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Original Research Article

Acceptability of contraceptive implants at the maternity ward of the Matam Communal Medical Center

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ABSTRACT

Background: World Health Organization (WHO), defines contraception as "the use of agents, devices, methods or procedures to decrease the likelihood of conception or avoid it". In Africa, only 24% of women of childbearing age have access to a modern contraceptive method. The objective of the study was to determine the frequency of use of the contraceptive implant, to describe the socio-demographic characteristics of the users, to identify the reasons for the choice of the method and to assess the degree of satisfaction of the clients.

Methods: The study was conducted at the Matam Communal Medical Center on level 2 of the health pyramid in Guinea. This was a 12-month cross-sectional, descriptive and analytical study (June 2017 to May 2018), including all women admitted for desire for contraception and who agreed to choose the implant as a contraceptive method.

Results: The study involved 512 clients. The proportion of female users was 26.21%. The average age was 27.8 years, the main users were women of liberal trade, married, multiparous. The main reasons for choice cited by clients were the effectiveness and long duration of action of the method, i.e. 35.2% and 30.9% respectively. The majority of providers of the method were represented by midwives (73.3%) and the degree of client satisfaction with the method was 97%.

Conclusions: The implant is a long-acting method of contraction. It is frequently used at the Communal Medical Center of Matam. Its efficient use would involve effective counselling.

Keywords: Implant, Contraception, Effectiveness, Satisfaction

INTRODUCTION

Contraceptive implants are one of the most effective methods of family planning available. Implants are small, thin, flexible sticks that are inserted just below the skin of the woman's arm. According to the WHO, the effective use of contraceptives would prevent an estimated 2.7 million infant deaths and the loss of 60 million healthy lives while promoting family planning could reduce poverty, hunger

and prevent 32% of maternal deaths nearly 10% of child deaths.¹ Scientific evidence of the acceptability of long-acting reversible contraception and successful use is lacking in a population that generally opts for short-acting methods.² In order to promote women's reproductive health and prevent the risk of unwanted pregnancies, the use of long-acting reversible contraceptive methods is paramount and remains an important indicator that reflects access to reproductive health services.^{3,4} Improving knowledge of and access to these methods is a public

health imperative and a social justice imperative.⁵ Unfortunately, despite these benefits, implants are underused; less than 0.7% in the United States.⁶ In sub-Saharan Africa, where the burden of maternal mortality is the highest, this prevalence is still very low, 0.4% in Nigeria.⁷ In Guinea, contraceptive prevalence has evolved very slowly, during the IUD and subcutaneous implants has remained very low (1%)⁸.

METHODS

The study was carried out at the Gynecology-Obstetrics Department of the Matam Communal Medical Center, which is a level II hospital in the country's health pyramid. This was a cross-sectional, descriptive and analytical study of a period of 6 months, from June to May, 2018. The study included all women admitted for desire for family planning and who agreed to choose the implant for FP method and who received the method. Those who did not agree to participate or who did not choose the method were excluded. The sample size was calculated using the Lorenz formula: $N = Za^2/PQ$ (where: N = acceptable sample size in each group [calculated value = 95.04]; a = statistical significance level D2; Za = normal distribution value = 1.96 for $\alpha = 0.05$; P = prevalence of female users = 24.3%; Q = 1 - P; D = level of accuracy = 10%). The minimum acceptable sample size was 240 patients. The variables studied were epidemiological and clinical. The epidemiological and clinical variables are: age, occupation, level of education, parity, reasons for choice, satisfaction, side effects, reasons for withdrawing from the method. The data was entered and analyzed using epi info software version 6. The statistical test used is Chi2, with a level significance set at $p < 0.05$.

Consent

Before carrying out the study, we obtained the agreement of the administrative authorities of the service, the clients gave their consent to participate in the study, confidentiality was respected throughout the data collection procedure and the results were used for strictly scientific purposes.

RESULTS

Frequency of use of the implant

During the study period, we recorded 1953 users of family planning methods of all methods combined, among them 512 had chosen the implant as a method of birth spacing or a proportion of 26.21%.

The average age of female clients was 27.8 years with the extremes of 18 to 39 years. These clients were mainly aged 20-24 years, i.e. a proportion of 28.3%, exercising a liberal profession and pupils and/or students, i.e. 42% and 25.2% respectively. Almost half (49.8%) of these clients had secondary education and 38% had primary education.

Table 1: Socio-demographic characteristics of clients.

	Actual	%
Age		
15 – 19 years	77	15.0
20 – 24 years	145	28.3
25 – 29 years	110	21.7
30 – 34 years	142	27.5
35 years and over	38	7.5
Profession		
Housewives	104	20.3
Liberal functions	215	42.0
Pupils/students	129	25.2
Employees	63	12.5
Level of education		
uneducated	0	0.0
Primary	195	38.0
Secondary	255	49.8
Upper	62	12.2
Marital status		
Married	215	42.0
Single	237	46.3
Divorced	60	11.7
Total	512	100

Table 2: Obstetrics characteristics.

	Efficacy	%
Parity		
Nulliparous	94	18.4
Primipare	125	24.4
Paucipare	163	31.9
Multiparous	130	25.3
Total	512	100

Table 3: Distribution of clients according to the reasons for the choice of implant.

Reason for choice	Efficacy	%
Effectiveness of the method	389	76.1
Long duration of action	334	65.2
Discretion advice from a friend	164	32.1
	275	53.7
Advice from a neighbour	110	21.4
Total	512	100

Regarding marital status, the results showed that singles were the largest users of the implant in our sample at 46.3% followed by married women with 42.0%. Paucipares and primiparous women were the most numerous among clients with proportions of 31.9% (163) and 24.41% (125) respectively.

The effectiveness of the method and the long duration of action were the main reasons for choosing the implant in our study: 76.1% and 65.2% respectively.

Table 4: Medical providers of insertion of the method and the degree of satisfaction of the clients.

	Efficacy	%
Method insertion providers		
Doctor	77	25.0
Midwife	145	73.4
Nurse	110	1.6
Level of client satisfaction		
Satisfied	498	97.2
Not satisfied	14	2.8
Total	512	100

Table 5: Effects.

	Efficacy	%
Effects		
Spotting	282	55.0
Weight gain	144	28.2
Amenorrhea	81	15.9
Pain at the insertion site	5	0.9
Total	512	100

Table 6: Distribution of clients according to withdrawal and reasons for withdrawal from the method.

	Efficacy	%
Removing the method		
Yes	42	8.2
No	470	91.8
Reasons for removing the method		
Desire for pregnancy	30	71.4
Choosing another method	6	13.2
Effects	5	12.1
Method failed	1	3.3

Nearly 3/4 (73.4%) of implants were inserted by midwives and only 1/4 (25%) by doctors. The results showed that almost all (97.2%) of the clients were satisfied with the method compared to 2.8% of the unsatisfied clients. Spotting and weight gain were the top side effects found during our research at 55% and 28.2% respectively.

The continuity rate of the method was very high at almost 92%. The main reason for withdrawal was due to desire for a new pregnancy (71.4% of cases).

DISCUSSION

Frequency of use of the implant

Our proportion of female users is 26.21%. The frequency of contraceptive implant use nationwide in Guinea is 2% among women in union.⁹ This high rate of the method in

our study could be justified by the following elements: the first is a hospital frequency, and the second is the result of the success of the various awareness campaigns as well as the quality of the delivery offered by the health personnel of the service.

Socio-demographic characteristics of clients

Age

The average age of our users was 27.8 years, and clients aged 20-24 were the most numerous among clients with a proportion of 28.3%, followed by that of 30-34 years or 27.5% (Table 1). In research conducted in South Africa, Beesham I and Coll. report that the average age of their users was 28 years with extremes of 19 and 44 years.¹⁰

Occupation

Our survey shows that female clients in the liberal profession and pupils were the most numerous in our sample, i.e. 42% and 25.2% respectively (Table 1). This could be explained by the proximity between the CMC and the large market of Madina, in addition these women would like to space the births in order to fruit their activity or continue their study. In a study carried out in Mbuji-Mayi (DRC), Mukengeshayi et al found that 41.4% of their users were merchants; and 32.1% were housewives.¹¹ This result is different from that of Koné B and al. who reported a predominance of housewives with a proportion of 65%.¹² Our result could be justified by the fact that these women with a liberal profession are more and more numerous in the general population, but also these women do not have a wide knowledge of their ovulation period so the way for them to avoid unwanted pregnancies is contraception.

Level of education

Almost half (49.8%) of our clients had secondary education and 38% had primary education (Table 1). This predominance of the secondary level of education was found by Mukengeshayi et al or more than half of their clients (55.4%) had a high school education; 32.1% had a primary level.¹¹ In contrast, in Zambia Mutombo et al report that more than half of their clients (54.7%) had a primary level of education and 36% had a secondary level.¹³ Our result could be justified by the fact that this level contains many more adolescent girls, and adults who have stopped studying most often for reasons of early marriage, or lack of support.

Marital status

The results showed that single women were the largest users of the implant in our sample at 46.3% followed by married women with 42.0% (Table 1). This result could be justified by the fact that our society stigmatizes single mothers and that any pregnancy out of wedlock and considered contrary to the values of society, and leads to

a kind of contempt for the mother. The same finding was made in South Africa where Beesham et al report that 69.2% of the clients in their sample were single.¹⁰ On the other hand, Keita et al find that the main users of modern methods of contraception were married women with a proportion of 90.71%.¹⁴

Obstetric characteristics

In our study, we found that most clients were either paucipare or primiparous with proportions of 31.9% (163) and 24.41% (125) respectively (Table 2). This result could be justified on the one hand by the manifest desire of these women to space births, on the other hand by the success of the various awareness-raising campaigns on long-acting contraceptive methods not only in our service but also throughout the country. This result is similar to that of Mutombo et al who reported in their study a high proportion (37%) of women who had three or four children.¹⁵ Unlike that of Lorenzo et al who reported in their study that 159 (42.7%) were nulliparous.¹⁶

Reasons for the choice of implant

The main reasons for choosing the implant were the effectiveness of the method and the long duration of action respectively 76.1% and 65.2% (Table 3). Identical reasons for choice, however, at different proportions, have been reported in South Africa where, 64.2% of women chose to use NXT Implant because it is a long-acting method, and half 50% because they did not want to return frequently to the clinic for follow-up.¹⁰

This enthusiasm for the use of the method could be due to the impact of the implementation of awareness campaigns carried out among populations on the benefits of long-acting contraceptive methods.

Medical providers of insertion of the method and the degree of satisfaction of the clients

Medical provider who inserted the implant

Our results show that nearly 3/4 (73.4%) of implants were inserted by midwives and 1/4 by doctors (Table 4). This could be explained by the fact that midwives often do counselling and at the same time have the skills for integration, not to mention gender issues that put clients in confidence between themselves and midwives.

Client satisfaction rate

Almost all (97.2%) of clients were satisfied with the method compared to 2.8% of unsatisfied clients (Table 4). This result could be justified by the effectiveness and discretion of the contraceptive method. This result could be justified by the effectiveness and discretion of the contraceptive method. Sergeant F and Coll. reported in their study that 81% of female users were generally satisfied with contraceptive implants.¹⁷

Side effects

Spotting and weight gain were the main side effects observed in our research, respectively 55% and 28.2% (Table 5). In contrast, in a study conducted in France, Martin et al reported that the main side effects were amenorrhoea (50%), weight gain (30%) and mood disorders (19%).¹⁸

Reasons for removal of the implant

The rate of continuity of the method was very high at almost 92%. It was found that very few of our clients withdrew their implants, mainly because they wanted to become pregnant again (71.4% of cases) or chose another method (13.2% of cases) (Table 6). A study conducted in Madagascar by Ralisat et al showed that the main reasons for clients to remove the implant were menstrual disorders, personal convenience for pregnancy, weight gain, and in rare cases method failure.¹⁹

Limitation of the study

This is a hospital-based study that cannot be extended to the general population and the resulting practical conclusions are only applicable to the target population defined above.

CONCLUSION

In short, the contraceptive implant is one of the reversible contraceptive methods most used by women. Clients were generally multiparous. The effectiveness and duration of action of the method were the reasons for choice most mentioned by the clients. Almost all clients were satisfied with the use of the method as a means of birth spacing. The desire for pregnancy and the client's willingness to change methods were the main reasons for withdrawing from the method. However, a good information and awareness campaign on side effects would be necessary in order to reduce the number of implant removals. Since the small size of our sample does not allow conclusions to be drawn at the national level, multicentre studies are needed to define the contours of this question and identify the determinants of the contraceptive implant in Guinea.

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