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Original Research Article

## DMPA: acceptance and compliance in a tertiary care hospital in Mumbai, India

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### ABSTRACT

**Background:** The use of safe and effective contraception is the need of the hour in India, which has one of the world's largest and fastest growing population. Contraceptive advice is a vital component of good community health.

**Methods:** The present study was conducted in one of the premier teaching medical institute of Mumbai. The aim of this study was to assess the acceptance and compliance of DMPA (Depot Medroxy Progesterone Acetate) among women attending family planning OPD. The study was conducted over the period of 3 years. Meticulous follow up was kept for all the women recruited in the study.

**Results:** The study concluded that DMPA is highly effective contraceptive with low failure rate, when women are effectively counselled. Also, it should be made freely and easily available through health care facilities.

**Conclusions:** It should be available as a first line method to all who wish to opt for reversible methods of contraceptive.

**Keywords:** Acceptance, Contraceptive, Counselling, DMPA

### INTRODUCTION

The use of safe and effective contraception is the need of the hour in India, which has one of the world's largest and fastest growing population.<sup>1</sup> Contraceptive advice is a vital component of good community health. An ideal contraceptive should suit an individual's personal, social, and medical needs. Socio-economic factors and education are some of the factors that play an important role in family planning acceptance. There are approximately 40 million women in India who would prefer to avoid becoming pregnant but are not practicing any form of contraception. In the Indian scenario, women have no role in making of reproductive decisions. According to NFHS-3, around 30% of the fertility in India was unwanted, indicating a huge gap between the demand and supply of family planning measures. The unmet need for

contraception in the country as a whole is about 13%. The unmet need is high among women aged 15-19 years, and among those aged 20-24 years (15% for spacing and over 6% for limiting).<sup>2</sup>

Depot Medroxy Progesterone Acetate, or DMPA is a progestin-only method of contraception. It is a 3-monthly intramuscular injectable that delivers 150 mg of medroxyprogesterone acetate in microcrystalline suspension form that delays absorption of the hormone after the injection. It provides long acting, effective and reversible contraception.<sup>3</sup> It is accepted by women who cannot remember to take OC pills regularly and by those who do not wish to insert an IUD. Theoretical concerns with early postpartum administration of DMPA remain that of infant safety, premature inhibition of lactation and its metabolic effects on mother. Studies indicate that

effect of DMPA on infant health and lactation are unfounded.<sup>4,6</sup>

**METHODS**

A retrospective study was conducted in the Department of Obstetrics and Gynaecology at a Tertiary Care Hospital in Mumbai for a period of three years. All eligible women were given choice of contraceptive options and explained well about the benefits and side effects of each contraceptive method. Those who chose DMPA were included in this study.

Injection DMPA 150 mg IM was given intramuscularly after counselling. Care was taken to ensure that the injection was given either in the first week of menses, immediate post abortal or at 40 -45 days of post partum period.

A total of 200 women were included in the study over a period of three years and their follow-up visits were noted subsequently. The collected data was represented as graphs and charts.

**RESULTS**

According to figures in Table 1, Most of the women 107 (53.5%) recruited in the present study were from the age group of 26 to 30 years. These were the group of women in reproductive age group, who attend family planning outpatient dept in large number, Hence receptive to contraceptive counselling in much better way.

**Table 1: Age distribution.**

Age (yrs)	Number	%
<20	0	0
21-25	65	32.5
26-30	107	53.5
31-35	19	9.5
≥36	9	4.5

Table 2 depicts no of patients as per their parity. No Nulligravida was offered this contraceptive method as method of birth spacing. Most of the women 88 (44%) had 2 or more children, thus had completed their family size.

**Table 2: Parity-wise distribution.**

Parity	Number	%
Nulligravida	0	0
1	43	21.5
2	88	44
≥3	69	34.5

As per Table 3, most common side effect noted was irregular bleeding / spotting, which was seen in 126

women (63%). In this study, the maximum dropout rate was after the 1<sup>st</sup> and 2<sup>nd</sup> injections.

**Table 3: Side effects.**

Side Effects	Number	%
Irregular bleeding	126	63
Amenorrhea	9	4.5
Weight gain	37	18.5
Headache	17	8.5
No problems	11	5.5

In the present study, many women did not report any major side effect. In the present study, most of the women 146 (73%) had lost to follow up after 1st injection. The reasons can be attributed to their socio-cultural factors, as most of them were residents of distant places and had come to delivery at this tertiary care centre. Few of them had opted for further pregnancies. Hence, discontinued the injections.

**Table 4: Discontinuation rate.**

Follow up rate	No. of Women	%
After 1st Injection	146	73
After 2nd Injection	118	59
After 3rd Injection	82	41
After 4th Injection	63	31.5
After 5th Injection	58	29

**Table 5: Reasons for attrition.**

Reason	No. of patients	%
Side effects	76	38
Lost to Follow up	56	28
Planning pregnancy	13	6.5
Missed Injection	34	17
Date/changed contraception		

**DISCUSSION**

Perhaps the most important issue surrounding the use of DMPA is that of patient information. Injectable contraceptives are associated with a lot of apprehension and misinformation, because of the alterations in menstrual cycles, which naturally makes potential users anxious and biased against these.<sup>7</sup> Pre-administration counselling is essential tool to minimise attrition because of the menstrual changes which occur in most of the patients. This can be reduced with effective counselling at the start. DMPA should be considered a highly effective, safe, convenient contraceptive option for appropriately selected patients. Progestin-only contraceptives do not impair lactation and, in fact, may increase the quality and duration of lactation. Thus, DMPA represents a good contraceptive option for lactating women.<sup>8</sup> Injection DMPA should be made freely available, along with IUCD and other modes of contraception like condoms and OC pills. Women should

be provided with IEC material to create awareness about this method of contraception and to allay all the misinformation.<sup>9</sup> If women are given reminders for their follow-up injections, it could increase regular and uninterrupted use of the injection. DMPA should be made available in multiple service delivery systems (e.g., other than social marketing or private sector settings) that can ensure provider technical competence and informed choice.

## CONCLUSION

DMPA when given every 12 calendar weeks, is a highly effective hormonal contraceptive with a very low failure rate. It should be available as a first line method to all who wish to opt for reversible methods of contraceptive.

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