

Evaluation Of The Uptake Of Implanon In A Tertiary Health Facility In Uyo, South-South Nigeria

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Abstract

Background: Implanon is a reversible hormonal contraceptive that contains a single rod of 68mg of etonogestrel and it is safe, highly effective and convenient to insert. Evaluation of the uptake of implanon is essential in the prevention of unwanted pregnancies.

Objectives: To evaluate the uptake of implanon in a Tertiary Health Facility in Uyo, South-South Nigeria.

Study Design: A retrospective study of clients who accepted to use Implanon contraceptive implant for birth spacing at the Family Planning Clinic of the University of Uyo Teaching hospital over a period of five years.

Methodology: A total of 7240 clients used different forms of contraceptive during the period of review including implanon while 599 clients accepted implanon for birth spacing over a period of five years (1st January, 2017 - 31st December, 2021). The case files of the clients were retrieved through their registration numbers and relevant data extracted. The information obtained included the socio-demographic characteristics and medical history of the clients, sources of referral, type of implant inserted, previous history of contraceptive use, reasons for discontinuation of the method, and side effects experienced by the clients. The data collected were analysed using statistical package for social sciences (SPSS) version 26.0 and presented in tables with p-value <0.05 termed significant.

Results: A total of 7240 clients used different contraceptions out of these 599 accepted Implanon giving an uptake rate of 8.27%. Most clients were at the age range of 31-35year, most are multipara, para 3 being the highest 49.75%, 96% of clients were married. Most clients 42% heard about implanon from health personnel. Thirty-eight clients reported different side effects following insertion. The discontinuation rate was 7.68%.

Conclusion: The use of implanon contraceptive is gaining wider acceptance among women in our environment and the increase uptake is credited to its safety, affordability, effectiveness and minimal tolerable side effects.

Recommendation: Women of reproductive age group should be encouraged to make use of implanon contraceptive implant in order to reduce the incidence of unwanted pregnancies.

Keywords: Implanon, Evaluation, Uptake, Review.

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I. Introduction

Contraception plays a critical role in controlling unwanted pregnancies, fertility rate, population growth rate and maternal mortality rate which have been shown to be associated with one another.¹ Nigeria has a low contraceptive prevalence rate of 15% and a high unmet need for contraception of 16%.² There is also a high total fertility rate of 5.5% and a high population growth rate of 2.6% in our country.¹ Nigeria is rated the fourth highest maternal mortality country in the world, with an estimated 814 deaths per 100,000 live births.² Long-acting contraceptives (LACs) have made it possible to postpone child bearing, decide the number of children one desires and adequately space them for medical, social and economic reasons.³ The role of this form of contraceptives can't be over emphasized as it prevents too early, too soon and too many pregnancies that can spell doom to maternal health and life.⁴ Thus, LACs play a significant role in reducing maternal morbidity and

mortality.⁵ Most women tend to try different contraceptive methods during their reproductive life⁶. This trend may be influenced by the woman's age, marital status, health status, and lifestyle.⁶

Implants seem to be favoured and accepted by most women in both developed and developing countries mainly because of their dissatisfaction with other methods of contraception, and a large proportion of implant users find it convenient and highly effective in the prevention of unwanted pregnancies.¹

Implanon contraceptive implant is one of the most effective and affordable long-acting reversible contraceptives and it is said to be one of the most effective family planning methods available and well-accepted worldwide⁷. It was introduced into Nigeria in 2006 by the Federal Ministry of Health.^{7,8,9} It is a long term hormonal contraceptive implant and a better option for women in sub-Saharan Africa due to its effectiveness and convenience.¹⁰

It contains 68 micro-grams of Etonogestrel, which has a single silastic capsule of 40 mm long and 2 mm thick licensed for 3 years use.⁷⁻¹¹ It is sterilized, sealed with adhesive, and usually inserted in a superficial plane beneath the skin of the upper arm under aseptic conditions and can be effective for three years.¹²

Implanon has the advantage of being less conspicuous and easier to insert and remove¹¹. Some women also like the fact that pelvic examination and laboratory investigations are not required prior to implanon insertion¹¹. Furthermore, implanon are popular among women in our country, it does not interfere with sexual intercourse, and return to fertility upon removal is not delayed or negatively affected.¹²

However, some disadvantages include unscheduled bleeding, non protective of sexually transmitted diseases and provider dependency a trained practitioner is needed in a reliably aseptic environment to perform the minor procedure necessary to either insert or remove the device.¹² Specific counseling should also be made available to potential recipients by trained counselor in contraceptive services for the clients to clearly understand implanon insertion and removal procedures; the risks and benefits of its use, as well as its associated side effects.¹²

Studies on the review of the uptake of implanon are scarce in Nigeria especially in the South-South part of the country and this represents a gap in knowledge which this study will provide answer to. The aim of this study is to evaluate the uptake of implanon in a Tertiary Health Facility in Uyo, South-South Nigeria.

II. Materials And Method

The study was a retrospective study of clients who accepted to use Implanon contraceptive implant for birth spacing at the Family Planning Clinic of the University of Uyo Teaching hospital over a period of five years (1st January, 2017 - 31st December, 2021). The case files of the clients were retrieved through their registration numbers and relevant data extracted. The information obtained included the socio-demographic characteristics and medical history of the clients, sources of referral, type of implant inserted, previous history of contraceptive use, reasons for discontinuation of the method, and side effects experienced by the clients. The data collected were analysed using statistical package for social sciences (SPSS) version 26.0 and presented in tables with p-value <0.05 termed significant.

III. Results

The study was conducted over a period of 5 years (1st January, 2017 - 31st December, 2021). A total of 7240 clients used different forms of contraceptive during the period of review including implanon while 599 clients accepted implanon giving an uptake rate of 8.27%. However, 46 clients discontinued with implanon giving a discontinuation rate of 7.68%.

Table 1 Showed the demographic characteristics of acceptors of implanon. The majority 293 (48.92%) of the acceptors were 31-35 years of age. Three (0.50%) were less than 20 years. Two hundred and ninety eight (49.75%) were para 3 which was the highest, and 147(24.55%) were para 4 while 1(0.17) were para 7 which was the least. Five hundred and seventy six (96%) were married. It also revealed that most of the acceptors 260 (43%) had secondary level of education, 192(32%) had tertiary level of education, while 147(25%) had primary level of education. The majority 593 (99%) were Christians and 6 (1%) were Muslims. One hundred and seventy one clients (28.5%) were unemployed, 98(16.4%) were unskilled workers, 248 (41.4%) were semi-skilled workers, while 2 (0.3%) were professionals.

Table 2 Showed a general overview of the acceptors of Implanon. The first part revealed that the clients were all on different forms of contraceptives before choosing to accept Implanon. Thirteen clients (15%) were on IUCD while 58 (10%) were on traditional forms of contraception. Also 33 (5%) clients reported that friends/relatives were their source of information about implanon, 57(10%) said their source was the radio, television or internet. One hundred and twenty four (21%) stated outreach as their source of information, while 132(22%) gave the printing media as their source of information, 253(42%) gave health personnel as their source of information. Additionally, 5 (13%) complained of

spotting and prolonged menses after insertion; 5(13%) complained of amenorrhoea, 14(37%) complained of weight gain while 12(32%) reported headache as a complication. Reasons for discontinuation; 12(26.1%) desired to conceive, 6 (13%) had elevated blood pressure, there was loss of libido in 3(6.5%), spouse request in 8(17.4%), irregular bleeding in 9(19.6%), loss of spouse in 5(10.9%) and menopause in 3 (6.5%) clients.

Table 3 and 4 showed that a total of 7240 clients used different forms of contraceptive during the period of review including Implanon while 599 clients accepted implanon giving an uptake rate of 8.27%. However, 46 clients discontinued with implanon giving a discontinuation rate of 7.68%.

Table 1: Socio-Demographics Characteristics Of Acceptors Of Implanon

Ages range	Frequency (n)	Percentage %
≤15	0	0
16-20	3	0.50
21-25	41	6.84
26-30	105	17.53
31-35	293	48.92
36-40	134	22.37
44-45	23	3.84
Parity	Total	Percentage
0	3	0.50
1	24	4.00
2	109	18.20
3	298	49.75
4	147	24.55
5	15	2.50
6	2	0.33
7	1	0.17
MARITAL STATUS		
Types	Frequency	Percentage
Married	576	96
Unmarried/single	23	4
EDUCATION		
Education level	Frequency	Percentage
Primary	147	25
Secondary	260	43
Tertiary	192	32
RELIGION		
Types	Frequency	Percentage
Christianity	593	99
Islam	6	1
OCCUPATION		
Types	Frequency	Percentage
Unemployed	171	28.5
Unskilled workers	98	16.4
Semi-skilled workers	248	41.4
Skilled workers	80	13.4
Professionals	2	0.3

Table 2: General Overview Of The Acceptors Of Implanon

TYPES OF CONTRACEPTIVES IN USE BEFORE IMPLANON		
Types	Frequency	Percentage (%)
Injectables	99	16
Oral pills	76	13
IUCD	90	15
Jadelle	158	26
Barrier	118	20
Traditional method	58	10
SOURCES OF INFORMATION		
Medium	Frequency	Percentage
Radio /TV/Internet	57	10
Friends/relatives	33	5
Health Personnel	253	42
Print media	132	22
Clinical outreach	124	21

Complications	Frequency	Percentage
Spotting/prolonged menses	5	13
Amenorrhoea	5	13
Vomiting	2	5
Weight gain	14	37
Headache	12	32
REASONS FOR CONTINUATION		
Reasons	Frequency	Percentage
Desire to conceive	12	26.1
Elevated blood pressure	3	6.5
Expired	3	6.5
Loss of libido	3	6.5
Spouse request	8	17.4
Irregular bleeding	9	19.6
Loss of spouse	5	10.9
Menopause	3	6.5

TABLE 3: IMPLANON UPTAKE

Parameters	Frequency (n)	Percentages %
Implanon	599	8.27
Other contraceptives	6641	91.73
Total contraceptive uptake	7240	100

TABLE 4: IMPLANON DISCONTINUATION RATE

Parameters	Frequency	Percentages
Implanon discontinuation rate	46	7.68
Current use	553	92.32
Total Implanon uptake	599	100

IV. Discussion

The prevalence of implanon contraceptive implants uptake in this study was 8.27%. This was higher than the 4.1% and 1.1 % derived from studies conducted in port Harcourt and Zaria respectively.^{8,12} However it was lower than the 12.4% from Ogbomosho.¹¹ The higher usage noted in this study might be as a result of the awareness campaign on contraception by the Akwa Ibom State Ministry of Health, Government and other Non-Governmental Organisations within the State.

The socio-demographic characteristics of acceptors of implanon showed that most of the acceptors were within the age range of 31-35 years which was similar to results from other related studies.^{8,12-15} Women of reproductive age group are prone to experiment various contraceptive methods in life.^{6,16} This pattern may be influenced by the woman's age, marital status, health status, and lifestyle.⁶ Majority of the implanon acceptors were multiparous which was in agreement with earlier studies on contraceptives.^{3,10,11,13} It was observed that that the highest level of education of most of those who accepted implanon was secondary school which was similar to the finding in a Nigerian research.¹² However, another study concluded that majority of women who use implanon as their contraceptive implant method were those with tertiary level of education.⁹ Approximately all the acceptors of implanon in the study were Christians as opposed to a study in the Northern part of the country where the vast majority of women on implanon were Muslim.¹⁴ This could be attributed to the religious dominance at the study area. This study observed that acceptance of implanon was more among married women and it was similar to the report by a study carried out in Ilorin, Nigeria.⁹ The percentage of clients in this study that were semi-skilled was absolutely lower than that recorded in a related study in Cross Rivers State Nigeria.¹⁷

The number of clients who changed from using other contraceptive methods to implanon in this study was higher than those who did the same in a similar study.⁸ The reason for the change to implanon was likely because their source of information about implanon was from health personnel which was so detailed as opposed to the information obtained from the media. This was in tandem with a study in Port Harcourt, Nigeria that reported that most of their clients heard of implanon from health personnel while the least number of clients heard of implanon from relatives.⁸

The commonest complications following insertion of implanon was weight gain, headache, amenorrhoea, spotting from the vagina and prolonged bleeding. These complications were similar to the findings in some studies.^{5,6} Most clients in this study discontinued implanon on account of irregular bleeding and it was similar to the observation in a study conducted in Calabar, Nigeria.¹ The discontinuation rate was 7.68% which was lower than 19% from a study in Zaria.¹² No client in this study got pregnant while on implanon contraceptive implant. This was comparable to other related studies.^{8,9,11} The reason for low discontinuation rate might be a reflection of the acceptability of the method by women in our environment.

V. Conclusion

The use of implanon contraceptive is gaining wider acceptance among women in our environment and the increase uptake is credited to its safety, affordability, effectiveness and minimal tolerable side effects.

VI. Recommendation

Women of reproductive age group should be encouraged to make use of implanon contraceptive implant in order to reduce the incidence of unwanted pregnancies.

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