%)	412 (46.9%)	879 (100%)

PEARSON Chi-square Test: P (0.000)

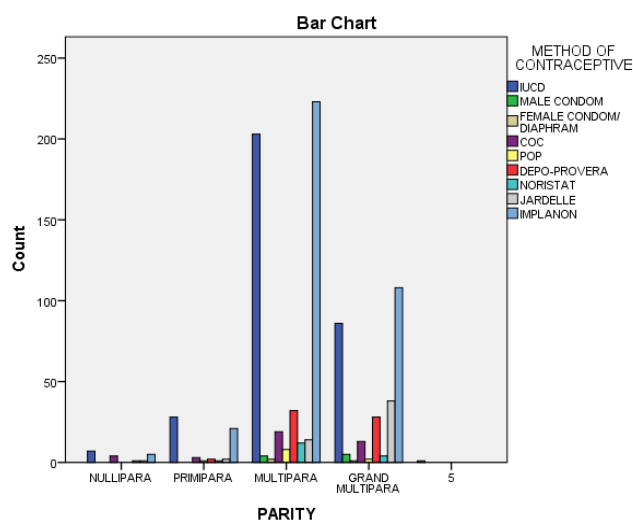


Figure 4: These show the relationship between the woman's parity and pattern of contraceptive uptake. A total of 18(2%) women were nulliparous, 58(6.6%) were primiparous, 517(58.8%) were multiparous and 285(32.4%) were grand multiparous. The P(0.000) showed that parity has a significant influence.

Table 5: Relationship between number of living children and uptake of contraceptives.

No. of Children	IUCD	Male Condom	Female Condom	COCP	POP	Depo-Provera	Noristerat	Implants	Total
NONE	8 (0.9%)	0 (0%)	0 (0%)	4 (0.5%)	0 (0%)	0 (0%)	1 (0.1%)	7 (0.8%)	20 (2.3%)
1-2	72 (8.2%)	1 (0.1%)	0 (0%)	11 (1.3%)	1 (0.1%)	7 (0.8%)	5 (0.6%)	79 (8.9%)	176 (20%)
3-4	161 (18.3%)	4 (0.5%)	2 (0.2%)	13 (1.5%)	7 (0.8%)	28 (3.2%)	7 (0.8%)	184 (20.9%)	406 (46.2%)
>4	84 (9.6%)	4 (0.5)	1 (0.1%)	11 (1.3%)	3 (0.3%)	27 (3.1%)	5 (0.6%)	142 (16.1%)	277 (31.5%)
TOTAL	325 (37%)	9 (1%)	3 (0.3%)	39 (4.4%)	11 (1.3%)	62 (7.1%)	18 (2%)	412 (46.9%)	879 (100%)

Pearson Chi-Square Test: P(0.000)

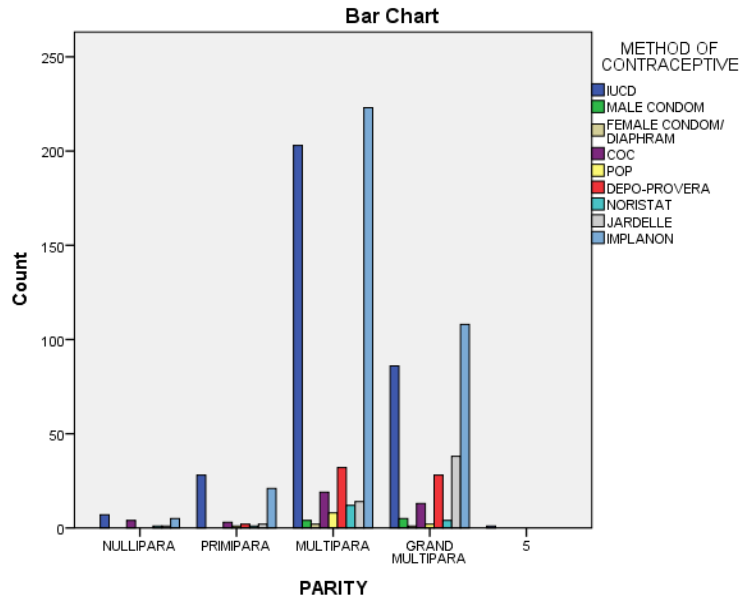


Figure 5: These show the relationship between number of living children and pattern of contraceptive uptake. Of all the women sampled 20(2.3%) had no living child, 176(20.0%) had 1-2 children, 406(46.2%) had 3-4 children and 277(31%) had more than 4 children. The P(0.000) showed that the number of living children has a significant influence.

4. RESULT

A total of 879 antenatal records were reviewed and a total of 3838 women between 15 years to 49 years were seen in the gynaecological clinic over the 3 year period under review. From the above, the contraceptive prevalence in ESUTH was calculated to be 22.90%. In all, 325(37%) used IUCD, 9(1.0%) used male condom whereas 3(0.3%) only used female condom. Combined oral contraceptive pills was used by 39(4.4%), 11(1.9%) used progesterone only pills, 62(7.1%) used Depo-Provera and 18(2%) used Noristat. Majority of the clients, 412(46.9%) used Implants.

5. DISCUSSION

From the study the contraceptive prevalence of 22.9% was found for ESUT Teaching Hospital Enugu during the period under review. This showed an improvement on the national contraceptive prevalence of 15% [8]. It also ranked higher than the sub-Saharan African rate of 17% [11]. The value was lower than 28.3% found by Okafor et al among market women in Abakaliki in 2015 [13]. It was also lower than 36.1% reported by Muhammad Z & Maimuna DG in North-Western Nigeria [14]. The differences could be due to varying cultural and religious backgrounds in which the studies were carried out. It could also be supported by the variations in contraceptive uptake and prevalence among various regions in Nigeria [11].

Majority of the women 357(40.6%) were using Implanon, followed closely by IUCD 325(37%), while the least was female condom 3(0.3%). This was similar to findings in Warri, & Orlu in southern Nigeria and Zaria in the north [15-17]. This was found to differ from the findings in another North-Western Nigeria study where uptake of injectables (Depo-Provera & Noristerat) was 65% [11], possibly due to variations in religion and culture. It was found to differ from similar study in Jos, North-Central, Nigeria, where IUCD was the most widely used contraceptive [18]. This could also be due to cultural differences and multi-ethnic composition of the Jos and other cities of the North-Central region of Nigeria.

Majority of the women who used the implants were in the age range of 30-34 followed by those of 25-29 and 35-39, the secondary and tertiary education group, multi Para and grand multipara group. Most of them were married and in a stable relationship requiring a reliable, long lasting contraceptive method that was easy to use and not dependent on intercourse. Condoms (male & female) were the least used in our studies contributing only 1.3% of the prevalence. This was in keeping with another study in Kano where the uptake of condoms was 3% [14]. The poor uptake of condoms could be due to the fact that it needs some persuasion and also as most couple do not find it pleasurable and some couples consider it a sign of mistrust to use condoms. Majority of those who used condoms are in the age ranges of 30-34 years perhaps these group are more mature and disciplined enough to control their sexual activities more than the younger ones. In all only educational level was found not to have a significant influence on the pattern of contraceptive uptake. This was found to disagree with many other studies by Oluwafemi David et al. [19], Bina Gubhaju [20], Plivera Radulovic et al. [21]. The variations could be due to the differences in the population studied and the size of the population studied in the quoted studies and our own.

6. CONCLUSION

In conclusion, the majority of the women in this study used the hormonal implants (implanon) and followed by the IUCDs while the least was condoms. It also showed that age, religion, parity and the number of living children were significant determining factors in the uptake and pattern of contraceptive use. The level of education did not appear to have any significant influence.

7. RECOMMENDATIONS

1. Since most of our women prefer the implants as the contraceptive option of choice, their supply should be optimized.
2. The family planning clinic should be made more adolescent friendly to encourage more young women to access family planning and reduce unintended pregnancies
3. More awareness should be done on the benefits of contraceptive to the woman, the couple and the community at large to increase contraceptive uptake and reduce the unmet need.

REFERENCES

1. Birth control.
2. (2016) Family planning/contraception.
3. Knowles J (2006) A history of birth control methods. Katharine Dextrer McCormick library. Planned Parenthood Federation of America report 1-15.
4. (2013) WHO. Family planning.
5. Ikema L et al. (2013) National, regional and global rates and trends in contraceptive prevalence and the unmet need for family planning between 1990-2015: A systemic and comprehensive analysis. *Lancet* 381(9878): 1642-1652.
6. (2013) Global levels of contraceptive use by married women have risen, especially in developing countries. *International perspective on sexual and reproductive health. A Journal of Peer Review Research* 39(2): 103-104.
7. Trading economics. Contraceptive prevalence rate in Nigeria.
8. (2014) Nigerian demographic and health survey 2013. National Population Commission (NPC).
9. (2003) Nigeria demographic and health survey (2003 NDHS).

10. Cates W Jr. (2010) Family planning: The essential link to achieving all eight millennium development goals. *Contraception* 81(16): 460-461.
11. Willam W (2013) A review of teenage pregnancy in South Africa - experiences of schooling and knowledge and access to sexual and reproductive health services. South Africa: Partners in sexual health.
12. (2007) National department of health, medical research council, OrcMacro. South Africa demographic and health Survey 2003. Pretoria: NDOH.
13. Okafor JE, Chukwu RO, Ugochukwu OJ, et al. (2015) Contraceptive prevalence and preference in a cohort of south-east Nigerian women. *Patient Preference Adherence* 9: 707-704.
14. Mohammad MZ, Maimuna DG (2014) Contraceptive trend in a tertiary facility in north western Nigeria: A 10-year review. *Nigerian Journal of Basic and Clinical Sciences* 11(2): 99-103.
15. Awusi VO (2012) Contraceptive choice amongst women in Warri, Nigeria. *International Journal of Life Sciences & Pharma Research* 2(2): 35-39.
16. Ojiyi E, Dike EI (2009) The choice of contraceptive among women in Orlu, Nigeria. *Port Harcourt Medical Journal* 4(1): 63-67.
17. Ameh N, Sule ST (2007) Contraceptive choices among women in Zaria, Nigeria. *Nigerian Journal of Clinical Practices* 10(3): 205-207.
18. Muthir JT, Pam VC (2008) Overview of contraceptives in Jos university teaching hospital, North central Nigeria. *Nigerian Journal of Clinical Practice* 11(2): 139-143.
19. Oluwafemi DA, Babajide OD, Olugbenga KO, et al. (2020) Factors influencing the use of modern contraceptive in Nigeria: A multilevel logistic analysis using linked data from performance monitoring and accountability 2020. *BMC Women's Health* 20(1): 191.
20. Gubhaju B (2009) The influence of wives and husbands educational levels on contraceptive method choice in Nepal, 1996-2006. *International perspective on sexual and reproductive health: A Journal of Peer Review Research* 35(4): 176-185.
21. Olivera R, Cedimir S, Aleksandar V, et al. (2006) Influence of education level on family planning. *Facta Universitatis Series: Medicine and Biology* 13(1): 58-64.