

# NORPLANT ACCEPTABILITY IN FOUR FAMILY PLANNING CLINICS

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**Abstract** - From 515 Norplant insertions in four family planning clinics, 138 (26.8%) removals were documented before the completion of 5 years. The duration of implant ranged from 15 days to 48 months. No pregnancy was reported during the study period in those who elected to remove Norplant. Spotting and irregular bleeding were the most common side effects (93.4%) and the most common reasons for early removal (73.6%). Disturbance in daily religious duties was the main reason for removal in those with irregular bleeding and disturbance in sexual intercourse while menstruating was the main reason in another group. The majority of the sample stated that they would not consider using Norplant in the future; only 6% of the sample (those desiring pregnancy) stated that they would use it again.

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**Key Words:** Norplant, implant, contraceptive

All subjects had their implants removed at the same clinic where insertion had been performed and were evaluated before removal concerning their reaction to the method, reasons for removal (including sociocultural and religious reasons) and the alternate method for contraception. The data were analyzed using the SPSS.

## RESULTS

Subjects ranged in age from 17 to 45 years with a mean age of 28.7; 0.7% of the sample were under 20 years of age, 25.4% were 20-25, 31.2% were 25-30 and only 8% were 35 or older. At the time of insertion 37% had completed elementary school, 20.3% had completed high school, and 12.3% had college degrees.

## INTRODUCTION

The contraceptive implant system Norplant, was introduced for use in Iran in 1991, and since then, it has been used from time to time.

Acceptability studies conducted throughout the world indicate that many women who use this contraceptive method elect to have implants removed before they have been in place for five years (1,2). The cost-effectiveness of the method is reduced when discontinue use prior to five years. Menstrual irregularity and other side effects are the most common reasons for early removal (3,4). Changes in bleeding pattern occur in two-thirds of Norplant users in the first year and decline to one-third by the fifth year of use (5). This article examines 138 Iranian women who elected to remove Norplant before the completion of 5 years.

Acceptability of the method, reasons for removal, sociocultural and religious reasons for removal are reported.

## MATERIALS AND METHODS

Data were collected from 138 women who elected to have implants removed before the completion of 5 years at four university - based, family planning clinics.

**Table 1.** Reasons for early removal

| Reasons                     | %of all removal<br>(n = 138) | %of whole<br>cohort (n=515) |
|-----------------------------|------------------------------|-----------------------------|
| Menstrual changes           | 73.6                         | 19.7                        |
| Headache                    | 13                           | 3.5                         |
| Weakness, dizziness         | 7.2                          | 1.9                         |
| Mood changes                | 6.5                          | 1.7                         |
| Depression                  | 6.5                          | 1.7                         |
| Desiring pregnancy          | 6                            | 1.6                         |
| Weight gain                 | 5.6                          | 1.5                         |
| Implantation site infection | 1.4                          | 0.38                        |
| Decreased visual capacity   | 0.7                          | 0.19                        |
| Ovarian cyst                | 0.7                          | 0.19                        |

More than one reason for discontinuation could be cited for a subject.

Hundred percent of subjects were moslems and 100% were married at the time of initial insertion. Thirty-one percent of the sample had at least one live birth before the implant, 45.7% had two and 22.4% had more than two live birth. Seven percent had a history of one spontaneous abortion and 0.7% of two.

Eighteen percent were breast feeding when they received implants and 6% were still breast feeding when they were removed. Subjects ranged in weight from 39 to 90 kg.

From 515 insertions, 138 removals (26.8%) were documented and described Norplant duration utilization ranged from 15 days to 48 months. No pregnancy was

reported during the study period in those who removed the Norplant early. Before removal the subjects were asked to state their reasons for removal (Table 1). Menstrual changes were the most frequently stated reasons for removal (Table 2).

Over half of the subjects had received treatment during the early months for spotting and irregular bleeding, which had been effective in the short period of treatment.

Sociocultural reasons for removal in those with irregular bleeding and spotting are presented in table 3.

The method of contraception that subjects planned to use after norplant removal are listed in table 4.

Table 2. Changes in bleeding pattern

|                            |       |
|----------------------------|-------|
| Spotting                   | 41%   |
| Irregular bleeding         | 38.4% |
| Amenorrhea                 | 14%   |
| Heavier menstrual bleeding | 13%   |
| Shorter menstrual periods  | 7.7%  |
| Longer menstrual periods   | 3.1%  |
| Less frequent periods      | 1.5%  |
| Light menstrual bleeding   | 0.7%  |

Table 3. Sociocultural reasons for removal in those with irregular bleeding

| Reasons*   | % of all removal<br>(n = 138) | % of whole<br>cohort (n=515) |
|--|-------------------------------|------------------------------|
| Disturbance in daily religious duties (while menstruating) | 30                            | 8.0                          |
| Disturbance in sexual intercourse (while menstruating)     | 29                            | 7.8                          |
| Both of the above  | 25                            | 6.7                          |
| Effect on general health                                   | 9.5                           | 2.5                          |
| Considering tumor  | 4.3                           | 1.2                          |
| Physician recommendation                                   | 2.2                           | 0.6                          |

\* More than one reason for discontinuation could be cited for a subject.

Table 4. Contraceptive methods after Norplant

| Contraceptive Method | % of removal (n=138) |
|----------------------|----------------------|
| OCP                  | 27.5                 |
| IUD                  | 23.9                 |
| Withdrawal           | 21                   |
| TL                   | 10.1                 |
| No Method            | 5.8                  |

OCP (oral contraceptive pill), IUD (intra-uterine device), TL (tubal ligation)

## DISCUSSION

The continuation rate of 73.2% in this study is lower than what is reported from international experience with Norplant which is typically between 76% and 90% (3,6,7).

The lower limit of acceptability in this study may result from the following:

Firstly, Iranian women often seek contraceptive methods alone, so they are counselled in the absence of their husbands. With the occurrence of side effects such as irregular and continuous bleeding, their husbands object and reject the method of contraception.

Secondly, moslem women have restrictions for participating in religious activity and sexual intercourse while menstruating and because of this, over half of the subjects had received some kind of treatment during the early months of use which had not been totally effective (8,9).

Thirdly, because Norplant is offered only in public family planning clinics free of charge, most ordinary applicants take it for granted that this method is not good enough and has many side effects; they are not aware of the high cost of Norplant (10).

In order to increase continuation rate in Iran, the following guidelines are suggested:

1- Improving the counselling procedure is important in the acceptability of the method. Counselling should be conducted with the attendance of both spouses.

The women must emphatically be warned that menstrual changes may take about a year to settle. By careful counseling we can identify women who might better be served by a shorter term contraception.

2- This effective, safe, easy and long-lasting method should also be offered in private health centers which have an important role in medical care in Iran. Usually, educated and high socioeconomic women are served in private clinics where the acceptability is seemingly high. Further study is needed to survey the acceptability in private clinics.

3- The most important matters that must be considered in providing contraceptive methods are the prevailing culture, norms, attitudes and religious beliefs.

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