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Study of Reasons for Non-Compliance of DMPA at A Tertiary Care Centre

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Abstract

Aim : Population can only be controlled by effective and complaint method of contraception. The high rate of unintended pregnancies and the relative failure rates with the available reversible methods of contraception are strong indicators of the need for a long acting contraceptive method that simplifies compliance. One such method is injectable DMPA.

Methods : It was an observational study conducted in Department of Obstetrics & Gynaecology, SMS Medical College, Jaipur. The aim was to study the compliance of DMPA among women with unmet need. The study was conducted over the period of 1 year.

Results: Majority of women (61.11%) had side-effects in the form of irregular bleeding during the use of DMPA. 87.378% women discontinued DMPA due to the side-effects.

Conclusion: It should be available as a first line method of contraception to all who can accept changes in menstrual bleeding pattern.

Keywords: DMPA, Nephropathy, Antibodies

Introduction

It is imperative to increase the basket of choices as well as the service coverage simultaneously in the National Family Planning Program.[1] The inclusion of injectables in National Family Planning Programme is consistent with steps by Government of India towards reducing unmet need of family planning.[1] The decision to add DMPA in the National Family Planning Program thus has opened the way for clients to avail of a safe, effective and hassle free method with full confidentiality.[1]

Adequate pre administration counseling, reassurance and reminders for continuing the DMPA is very important since side effects are the most important reason for discontinuation. So continuity of care can be maintained by home visits of community health care workers, telephonic reminders and reassurance.[2]

Material And Methods

Study Type: Observational study
Study Design: Prospective study
Duration of study: Feb 2019 to Feb 2020 and 2 months for data analysis and data compilation.

Place of study: Department of Obstetrics and Gynaecology, SMS Medical College, Jaipur.

Sample Size

Sample size was calculated at 95% confidence level assuming at 38% side effects after Depot Medroxy Progesterone Acetate as per results of seed article. (Fonseca M, Deshmukh PY, Kharat. DMPA : acceptance and compliance in a tertiary care hospital in Mumbai, India). At the precision of 10%, minimum 90 subjects were required for present study.

Inclusion Criteria

1. Women desiring a long term and reversible contraceptive method.
2. Women participated in the study.
3. Women (age 18-45 years) satisfied following criteria:

A. Regular normal menstrual cycles (within first 7 days of cycle)

B. Post-delivery lactating females (>6 weeks to 6 months postpartum)

C. Post-delivery non-lactating females (<4 wks)

D. Post-abortal (immediate or within 7 days)

Exclusion Criteria

1. Desire for rapid return to fertility
2. Unexplained vaginal bleeding
3. Breast cancer
4. History of myocardial infarction, ischemic heart disease or stroke
5. Cirrhosis (severe-decompensated)
6. Liver tumours-adenoma or hepatoma
7. Hypertension (>160 systolic or >100 diastolic)
8. Diabetes with nephropathy / retinopathy / neuropathy
9. Other vascular disease or diabetes of >20 years duration
10. Antiphospholipid antibodies, and severe thrombocytopenia
11. Rheumatoid arthritis
12. Migraine with aura.

Methodology

- All eligible candidates were given options and explained well about the benefits and side effects of each and every contraceptive which can be used. Those who chose Depot Medroxy Progesterone Acetate were included in the study.
- Written and informed consent was taken from the women, who were enrolled for the study.
- Eligible candidates were given the first dose of Depot Medroxy Progesterone Acetate 150 mg IM and counseled them to come for next injection after 3 months with a grace period (2 wks earlier and 4 wks later) for 2 follow-up visits.
- Post injection instructions were given like i) Not to rub injection site ii) Hot fomentation not to be done.
- Every time they came for follow-up; they were asked about general questions like effect of Depot Medroxy Progesterone Acetate on menstrual cycle, weight changes, mood swings, headache and also about the symptoms to rule out pregnancy to look forward for any failure.
- Failure of women to came for subsequent visits or not willing to continue the injection due to social causes, family limitation and the various side-effects were considered as non-compliant.

Results

In the present study, out of 90 women, 43 (47.78%) were of 25-29 yrs age group and mean age was 25.91 ± 3.60 yrs.

Table 1: Distribution of Cases According to Number of Doses Received

Number of Doses Received	No.	%
1	59	65.56
2	20	22.22
3	6	6.67
4	5	5.56
Total	90	100.00

In present study, 59 (65.56%) women received single dose of DMPA, 20 (22.22%) women received 2 doses of DMPA, 6 (6.67%) women received 3 doses of DMPA, 5 (5.56%) women received 4 doses of DMPA. Most of the women discontinued DMPA after 1st injection.

Table 2: Distribution of Cases According to Side-effects

Side-effects	No.	%
Irregular Bleeding	55	61.11
Amenorrhoea	4	4.44
Weight Gain	18	20.00
Headache	7	7.78
No Problems	5	5.56

In present study, 55 (61.11%) women had side-effects in the form of irregular bleeding, 18 (20%) women had side-effects in the form of weight gain, 7 (7.78%) women had side-effects in the form of headache, 5 (5.56%) women had not experienced any side-effects and 4 (4.44%) women had amenorrhoea. Most of the women experienced irregular bleeding during the use of DMPA.

Table 3: Distribution of Cases According to Reason for Attrition

Reason for Attrition	No.	%
Side-effects	34	37.78
Lost to Follow-up	22	24.44
Planning Pregnancy	6	6.67
Missed Injection Date / Changed Contraception	13	14.44

In present study, 34 (37.78%) women discontinued DMPA due to the side-effects, 22 (24.44%) women discontinued DMPA due to lost to follow-up, 13 (14.44%) women missed injection date or changed to the other method of contraception, 6 (6.67%) women were planning of pregnancy.

DISCUSSION

In our study 43 (47.78%) women were of 25-29 yrs age group and mean age was 25.91 ± 3.60 yrs. Maximum women were in age of 25-29 yrs which coincides with the child bearing age group. Similar to our study Patel A et al (2019)[3] reported a mean age of women was 18-25 years. Similar observation was noted by Mishra S et al (2019)[4] where mean age was between 21-30 yrs.

59 (65.56%) women received single dose of DMPA, 20 (22.22%) women received 2 doses of DMPA, 6 (6.67%) women received 3 doses of DMPA, 5 (5.56%) women received 4 doses of DMPA. Most of the women discontinued DMPA after 1st injection. Similarly Mishra S et al (2019)[4] reported 73.3% women discontinued after 1st injection. Similar to our study Fonseca M et al (2017)[5] reported 73% women had lost to follow-up after 1st injection of DMPA.

61.11% women had side-effects in the form of irregular bleeding, 20% women had side-effects in the form of weight gain,07.78% women had side-effects in the form of headache, 05.56% women had not experienced any side-effects and 04.44% women had amenorrhoea.

Most of the women experienced irregular bleeding during the use of DMPA. Patel A et al (2019)[3] reported that most of the women reported irregular bleeding (61.11%) as a side-effect of DMPA injection. Similar to our study Divya V et al (2019)[2] reported that majority of the women (40%) reported irregular bleeding. Similar to our study, Mishra S et al (2019)[4] observed that majority of the women reported irregular bleeding (58%). Similar to our study, Fonseca M et al (2017)[5] observed that majority of the women reported irregular bleeding (63%).

Similar to our study, Rani S et al (2017)[6] observed that majority of the women reported irregular bleeding (77.6%). Robabi H et al (2016)[7] reported that most of the women experience the side-effects in the form of irregular bleeding (42%). Rai L et al (2007)[8] reported that the major side effect of DMPA injection was irregular bleeding (70%).

34 (37.78%) women discontinued DMPA due to the side-effects, 22 (24.44%) women discontinued DMPA due to lost to follow-up, 13 (14.44%) women missed injection date or changed to the other method of contraception, 6 (6.67%) women were planning of pregnancy. Mishra S et al (2019)[4] reported that majority of women (56.6%) had lost to follow-up due to side-effects. Similar to our study, Fonseca M et al (2017)[5] reported majority of women (38%) had lost to follow-up due to side-effects.

Conclusion

The study concluded that it should be available as a first line method of contraception to all who wish to opt for reversible method of contraception and can accept changes in menstrual bleeding patterns and women who wants here use of a contraceptive to be a private matter than no one else needs to know about.

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