

CASE REPORTS: FOUR (4) CLIENTS USING NORPLANT CONTRACEPTIVE IMPLANTS BEYOND 8 YEARS IN JOS, NIGERIA.

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INTRODUCTION

Norplant was registered for use in Nigeria with National Agency for Food and Drug Administration and Control (NAFDAC), in 1998, with the registration number of 04-110¹. A local clinical trial was conducted on the product before its registration by NAFDAC; and to date, no adverse reports have been received following its use.

Women of any age and parity, with or without children can use the implants for contraception. A set of Norplant capsules can prevent pregnancy for at least 5 years²⁻⁵. It may be effective for a longer period of time. Some workers have reported the successful 7-year use and effectiveness⁶⁻⁸.

Norplant implants become less effective after 5 years, and the risk of pregnancy including ectopic pregnancy may rise unless the woman uses another effective method of contraception. Norplant implants themselves are not harmful or dangerous if left in situ for more than 5 years⁷. Leaving them however is not recommended.

I report four clients who used the Norplant capsules for the duration of 8-10 years, on their own volition, without becoming pregnant, and without any adverse effects.

CASE REPORTS

Client 1

Mrs. E.I. was a 48-year-old housewife, Christian by religion from Saminaka in Kaduna State of Nigeria, a town about 60 kilometers from Jos.

Date of insertion: 7th October 1993 Date of removal: 22nd July 2003.

Weight at insertion: 85.5kg Weight at removal: 102.0kg.

Blood Pressure: 110/80mmHg Blood Pressure: 120/80mmHg

Age at insertion 38 years Age at removal 48 years

Duration of Use: 9 years, 10 months

She was para 6 + 0, with 4 Children alive. She was non-literate, having had no formal education. Her husband was still living, and they had no desire for more children. She had used the Intrauterine Contraceptive Device (IUD) for two years prior to hearing about Norplant implants from hospital staff at the time of delivery in her last confinement.

She received counseling and had the Norplant capsules inserted 2 weeks after spontaneous vaginal delivery, on 7th of October 2003.

She had no serious illness or problems during the almost 10-year period of use of the Norplant capsules. She did not smoke cigarettes or take alcohol.

She admitted to having been told that the capsules were to be used for a maximum period of 5 years. She decided on her own accord to keep the capsules, as she had no adverse reactions, complications, failure or problems with the method. She did not return to the clinic at the expiration of duration of use of the implants because she did not want them removed.

Her Blood pressure remained normal at 120/80mmHg throughout the duration of use. She however gained weight from 85.5 kg at insertion to 102.0 kg at removal of the capsules.

Her menstrual periods remained regular and of moderate flow for the duration of use. Her last menstrual period was on 8. 7. 2003. The reason for removal was for a fever that she attributed to the capsules, and decided to have them removed to cure her febrile illness. She had the capsules removed with no difficulty or complication on the 22nd July 2003. She was further counseled for contraception, as she wanted no more children. She is yet to come back for another method of contraception.

Client 2:

Mrs. C.G. was a 45-year-old Berom housewife, Christian from Yan-Trailer area in Jos.

Date of insertion: 12th October 1993 Date of removal: 22nd July 2003.

Weight at insertion: 50kg Weight at removal: 62 kg.

Blood Pressure (insertion): 110/70mmHg Blood Pressure (removal): 120/80mmHg

Age at insertion 35 years Age at removal 45 years

Duration of Use: 9 years, 10 months

She was para 5 + 0 non-literate woman with all the 5 children alive. She did not want any more children. She had heard of the Norplant implants from hospital staff of the Jos University Teaching Hospital. She did not smoke cigarettes or drink alcohol, and her husband was alive and well. She had the Norplant capsules inserted on 12th October 1993. She had an initial secondary amenorrhoea with the method for

the first 5 years, after which the menstruation resumed. The flow at this time was now scanty and lasted between 5 and 7 days. Her Blood Pressure remained normal (between 110/70 and 120/80mmHg) throughout the duration of use of the Norplant. She had occasional feeling of heaviness of the left hand, which was not disabling. She was aware that the capsules were effective for up to 5 years but decided to use them beyond the period as she had no problems or failure with the method. She decided to come for removal for fear of what might happen to her if she kept them for a longer period of time. She therefore wanted to switch over to a permanent form of contraception, bilateral tubal ligation.

She had the capsules removed with no complications, and was further counseled for contraception. She made an informed choice to have female sterilization but is yet to come for the method.

She was Para 7 + 0, with 7 children alive. She had had no formal education and did not want any more children. This was the second time she was having the Norplant capsules inserted. The first set of capsules was inserted on the 7th June 1989 and she had them removed on the 24th June 1994, (5 years). She had the second set inserted on the same day that the expired Norplant capsules were removed. Her menstrual periods remained regular but scanty. She did not smoke cigarettes or drink alcohol. Her husband was alive and well. Her Blood Pressure remained normal (between 110/80 and 120/80mmHg) throughout the duration of use of the Norplant implants.

She was aware that the capsules were effective for up to 5 years but decided to keep them beyond the period as she had no failure or any problems with the method.

She had the capsules removed with no complications. She was further counseled for contraception. She is yet to choose another method of contraception.

Client 3:

Mrs. E.I. was a 47-year-old woman, housewife, Christian by religion and residing in Jos.

Date of insertion:	24 th June 1994	Date of removal:	3 rd December 2002.
Weight at insertion:	81kg	Weight at removal:	86 kg.
Blood Pressure (insertion):	120/80mmHg	BP at removal:	110/80mmHg
Age at insertion	37 years	Age at removal	45.5 years

Duration of Use: 8 years, 6 months

Client 4:

Mrs. L.L. was a 41-year-old cook and Christian by religion from Jos environs.

Date of insertion:	1 st July 1994	Date of removal:	25 th June 2003.
Weight at insertion:	66 kg	Weight at removal:	80 kg.
Blood Pressure (insertion):	110/70mmHg	BP at removal:	130/90mmHg
Age at insertion:	32 years	Age at removal:	41 years

Duration of Use: 9 years.

She was Para 6 + 0 with 5 children alive. She had primary school education. She had had the desired family size and did not want any more children. She had used Depot-medroxy-progesterone acetate (Depo-provera) as a form of contraception prior to hearing about Norplant implants from a friend who was using the method. She did not smoke cigarettes or drink alcohol. Her husband was alive and well.

She had the Norplant capsules inserted on 1st July 1994. Her menstrual cycle remained normal but the flow was now much reduced in amount, lasting 2-3 days. Her Blood Pressure rose from 110/70 to 130/90 during the time she was using the Norplant implants. She admitted that the capsules were effective for up to 5 years but decided to keep them beyond the period, as she had no problems with the method.

She decided to come for removal because she had

reached the age of about 40 years and had no fear of pregnancy anymore. She had the capsules removed with no complications.

DISCUSSION

The literature is full of information about Norplant, that is, research work on its development and incorporation, content, effectiveness and side effects^{2,3}. Some authors have reported prolonged use and effectiveness of the implants^{4,6}. The reasons for prolonged use were found to be similar, that is, the belief that the implants still provided them with contraceptive coverage beyond the stipulated 5 years. The 4 women presented here used the Norplant contraceptive implants for between 8 and 10 years before presenting themselves for removal. The women prolonged the use of the implants on their own

Accord, refusing to come forward for removal. This, therefore, does not constitute an ethical issue indicting the health care providers that offered the method to the clients. They clients simply did not show up for review or removal, despite that fact that they all knew when it was time for removal. The facility provides implant insertion and removal 5 days a week, and on request. They simply did not show up for review or removal when they knew that it was time for removal.

The women were all in their reproductive years (30-38 years) when they had this contraceptive method. Their husbands were all alive and well, and they admitted to being sexually active. The women believed that the contraceptives were still effective and so kept them from being removed. They were all non-literate and grand-multipara. The women gained weight of between 5.0-16.5 kg with an average of 11.9 kg during the time of Norplant use. Another study also demonstrated a mean weight increase in prolonged use of the implants⁶. This cannot be said conclusively that the weight gain was solely due to the method. This might just have been a coincidental finding. The very small number of the clients makes its verification or significance inconclusive.

Despite the inadvertent prolonged use of the implants, none of them became pregnant despite the fact that they were still sexually active. This finding is similar to the finding of other studies^{4,6}. The women did not experience any adverse effects during this long period of use.

Norplant provided prolonged contraceptive protection in these women for a longer period than the specified 5 years in the 4 cases. Extension of its use may therefore be considered when clients wish to keep them for a longer period, particularly when they are above the age of 40 years, whose fertility is already on the decline, and are not yet ready for a permanent method of contraception. Conclusions may however not be drawn from these cases as they are very few. More studies will need to be conducted to draw this conclusion. Extension of its use may therefore be considered only when clients have not yet made up their minds for a permanent method of contraception, particularly those near the age of menopause, where their fertility is already on the decline.

REFERENCES

1. **Eniojukan JF.** Drug administration/registration: Norplant/Jadelle Update. Paper presented at a one-day meeting on Technology Update and Programmatic Review of Implantable Contraceptives in Abuja, Nigeria, 25th April 2002.
2. **Croxatto H, Diaz S, Vera R, et al.** Fertility control in women with a Progestin released in microquantities from subcutaneous capsules. *Am J Obstet Gynecol*, 1969; 105: 1135-1138.
3. **Segal SJ, Croxatto HB.** Single administration of Hormones for long-term control of reproductive function. Paper presented at meeting of the American Fertility Society; Washington DC; 14th 16th April 1967.
4. The Population Council. *Norplant^R Levonorgestrel Implants: A Summary of Scientific data.* The Population Council: New York, 1990: 1-5.
5. The future of Contraceptive Implants in Nigeria. *EngengerHealth Activity Brief: Nigeria.* 2002: 1-2.
6. **Ezegwui HU, Oguano T, Nwogu-Ikojo EE.** Prolonged use of Norplant contraceptive subdermal implants. *Int J Gynecol Obstet* 2005; 88: 162-163.
7. **Sivin I, Mishell Jr DR, Diaz S, et al.** Prolonged effectiveness of Norplant capsule implants: 7-Year study. *Contraception* 2000; 61: 187-194.
8. **Gu S, Sivini I, Du MK, et al.** Effectiveness of Norplant implants through seven years: a large-scale study in China. *Contraception* 1995; 52: 99-103.