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STUDY OF ACCEPTANCE AND COMPLIANCE OF DMPA AT A TERTIARY CARE CENTRE

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ABSTRACT **Aim :** India was the first country in the world to launch a family planning programme, as early as 1952, with the main aim of controlling its population, so contraceptive advice is a vital component of good community health. **Methods :** It was an observational study conducted in Department of Obstetrics & Gynaecology, SMS Medical College, Jaipur. The aim was to study the acceptance and compliance of DMPA among women with unmet need. The study was conducted over the period of 1 year. **Results :** Majority of women (65.56%) lost for follow-up after one dose of DMPA due to side effects and majority (90.00%) women were in postmenstrual period who chose DMPA with low failure rate. **Conclusion :** The study concluded that DMPA is long acting, reversible and non-coitus dependent contraception.

KEYWORDS : DMPA

INTRODUCTION

India was the first country in the world to launch a Family Planning Programme, as early as 1952, with the main aim of controlling its population. The challenge now has extended beyond population stabilization to addressing sustainable development goals for maternal and child health. 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]

Depot Medroxy Progesterone Acetate or DMPA is a 3-monthly intramuscular injectable that delivers 150 mg of medroxy progesterone acetate in microcrystalline suspension form. It provides long acting, effective and reversible contraception. It acts by inhibition of ovulation by suppressing mid cycle LH & FSH peak, thickens the cervical mucous and the endometrium becomes atrophic preventing blastocyst implantation. DMPA is the preferred method of contraception in those women who are not willing for daily pills or intrauterine contraceptive devices and lactating mothers. Typical failure rate of DMPA is 0.3/100 women years which is comparable with OCP's, IUCD and surgical sterilization.[2]

The typical failure rate of Depot Medroxy Progesterone Acetate is 0.3 per 100 women years, which is comparable with that of IUCD or surgical sterilization.[3]

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)
4. Women (aged 18-45 years) not satisfied above criteria:-
   A. More than 7 days of menses
   B. Post-delivery lactating females (>6 months postpartum)
   C. Post-delivery non-lactating females (>4 weeks)
   D. Post- abortal (>7 days)

were included after ruling out pregnancy and Depot Medroxy Progesterone Acetate was given with back- up options for next 7 days.

Exclusion Criteria

- Desire for rapid return to fertility
- Unexplained vaginal bleeding
- Breast cancer
- History of myocardial infarction, ischemic heart disease or stroke
- Cirrhosis (severe-decompensated)
- Liver tumours-adenoma or hepatoma
- Hypertension (>160 systolic or >100 diastolic)
- Diabetes with nephropathy/retinopathy/neuropathy
- Other vascular disease or diabetes of >20 years duration
- Antiphospholipid antibodies, and severe thrombocytopenia
- Rheumatoid arthritis
- 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. In the present study most of the women 42 (46.67%) who accepted DMPA were primipara.

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.

DISCUSSION

In our study, 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)[4] reported a mean age of women was 18-25 years. Similar observation was noted by Mishra S et al (2019)[5] where mean age was between 21-30 yrs.

Most of the women 42 (46.67%) who accepted DMPA were primipara. Similar to our study, Mishra S et al (2019)[5] reported majority of women were primipara (41.13%). Similar observation was noted by Sirisha PSNRS et al (2017)[6]. They reported majority of women were primipara (90%).

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)[5] reported 73.3% women discontinued after 1st injection. Similar to our study Fonseca M et al (2017)[7] reported most of the women (73%) had lost to follow-up after 1st injection of DMPA. Sirisha PSNRS et al (2017)[6] reported that most of the women (64%) received only 1st injection of DMPA.

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. Patel A et al (2019)[4] 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)[8] reported that majority of the women (40%) reported irregular bleeding. Similar to our study, Mishra S et al (2019)[5] observed that majority of the women reported irregular bleeding (58%). Similar to our study, Fonseca M et al (2017)[7] observed that majority of the women reported irregular bleeding (63%).

CONCLUSION

The study concluded that DMPA is long acting, reversible and non-coitus dependent contraceptive method. It does not need a daily motivation so with appropriate pre-administration counselling there will be minimum dropout rates.

REFERENCES

1. Reference manual for injectable contraceptive (DMPA) Family Planning Division Ministry of Health and Family Welfare Government of India available at :http://upnrhm.gov.in / site-files / family_planning / 4. Manuals_of_FP-2015-16 /Injectable_Manual
2. Hirve S. Injectables as a Choice-Evidence Based Lesson. Indian J Medical Ethics. 2005;11(1):12-13.
3. Fu H, JE Darroch, T Hass, Ranjit N. Contraceptive failure rates: new estimates from the 1995 National survey of family growth. Fam Plan Perspect. 1999; 31 : 56-63.
4. Patel A, Thakkar J, Patel MS, Khatri SA. A Study of Use of Dmpa (Injectable Contraceptive) in Postpartum and Postabortal Patients. International Journal of Scientific Research. November 2019;8(11):34-36. PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
5. Mishra S, Gupta R. Acceptability and compliance of DMPA among rural women in Sitapur UP. International Journal of Clinical Obstetrics and Gynaecology. 2019; 3(2): 08-10.
6. Sirisha PSNRS. Efficacy of Depot Medroxy Progesterone Acetate as a Contraceptive. International Journal of Medical Research and Pharmaceutical Sciences. December 2017;4(12): 22-38.
7. Fonseca M, Deshmukh PY, Kharat D. DMPA: acceptance and compliance in a tertiary care hospital in Mumbai, India. Int J Reprod Contracept Obstet Gynecol. 2017 Sep;6(9):3879-3881.
8. Divya V, Gayathri M and Priyadarshini P. DMPA: Compliance and Side Effects in a Tertiary Care Hospital. International Journal of Recent Academic Research. September 2019;01(6):263-264.