

## Five-Year Experience With Depot Medroxy Progesterone Acetate Injectable Contraception

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### ABSTRACT

**Background:** The objective of this article is to describe the characteristics and experiences of clients who used depot medroxy progesterone acetate for contraception.

**Methods:** A retrospective review of family planning records of clients who used depo-provera between 1992 and 1996 at the family planning clinic of University of Nigerian Teaching Hospital, Enugu.

**Results:** The mean age of clients was  $32.7 \pm 5.2$  years. Over 71% of clients had five or more children. Clients with no education (78.7%) or primary education (75.1%) were more likely to be grand-multiparous compared to women with at least secondary education (49.6%). Among clients with 1-4 living children, 81.3% used depo-provera for child spacing. Among those with 5-8 living children, 48.8% used it for child spacing. Menstrual abnormalities were the main complications but the commonest reason given for discontinuation was "husband's wish". The continuation rate at 36 months was 82.7%.

**Conclusion:** Depot medroxy progesterone acetate is an acceptable and effective method of contraception. The involvement of men in family planning programmes cannot be over-emphasised as they significantly influence the decision of women regarding contraceptive use.

**KEY WORDS:** Child spacing; Family planning; Injectable contraception.

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### INTRODUCTION

Grand-multiparity and unsafe abortion following unintended pregnancies contribute to the high maternal morbidity and mortality rates in Nigeria<sup>1</sup>. This situation can be partly remedied by improving contraceptive use. In the United States of America, a decline in unintended pregnancies and abortions was attributed to increased use of depot medroxy progesterone acetate injection and levonorgestrel implants<sup>2</sup>. Depot medroxy progesterone acetate is a long acting injectable contraceptive that is valued for its effectiveness, convenience, safety and reversibility<sup>3</sup>. We assessed the characteristics and experience of women who used it for contraception with a view towards improving its utilization in the

community with the attendant benefits.

### MATERIALS AND METHODS

The records of women who accepted depot medroxy progesterone acetate injectable contraception from January 1, 1992 to December 31, 1996 were obtained from the family planning clinic and reviewed. Of interest were the demographic attributes of acceptors, sources of awareness, complications, discontinuation and failure rates. Results were based on data obtained from 596 client cards.

Statistical analyses included the calculation of means, proportions and relative risk with 95% confidence intervals.

### RESULTS

#### Contraceptive choice of new acceptors

Table I shows the contraceptive methods accepted by clients during the period under review. The injectable contraception ranked second to the intrauterine contraceptive device.

#### Age and parity

The age range of new acceptors was 20-46 years with a mean of  $32.7 \pm 5.2$  years. The mean parity was  $5.9 \pm 3.2$  (range, 0-13). The mean number of living children was  $5.3 \pm 1.8$ .

#### Parity and level of education

Table II displays the relationship between parity and level of education attained by acceptors of depo-provera. No client with secondary education had more than eight children. Only clients with secondary education used injectable contraception while nulliparous. Clients with no education (78.7%) or primary education (75.1%) were more likely to be grand-multiparous compared to women with at least secondary education (49.6%). The difference was statistically significant ( $\chi^2 = 30.3$ ;  $p = 0.000000$ ; RR = 1.54, 95% CI = 1.27 - 1.87).

#### Source of awareness

Friends were the leading source of initial information (Table III).

#### Reasons for contraception

These are presented in Table IV and were either child spacing or permanent contraception. Among clients with 1-4 living children, 81.3% used depo-provera for child spacing. Among those with 5-8 living children, 48.8% used it for child spacing.

**Interval between last childbirth and acceptance of contraception**

The interval between last confinement and acceptance of contraception ranged from 1 to 120 months among 309 clients for whom this information was available. The average interval was  $21 \pm 17.5$  months. Only 38.5% of clients accepted the method within 12 months of confinement.

**Complications, discontinuation and failure rates**

Problems with the menstrual cycle were the main complications reported but were not always associated with discontinuation (Tables V). It is likely that complications were underreported. There were two failures (0.34%) while receiving the injections.

**Table I. Contraceptive choices of 3461 new clients 1992 -1996.**

Contraceptive choice	%
Intra-uterine device	65.9
Injectable	18
Barrier	6.7
Norplant	6.5
Oral contraceptives	1.9
Sterilization	1.0

**Table II. Relationship between parity and level of education among 581 clients**

Parity	No education	Primary education	Secondary education	Total
0	-	-	12	12
1-4	33	78	45	156
5-8	92	182	56	330
9+	30	53	-	83
Total	155	313	113	581

**Table III. Source of awareness regarding injectable contraception**

Sources of awareness (n=596)	%
Friend	40.4
Television/radio	18.1
Clinic personnel	16.8
Relative	11.7
Other clinic	5
Other medical personnel	3.2
Multiple sources	2.3
Not stated	2.3

**Table IV. Relationship between reasons for contraception and number of living children (n=556)**

Number of living children	Reason for contraception		Total
	Spacing of children	Cessation of childbearing	
0	8	-	8
1-4	148	34	182
5-8	165	173	338
9+	-	28	28

**Table V. Complications, reasons for discontinuation and new methods selected**

Complications (n=596)	%
Amenorrhoea	5.0
Irregular vaginal bleeding	2.3
Prolonged menses	2.2
Headache	0.3
Reasons for discontinuation of injectable contraception (n=24)	%
Husband's wish	29.2
Irregular vaginal bleeding	25.0
Amenorrhoea	8.3
Headache	4.2
Goitre	4.2
Palpitation	4.2
Excessive weight gain	4.2
Hypertension	4.2
Wanted Norplant	4.2
Fear of chance of failure	4.2
New method selected by clients discontinuing injectable contraception (n=20)	%
Intra-uterine device	70.0
Oral contraceptive pill	20.0
Norplant	5.0
Bilateral tubal ligation	5.0

**DISCUSSION**

Injectable contraception appears to be a significant method of family planning among women in our population who choose to practice contraception. This contrasts with developed countries where the oral contraceptive pill and barrier methods are the leading methods of contraception while injectable contraception is unpopular<sup>4</sup>. Features which enhance its acceptability among our clients in addition to its

effectiveness include ease of compliance and the ability to avoid detection by their husbands. By contrast, the thread in the IUCD often gives away the women when using contraception without the consent of their husbands. Hence, it is useful for women who do not have the support of their husbands in seeking contraception. The significance of the husband is demonstrated in the observation that they were the single most important reason for discontinuation of the method. The influence of level of education on reproductive behaviour is well known<sup>5</sup> and seen in this review with parity declining as level of education increased.

The main complication associated with injectable contraception was abnormality of the menstrual cycle. This can limit acceptability of the method<sup>6</sup>. Only 1.5% of clients discontinued the method because of these complications with irregular vaginal bleeding, the least likely to be tolerated. This is lower than the 30% who discontinued the method because of menstrual irregularity<sup>7</sup>. This low figure may have been due to the effect of counselling such that the women considered the complications acceptable<sup>8</sup>. Amenorrhoea can be regarded as a beneficial feature of the contraceptive as monthly blood loss is eliminated in a country where anaemia is prevalent. Where irregular bleeding remains a problem, a short course of oestrogen or shorter injection intervals can be used<sup>8</sup>. More recently, monthly combined injectables that contain oestrogen and enable better control of the menstrual cycle have been developed<sup>9</sup>. However, these preparations are not available in our clinic.

The continuity rate at 36 months was 82.7% and higher than that reported from developed countries<sup>10</sup>. This may be due to a greater motivation among women choosing this method in our population since a large proportion of them had already completed their families. This is probably also evidence of the satisfaction of the women with the method for contraception. Considering that 40%

of users had completed their families, sterilization may have been a more appropriate method of contraception. However, its acceptability remains low because of socio-cultural beliefs.

Injectable contraception has been firmly established as a means of contraception for both short and long-term use. Increasing its utilization can be achieved through more aggressive programmes to educate and inform women. The involvement of men in such programmes cannot be over-emphasised as they significantly influence the decision of women regarding contraceptive use. Such community counselling may increase contraceptive use as a whole and contribute to a reduction in fertility with its attendant benefits.

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