

Research Article

# Modern Contraceptive Use at The Lagos University Teaching Hospital Family Planning Clinic

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## Abstract

**Background:** Today, the importance of modern methods of contraception cannot be overemphasized. It even becomes more imperative in developing countries where maternal death during pregnancy is alarmingly high. Contraceptives, when properly used, will prevent most unplanned and or unwanted pregnancies subsequently lowering maternal ill-health and pregnancy-related deaths. This will invariably reduce the risk of unsafe abortion, HIV transmission from mother to neonates, improves education and wellbeing of the girl child and enhances women empowerment. To examine the pattern of modern contraceptive use amongst women attending the family planning clinic of Lagos University Teaching Hospital family clinic.

**Methods:** This was a retrospective study carried out at the family planning clinic of the Lagos University Teaching Hospital between January 2021 and December 2022.

**Result:** The mean age the women was 37.6(±5.7) years. They were mostly educated women (78.7% having a form of tertiary education). 51.7% have at least 3 children alive and 58.3% have completed their family size. Implants was the most accepted contraceptive (66.5%), followed by the intra-uterine contraceptive device (24.3%), injectable contraceptives (7%), oral contraceptive pills (2%) and the barriers (0.2%) in that order with female sterilization not being offered at the clinic where the study was carried out.

**Conclusion:** In conclusion, contraceptive use was lowest amongst teenagers in this study. Subdermal implants being the commonest chosen method by the women followed by IUCD and injectables.

**Keywords:** Subdermal Contraceptive Implant, Iucd, Condoms, Parity and Lagos.

## 1. Introduction

Contraception is the prevention of pregnancy by methods other than abstinence from coitus [1]. Contraceptives are primarily meant for prevention of conception, which could be for spacing/delaying next pregnancy or for completed family size. Non-usage of contraceptive by reproductive age women, who engage in sexual activity, can result in unwanted/unplanned pregnancy with its attendant problems such as unsafe abortion, post-abortal sepsis and maternal death [2, 3]. It is estimated that there are 1.9 billion women between the ages of 15-49 years worldwide out of which 1.1 billion desire a method of family planning. Among these cohort of

women, 842 million are using a method of contraception and 80 million are using a traditional method or not using any method of contraception [3].

Along those lines, worldwide, female sterilization and male condoms are the commonest method of contraception in use today [3]. However, this pattern differs between and even within countries. In Asian (East and south-eastern) countries IUD and male condoms seem to be the most prevalent, Pills and condoms are mostly used in Europe and North America, female sterilization and pill in Latin America and Caribbean, pill in Oceania, female sterilization in central and southern

Asia, pill in west Asia and North Africa while the dominant method in sub-Saharan Africa is injectable [3].

In Nigeria, different centers have reported different methods as the dominant method of contraception [4-10]. This may reflect the multi-cultural and ethnic diversity of Nigerian women. For instance, a study in Abakaliki and Port Harcourt reported that most women used contraceptive method were natural method of family planning followed by condoms and subdermal implants, subdermal implants were the most used method in studies done at Adamawa and Lagos, injectables in studies from Taraba and Ilorin while IUCD and injectables are the dominant contraceptive in Kano [4-10]. This confirms that even within a country that differences still exist in the pattern and distribution of contraception. It is therefore imperative to revisit, our family planning clinic to determine what has changed in nearly a decade. This study therefore aims to examine the pattern of modern contraceptive use amongst women attending the family planning clinic of Lagos University Teaching Hospital family clinic.

## 2. Methodology

**Study design and setting:** This was a retrospective audit at the family planning clinic of the Lagos University Teaching hospital over a two-year period (January 1st, 2021, to December 31st, 2022).

### Sample size and sampling technique

A minimum sample size of 300 was calculated. This was based on 5% margin of error, 95% confidence interval, response distribution rate of 50% and 20,000,000 estimated population was derived using the Raosoft online sample calculator [11]. However, to improve the power of the study, more case notes were evaluated [11].

**Selection criteria:** It involved the review of 460 case note of women who had modern contraceptives. A pretested proforma was used to collect the sociodemographic and clinical variables of the women, and their contraceptive choices and reason for switching contraception from the case note.

**Inclusion:** All case notes of women who attended family planning clinic with complete data within the period of review was included.

**Exclusion criteria:** Case records who has missing data and women who attended only for contraceptive counselling but yet to decide on a particular method.

**Data Collection and Analysis:** The data was entered into and excel spreadsheet and later imported and analysed using SPSS version 22. Categorical variables were estimated as mean, and standard deviation, while Pearson Chi-square was used to test for significant. statistical test. A significant relationship between variable existing if the P-value is <0.05.

**Ethical Considerations:** Ethical approval was obtained from the Health Research Ethics Committee of LUTH. Ethical principles according to Helsinki's declaration were observed throughout the study duration.

## 3. Results

During the two-year period, 460 contraceptive users were studied. The mean age of the women was 37.6years  $\pm$ 5.7. The age range was 16 to 49years. Majority (60.0%) were between 30-39years of age, and a few were < 20years (1.3%). They were mostly (96.7%) married women, of the Christian religion (87.8%) and Yoruba (55.9%) by tribe. Majority (78.7%) had a tertiary education (Table1).

**Table 1: Socio-Demographic Characteristics of Women Using Modern Contraceptive.**

Age	FREQUENCY (%)
<20yrs	6(1.3)
20-29yrs	103(22.4)
30-39yrs	276(60.0)
40yrs and above	75(16.3)
Total	460(100)
Marital status	
Single	11(2.4)
Married	445(96.7)
Divorced/ Separated / Widowed	4(9.0)
Total	460
Religion	
Christianity	404(87.8)
Islam	51(11.1)
Traditional	4(9)
None	1(2)
Total	460

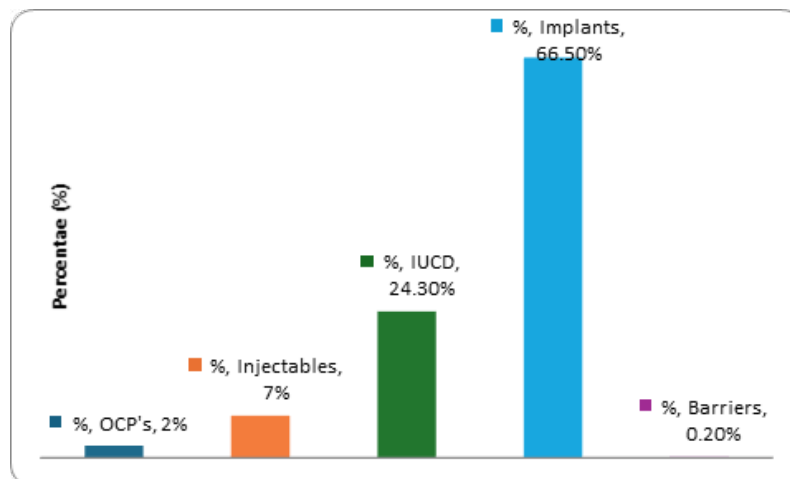
Ethnicity	
Hausa	12(2.6)
Yoruba	257(55.9)
Igbo	129(28.0)
Others	62(13.5)
Total	460
Education	
No formal education	1(0.2)
Primary	8(1.7)
Secondary	89(19.3)
Tertiary	362(78.7)
Total	460
Mean age+ SD = 37.6+5.7	

Most has had at least 3 pregnancies (66.3%), 53.7% had at least 3 deliveries 51.7%. have at least 3 children alive compared to 3.0% who have never been pregnant, 4.3% were nulliparous (Table 2).

**Table 2: Parity of The Women Seeking Contraception Luth**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	20	4.3	4.3	4.3
1	75	16.3	16.3	20.7
2	118	25.7	25.7	46.3
3 and above	247	53.7	53.7	100.0
Total	460	100.0	100.0	

Majority of the women (66.5%) had implants, 24.3% had intra-uterine contraceptive device (IUCD's), 7% had injectables, 2% had oral contraceptives pills (OCP's) and 0.2% opted for barriers (Figure 1).



**Figure 1: Type of contraceptive use**

OCP- oral contraceptive pills, IUCD- intrauterine contraceptive device  
Implant- subdermal implants, Barriers- male and female condoms.

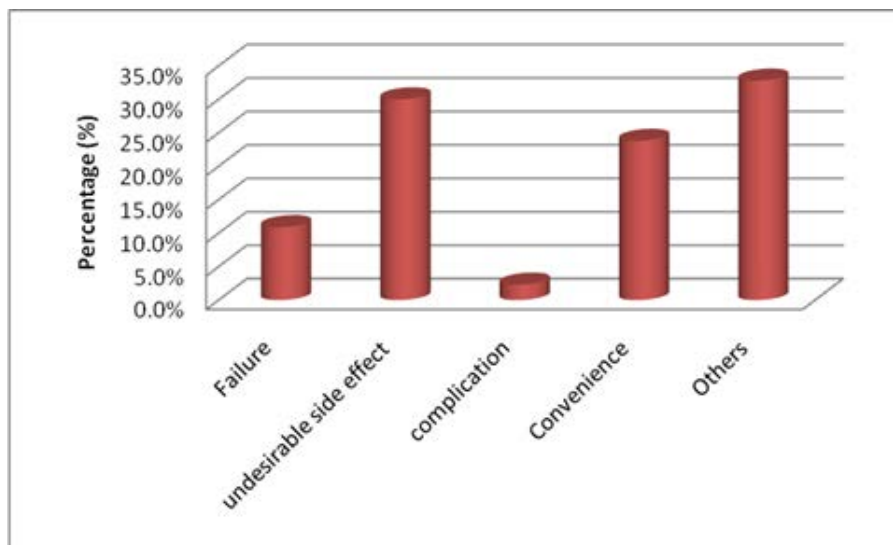
48.5% of the women had never used any contraceptive/

family planning method before now. 4.3% used natural methods of family planning, 8% used barriers before now, 6.7% used OCP's before present method. 18.9%, 12.2% and 1.3% used injectables, IUCD's and implants before present method respectively (Table 3).

**Table 3: Previous Contraceptive / Family Planning Method Before Present Method**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid natural method	20	4.3	4.3	4.3
Barriers	37	8.0	8.0	12.4
OCP's	31	6.7	6.7	19.1
Injectables	87	18.9	18.9	38.0
IUCD	56	12.2	12.2	50.2
Implants	6	1.3	1.3	51.5
None	223	48.5	48.5	100.0
Total	460	100.0	100.0	

The major reason for the discontinuation of a contraceptive method was undesirable side effects (30.1%), followed by convenience (23.8%), failure (10.9%), and then complications (2.3%) in that order (Figure 2).

**Figure 2: Reason for change of contraceptive method**

#### 4. Discussion

The findings of this study revealed that majority of modern contraceptive users were in the age group 30 to 39 years of age, while the least frequency was among teenagers. (in the group less than 20 years). The low usage amongst the adolescents calls for concern in a country with high prevalence of teenage pregnancy, where it has been estimated that 1 in 5 women aged 15-19 years has either terminated a pregnancy, given birth or expecting her first child [12-14]. The suggested reasons for increase rate of teenage pregnancy and low contraceptive usage among this age group may be due to peer pressure, poor awareness campaign, fear, ignorance about their fertility, inability to plan, fear of side effects, future fertility, lack of access to contraception and attitude of healthcare providers towards teenagers seeking information and Contraceptives [12-14].

In this study, the subdermal implants were the commonest method accepted followed by the IUD's, the injectables, OCP's and barrier methods. This is similar to the study of Omisakin et al in Lagos Southwest Nigeria, who also reported

that subdermal implants and IUD were the most sort after contraceptive in their study [15]. However, it differs from the findings of Ibrahim et al in Kano Northwest, Nigeria where injectable contraceptive is the predominant method of modern contraceptive among women accounting for over half of the method used among their participants [16]. This may further suggest that ethnicity and geographical location and level of education may impact contraceptive usage as this two centers are located among diverse populations.

The increased usage of provider dependent methods in our centre notwithstanding the associated side effects such as skin discolouration, pain and swelling associated with implant insertion may be because in our centre, it is being carried out by trained doctors/nurses with minimal or no side effect reported in the clinic thereby allaying fears associated with invasive contraceptive methods such as subdermal implants. The barrier method (male and female condoms) was the least used in this study probably because most of the women with previous failed modern contraceptive before attending the clinic had used the barrier method which could be purchased easily over the counter, as its use is not

provider dependent and has a high failure rate. Therefore, they may have opted out for barrier method even before presenting to the clinic.

This review also reveals that almost half of the women were not using any contraceptive method prior to presentation to our family planning clinic. This reflects low contraceptive prevalence rate among Nigerians which has been estimated to be about 4-12% [15]. It is therefore very important to create more awareness in communities and women groups in the society to enhance contraceptive uptake.

The common reasons why women change from one method of contraception to another in our study is because of undesirable side effect, convenience of use of a particular method (does not interfere with menstrual period, coitus etc) and other minor reasons such as health risks, permanent contraception on the male partner etc. This is somewhat like the finding of Johnson et al where the need to become pregnant again, undesirable side effects, medical conditions associated with a particular method, and vasectomy in the male partner are outlined as the main reasons for discontinuing a contraceptive method [17]. It also mirrors the report of Simmons et al, who also agrees that most women switch or discontinue contraceptive option when there is "reduced need" (desire for pregnancy), and side effects [18]. They went further to affirm that more than three quarters of women will switch or stop their contraceptive method within one year of use, and this is more prevalent among women that uses barrier method of contraception (female condom).

Our strength lies that this study was done in a public tertiary teaching hospital which provides a large cohort of women with varied ethnicity and educational background. However, the limitation of this study is the fact that it is a hospital-based study and may not have considered over the counter condom purchase in most pharmacies around Lagos. Also, the location of the family planning clinic in the busy antenatal clinic building may have discouraged access for many adolescents.

## 5. Conclusion

Contraceptive use in was lowest amongst teenagers in this study. Subdermal implants being the commonest chosen method by the women followed by IUCD and injectables. Therefore, more awareness is required to increase the utilization of modern methods of contraception in our centre.

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