



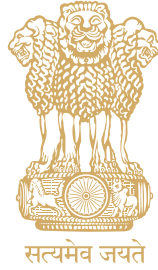
# REFERENCE MANUAL FOR INJECTABLE CONTRACEPTIVE (DMPA)



March 2016



**Family Planning Division**  
**Ministry of Health and Family Welfare**  
Government of India



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Government of India, Nirman Bhawan, New Delhi -110101

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Secretary



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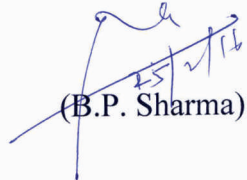


### MESSAGE

Reproductive Health is an integral component of the multipronged RMNCH+A strategy and is a vital component for addressing the sustainable development goals for maternal and child health. The introduction of new contraceptives can substantially contribute to increasing the coverage of the programme and most importantly address the unmet need for family planning. The inclusion of Injectables in the National Family Planning Program is consistent with the commitment of Government of India to reduce unmet need for spacing and will provide an impetus to the endeavours for increasing modern contraceptive usage.

The reference manual would serve as a quick-reference resource for all levels of health care providers as well as trainers at District Hospitals, Sub District Hospitals, Community Health Centres, Primary Health Centres and faculty of Medical Colleges. It has been developed to also serve as a resource for Programme Managers for effective planning and implementation of the Injectables in the field.

I am certain that the States, service providers and programme officers will make optimum use of this valuable resource. The efforts of the Family Planning Division in developing the manual is appreciated.

  
(B.P. Sharma)

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## FOREWORD

Investing in reproductive health is one of the most cost effective development strategies. It allows beneficiaries to make reproductive choices they could not otherwise make, and helps them to lead a more fruitful life. As a technology, there is probably nothing else that contributes so significantly to the improvement of maternal and new born health.

The introduction of Injectable contraceptives marks a turning point in the country's approach to contraception. The Injectables would expand the available family planning choices. The concerted efforts by the Government have resulted in the decline of the unmet need for family planning from 25.4% (DLHS-I) to 21.3% (DLHS-III), but approximately 4.2 crore couples still have an unmet need for contraception. At present, the spacing options are limited to only condoms, IUCDs and Oral Pills. Evidence of contraceptive method-mix clearly indicates that with the addition of a single method there is a substantial increase in the contraceptive prevalence rate. The strengthening of the health system under the National Health Mission (NHM) has resulted in the overall improvement of infrastructure including manpower in the public sector. Therefore this is an opportune time to introduce and ensure the availability of Injectable contraceptives in the public health facilities.

This Manual is the result of efforts to develop a uniform reference manual for an effective implementation of the Injectables' program. The guidelines are the culmination of a truly consultative process and is based on inputs from a wide pool of technical and managerial experts across the country.

I am certain that this manual will serve as an important reference for the effective implementation of Injectables' program all over the country.

  
(C. K. Mishra)





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सत्यमेव जयते

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## PREFACE

The Government of India is committed to preventing unwanted pregnancies and meet the unmet demand for contraceptive services and products, by ensuring the widest possible choice of and access to safe, effective and quality reproductive health care to every strata of the society, including the poorest of the poor. The epidemiological impact of contraceptive use is enormous in terms of reducing maternal and perinatal morbidity and mortality. Ensuring healthy timing and spacing of pregnancies is now considered the most important intervention affecting reproductive, maternal, neonatal, child and adolescent health. The introduction of Injectable contraceptives into the family planning services provides beneficiaries with wider choices to meet their reproductive health goals.

This Manual seeks to provide the latest information on Injectable contraceptive and is in alignment with the focus of the Government to establish it as an important component for spacing methods in India's National Family Planning Programme. It addresses all the managerial and technical issues related to the Injectable contraceptive DMPA. It also lays down the training strategy, curricula as well as counselling issues to train the service providers thereby ensuring quality service provision. I recommend that these guidelines be popularized not only among the health workers who will be guided by them but also to the clients who need and benefit from the Injectable contraceptives.

I extend my best wishes to this new initiative. I am confident that these guidelines with practical information on Injectables will be widely available for all levels of health care providers leading to an increased uptake of the newer contraceptive choices. I commend the efforts of the Family Planning Division for developing this resource.

(Dr. Rakesh Kumar)







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## ACKNOWLEDGEMENT

The diffusion of information about and access to contraceptive methods, aided by a rapid expansion of family planning programmes has been a key factor contributing to the rise in contraceptive use. The use of contraception increases by extending the availability of current methods and by introducing new methods in the existing basket of choices. The inclusion of 'Injectables' in the National Family Planning Programme marks a defining moment in the provision of Family Planning services.

The manual for Injectable Contraceptives has been made possible with constant support and encouragement from Shri B. P. Sharma, Secretary (H&FW) and Mr. C. K. Mishra, Additional Secretary and Mission Director (NHM), Ministry of Health and Family Welfare. My special thanks to Dr. Rakesh Kumar, Joint Secretary RCH, for his continued guidance and support.

I wish to acknowledge all the members of the Family Planning Technical Resource Group, especially the core group comprising of Dr. Alok Banerjee, Dr. B. P. Singh, Dr. Sunita Singhal, Dr. Ravi Anand and Dr. Saswati Das. The shared technical knowledge, experiences and perspectives have produced a manual that will have a significant positive impact in the implementation of the 'Injectables' programme.

Appreciation is also extended to other members of Family Planning Division namely Dr. Teja Ram, Deputy Commissioner, Dr. Pragati Singh, Ms. Shilpa John, Ms. Renuka Patnaik and Mr. Jay Prakash. I am also thankful to all the members of the National TSU team especially Dr. Nidhi Bhatt for drafting and reviewing the content of this document to bring it to its final shape.

I hope this techno-managerial manual will empower programme managers and service providers to strengthen the service delivery and monitoring systems for the provision of injectables contraceptives in our country.

(Dr. S. K. Sikdar)





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# ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANM	Auxillary Nurse Midwife
ASHA	Accredited Social Health Activist
BCC	Behaviour Change Communication
CHC	Community Health Centre
CPR	Contraceptive Prevalence Rate
DCGI	Drug Controller General of India
DFWO	District Family Welfare Officer
DH	District Hospital
DLHS	District Level Household Survey
DMPA	Depo Medroxy Progesterone Acetate
DQAC	District Quality Assurance Committee
FDA	Food and Drug Administration
FOGSI	Federation of Obstetric and Gynaecological Societies of India
FPAI	Family Planning Association India
GMSD	Government Medical Store Depot
Hb	Haemoglobin
HIV	Human Immunodeficiency Virus
IEC	Information Education Communication
IM	Intra Muscular
IP	Infection Prevention
IUCD	Intra Uterine Contraceptive Device
LHV	Lady Health Visitor
LMP	Last Menstrual Period
MEC	Medical Eligibility Criteria
MO	Medical Officer
MTP	Medical Termination of Pregnancy
NFHS	National Family Health Survey
NGO	Non-Government Organization.
NHM	National Health Mission
NSAID	Non Steroidal Anti-Inflammatory Drug
OCP	Oral Contraceptive Pills
PHC	Primary Health Centre
POC	Progestogen Only Contraceptive

POI	Progestogen Only Injectable
PRB	Population Reference Bureau
PSI	Population Services International
QA	Quality Assurance
RCH	Reproductive and Child Health
RTI	Reproductive Tract Infections
SC	Sub Cutaneous
SC	Sub Centre
SDH	Sub District Hospital
SN	Staff Nurse
SQAC	State Quality Assurance committee
STI	Sexually Transmitted Infections
TFR	Total Fertility Rate
UNDP	United Nations Development Program
UNFPA	United Nation Population Funds
WHO	World Health Organization

# Introduction

## Background

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. India's population has already reached 1.26 billion and considering the high decadal growth rate of 17.64, the country's population is slated to surpass that of China by 2028 (UNDP). The challenge now has extended beyond population stabilization to addressing sustainable development goals for maternal and child health. Post the International Conference on Population and Development (1994) Cairo, Family Planning emerged as a vital component in reducing maternal morbidity and mortality. The London Summit on Family Planning (2012) buttressed this further and has succeeded rightfully in bringing back the focus on Family Planning. Hence over the years India's National Family Planning Programme too has evolved with a shift in focus from merely population control to more critical issues of saving the lives and improving the health of mothers and children through use of reversible spacing methods leading to reduction in unwanted, closely spaced and mistimed pregnancies and thus avoiding pregnancies with higher risks and chances of unsafe abortions.

Studies reveal that without contraceptive use the number of maternal deaths would have been 1.8 times higher than at present. Thus contraceptive usage averted 44.3% of maternal deaths worldwide. Even though, India has made considerable progress in reducing maternal mortality ratio, it still contributes 17% of maternal deaths globally, according to a 2012 report of World Bank, UNFPA, WHO. Family Planning can avert more than 30% of maternal deaths and 10% of child death if couples spaced their pregnancies more than 2 years apart. A UNFPA Study has estimated that if the current unmet need for family planning could be fulfilled within the next five years, the country can avert 35,000 maternal deaths and 12 lakhs infant deaths.

Concerted efforts by the government have resulted in the decline of unmet need for family planning from 25.4% (DLHS-I) to 21.3% (DLHS-III) but approximately 4.2 crore couples still have an unmet need for contraception (1.6 crore for spacing and 2.6 crore for limiting). Presently the spacing options are limited to only condoms, IUCDs and Oral Pills contributing to 5.9%, 1.9% and 4.2% share of mCPR respectively. Evidence of contraceptive method mix clearly indicates that with the addition of a single method there is a linear increase in mCPR by 3-4%. It is therefore imperative to increase the basket of choices as well as the service coverage simultaneously in the National Family Planning Program.

Introduction and widespread provision of new contraceptives can substantially contribute to achieving this goal. Considerable scientific evidence is now available to address key concerns and accommodate injectable contraceptive DMPA in the National Family Planning Program. The growing availability and use of DMPA in the NGO/private sectors, combined with the strengthening of the health system under the National Health Mission (NHM) has resulted in the overall improvement of infrastructure including manpower in the public sector. International and National experiences confirm that DMPA is acceptable to women when offered with quality counselling and follow-up care. Women who are counselled about side-effects are less likely to discontinue their use, more likely to become satisfied users and eventually become its' best promoters as a reversible contraceptive.

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.

Inclusion of injectable contraceptive in the basket of FP Choices would not only be consistent with the GOI's commitment to reduce unmet need for spacing but will also provide impetus to efforts for increasing modern contraceptive usage in addition to addressing the new sustainable development goals.

Ensuring healthy timing and spacing of pregnancies is now considered the most important intervention affecting reproductive, maternal, neonatal, child and adolescent health

## Scope of this Manual

This manual seeks to provide the latest information on Depo MedroxyProgesterone Acetate (DMPA) injectable contraceptive that is safe and effective. This is in alignment with the focus of the government to establish it as an important component of the basket of choice for spacing methods in the public sector in India's National Family Planning Programme. This manual addresses all the managerial, programmatic, technical and counselling issues related to the injectable contraceptive DMPA. It also lays down the training strategy and curricula to train the service providers for quality service provision in a sensitive manner.

## Target Audience

This comprehensive manual is meant to be used all over the country by all stakeholders, including programme managers at the national, state, district and block levels, trainers and service providers at all levels (medical doctors, nursing personnel and other paramedical), faculty of medical colleges as well as clients who want to get acquainted with the program and be aware of their rights and responsibilities.

It can also be used for monitoring and ensuring quality service provision of DMPA injectable contraceptive by outlining the steps and mechanisms for measuring the quality of services provided at public health facilities.

It will not only help in enhancing the knowledge and skills of service providers in providing quality services but also empower the programme managers in scaling up the services in their states and districts which in turn will help to improve the acceptance and continuation rates leading to client satisfaction.

## **SECTION I:**

### Technical Aspects of Injectable Contraceptive (DMPA)





# Overview

## 1.1 Historical Background

Development of a long-acting reversible contraceptive was a goal of family planning researchers for many years. Long-acting progestins were recognized as the steroids suitable to fulfil this criterion because they are effective, safe and their side effects are few. Shortly after oral contraceptives were introduced, it was discovered that when a synthetic form of progesterone is injected intramuscularly, it is released slowly into the blood stream and provides long lasting hormonal activity. DMPA (Depot MedroxyProgesterone Acetate) is one such synthetic progesterone, developed in 1954 by the Upjohn Company for treatment of endometriosis and habitual or threatened abortions. In early 1960s, it was noted that women receiving DMPA for premature labour subsequently had a marked delay in return of fertility. This observation led to the development of DMPA as a fertility-regulating agent. In the mid 1960s, Upjohn got a contraceptive product licence for marketing DMPA as a contraceptive in many countries. Since then DMPA has become a popular contraceptive and has been one of the most extensively researched drugs with an accumulated research experience of over 3 million women months of use with more than a thousand published scientific papers and reviews. It is now a widely used contraceptive and is approved for use in more than 130 countries (WHO: Family Planning: A Global Handbook for Providers).

## 1.2 Global and National Experiences

### 1.2.1 Global Experiences

DMPA is the fourth most prevalent contraceptive and is widely used as an effective, safe and acceptable method of contraception across the world. It is estimated that currently, an estimated 42 million women worldwide use injectables as a method of choice. Some of the neighbouring countries offer DMPA in their government-run family planning programs which contributes significantly to their contraceptive method mix. DMPA use is 31.9% in Indonesia, 28.9% in Bhutan, 14.8% in Sri Lanka, 14% in Thailand, 11.2% in Bangladesh and 9.2% in Nepal (Population Reference Bureau 2013). Trend estimates suggest that acceptance is increasing due to the reassuring World Health Organization (WHO) consensus regarding cancer risk, changes in bone mineral density, metabolic effects, associated HIV risk etc. The 3 monthly DMPA was approved as a contraceptive by US FDA in February 1992.

Experiences from many countries of Asia, Africa and South America have also shown that DMPA can be delivered in non-clinical settings through community-based workers, after appropriate training on counselling, client selection and screening, safe administration of injection, follow-up care etc. with comparable rates of acceptability and continuation.

### 1.2.2 National Experiences

DMPA was approved by the Drug Controller General of India (DCGI) in June 1993 for marketing and use as an injectable contraceptive method. A Post-Marketing Surveillance of DMPA use on 1079 Indian women, to validate the efficacy, safety and acceptability of the drug as contraceptive was carried out by Upjohn Company from 1994 to 1997, in 10 independent,

well reputed private and NGO health centres across the country, co-ordinated by FOGSI. The results demonstrated that 150 mg DMPA injection is a safe and effective contraceptive and that appropriate counselling on the expected side effects greatly increased the acceptability of the method.

From 1994 onwards several operational research by Population Council, UNFPA, EngenderHealth and DKT India were carried out and DMPA service delivery in clinical setting was started by some of the NGOs such as Parivar Sewa Sanstha and FPAI. Subsequently many private providers under the banner of FOGSI/IMA also began providing DMPA services through their health facilities.

In 1999 the social marketing approach for DMPA began by Social Marketing Organizations like DKT-India, Janani, PHSI and PSI to improve access and availability of DMPA. Training of service providers was also supported which bolstered the confidence of the providers and the use of DMPA increased.

However, the lone efforts of the private sector to offer DMPA to women has not been able to cause any significant change in the overall contraceptive use as number of DMPA users still remain small. NFHS-3 (2005-06) showed acceptance is only 0.1%, which has increased from 0.004% as was in 2003 (PRB survey). One of the reasons for this slow increase has been the high cost of the commodity and services which can be redressed by offering it free in the public health system.

## 1.3 Consensus Statements

### 1.3.1 WHO Statement on Depot MedroxyProgesterone Acetate (DMPA) – (October, 2015)

The purpose of this 'Statement' is to reiterate and clarify the existing (current) WHO position based on published guidance that is still valid. WHO monitors the evidence closely and updates its guidance as and when new evidence becomes available.

Depot MedroxyProgesterone Acetate (DMPA) is a hormonal contraceptive with high acceptability as it is provided by an injection every three months, which can be given outside clinical facilities. It is also low cost and highly effective. It is a reversible method and women's chances of getting pregnant after stopping its use are no different from those who have not used DMPA.

WHO recommends DMPA for-

- 1) Women aged 18 to 45 years of age; there should be no restrictions on the use of DMPA, including no restrictions on the duration of its use (Medical Eligibility Criteria[MEC] Category 1).
- 2) Among adolescents (menarche <18 years) and women over 45 years, the advantages of using DMPA generally outweigh the theoretical safety concerns regarding fracture risk (MEC Category 2).
- 3) There should be no restriction on the use of DMPA among women who are otherwise eligible to use this method, including on duration of use.
- 4) There are no restrictions on the use of DMPA for women at high risk of HIV (MEC Category 1). Women and couples at high risk of HIV acquisition should also be informed about and have

access to HIV preventive measures, including male and female condoms irrespective of the family planning method they choose.

### **1.3.2 Statement by Royal College of Gynaecologist (RCOG) London on Progestogen-only Contraception (DMPA) – (July, 2010)**

- 1) Women and their partners should be advised that very long-acting reversible contraception can be as effective as sterilization.
- 2) Women should be advised that return of fertility can be delayed for up to 1 year after discontinuation of progestogen-only injectable contraception.
- 3) Women can be informed that there is no conclusive evidence of a link between progestogen-only methods and breast cancer.
- 4) Progestogen-only methods may help to alleviate dysmenorrhoea.
- 5) Women should be advised that altered bleeding patterns are common with use of Progestogen-Only Contraception (POC).
- 6) Women should be informed that the progestogen-only injectable is associated with a small loss of BMD, which usually recovers after discontinuation.
- 7) Women who wish to continue using Depot MedroxyProgesterone Acetate (DMPA) should be reviewed every 2 years to assess the benefits and potential risks.
- 8) Users of DMPA should be supported in their choice of whether or not to continue using DMPA up to a maximum recommended age of 50 years.
- 9) Women can be advised that although the data are limited, POC does not appear to increase the risk of stroke or MI and there is little or no increase in venous thromboembolism risk.
- 10) Caution is required when prescribing DMPA to women with cardiovascular risk factors due to the effects of progestogen on lipids.

### **1.3.3 FOGSI Policy Statement on Long Acting Injectable Progestogens – (May, 2010)**

- 1) FOGSI recognizes the scientific evidence supporting the use of long acting injectable progestogens as a safe, effective, reversible long acting method of contraception.
- 2) Long acting injectable progestogens as a contraceptive method have been used since two decades and are available worldwide in more than 100 countries.
- 3) The advantages of long acting injectable progestogens are that they are highly effective, safe, long acting, easy to administer and easy to use method of contraception, a flexible option when oestrogen-containing contraceptives are not favoured or medically contraindicated, with no adverse effects on lactation.
- 4) For women they provide autonomy and choice with privacy about their use easily maintained and as a reversible method which can be discontinued without having to seek provider assistance.
- 5) Concern regarding menstrual disturbances and osteoporosis can be addressed by counselling while those involving risk of malignancy have no proven scientific basis.
- 6) FOGSI believes that long acting injectable progestogens are an important component of the contraceptive choices which should be available to the women of our country through both the private and public sector.

**Note:** In line with WHO and RCOG Statements, other international professional bodies like Australian and New Zealand College of Obstetricians & Gynaecologists (ANZCOG); American College of Obstetricians & Gynaecologists (ACOG) and The Society of Obstetrics & Gynaecologists of Canada (SOGC) have also endorsed the above statements.

## 1.4 Injectable Contraceptives

The Injectable Contraceptives contain synthetic hormones resembling the natural female hormones. When administered (IM/SC) there is a slow release of hormone into the blood stream and it provides protection from pregnancy for a long duration of time to the client.

### 1.4.1 Types of Injectable Contraceptives

There are two main types of injectable contraceptives:

- 1) Progestogen-only Injectables (POI) containing only synthetic progesterone. They are of two types:
  - a) Depot MedroxyProgesterone Acetate (DMPA) – 3 monthly Injection.
  - b) Norethisterone enanthate (NET-EN) – 2 monthly Injection.
- 2) Combined Injectables Contraceptive (CIC): containing estrogen (usually ethinylestradiol) and progesterone - 1 monthly injection.

*Under the National Family Planning program, DMPA injectable contraceptive have been added to the basket of choice and henceforth DMPA will be discussed in this manual.*

### 1.4.2 Routes of DMPA Injectable Contraceptive

Depot MedroxyProgesterone Acetate can be given through intramuscular route (DMPA IM) or subcutaneous route (DMPA SC).

- 1) Intramuscular DMPA: available as
  - a) Single dose vial with disposable syringe and needle
  - b) Prefilled syringe with needle
- 2) Subcutaneous DMPA: Prefilled auto disable syringe in Uniject system (squeezing bulb pushes the fluid through the needle)

# Depo Medroxy Progesterone Acetate (DMPA)

## 2.1 Composition

Injectable Contraceptive (DMPA) is an aqueous suspension of microcrystal for depo injection of pregnane 17 alfa – hydroxyprogesterone – derivative progestine medroxyprogesterone acetate. DMPA is a Progestogen-only Injectable (POI) given deep intra-muscular every three months (one dose = one vial of 150 mg, aqueous suspension of DMPA)



Fig.1. Injectable Contraceptive DMPA (Antara) in the National Family Planning Program

### 2.1.1 Mechanism of Action of DMPA

DMPA acts in the following way:

- Inhibiting ovulation - by suppressing mid cycle peaks of LH and FSH
- Thickening of cervical mucus - due to depletion of oestrogen. The thick mucus prevents sperm penetration into the upper reproductive tract.
- Thinning of endometrial lining - due to high progesterone and depleted oestrogen, making it unfavourable for implantation of fertilized ovum.

## 2.2 Safety and Effectiveness

### 2.2.1 Safety

DMPA is a safe contraceptive. Like other progestogen-only contraceptives women who want a highly effective contraceptive can use it, including women who are breastfeeding or who are not eligible to use estrogen-containing combined oral contraceptives. Studies by WHO on over 3 million woman months of DMPA use give reassurance that DMPA presents no overall risks for cancer, congenital malformation or infertility. Also extensive research has found that DMPA use:

- Exerts a strong protective effect against endometrial cancer, no overall increased risk of breast, ovarian & cervical cancer similar to oral contraceptives.
- Has not been found to affect the risk of developing liver cancer in areas where hepatitis B is endemic.
- Does not cause any significant changes in blood pressure or on the coagulation of the fibrinolytic system affecting thrombosis.
- Keeps the fertility intact although it takes a woman few months (4 to 6) longer to become pregnant after discontinuing DMPA than after discontinuing COCs, IUDs or barrier methods.

Studies have found no differences in the health, growth, sexual development, aggression,

physical activity or sex role identity of teenage children exposed in utero to DMPA as compared with no in-utero exposure.

### 2.2.2 Effectiveness

It is a highly effective contraceptive method. With a standard regimen the first year effectiveness is 99.7% when the drug is used correctly; however the effectiveness decreases in typical use. The perfect use failure rate of 0.3% is lower in comparison to 0.5% of female sterilization, 0.8% of IUCD and 0.3% of combined oral contraceptives (WHO: Family Planning: A Global Handbook for Providers).

Effectiveness depends on timing of first injection, taking injections regularly on time, the injection technique and post injection care.

## 2.3 Benefits – Contraceptive & Non-Contraceptive

### 2.3.1 Contraceptive Benefits

- Safe, highly effective with long term contraceptive benefits.
- Convenient and easy to use (does not require daily routine or additional supplies).
- Acts for 3 months with a grace period of 4 weeks.
- Completely reversible: 7-10 months from date of last injection (average 4-6 months after 3 months effectivity of last injection is over).
- A private and confidential method.
- Does not interfere with sexual intercourse/pleasure.
- Pelvic examination not required prior to use.
- Suitable for women who are not eligible to use an oestrogen containing contraceptive.
- Suitable for breast feeding women (after 6 weeks postpartum) as it does not affect quantity, quality and composition of breast milk.
- Provides immediate postpartum (in non-breastfeeding women) and post-abortion contraception.
- May be used by women at any age or parity if they are at risk of pregnancy.

### 2.3.2 Non-contraceptive Benefits

- May decrease menstrual cramps and reduce pre-menstrual syndrome/tension.
- Improves anaemia by reducing menstrual blood loss due to menstrual changes such as amenorrhea.
- Reduces the symptoms of endometriosis.
- Decreases benign breast disease and ovarian cyst.
- Helps prevent uterine tumours (fibroids).
- Reduces the incidence of symptomatic pelvic inflammatory disease (PID).
- Protect against endometrial cancer and possibly ovarian cancer.
- Reduces sickle-cell crises in women with sickle cell anaemia.
- Protects against ectopic pregnancy (since ovulation does not occur).
- Minimal drug interactions – no demonstrable interaction has been found between DMPA and antibiotics/enzyme-inducing drugs.



## 2.4 Limitations

DMPA is an appropriate long acting contraceptive method suitable in majority of the women, however it has some limitations like

- It does not protect against STI/RTI and HIV infection.
- Once taken its action cannot be stopped immediately.
- It causes changes in the menstrual cycle and bleeding due to its inevitable effect on a woman's body hormones.
- It has to be repeated every three months to achieve desired contraceptive effectiveness.
- Return of fertility takes 7-10 months from date of last injection (Average 4-6 months after 3 months effectivity of last injection is over).
- Cannot be given in few medical conditions/diseases.

## 2.5 Return to Fertility

DMPA may cause a delay in the return of fertility. Since one injection is effective for 3-4 months, the return of fertility takes 7-10 months from date of last injection (average 4-6 months after 3 months effectivity of last injection is over).

Studies have also shown that ovulation/fertility return is not affected by duration of DMPA use or women's age.

## 2.6 Initiation

### 2.6.1 When to Start DMPA Injection

A DMPA injection can be started any time if it is reasonably certain that the woman is not pregnant (Annexure 1).

A physical examination is always an important part of good reproductive health care but recent scientific studies have shown it is not required for the provision of DMPA.

The following table highlights different situations of women, when one can start the first dose of DMPA injection as an effective contraceptive method.

Woman's situation	When to start
Having menstrual cycles or switching from a non hormonal method	<ul style="list-style-type: none"><li>• Can be started any day within 7 days of menstrual cycle with no need for a backup method.</li><li>• Can also be started any time later in the menstrual cycle (after 7 days) if it is reasonably certain that the woman is not pregnant (no history of unprotected sex since LMP). She will need a backup method (e.g. condom) for the first 7 days after the injection.</li><li>• Can be started immediately, if she is switching from an IUCD.</li><li>• If starting after 7 days of menstrual cycle, she will need a backup method (e.g. Condom) for next 7 days.</li></ul>
Switching from a hormonal method	<ul style="list-style-type: none"><li>• Can be started immediately, if she has been using the hormonal method consistently and correctly or if it is reasonably certain that the woman is not pregnant. No need to wait for her next monthly bleeding. No need for a backup method.</li></ul>

Woman's situation	When to start
<b>Post-Partum Women breastfeeding</b>	
Less than 6 months postpartum	<ul style="list-style-type: none"> <li>• Wait until 6 weeks postpartum and then start DMPA.</li> <li>• Can be started any time between 6 weeks and 6 months, if she is fully or nearly fully breastfeeding and her monthly bleeding has not returned. No need for a backup method.</li> <li>• Can be started at any time between 6 weeks and 6 months, if she is partially breastfeeding and her monthly bleeding has not returned and if it is reasonably certain that the woman is not pregnant. She will need a backup method (e.g. Condom) for the first 7 days after DMPA injection.</li> <li>• If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.</li> </ul>
More than 6 months postpartum	<ul style="list-style-type: none"> <li>• Can be started at any time, if her monthly bleeding has not returned and if it is reasonably certain that the woman is not pregnant. She will need a backup method (e.g. Condom) for the first 7 days after DMPA injection.</li> <li>• If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.</li> </ul>
<b>Post-Partum Women not breastfeeding</b>	
Less than 4 weeks after giving birth	<ul style="list-style-type: none"> <li>• Can be started at any time. No need for a backup method.</li> </ul>
More than 4 weeks after giving birth	<ul style="list-style-type: none"> <li>• Can be started any time, if her monthly bleeding has not returned and if it is reasonably certain that the woman is not pregnant. She will need a backup (e.g. Condom) method for the first 7 days after the injection.</li> <li>• If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.</li> </ul>
<b>Other situations</b>	
No monthly bleeding (not related to childbirth or breastfeeding)	<ul style="list-style-type: none"> <li>• Can be started any time if it is reasonably certain that the woman is not pregnant. She will need a backup method (e.g. Condom) for the first 7 days after the injection.</li> </ul>
After miscarriage or abortion	<ul style="list-style-type: none"> <li>• Can be started immediately after abortion or within 7 days of first or second-trimester miscarriage/abortion, with no need for a backup method.</li> <li>• Can also be started after more than 7 days of first or second trimester miscarriage/abortion, any time, if it is reasonably certain that the woman is not pregnant. She will need a backup method (e.g. Condom) for the first 7 days after the injection.</li> </ul>
After taking Emergency Contraceptive Pills (ECPs)	<ul style="list-style-type: none"> <li>• Can be started on the same day as the ECPs.</li> <li>• Can also be started within 7 days of monthly bleeding, a backup method (e.g. Condom) will be required for next 7 days. She should be asked to return, if she has signs or symptoms of pregnancy other than amenorrhoea.</li> </ul>

# Counselling

## 3.1 Counselling

Counselling is defined as a facilitation process where a person (skilled service provider) explicitly and purposefully gives his/her time, attention and skills to assist a client to explore their situation, identify and act upon solutions within the limitations of their given environment. Counselling is a very essential component of Family Planning Services and is a client centered approach that involves communication between a service provider/counsellor and a client. Counselling enables the service provider to understand clients' perceptions, attitudes, values, beliefs, family planning needs and preferences and accordingly can guide him/her towards decision making. The provider/counsellor should be non-judgmental. Privacy (auditory and visual) and confidentiality should be maintained during the process of counselling. Women/couples may have limited information about DMPA which is further compounded by misconceptions and concerns. These should be dispelled by providing correct information to women, so that they are able to make an informed choice for DMPA and continue using it till they desire.

### 3.1.1 Benefits of Family Planning Counselling

- Increases acceptance
- Enhances continuation of methods
- Dispels myths/rumours and corrects misunderstandings about contraceptive methods
- Promotes effective use
- Increases client satisfaction

### 3.1.2 Decision-Making

Counselling helps the client to make voluntary decisions regarding:

- Whether to use contraception to delay, space or limit childbearing.
- Which method to use.
- Whether to continue using the method if side effects occur.
- Whether to switch methods when the current method is unsatisfactory.
- Whether to involve one's partner(s) in reaching a decision.

### 3.1.3 Principles of FP Counselling

- Privacy.
- Confidentiality.
- Respectful, non-judgmental, accepting, and caring attitude.
- Simple culturally appropriate language easy for client to understand.
- Good verbal and non-verbal interpersonal communication skills.
- Brief, simple and specific information with key messages.
- Opportunity for client to ask questions and express any concerns.

- Effective use of audio-visual aids, anatomic models and contraceptive samples.
- Repeat key information shared by the client, show and confirm that you have understood correctly what they are saying.
- Voluntary Informed Decision making by client.

## 3.2 Stages of Family Planning Counselling

### 3.2.1 Stage I: General - Counselling

During this stage, the provider creates the conditions that help a client select a family planning method.

- Establish and maintain a warm, cordial relationship and listen to the client' contraceptive needs.
- Rule out pregnancy using the Pregnancy Checklist. (Annexure 1)
- Display all the methods using flip charts, actual methods, photographs, illustrations or posters. Arrange by method type: Spacing (temporary/reversible methods) methods, Limiting (permanent) methods.
- Set aside methods that are not appropriate for the client. It helps to avoid expanding on methods that are not relevant to the client's needs.
- Give information about the methods that have not been set aside, including their effectiveness.
- Ask the client to choose the method that is most convenient for her/him.
- Determine client's medical eligibility for the chosen method.
- Give the client complete information about the method that is chosen. If client choose DMPA explain the information about the method as given in section 3.2.2.
- Check the client understands and reinforce key information.
- Make sure the client has made a definite decision.
- Encourage the client to involve her/his partner(s) in decisions about contraception either through discussion or a visit to the facility.
- Assess STI/HIV risk, if the client has STI symptoms, refer or treat her/him syndromically (if needed HIV counselling). Discuss triple protection. Offer condoms and instruct the client in correct and consistent use.

Healthy Timing and Spacing of Pregnancy (HTSP) is important for the health of the mother and baby. Following are the recommendations to a woman considering using a family planning method of choice before trying to become pregnant again:

- Wait at least 24 months after child birth.
- Wait at least 6 months after miscarriage or abortion.
- Wait until the age of 18 years.

### 3.2.2 Stage II: Method Specific Counselling on DMPA

The following information should be given so that the woman can make an informed decision for DMPA voluntarily.

- It is a three monthly injection hence injections need to be repeated every three months.
- It is best to take next injection on time, though it can be taken two weeks before or four weeks after scheduled date.

- It is a safe and an effective method.
- It does not affect breast milk hence can be used safely by breastfeeding mothers.
- It causes menstrual changes like irregular/prolonged bleeding and amenorrhea which are harmless and occur due to the effect of the method.
- Other minor effects may include change in weight, mood swings, headache and decrease in bone mass.
- It is a reversible method but there is a delay in return to fertility and it takes 7-10 months from date of last injection (average 4-6 months after 3 months effectivity of last injection is over). When the woman wants to conceive, she should discuss it with her provider and discontinue taking the method well in advance.
- It does not protect from HIV/STIs. Discuss that condoms need to be used if she needs protection from them.

### 3.2.2.1 Counselling about Side Effects

During counselling special emphasis is needed for explaining the reason of menstrual changes and other side effects that might occur. This understanding helps women to opt for the method without getting worried about the side effects and also to cope with them when they occur.

- Many women tend to worry about amenorrhoea as they do not even know process of menstruation and many think it is the dirty blood that comes out of the body. Their concerns/myths related to these changes are addressed in the section 3.3 at point no. 3.
- Women need to be told that absence of period occurs because that is the way the method works and is not harmful. Reassure that periods resume after discontinuing DMPA.

#### **Explain the Process of Menstruation**

Using simple language and examples explain:

“Every month a woman’s body prepares for conception. An ovum is released and the uterus also prepares to nurture the baby. So its inner lining becomes thick and soft as it gets more blood supply. If she does not conceive that month, this inner lining of blood is thrown out of her body as menstrual flow. This is repeated every month, causing menstrual cycles.”

#### **Explain Why Menstrual Changes Occur**

With DMPA, the monthly preparation for pregnancy in woman’s body does not occur. There is no release of ovum and thickening of inner lining of uterus.

The menstrual cycle gradually comes to a stop after irregular bleeding for some time.

When the woman stops using it, body starts preparing for conception and menstrual cycle is resumed.

Women can be explained that if they do not want to become pregnant, there is no significance of menstruation.

### 3.2.2.2 Immediate Post Injection Counselling

Right after DMPA injection is given to a woman, it is important to advise her.

- Not to massage or apply hot fomentation to the injection site as it may hasten the absorption of DMPA, due to which its effect may go away before 3 months.

- The injection needs to be repeated every 3 months so she should try to come for the next dose on the date mentioned on the DMPA client card. Tell her that in case she is unable to come on the specified date due to some reason, she should still come for the injection, as it can be given a few days earlier or later.
- Explain that menstrual changes are common with the method so she should not get unduly alarmed if they occur.
- Tell her she can return any time, especially if she has concerns or problems.

### 3.2.3 Stage III: Follow-Up Counselling

During all repeat visits, follow-up counselling of the client is very important to ensure client satisfaction and continuation of the accepted method. Every time the client comes to the health facility, she should be counselled.

- Ask her experience and satisfaction with the method.
- Discuss if she has any side effects. If yes, ask how she feels about them.
- Ask if she has any questions/concerns about the method (Refer Section 3.3 and Annexure 4,5).
- Reassured about the side effects and her concerns/questions should be answered appropriately.
- If she wants to continue the method and the next injection is due, give/help her to get it.
- In case the woman does not want to continue with the method, help her to choose another method.

### 3.3 Myths and Misconceptions on DMPA (Also refer to Annexure 4,5)

S. No	Myth/Concern	What to tell
1.	Will irregular bleeding mean something harmful has happened to me because of using DMPA?	<b>No</b> , irregular bleeding with DMPA use occurs due to the way the method works. It is not a sign of illness and it is harmless. Irregular bleeding occurs only in the first few months of injection use because amenorrhea sets in after that.
2.	Will stoppage of period mean method has failed causing pregnancy?	DMPA is a very effective method if taken on time every three months. Therefore a chance of a pregnancy is very low. Period stops because that is the way the method works.
3.	Will stoppage of monthly bleeding lead to collection of dirty blood in my body?	<b>No</b> , blood coming out of the body every month as period is normal blood and is not dirty. Monthly bleeding occurs because every month the inner lining of uterus becomes thick and soft with increased blood supply in preparation of pregnancy and this blood is flushed out of her body if she does not conceive that month. A foetus is nurtured with this blood, in case pregnancy occurs, so how can it be dirty? With DMPA, monthly bleeding stops because the bodily preparation for conception comes to a halt. When the woman discontinues using DMPA, body again starts preparing for conception and monthly bleeding (period) is resumed.

S. No	Myth/Concern	Myth/Concern
4.	Will stoppage of period weaken my eye sight?	<b>No</b> , there is no connection between a woman's eye sight and period.
5.	Will stoppage of period mean untimely menopause?	<b>No</b> , DMPA does not cause menopause. It only temporarily stops period from occurring every month and once DMPA use is discontinued, period resume after few months.
6.	Will stoppage of period lead to infertility?	<b>No</b> , DMPA does not cause infertility. After discontinuing DMPA, a woman can become pregnant if she wants to. Pregnancy usually occurs 7-10 months from date of last injection (Average 4-6 months after 3 months effectivity of last injection is over).



# Eligibility Criteria and Client's Assessment

All women can use DMPA safely except in certain physiological or medical conditions. Therefore, assessment as per Medical Eligibility Criteria (MEC) is important.

## 4.1 Eligibility Criteria

DMPA is safe for all women including who:

- Are of any age, including adolescents and women over 45 years old.
- Have or have not had children.
- Are unmarried.
- Have just had an abortion or miscarriage.
- Are smoker, regardless of age.
- Are breastfeeding (starting 6 weeks after child birth).
- Are at risk of STI/ HIV infection.
- Are infected with HIV, whether or not on antiretroviral therapy.

Women can begin DMPA injection:

- Without a pelvic examination.
- Without any blood tests or other routine laboratory tests.
- Without cervical cancer screening.
- Without a breast examination.
- Even when she is not having monthly bleeding at the time of injection, if it is reasonably certain that the woman is not pregnant

There are only few medical and physiological conditions in which DMPA is not recommended for the woman e.g. breastfeeding woman less than six weeks postpartum, blood pressure 160/100 mm Hg or more, unexplained vaginal bleeding etc. (Category IV as per WHO MEC).

Once a woman chooses DMPA, it is important for the provider to ascertain if the method can be given to her or not (Annexure 1, 2).

## 4.2 Clinical Assessment and Screening of Clients

DMPA can be administered by health care providers to clients who were counselled about contraceptive options and have made an informed & voluntary decision for its use. This can be done by using a screening checklist, based on the contraceptive wheel of GoI 2015 adapted from WHO MEC 2015 (Fig. 2, Annexure 2).

With the checklist, a few questions are asked and based on the answers, it becomes clear whether DMPA can be given to that woman or not.

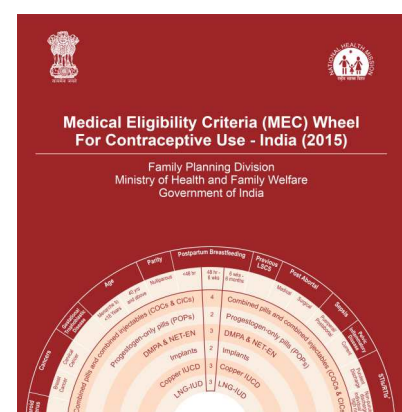


Fig.2 WHO MEC Wheel



**4.2.1 Demographic Information** -The information required are: Client's name, husband's name, address and phone/mobile number, age, marital status, occupation, religion, educational status, number of living children and age of youngest child. Contact telephone number of ASHA/ANM (if available)

#### 4.2.2 History

- **Menstrual** - date of Last Menstrual Period (LMP), menstrual cycle details including length of cycle, duration and amount of flow, any dysmenorrhoea, regularity of periods, any intermenstrual bleeding.
- **Obstetric** - number of pregnancies and living children and mode of delivery, date of last childbirth, number and date of abortion/MTP, current pregnancy status.
- **Breast feeding** - full, partial or not at all.
- **Contraceptive** - when and what was the last contraceptive used. If discontinued, when and why.
- **Medical-**
  - History of illness and other medical conditions in the past or at present as mentioned under the screening checklist as adapted from WHO MEC 2015 (Annexure 2). Rule out any febrile illness or diabetes.
  - Known allergies especially to progesterone or to constituents of injection.
  - Current medications and reasons thereof.

#### 4.2.3 Physical Examination

Although a detailed examination is seldom necessary, it is a good practice to perform general physical examination, abdominal, pelvis and any other examination as indicated by the client's history.

- **General Physical Examination:** includes general condition, pulse, blood pressure, respiratory rate, temperature, body weight, pallor, nutritional status etc.
- **A Routine Abdominal Examination** should be done.
- **Pelvic Examination:** *It is not mandatory but the opportunity may be used to rule out STIs/RTIs or other pelvic diseases.*

#### 4.2.4. Investigations

There is no necessity for laboratory investigations routinely. In cases where the possibility of pregnancy is difficult to rule out, a pregnancy test should be done. If pregnancy testing is not available, counsel the client to use a barrier method until her next menses to prevent pregnancy and plan to start the injection from the next menstrual cycle.

# Administering the Injection

## 5.1 Storage of DMPA Vials

DMPA injection vials are to be stored preferably at room temperature between 15° to 30° Celsius in a dry, dust free place and not exposed to extreme heat and cold.

Do not keep the injection vials in the refrigerator/freezer; instead keep outside in a cupboard away from direct sunlight in a dry place.

## 5.2 Pre-Injection Preparation

- Ensure client is properly counselled and has chosen DMPA.
- Check vial for expiry date.
- Shake the vial well. If the vial is cold, warm to body temperature by rubbing between palms before giving injection. Ensure that all the microcrystals are dissolved completely in the fluid of the vial.
- Wash hands with soap and water.
- Withdraw full quantity of solution from the vial into the disposable syringe with needle, taking care not to push any outside air into the vial.

## 5.3 Site of Injection

The injection site for DMPA is the upper arm (deltoid muscle), the buttocks (gluteal muscle, upper outer portion) or thigh (outer anterior) (Fig. 3). The preferred, easily accessible and acceptable site is deltoid muscle. But the client's preference should be taken into consideration before administering the injection.

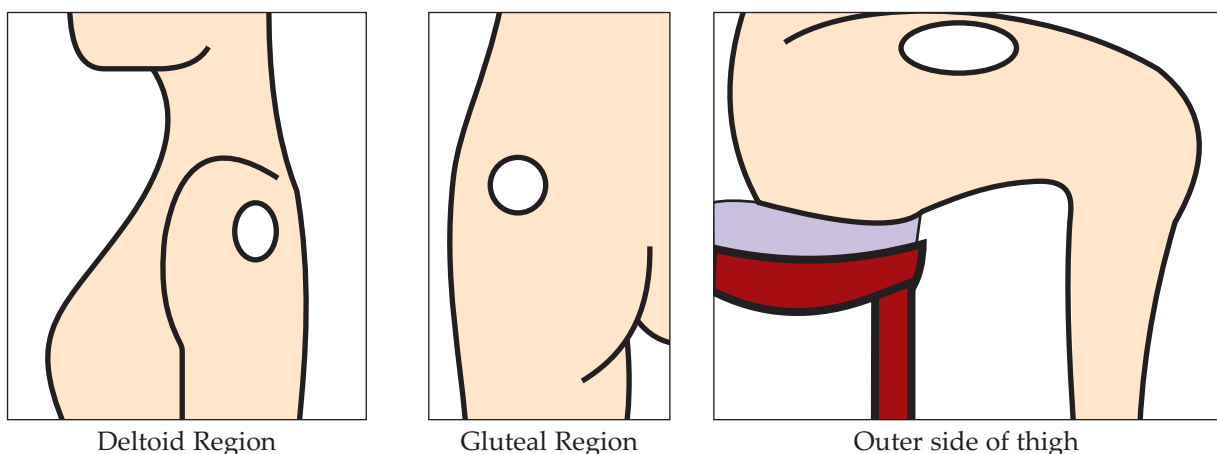


Fig.3 : Site of administration of DMPA Injection

## 5.4 Administration of Injection

- Clean the skin at the site of the injection with an antiseptic, removing any visible dirt or soil. Allow the antiseptic to dry before administering the injection.
- Insert sterile needle deep into the chosen site for injection i.e. the upper arm (deltoid muscle), the buttocks (gluteal muscle, upper outer portion) or thigh (outer anterior).

- Aspirate first to ensure that the needle is not in a vein.
- Inject the contents of the syringe fully.

### 5.5 Post Injection Care

- Do not massage the injection site; just leave the site as it is. If there is little oozing just apply gentle pressure for few seconds.
- Ask the client to remain within facility for 5-10 minutes after receiving the injection.
- Follow safe practices for disposal of used syringes and needles (Refer Chapter 9: Infection Prevention and Safe Injection Practices).

### 5.6 Post Injection Instruction to the Client

- Instruct client not to massage or apply hot fomentation to the injection site as the drug needs to stay there for a long time and release very slowly for the next three months.
- Instruct client that she must come after 90 days for a repeat injection and give her the scheduled date. Hand over the DMPA Client Card (Annexure 3) to her after explaining its content to her.
- Inform the client that the effect of injection is immediate if given between 'day one' to 'day seven' of her menstrual cycle. But if given after 'day seven' a backup contraceptive method (e.g. condom) should be used for 7 days.
- Assure the client that she is welcome to come back any time, if she feels any problem, wants another method, has a major menstrual change, has a major change in health status or thinks might be pregnant.
- Ensure post injection counselling.

**Do not massage the injection site and do not apply hot fomentation after injection**

## Follow Up Care

Follow up of client is an important step for quality services and help clients to continue using the method till they want protection from unwanted pregnancy. It is seen that DMPA clients usually tend to discontinue the method after a few injections as they get concerned with the side effects or may forget to come for repeat injections. This leads to high dropouts, particularly after the first injection. Clients need a lot of reassurance and reminders for continuing the method.

Clients can be supported for continuing use of the method by:

1. Mechanisms for continuity of care.
2. Effective follow-up of the client including management of side effects.

### 6.1 Mechanisms for Continuity of Care

- Discuss the importance of follow up visits with the client. Inform the client the date for next injection and give DMPA client card to her after explaining about its contents, with due date mentioned on it.
- It is a good practice to note down client's phone number in the register, if she agrees to share it. Telephonic follow up can provide both reassurance and reminders for the next dose.
- Community Health Workers like ASHAs and ANMs can visit the client periodically and allay her anxieties and concerns. This can minimize the number of dis-satisfied clients thus helping them continue the method.
- Strictly maintain confidentiality of the acceptors/beneficiaries during every visit.

### 6.2 Effective Follow-Up of Client

Clients need repeat injections every three months. A few clients may come late for the repeat injection and some may stop coming altogether; hence providers need to follow them up accordingly to minimize the problems of method discontinuation.

#### 6.2.1 Follow up of Clients (Coming on scheduled date for next injection i.e after 3 months).

Time of visit	Action to be taken	Points for reinforcement
At 3 months after last injection on the scheduled date	<ul style="list-style-type: none"> <li>• Give DMPA injection</li> <li>• No back up required</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage her to come on time for next injection as per the date given on the DMPA client card.</li> <li>• Discuss if she is having any side effects and counsel accordingly.</li> </ul>

#### 6.2.2 Follow Up of Defaulters

A defaulter is a client who does not return for the next injection on the scheduled date (scheduled date is every 3 months/13 weeks) but comes for it within the grace period (grace period is 2 weeks earlier and up to 4 weeks later from the scheduled date).

Time of visit	Action to be taken	Points for reinforcement
<b>2 weeks earlier or up to 4 weeks later from the scheduled date (within grace period)</b>	<ul style="list-style-type: none"> <li>• Give DMPA injection</li> <li>• No back up required</li> </ul>	<ul style="list-style-type: none"> <li>• Counsel her on the importance of coming on time for next injection, as per the date given on the DMPA client card. (If she has come two weeks earlier then the follow up date will be calculated two weeks earlier from the next follow up date and four weeks later if she comes four weeks late).</li> <li>• Discuss if she is having any side effect and counsel accordingly.</li> </ul>

### 6.2.3 Follow Up of Drop Outs

A dropout is a DMPA client who comes for the next injection after the grace period of 4 weeks is over and more than 4 months have passed since she took her last injection.

Time of visit	Action to be taken	Points for reinforcement
<b>More than 4 months from the date of last injection.</b>	<ul style="list-style-type: none"> <li>• Rule out pregnancy</li> <li>• If not pregnant, give DMPA Injection</li> <li>• Advise back up method (e.g. Condom) for next 7 days</li> </ul>	<ul style="list-style-type: none"> <li>• Ask reason for coming late.</li> <li>• If returning within 4 months is a problem for the client, discuss other contraceptive methods of FP.</li> </ul>

# Management of Side Effects

## 7.1 Introduction

The client satisfaction on continuing use of DMPA depends on the ability of service providers to counsel the client on the nature of side effects.

When side effects occur they are usually weeks or months following the injection of DPMA. Many women stop using DMPA due to fear and misunderstanding about side effects. To help clients continue using DMPA, it is important to counsel and manage the associated side effects, especially menstrual changes.

There are no serious side effects of DMPA, however a few women may experience some menstrual irregularities in the form of irregular bleeding, prolonged bleeding or amenorrhea. Counselling should resolve concerns of the women; however, if provider feels that the changes are of a serious nature, client should be referred to a higher centre.

Approximately 50 percent of women will have amenorrhea after one year of use and over 70 percent will report amenorrhea with longer duration of use .

## 7.2 Guidelines for Management of Side Effects

Based on WHO guidelines effective management of side effects can be done in the following way. (WHO: Family Planning; A Global Handbook for Providers)

### 7.2.1 Menstrual Changes

- Counselling and reassurance during follow up visits is crucial to allay client's anxiety.
- Assess the bleeding changes and rule out other gynaecological causes.
- Manage menstrual bleeding changes as described below.
- If next injection is due, give it and if client does not want to continue the method, discontinue and help her choose another method.

#### 7.2.1.1 Irregular Bleeding

- Reassure client that this is common, not harmful and usually settles with time.
- For modest short term relief give NSAIDs such as-
  - Ibuprofen 400 mg 3 times a day for 5 days
  - or
  - Mefenamic acid/Tranexamic Acid 500 mg 3 times a day for 5 day.

#### 7.2.1.2 Prolonged/Heavy Bleeding (Bleeding longer than 8 days or twice than usual)

- Reassure the client.
- Give NSAID/Mefenamic/Tranexamic acid 500 mg 3 times a day for 5 days.
- If there is no response with NSAID, give 50 mcg of EthinylEstradiol daily for 21 days or refer for further management.
- In addition, give iron tablets and suggest foods high in iron to prevent anaemia.

- If bleeding becomes a health threat or if the woman wants, help her choose another method.

#### 7.2.1.3 Amenorrhea

After assessing amenorrhoea and ruling out pregnancy, reassure the client that:

- Absence of period is common and not harmful.
- No medical treatment is necessary and there is no need to induce withdrawal bleeding.
- There is no need to menstruate every month.
- It is similar to not having monthly bleeding during pregnancy/lactation.
- Blood is not building up inside her.
- Stoppage of period does not mean woman has become infertile.
- If amenorrhea is still unacceptable, discontinue the method and help her choose another method.
- Menstruation is resumed after discontinuation of DMPA.

### 7.2.2 Other Side Effects

#### 7.2.2.1 Weight Gain

- Counsel the client that in some women, its use can lead to slight weight gain (1-2 kg in one year). This is not significant.
- If the client has gained more than 1-2 kg weight, it could be due to other reasons like diet and lack of physical activity. Review diet and counsel accordingly.

#### 7.2.2.2 Headache

##### 7.2.2.2.1 Non Migrainous Headache

- Reassure and suggest pain relievers like Ibuprofen, Paracetamol. Evaluate headaches that worsened after starting injectable.

##### 7.2.2.2.2 Migrainous Headache

- If without aura, method can be continued.
- If with aura, discontinue the method. Help her choose another method without oestrogen hormone.

#### 7.2.2.3 Changes in Mood or Sex drive

- Ask about changes in life that could affect mood or sex drive, including relationship changes.
- Give support as appropriate.
- For severe mood changes, refer for care to higher center.

## 7.3 Problems not Related to DMPA

Women may report problems which are not due to the method. However, these problems also deserve the provider's attention because they affect women's satisfaction and use of injectable contraceptive. If the client reports any problem with use of DMPA, listen to her concerns, give her appropriate advice/treatment. If problems continue or the client wishes, help her choose another method.



## Special Issues on DMPA

### 8.1 DMPA & Bone Effects

Bone Mineral Density (BMD) refers to the amount of mineral matter per volume of bones and directly correlates with the bone strength. Bone mineral density is influenced by many factors such as gender, age, race, body mass index, hereditary factors, physical stress on bones related to physical activity and weightbearing, nutritional factors such as dietary calcium and vitamin D, alcohol consumption, smoking, corticosteroid exposure, sex hormones and physiological conditions such as pregnancy, breastfeeding and menopause. There is a decrease in bone mineral density of 2-8 % during pregnancy and 3-5 % during breastfeeding.

With use of DMPA injectable contraceptive, bone mineral density decreases by 5-6% in 5 years, with most loss happening in first 2 years. This is believed to be associated with DMPA's interference with the production of the hormone estradiol, which is involved in bone mineral density development. The use of DMPA is associated with temporary decrease in bone mineral density (BMD), which is reversible on discontinuation of DMPA. There is no increase in fractures. Routine bone mineral density monitoring is not recommended in any population using DMPA.

#### 8.1.1 DMPA in Adolescents

Concerns are raised about the effects of DMPA on later sexual development and reproductive function. Adolescence (12-18) is a crucial period of skeletal development and sex hormones play a key role in bone mass accrual. There is up to 50% increase in total body bone mass between the ages of 12 and 18 years. Adolescent DMPA users will show a slower increase in Bone Mineral Density (BMD) values when used over 2 years period compared to non-hormonal users. However, complete recovery of BMD was observed with follow up within 3-5 years and there is no effect on subsequent fertility.

Sexually active adolescents have potentially high fertility rates and unwanted pregnancy/abortion which has substantial medical, social and psychological impact. An effective and easy to use contraceptive can help them in averting unwanted pregnancy. Therefore, WHO recommends that DMPA can be used safely in adolescence.

### 8.2 DMPA in Women > 35 Years of Age

A natural decline in fertility occurs from mid-30s in women, however, an effective contraception is required to prevent unintended pregnancies. At this age there is an increase in the risks of chromosomal abnormalities, miscarriage and pregnancy related complications including maternal morbidity and mortality during child birth. Special considerations in this age group include the frequency of menstrual irregularity, sexual problems and the possibility of menopausal symptoms including risk of cancers in reproductive organs, all of which may respond to DMPA use.

In large trials, no substantial increase in the overall incidence of Venous Thrombo Embolism (VTE), myocardial infarction or cerebrovascular accidents have been noted. Therefore, DMPA is safe and an effective available option for high risk women of over 35 years.

In healthy non-smoking peri-menopausal women, DMPA can be the appropriate contraceptive option. It may reduce vasomotor symptoms and effectively treat abnormal uterine bleeding and prevent endometrial hyperplasia. The reduced risk of endometrial and ovarian cancers is of particular importance to older women of reproductive age.

The potential benefit of decreased bleeding and endometrial protection outweighs the risk of continuing use because arterial and venous cardiovascular events are not increased.

Women who wish to continue using DMPA should be reviewed every 2 years to assess the benefits and risks. Users of DMPA should be supported in their choice of whether or not to continue using DMPA beyond 45 years of age.

### **8.3 DMPA in Post Partum and Lactating Women**

Postpartum period is a critical time period for initiating contraception that helps women space their pregnancies adequately. The immediate postpartum period offers an ideal time for women to initiate contraception because of easy access and convenience.

By six weeks of postpartum up to 40 percent of women will have had unprotected intercourse and nearly 50 percent will have ovulated. Therefore, contraception in postpartum period is essential. Traditionally, COCs have not been recommended as first choice for breast feeding women due to the concerns that estrogenic component can reduce the volume of milk production and the caloric and mineral content of the breastfeed.

The use of progestogen-only contraceptive has no adverse effect on the quantity, quality and composition of breast milk as well as duration of lactation, once breast feeding has been established. In lactating breast feeding women DMPA can be started after 6 week post- partum whereas in non-breast feeding women it can be started anytime within 4 weeks. No backup method is required. However, after 4 weeks it can be started after ruling out pregnancy. Since, it is unlikely that a lactating woman will conceive within 6 weeks post-partum, WHO recommends the use of DMPA after 6 weeks post-partum, if a woman is fully or partially breast feeding. If the woman is not breast feeding, she may start DMPA at 4 weeks post-partum.

### **8.4 DMPA in HIV Positive Women**

WHO recommends that there is no contraindication to the use of DMPA amongst women who may have sexually transmitted infections and is a safe, category 1 option for women infected with HIV. Condom use is strongly encouraged along with DMPA. There is also no definitive evidence on the possible interaction between DMPA and anti-retroviral drugs. DMPA represents preferable contraceptive choice for women taking any antiretroviral treatment.

### **8.5 DMPA and Cancer**

DMPA does not cause cancer and exerts a protective effect against risk of endometrial cancer. This protective effect appears similar or even greater than that associated with combined oral contraceptives and continues for at least 8 years after discontinuation of DMPA (Thomas 1991). There is no association between DMPA use and the risk of ovarian, breast or cervical cancer.

### **8.6 DMPA and Cardio Vascular Diseases**

There is insufficient data to indicate whether there is any relation between DMPA use and cardiovascular complications. Results of a WHO study suggest that there is little increased risk of

cardiovascular disease associated with the use of progestogen-only contraceptive (DMPA). DMPA does not produce the type of changes in blood clotting factors as observed with COCs. There is no significant change in systolic or diastolic blood pressure in women using DMPA.

### **8.6 DMPA and Metabolic Effect (Weight Change)**

The only metabolic effect is minor weight gain of 1-2 kgs after 1 year of use. Weight gain may also occur due to other reasons e.g food intake and sedentary lifestyle. Only 2% of women stop using DMPA because of weight gain. Some DMPA users may view weight gain as desirable, while others may consider it disadvantageous or unacceptable. Minor alterations of lipid metabolism, fluid/nitrogen balance, glucose tolerance, steroid metabolism and immune function have been recorded but are of no clinical significance

### **8.7 Failure and Risk of Exposure to Foetus in Utero**

DMPA has good efficacy as compared to other contraceptive methods. In the rare events of method failure, woman receiving DMPA while pregnant or a woman conceiving shortly after discontinuing DMPA there is no increased risk of congenital anomaly or effect on growth and development of children. In case a pregnancy occurs during DMPA use, the client should discontinue the use of DMPA. She can continue with pregnancy, if she wishes to.

# Infection Prevention and Safe Injection Practices

## 9.1 Infection Prevention

Health care facilities are primary settings for infection transmission. Therefore, it is mandatory to practise appropriate infection-prevention procedures at all times, with all clients. The objectives of infection prevention practices are to minimize the risk of transmission of infections including HIV, Hepatitis B and C to service providers, clients and community, prevent spread of antibiotic-resistant microorganisms, reduce the overall cost of health care services and provide high-quality, safe services for greater client satisfaction.

The consistent use of recommended infection prevention practices is a critical component of quality health services, as well as a basic right of every patient, client or staff member in a health care setting.

Key objectives of infection prevention in providing injectable contraceptive services are to:

- Reduce risk of infection due to injectable contraceptive services.
- Reduce risk of disease transmission to clients.
- Protect health care providers at all levels-doctors, nurses other service providers and housekeeping staff from getting infection.

## 9.2 Standard Precautions

Standard Precautions for infection prevention include:

- Proper Hand washing
- Self-protection of health care providers by using protective attires
- Maintaining proper environmental asepsis
- Safe practices to prevent injuries from sharps
- Processing of instruments and reusable items
- Proper waste-disposal

## 9.3. Relevant and Important Standard Infection Prevention Practices for Administering Injectable Contraceptive

### 9.3.1 Proper Hand Washing: Most effective way to reduce transmission of infection

- Routine hand wash with plain or antiseptic soap and running water before and after giving injection, before wearing and after removing gloves, before and after examining, after having any direct contact with a client and after contact with body fluids.
- Hand hygiene using alcohol based hand-rub (if available) is an accepted option especially when running water supply is limited or client load is high.
- The duration of scrub should be 30-40 seconds both with soap & water and while using alcohol.
- All six steps of proper hand wash should be followed for effective hand wash (Fig. 4).

- Hands should be dried with a clean personal towel or air-dried. Do not use towels which are shared by others.
- Once hands are washed and dried, necessary task needs to be carried out e.g. injecting DMPA, taking care not to contaminate the hands by touching things.

**A non-irritating alcohol hand-scrub solution can be prepared by adding (2 ml glycerine in 100ml of 60-90% alcohol solution**

### Steps of effective hand washing

The following chart highlights the steps of an effective hand wash:

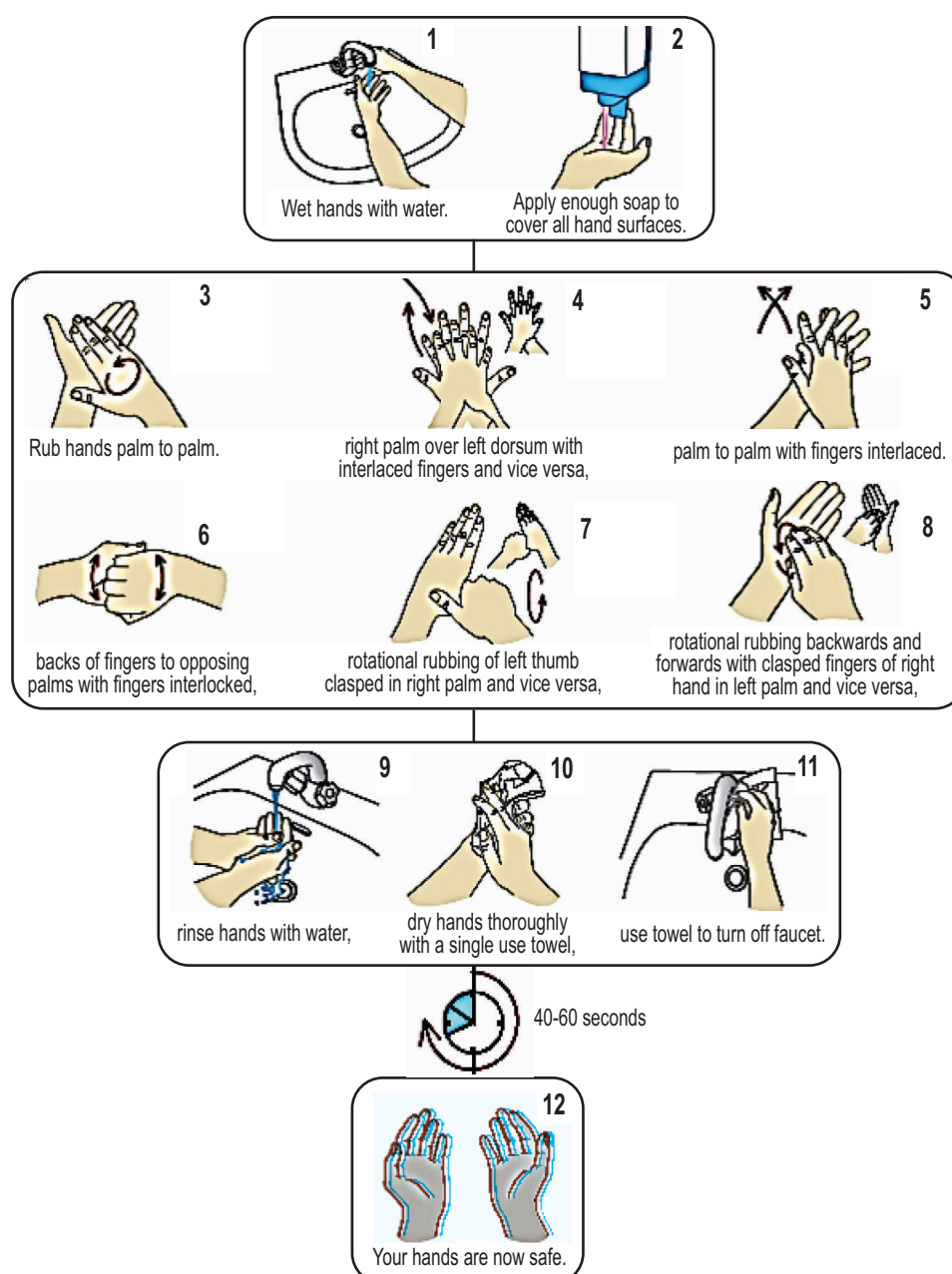


Fig. 4: Adapted from *WHO guidelines on hand hygiene in health care (advanced draft): A summary*, World Alliance for Patient Safety, World Health Organization, 2005

### 9.3.2 Environmental Asepsis

Health care workers should follow the following cleanliness protocols at all the facilities

- Wear protective attires including utility gloves while cleaning.
- Use a damp/wet cloth for scrubbing surfaces to reduce the spread of dust and microorganisms.
- Scrub room surfaces from top to bottom so that dirt falls on the floor.
- Scrub the floor with a mop soaked in 0.5% chlorine solution (never use a broom).
- Use 0.5% chlorine solution\* for decontamination, cleaning and managing body fluid spills.

#### Preparation of 0.5% chlorine solution\*

##### a. Calcium Hypochlorite or Chlorinated lime:

If using bleaching powder: Use the formula –  $(0.5\% \text{ active chlorine in powder}) \times 1000 = \text{gm of powder/litre of water}$ . So, for bleaching powder with 35% available chlorine, the formula will be:  $(0.5/35) \times 1000 = 14.3/15 \text{ gm/litre of water}$

Dissolve three teaspoons of bleaching powder (15 gm of calcium hypochlorite) in one litre of water. Increase quantity of chlorine in same proportion to prepare larger quantities of solution e.g. 150 gms of bleaching powder for 10 liters of water.

##### b. Sodium Hypochlorite Solution

If using liquid hypochlorite solution/bleach: mix one (1) part of the solution to nine (9) parts of water to make 0.5% chlorine solution (if solution has 5% active chlorine available)

OR

one part of liquid bleach to six parts of water (if solution has 3.5% active chlorine available).

Prepare chlorine solution only in plastic bucket or tub. Use only for 24 hours and then discard it.

### 9.3.3 Safe Injection Practices

Sharps have the highest potential to spread infection by transferring the micro-organisms directly into the blood and it is crucial that sharp items used during the procedure be handled with great care to avoid chances of injury. The risks of transmission of infection from an infected patient to the health worker following a needle-stick injury is estimated to be

- Hepatitis B: 9-30%% (up to 30%);
- Hepatitis C: 3-10% ;
- HIV: 0.3% -0.4% (mucous membrane exposure risk is 0.09%).

A safe injection is one that does not harm the recipient, does not expose the provider to any avoidable risk and does not result in any waste that is dangerous for other people.

#### 9.3.3.1 Do's & Don'ts for Safe Injections & Needles

##### Do's

1. Do carry out hand hygiene for 30-40 seconds before & after giving an injection.
2. Do use sterilized disposable/auto disable syringe.
3. Safe handling of sharp instruments/syringes requires using the 'Hands Free Technique' by placing them in a kidney tray.



4. Immediately after use, sharp objects such as needles, scalpel blades and other sharp items should be disposed off in a puncture-resistant container with a lid made of either metal or heavy rigid plastic or cardboard. These containers should be filled upto not more than 3/4<sup>th</sup> level and sealed before it is disposed off. Any delay in disposal of sharps will increase the chances of accidents.
5. Puncture-resistant containers should be kept in convenient areas, where sharp objects are frequently used.

#### Don'ts

1. Do not take apart the needle and syringe.
2. Do not recap, bend or break or remove the needles from the syringe before disposal. Where recapping is unavoidable, do use one hand technique.
3. Do not reuse the same syringe/needle to give injections to multiple people - even if the needle is changed.

### 9.3.3.2 Management of Needle Stick Injury

- Immediately wash the wound with soap and water.
- Do not use any solution other than soap and water.
- Let the wound bleed freely for a few seconds – do not squeeze the puncture site or suck blood with mouth.

*In case, despite best efforts accidental exposure to needle pricks or cuts occurs, follow NACO PEP guidelines.*

## 9.2.4 Waste Management

Improper disposal of biomedical waste poses significant health risk to health personnel and the community. Proper disposal of infectious waste is crucial in maintaining environmental cleanliness. All healthcare facilities in the country are covered under Bio Medical Waste Management and Handling Rules (1998), hence it is mandatory to manage waste as per the guidelines of the local authorities.

All waste in a health facility can be divided into:

- A. General wastes** - It is the waste that poses no risk of injury or infections and is similar to household trash. Examples include paper, boxes, packing materials, bottles, plastic containers and food-related trash. It should be stored in black bins, which will be taken away by the municipality.
- B. Biomedical wastes** - It is the waste that poses a risk to health care providers and to the surrounding environment. These are materials generated in the diagnosis, treatment or immunization of clients, including blood, blood products and other body fluids, as well as material containing fresh or dried blood or body fluids, bandages, surgical sponges and organic waste such as human tissue, body parts, placenta and products of conception.

### 9.2.4.1 Steps of Waste Management

- 1. Segregation** - as wastes are to be segregated into infectious (solid and plastic) and non-infectious waste, where it is generated at the health facility. Never mix infectious and non-infectious wastes.



**2. Collection and Storage** - put infectious, non-infectious and sharp wastes in appropriate containers (Fig. 5) such as-

- Sharps: needles, blades, broken glass are to be collected in white or blue bins/bags. Needles should be cut with a hub cutter (if available) before disposing off in blue bins. In absence of white or blue bins/bags, puncture proof box should be used for disposal of sharps.
- Infectious plastic wastes like soiled and infected plastics, syringes, dressings, gloves, fluid bottles, blood bags, urine bags are to be collected in red plastic bins/bags.
- Solid anatomical or pathological waste like placenta, body parts, swabs, bandages, dressings etc. are to be collected in yellow plastic bins/bags.
- Non-infectious (General) waste like packaging material, cartons, fruit and vegetable peels, left over food, syringe/needle wrappers and medicine covers are to be collected in black plastic bins/bags.

Always collect waste in covered and empty bins after they are filled up to 3/4th level. Never store waste beyond 48 hrs.

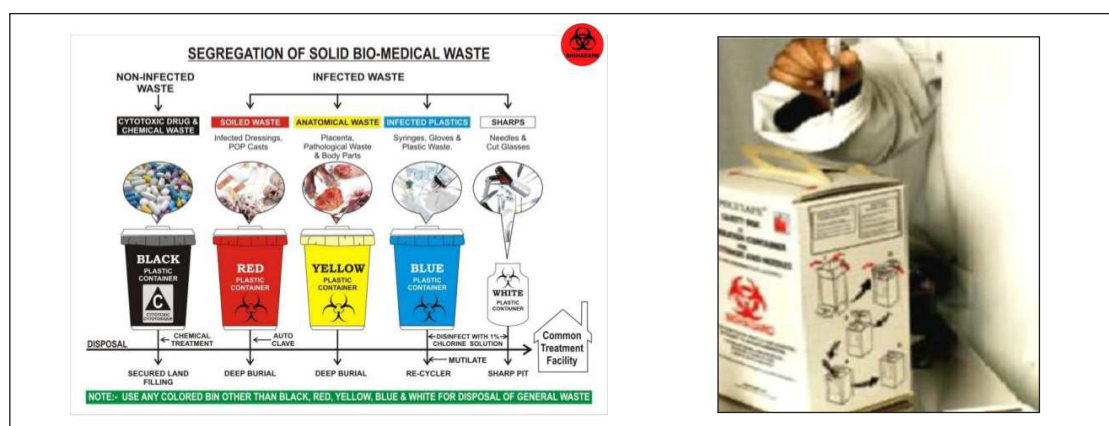


Fig. 5: Coloured Bins for segregation of waste and puncture proof box for sharp

**3. Transportation** - The waste should be transported in closed containers as carrying in open container may spill which will cause spread of infection. Also the containers with infectious wastes should never be carried through crowded areas.

**4. Disposal of Waste** - The disposal should be as per GoI guidelines. Burning solid infectious waste (including anatomical/pathological wastes) in an incinerator is the best option. But if incinerator is not available, burying solid infectious waste on-site in a deep burial pit, as long as it is secured with a fence or wall and away from any water source, is the next best option. The waste should be covered with 10 to 30 centimeters (4 to 10 inches) of soil at the end of each day. Plastics should be autoclaved or decontaminated and then shredded. Sharps are to be disinfected with chlorine solution and dumped in the sharps pit. Liquid infectious waste, after disinfecting with chlorine solution, should be poured down the drain connected to an adequately treated sewer or pit latrine; burial with other infectious waste is an acceptable alternative. General waste can be sent without any treatment to municipal dumps for final disposal.





## **SECTION II:** Managerial Aspects for Quality DMPA Services



# Program Determinants for Quality Services

## 10.1 Expansion of Basket of Choice

National Family Planning programme has been adding methods to the basket of choice from time to time, although they have been rather limited specially in the arena of spacing which is of vital importance in impacting maternal and child morbidities and mortalities. It is also acknowledged that multiple options make switching easier, reduce method specific discontinuation and improve user satisfaction.

Envisioning this Government of India has introduced injectable contraceptive (DMPA) in the public sector under the program in 2016.

Program Managers at various levels must develop mechanisms and strategies for introduction, adaptation, utilization and scaling up of injectable contraceptive services and strengthen practices to improve access to quality DMPA services.

## 10.2. Determinants of Services

It is important for program managers to ensure preparedness on various technical, proven managerial approaches and issues related to DMPA. Some of the crucial aspects of successful service delivery and care is dependent on the knowledge, skill and attitude of the health care providers. Therefore, there is a need to develop a cadre of properly trained service providers in the public health facilities at different levels, through structured competency based training based on the following requirements.

### 10.2.1 Identification of Service Delivery Sites

The DMPA will be rolled out in a phased manner. In the first phase it will be introduced in Medical Colleges and District Hospitals followed by SDH/CHC in the second phase and gradually upto sub-centres in the third phase. The demand for logistics and training batches will be calculated based on identification of these sites.

### 10.2.2 Eligibility of Providers

Doctors (MBBS and above, AYUSH), SN/LHV/ANM are eligible to administer injectable contraceptive to the clients after obtaining required training and skills. However, it is mandatory that the first shot of injection be administered under the guidance of a trained MBBS doctor after proper screening. Subsequent shots may be administered by trained AYUSH doctor, SN/LHV/ANM.

### 10.2.3 Assessment of Training Need

A situational analysis of the current status of service providers at different levels of health facilities in the district will help in identifying training needs. This will help to determine and plan the most appropriate interventions such as 'Training of Trainers' to develop a core group of 'trainers' and competent service providers at various levels.

The State Program Managers and State Training Coordinator/s in consultation with the District Chief Medical Officer should estimate the number to identify the availability of service providers required for providing regular DMPA injectable contraceptive services in DH, SDH/CHCs and PHCs in their respective districts. Based upon the need of the districts the doctors/SN/LHVs/ANMs can be trained. The training load can be calculated using the following RAG analysis.

#### Calculation of the Training Load - for various categories of providers (Doctors, Nurses, LHVs, ANMs etc.)

Injectable Contraceptive	DH / SDH			CHC			PHC		
	R	A	G	R	A	G	R	A	G

R- Required;

A- Available;

G – Gap

**Note:** For the First year of roll out there will be no available pool of providers, therefore districts would need to saturate the District Hospitals and Medical Colleges.

### 10.2.4 Ensuring Regular Supply

An effective and efficient supply chain management is the key to successful implementation of the injectable contraceptive program. Short supply or non-availability of contraceptives may lead to unwanted pregnancies and an oversupply may lead to wastage of the commodities. Thus the need to keep the right quantity of contraceptives, available at various levels of the health system is imperative so that beneficiaries have an easy access to the methods of their choice and as per their need and convenience and there is least wastage.

#### 10.2.4.1 Demand Estimation (Buffer Stock and Wastage)

To facilitate an uninterrupted supply and also to avoid stock outs of injectable contraceptives (vials & syringes) to states, districts and sub-district level, buffer stocks should be kept at each level. DFWOs/District Program Managers in consultation with the various service delivery centres in their region should identify the demand for DMPA injection and syringes with needles. The estimates need to be based on the number of eligible women, contraceptive prevalence and method mix of various contraceptive methods as well as unmet needs in their respective districts/ regions.

The estimate should be based on 3 doses per user with 25% of stock as buffer and 5% as wastage. Necessary measures should be taken to avoid wastage/damage of the DMPA vials and syringes during transportation and storing.

For disposing the expired injectable contraceptives and medical wastes, National Standards for Disposal should be followed.

#### 10.2.4.2 Transportation

The state should ensure that all the injectable contraceptives are transported from state to district and the lower level along with other contraceptives in a covered vehicle.

#### 10.2.4.3 Warehouse

The Injectable Contraceptives (DMPA vials and syringes) along with other contraceptives should be stored safely and securely at:

- National level: GMSD/hired central level warehouse (for buffer stock only)
- State level: State level warehouse
- District level: District level warehouse
- Block level: Block CHC/PHC store
- Sub Center Level: Sub Center (no. of vials & syringes as per beneficiary list only)

#### 10.2.4.4 Storage

Proper storing measures should be adopted to avoid damage and wastage to the injectable contraceptives (DMPA vials & syringes). They should be kept

- Upright in a cool dry, well-ventilated warehouse/storeroom at room temperature between 15-30°C.
- Away from direct sunlight or extreme heat and should not be kept in the refrigerator/freezer.
- In a warehouse/store should be well equipped with exhaust fans. Additional fans can be used during summer to keep the room at the desired temperature.
- In a store room which does not have any seepage.
- In a manner conducive for FEFO (First to Expire; First Out)

#### 10.2.4.5 Distribution

Supplies reach from manufacturers/suppliers to the state warehouse based on the consignee list provided by the Family Planning Division, MoHFW, GoI. State has to ensure further distribution to the district and block level stores.

The replenishment/further supply of the injectable contraceptives should be on consumption basis only. Demand estimation at state has to be an outcome of indent submitted by district based on the consumption and stock in hand at the facility.

### 10.2.5 Records and Reporting System

Record keeping and reporting is an integral component of National Family Planning Programme. Correct and timely reporting helps in monitoring of the program, identification of gaps and effective implementation of the strategies.

The purpose of record keeping and reporting system is to collect information for documenting relevant details of acceptors, follow-up with acceptors of the method regarding their level of satisfaction, concerns, side-effects and continuation of subsequent injections. These details help in generating information for reporting at various levels so as to ensure timely decision making for addressing service and supply related issues.

#### 10.2.5.1 Record Keeping

The relevant socio-demographic information of all clients receiving their first dose of DMPA injection should be recorded along with facility parameters. Subsequent



doses of DMPA and all relevant information should also be documented in the same register. The format for recording client information in facility is given in Annexure 11.

### 10.2.5.3 Reporting System

All facilities should report DMPA service delivery parameters/indicators regularly to the concerned District Family Welfare Officer for consolidation. DFWOs would further send the consolidated monthly report for the entire district to the State Family Welfare Officer for compilation and onward submission to GoI.

Apart from service delivery reports, stock information should be regularly updated at the facility level. The state should submit the quarterly stock report to GoI along with the reporting of other contraceptives.

### 10.2.6 Community Engagement and Demand Generation

Creating demand is a key component for service uptake. Districts need to orient and make all cadre of staff aware about the new contraceptives made available under National Family Planning Program. Demand generation is a continuous activity and can be accomplished by utilizing health workforce working at different levels.

The role of various health staff in community sensitization and demand generation is highlighted below:

- ASHA/ANM at community level- awareness generation by counselling eligible couples and family.
- RMNCH+A counsellors at facility level-awareness generation among eligible couples visiting facility including postpartum women and ANC clients.
- Doctors and Staff Nurses- Referring the clients from various departments to RMNCH+A counsellors (if available). Sensitize clients about benefits of new contraceptive. The facility-based providers can support community-based providers, such as treating side effects, use clinical judgment concerning medical eligibility in special cases, ruling out pregnancy in women who are more than 4 weeks late for an injection of DMPA and responding to any concerns of clients, which are referred by the community-based providers. The facility also can serve as a 'depot' for the community-based provider, which can be used for refurbishing the supplies, supervision, training, and advice and submit their records & reports.

States may also plan and budget IEC/BCC activity in their State PIPs.

## 10.3 Quality Assurance in DMPA Services

Quality assurance is an inbuilt system for monitoring the implementation of standards and practices of DMPA injectable contraceptive service delivery. It should ensure safety of the client, service providers and the community as well as client's satisfaction with continued use.

DQAC members during their visit to facilities should ensure the adherence to quality standards practised for DMPA service delivery. Quality can be assured through regular monitoring and addressing gaps in a timely manner. The key points to be covered during monitoring visits are.

- Availability of trained service provider

- Availability of injectable contraceptives (vials and syringes) and other supplies
- Availability of DMPA client cards
- Availability of counselling tools e.g. flipbook and pamphlets
- Availability of reporting formats and registers
- IEC materials on DMPA along with other contraceptives

There are no major complications/side-effects in case of DMPA and rare chances of adverse events which may require remedial actions at DQAC level. However, there should be emphasis on counselling to address discontinuation as well as misconceptions related to perceived side effects associated with DMPA. The section 10.4 indicates the key areas and the standards to be addressed for measuring the performance for DMPA injectable contraceptive services for achieving the desired quality of care.

#### 10.4 Key Areas and Standards for DMPA Services

Key Areas	Standards for DMPA Services
<b>Infrastructure and Human Resources</b>	<ul style="list-style-type: none"> <li>• Availability of trained providers for FP services.</li> <li>• Availability of trained personnel for counselling services.</li> <li>• The facility has adequate clean space for providing counselling and services.</li> <li>• The facility has sufficient supplies of DMPA injection.</li> <li>• The facility has Infection Prevention supplies including source of running water.</li> <li>• The facility has adequate light source (at least equivalent to three cell torch light).</li> <li>• Good storage principles are applied to contraceptives, essential drugs and medical supplies.</li> <li>• The facility has record keeping and reporting materials for DMPA services.</li> </ul>
<b>Client Focused IEC Materials</b>	<ul style="list-style-type: none"> <li>• The facility has informational posters on DMPA-Injectable Contraceptive.</li> <li>• There is information on client's rights regarding family planning.</li> <li>• The facility has flip charts/IEC material and samples of family planning methods for counselling particularly on DMPA.</li> </ul>
<b>Management Systems</b>	<ul style="list-style-type: none"> <li>• There are written routine protocols/instructions for the delivery of DMPA services.</li> <li>• Screening and client cards are available for DMPA clients.</li> <li>• The facility has GoI prescribed DMPA formats and registers in which record of each DMPA client is maintained.</li> <li>• The records are reviewed and analysed regularly.</li> </ul>
<b>Infection Prevention Practices</b>	<ul style="list-style-type: none"> <li>• There is clean running water available in the facility (tap or a tank with tap).</li> <li>• Facility for hand washing is readily available.</li> <li>• The availability and use of antiseptics for skin as per the standards.</li> <li>• The waste disposal system is according to standards guidelines, GoI.</li> </ul>

Key Areas	Standards for DMPA Services
<b>Family Planning Services</b>	
<b>FP Counselling</b>	<ul style="list-style-type: none"> <li>• There is a dedicated private space for counselling.</li> <li>• The first port of call for all women coming for ANC, Immunization of children and postnatal visits, should be the counsellor.</li> <li>• The counsellor uses job-aids, BCC material etc. for counselling.</li> <li>• The provider gives information about all the contraceptive methods available in the facility, with its benefits, side effects and limitation.</li> </ul>
<b>Providing Injectable Contraceptive to a New Client</b>	<ul style="list-style-type: none"> <li>• Ensures client's correct understanding about the method, including possible side effects and delayed return to fertility.</li> <li>• The provider rules out pregnancy.</li> <li>• The provider assesses the woman's eligibility for administering DMPA injection.</li> <li>• Performs the pre injection tasks and gives injection as per guidelines.</li> <li>• Provide post injection instructions and advice for the return and/or follow up visits.</li> <li>• Record of client is duly filled up &amp; client card given to her</li> </ul>
<b>Follow Up/ Management of Side Effects</b>	<ul style="list-style-type: none"> <li>• The provider finds out about the client's satisfaction with DMPA</li> <li>• Identifies and manages the side effects or problems as per standard guidelines and refers, if required.</li> </ul>
<b>Continuation of DMPA Services</b>	<ul style="list-style-type: none"> <li>• Reminders for timely administration of subsequent injections are given on phone or by field worker e.g. ASHA.</li> <li>• Repeat dose of DMPA is given as per the protocols as per the duration after which client comes for it.</li> </ul>
<b>Change of the Method</b>	<ul style="list-style-type: none"> <li>• Identifies and documents the reasons for discontinuation, if any.</li> <li>• Counsel on other family planning methods and ensure switch over.</li> </ul>

## **SECTION III:**

Capacity Building of Service  
Providers on DMPA



# Training and Skill Development

## 11.1 Introduction

Competency of providers in knowledge and skills is essential for providing quality family planning services, therefore, there is a need to strengthen the capacity of service providers at all levels. This training course is designed for service providers (Doctors, Staff Nurses, Lady Health Visitor (LHV) and Auxiliary Nurse Midwives (ANMs) at all levels). Training emphasizes on doing, not just knowing and uses competency-based evaluation of performance.

This course is based on the Competency-Based Training (CBT) approach.

- It is based on adult learning principles which means that it is interactive, relevant and practical in which the trainer facilitates the learning experience rather than serving in the more traditional role of an instructor or lecturer.
- It involves use of behaviour modelling to facilitate learning in a standardized way of performing a skill or activity.
- Evaluation is based on how well the participant performs the procedure or activity, not just on how much has been learned.

## 11.2 General Aspects of Training

### 11.2.1 Training Site Selection

- The facility for training should have a comfortable clean training hall to accommodate about 35 persons
- Availability of chairs, tables, light source, fans/AC, audio-visual facility and alternate source of power.
- Space for providing refreshments and basic amenities such as toilets.
- Availability of at least two trainers per site.

Identification and designation of these training centres at State and District level will be the responsibility of Director Family Welfare/SQAC and CMO/DQAC, whichever is applicable.

### 11.2.2 Criteria for Designation of 'Trainers'

- Trained service providers (MBBS and above, AYUSH, Staff Nurses) with prior training experience, good communication skills, well-versed with training skills and technique of adult learning principles who have competency/proficiency in the skills of counselling.
- Can spare time and willing to conduct training, follow-up monitoring visits for on-site support/hand-holding, if required.
- Can be designated as a trainer by Director Family Welfare/SQAC at State level and by CMO/DQAC at District level.

### 11.2.3 Selection of 'Trainees'

The intended trainees for this course are Doctors (MBBS/AYUSH), Staff Nurse (SN), Lady Health Visitor (LHV), Auxiliary Nurse Midwife (ANM) committed to provide the above methods after completion of the training.

While selecting trainees, priority should be given to service providers from institutions that are committed to provide FP Services. Facilities nominating trainees should be able to include injectable contraceptive DMPA in basket of FP Services.

#### **11.2.4 Equipment and Supplies for Training Sites**

- Reference Manual for Injectable Contraceptives (DMPA)
- Samples of all contraceptive methods including DMPA injectable contraceptive
- Syringes 2 ml, with needles 21-23 gauge
- Cotton swabs and antiseptic solution
- Hand wash facility - running water, soap and clean towels
- Formats with role plays and case studies (Annexure 6)
- Pre/Post-Test formats, Training evaluation formats (Annexure 8, 8a, 9)
- LCD Projector and screen for power point presentation, extension board, power back up, flip chart, flip stands, coloured markers etc.

### **11.3 Training Goal and Learning Objectives**

The goal of training is to assist service providers in learning how to provide safe quality DMPA injectable contraceptive through improved work performance. To achieve the above goal, at the end of competency based training participants will be able to:

- Acquire knowledge related to DMPA.
- Demonstrate appropriate counselling for DMPA.
- Assess client's eligibility for DMPA and provide the method as per standard procedure and guidelines.
- Demonstrate appropriate safe injection and other standard IP practices.
- Describe how to provide follow-up care to DMPA clients.
- Describe management of side effects/other issues related to DMPA.
- Demonstrate correct record keeping and reporting of new and continuing DMPA clients

#### **11.4 Number of Trainees per Batch**

Approximately 25 to 30

#### **11.5 Training Duration**

One full working day

#### **11.6 Training Approach and Methodology**

All training activities in this course should be conducted in an interactive, participatory manner as suggested in the course outline. To accomplish this, the trainer should change roles throughout the course. For example, the trainer is an instructor when presenting a classroom session, a facilitator when conducting small group discussions or role plays. Finally, when objectively assessing performance, the trainer serves as an evaluator.

Following training methodology will be used in this training course:

- Interactive presentations and group discussion
- Demonstration
- Individual and group exercises



- Role plays and case studies
- Counselling practice with real clients

A suggestive course outline (session plan) of DMPA Training has been provided in Annexure 12.

### 11.6.1 Important Tips for the Trainers

- Familiarize with the content of all Sections and Annexures in the 'Reference Manual for Injectable Contraceptives (DMPA)', Pre/Post-test questionnaires, Competency based check lists of injectable contraceptive, role plays and case studies, IP practice etc.
- Make necessary preparations in advance, as per the facilitator guide.
- Plan meeting with co-facilitators before each workshop for assigning responsibilities and to clarify any doubts, concerns or reservations.
- Work together as a team subtly supporting each other in every session.
- Conduct wrap-up session at the end of each training day and start the next day with a re-cap session to provide continuity in the training.
- Arrange a seating arrangement which is informal, preferably in a semi-circle, without any podium for the trainers.
- Adopt a warm and friendly attitude towards the participants to make the training very effective, and take care not to ridicule any trainee.
- Explain, demonstrate, answer questions, talk with participants about their answers to exercises, get roleplays conducted and analyse them, lead group discussions, organize and supervise clinical practice in out patient facility and generally give participants any help they need to successfully complete the course.
- Using leading questions draw the relevant information related to the session from participants and fill in the gaps, where necessary. This will help trainees to assimilate the knowledge and experiences.

### 11.6.2 Adapt the Curriculum to Reflect the Participants' Expectations.

Use the results of the small group exercise about participants' expectations. Although trainers may not always be able to meet all of the participants' needs and expectation, knowing expectations helps in tailoring the training and add relevant information and examples to the training sessions.

**Language**-Use non-technical simple language during the sessions so that participants are exposed to and can gain practice with simple terminology that can be used during their work.

## 11.7 Evaluation of Knowledge and Skills

Evaluation is a fundamental part of training. Proper evaluation helps ensure that the training is not merely a one-time intervention but part of a broader strategy to develop participants' skills and to help them apply those skills upon return to their work-sites. Evaluation can also help to improve future training activities. Evaluation of training includes:

- A pre and post-test of participants' knowledge: This pre-test and post-test is designed to be given at the beginning and end of the training course. The trainer can use the results to customize the training to best suit the trainees e.g. spend more time in explaining content with maximum wrong answers. Pre-test, post-test and their answers appear in this section.

- Continuous assessment of the training
- An assessment of the trainees by the trainer (Competency Based Checklist; Annexure 7)
- An assessment of the training by the participants (Evaluation of training; Annexure 9)

### 11.7.1 Training Follow-Up

For training to be truly successful, trainees must be able to use their new skills and knowledge and apply them when they return to their jobs. Practice on job helps in gaining competency and gradually proficiency in the skills. District training coordinator/CMO should conduct follow up within 2 to 3 months of completion of training (Annexure 10).

### 11.7.2 Certification

A certificate of attendance may be given to trainees who have participated in the training.

## 11.8 Roadmap for Training

The training strategy is to start with an orientation of Trainers and Program Managers at the National level and State level followed by facility based training of service providers at district/sub district level. This process would ultimately build a sustainable self-renewing system of DH/CHC based trainers responsible for developing the capacity of competent service providers for FP services.

## 11.9 Curriculum and Schedule of Training

Time	Duration	Points for reinforcement
9:00-9:30am	30 minutes	<ul style="list-style-type: none"> <li>• Welcome &amp; Introduction,</li> <li>• Participants' Expectations &amp; Group Norms</li> </ul>
9:30-9:50am	20 minutes	<ul style="list-style-type: none"> <li>• Pre Course Knowledge Assessment</li> </ul>
9:50-10:20am	30 minutes	<ul style="list-style-type: none"> <li>• National Family Planning Programme and Need For Expanding Contraceptive Choices</li> </ul>
10:20-11:20am	60 minutes	<ul style="list-style-type: none"> <li>• Technical Aspects of MPA Injectable Contraceptive (IM and SC)</li> <li>• Special Issues with Injectable Contraceptives</li> </ul>
<b>Tea Break-11:20-11:30 am</b>		
11:30-12:30pm	60 minutes	<ul style="list-style-type: none"> <li>• Counselling Clients on Family Planning Methods</li> <li>• General Principles of Counselling</li> <li>• Method Specific Counselling for MPA</li> <li>• Practice by Participants through Role Play, using Competency Based Checklist</li> </ul>
12:30-1:15 pm	45 minutes	<ul style="list-style-type: none"> <li>• Eligibility Criteria and Client's Assessment for MPA Contraceptive using WHO MEC</li> </ul>
1:15-2:00 pm	45 minutes	<ul style="list-style-type: none"> <li>• Administering Injectable Contraceptives (IM and SC)</li> </ul>
<b>Lunch-2:00-2:45 pm</b>		
02:45-3:45 pm	60 minutes	<ul style="list-style-type: none"> <li>• Follow up care and Management of Side Effects of Injectable Contraceptives</li> </ul>
03:45-4:00 pm	15 minutes	<ul style="list-style-type: none"> <li>• Infection Prevention &amp; Safe Injection Practice</li> </ul>
<b>Tea Break-4:00-4:10 pm</b>		
04:10-4:25 pm	15 minutes	<ul style="list-style-type: none"> <li>• Review Pre Course Knowledge Assessment</li> </ul>
04:25-4:55 pm	30 minutes	<ul style="list-style-type: none"> <li>• Program Management &amp; Quality Assurance Capacity Building of Providers</li> </ul>
04:55-5:10 pm	15 minutes	<ul style="list-style-type: none"> <li>• Record Keeping and Reporting Formats</li> </ul>
05:10-5:40 pm	30 minutes	<ul style="list-style-type: none"> <li>• Post Course Knowledge Assessment, Course evaluation &amp; closure</li> </ul>

# **Annexures**



# Pregnancy Screening Checklist

## *How to Be Reasonably Sure that the Client is Not Pregnant ?*

One can be reasonably sure that the client is not pregnant, if she has no signs or symptoms of pregnancy (e.g., breast tenderness or nausea) and

- Has not had intercourse since her last menses; or
- Has been correctly and consistently using a reliable contraceptive method; or
- Is within the first 7 days after the start of her menses ; or
- Is within 4 weeks postpartum (for women who are not breastfeeding); or
- Is within the first 7 days post-abortion; or
- Is fully breast-feeding, is less than 6 months postpartum and has had no menstrual bleeding.

## 1.1 Assessment of clients for DMPA

To determine if the client is medically eligible to use DMPA, ask questions 1–7. As soon as the client answers YES to any question, stop, and follow the instructions below

NO	1. Have you ever had a stroke, blood clot in your legs or lungs, or heart attack?	YES
NO	2. Have you ever been told you have breast cancer?	YES
NO	3. Do you have a serious liver disease or jaundice (yellow skin or eyes)?	YES
NO	4. Have you ever been told you have diabetes (high sugar in your blood)?	YES
NO	5. Have you ever been told you have high blood pressure?	YES
NO	6. Do you have bleeding between menstrual periods, which is unusual for you, or bleeding after intercourse (sex)?	YES
NO	7. Are you currently breastfeeding a baby less than 6 weeks old?	YES

If the client answered NO to all of questions 1–7 the client can use DMPA. Proceed to questions 8–13.

If the client answered YES to any of the questions 1–3, she is not a good candidate for DMPA. Counsel about other available methods or refer. If the client answered YES to any of questions 4–6, DMPA cannot be initiated without further evaluation. Evaluate or refer as appropriate and give condoms to use in the meantime. If the client answered YES to question 7, instruct her to return for DMPA as soon as possible after the baby is six weeks old.

Ask questions 8–13 to be reasonably sure that the client is not pregnant. As soon as the client answers YES to any question, stop, and follow the instructions below

← NO	8. Did your last menstrual period start within the past 7 days?	YES →
← NO	9. Did you have a baby less than 6 months age, are you fully or nearly-fully breastfeeding, and have you had no menstrual period since then?	YES →
← NO	10. Have you abstained from sexual intercourse since your last menstrual period or delivery?	YES →
← NO	11. Have you had a baby in the last 4 weeks?	YES →
← NO	12. Have you had a miscarriage or abortion in the last 7 days?	YES →
← NO	13. Have you been using a reliable contraceptive method consistently and correctly?	YES →

If the client answered YES to at least one of questions 8–13 and she is free of signs or symptoms of pregnancy, one can be reasonably sure that she is not pregnant. The client can start DMPA now. If the client had her last menstrual period within the past 7 days, she can start DMPA immediately. No additional contraceptive protection is needed. If the client had her last menstrual period beyond 7 days, she can be given DMPA now but instruct her that she must use condoms or abstain from sex for the next 7 days. Give her condoms to use for the next 7 days.

If the client answered NO to all of questions 8–13 pregnancy cannot be ruled out. She must use a pregnancy test or wait until her next menstrual period to be given DMPA. Give her condoms to use in the meantime.

# Medical Eligibility Criteria (MEC) WHO, 2015

The WHO Medical Eligibility Criteria (MEC) form the scientific foundation for client assessment regarding family planning methods. It gives detailed guidance regarding whether a woman with a certain condition can safely use an injectable contraceptive of family planning. The MEC has four categories:

<b>Category 1:</b> A condition for which there is no restriction for the use of the contraceptive method. Safely use.	<b>Category 2:</b> A condition where the advantages of using the method generally outweigh the theoretical or proven risks. Generally use.
<b>Category 3:</b> A condition where the theoretical or proven risks usually outweigh the advantages of using the method. Generally do not use	<b>Category 4:</b> A condition which represents an unacceptable health risk if the contraceptive method is used. Do not use.

CONDITION	CATEGORY
<b>PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY</b>	
AGE	
a) Menarche to < 18 years	2
b) 18 to 45 years	1
c) > 45 years	2
PARITY	
a) Nulliparous	1
b) Parous	1
BREASTFEEDING	
a) < 6 weeks postpartum	3
b) > or equal 6 weeks to < 6 months postpartum (primarily breast-feeding)	1
c) > or equal 6 months postpartum	1
POSTPARTUM (NON- BREASTFEEDING WOMEN)	
a) < 21 days	1
b) > or equal 21 days	1
POST ABORTION	
a) First trimester	1
b) Second trimester	1
c) Immediate post-septic abortion	1
PAST ECTOPIC PREGNANCY	1
HISTORY OF PELVIC SURGERY	1

\*I=Initiation, C=Continuation



CONDITION	CATEGORY
SMOKING	
a) Age < 35 years	1
b) Age > or equal 35 years	1
i) < 15 cigarettes/day	
ii) > or equal 15 cigarettes/day	1
OBESITY	
a) > or equal 30 kg/m <sup>2</sup> BMI	1
b) Menarche to < 18 years and > or equal 30 kg/m <sup>2</sup> BMI	1
<b>CARDIOVASCULAR DISEASES</b>	
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes, hypertension and known dyslipidaemias)	3
HYPERTENSION	2
a) History of hypertension where blood pressure CANNOT be evaluated (including hypertension in pregnancy)	
b) Adequately controlled hypertension where blood pressure CAN be evaluated	2
c) Elevated blood pressure levels (properly taken measurements)	2
i) systolic 140 - 159 or diastolic 90 - 99 mm Hg	3
ii) systolic > or equal 160 or diastolic > or equal 100 mm Hg	
d) Vascular disease	3
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is measurable and normal)	1
DEEP VEIN THROMBOSIS (DVT)/PULMONARY EMBOLISM (PE)	
a) History of DVT/PE	2
b) Acute DVT/PE	3
c) DVT/PE and established on anticoagulant therapy	2
d) Family history (first degree relatives)	1
e) Major Surgery	
i) With prolonged immobilization	2
ii) Without prolonged immobilization	1
f) Minor surgery without immobilization	1
KNOWN THROMBOGENIC MUTATIONS (e.g. factor V Leiden; prothrombin Mutation; protein S, protein C and antithrombin deficiencies)	2
SUPERFICIAL VENOUS DISORDERS	
a) Varicose veins	1
b) Superficial venous thrombosis	1
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE	3
STROKE (HISTORY OF CEREBROVASCULAR ACCIDENT)	3
KNOWN DYSLIPIDAEMIAS WITHOUT OTHER KNOWN CARDIOVASCULAR RISK FACTORS	2
VALVULAR HEART DISEASE	
a) Uncomplicated	1

\*I=Initiation, C=Continuation

CONDITION	CATEGORY	
b) Complicated (pulmonary hypertension, risk of atrial fibrillation, history of subacute bacterial endocarditis)	1	
RHEUMATIC DISEASES		
SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)	I*	C*
a) Positive (or unknown) antiphospholipid antibodies	3	3
b) Severe Thrombocytopenia	3	3
c) Immunosuppressive treatment	2	2
d) None of the above	2	2
NEUROLOGIC CONDITIONS		
HEADACHE	I*	C*
a) Non-migrainous (mild or severe)	1	1
b) Migraine		
i) without aura	2	2
age <35 years	2	2
age > or equal 35 years	2	3
ii) with aura, at any age		
EPILEPSY	1	
DEPRESSIVE DISORDERS		
DEPRESSIVE DISORDERS	1	
REPRODUCTIVE TRACT INFECTIONS AND DISORDERS		
VAGINAL BLEEDING PATTERNS		
a) Irregular pattern without heavy bleeding	2	
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition) before evaluation	3	
ENDOMETRIOSIS	1	
BENIGN OVARIAN TUMOURS (including cysts)	1	
SEVERE DYSMENORRHOEA	1	
GESTATIONAL TROPHOBLASTIC DISEASE		
a) Decreasing or undetectable B-HCG levels	2	
b) Persistently elevated B-HCG levels or malignant disease	2	
CERVICAL ECTROPION	1	
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)	2	
BREAST DISEASE		
a) Undiagnosed mass		
b) Benign breast disease	2	
c) Family history of cancer	1	
d) Breast cancer	1	
i) Current	4	
ii) Past and no evidence of current disease for 5 years	3	
ENDOMETRIAL CANCER	1	
OVARIAN CANCER	1	

\*I=Initiation, C=Continuation

CONDITION	CATEGORY
UTERINE FIBROIDS	
a) Without distortion of the uterine cavity	1
b) With distortion of the uterine cavity	1
PELVIC INFLAMMATORY DISEASE (PID)	
a) Past PID (assuming no current risk factors for STIs)	1
i) With subsequent pregnancy	1
ii) Without subsequent pregnancy	1
b) PID - current	
SEXUALLY TRANSMITTED INFECTIONS (STIs)	
a) Current purulent cervicitis or chlamydial infection or gonorrhea	1
b) Other STIs (excluding HIV and hepatitis)	1
c) Vaginitis (including Trichomonas vaginalis and bacterial vaginosis)	1
d) Increased risk of STIs	1
<b>HIV/AIDS</b>	
HIGH RISK OF HIV	1
ASYMPTOMATIC OR MILD HIV CLINICAL DISEASE (WHO STAGE 1 OR 2)	1
SEVERE OR ADVANCED HIV CLINICAL DISEASE (WHO STAGE 3 OR 4)	1
<b>OTHER INFECTIONS</b>	
SCHISTOSOMIASIS	
a) Uncomplicated	1
b) Fibrosis of the liver (if severe, see cirrhosis)	1
TUBERCULOSIS	
a) Non-pelvic	1
b) Pelvic	1
MALARIA	1
<b>ENDOCRINE CONDITIONS</b>	
DIABETES	
a) History of gestational disease	1
b) Non-vascular disease	
i) Non-insulin dependent	2
ii) Insulin dependent	2
c) Nephropathy/retinopathy/neuropathy	3
d) Other vascular disease or diabetes of >20 years duration	3
THYROID DISORDERS	
a) Simple goiter	1
b) Hyperthyroid	1
c) Hypothyroid	1
<b>GASTROINTESTINAL CONDITIONS</b>	
GALL BLADDER DISEASE	
a) Symptomatic	
i) treated by cholecystectomy	1
ii) medically treated	1

\*I=Initiation, C=Continuation

CONDITION	CATEGORY
iii) current	1
b) Asymptomatic	1
HISTORY OF CHOLESTASIS	
a) Pregnancy related	12
b) Past-COC related	
VIRAL HEPATITIS	
a) Acute or flare	1
b) Carrier	1
c) Chronic	1
CIRRHOSIS	
a) Mild (compensated)	1
b) Severe (decompensated)	3
LIVER TUMOURS	
a) Benign	1
i) Focal nodular hyperplasia	1
ii) Hepatocellular adenoma	
b) Malignant (hepatoma)	
LIVER TUMOURS	
a) Benign	
i) Focal nodular hyperplasia	2
ii) Hepatocellular adenoma	3
b) Malignant (hepatoma)	3
ANAEMIAS	
THALASSAEMIA	1
SICKLE CELL DISEASE	1
IRON-DEFICIENCY ANAEMIA	1
DRUG INTERACTIONS	
ANTIRETROVIRAL THERAPY (ART)	
a) Nucleoside Reverse Transcriptase Inhibitors (NRTIs)	
Abacavir (ABC)	1
Tenofovir (TDF)	1
Zidovudine (AZT)	1
Lamivudine (3TC)	1
Didanosine (DDI)	1
Emtricitabine (FTC)	1
Stavudine (D4T)	1
b) Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)	
Efavirenz (EFV)	1
Etravirine (ETR)	1
Nevirapine (NVP)	1
Rilpivirine (RPV)	1
c) Protease Inhibitors (PIs)	
Ritonavir-boosted atazanavir (ATV/r)	1
Ritonavir-boosted darunavir (DRV/r)	1
Ritonavir (RTV)	1

\*I=Initiation, C=Continuation

CONDITION	CATEGORY
d) Integrase inhibitors Raltegravir (RAL)	1
ANTICONVULSANT THERAPY	
a) Certain anticonvulsants (Phenytoin, Carbamazepine, Barbiturates, Primidone, Topiramate, Oxcarbazepine)	1
b) Lamotrigine	1
ANTIMICROBIAL THERAPY	
a) Broad-spectrum antibiotics	1
b) Antifungals	1
c) Antiparasitics	1
d) Rifampicin or rifabutin therapy	1

\*I=Initiation, C=Continuation

# MPA Client Card and Instructions for Clients

## Instructions for clients



- Once taken it is effective for 3 months.
- Return on scheduled date as decided with the



After Injection Do not  
massage injection site  
Do not give hot fomentation  
at the injection site



- MPA does not affect breast milk
- MPA does not affect future pregnancy however some women may take 7-10 months to conceive after injection
- There are some menstrual changes which are not harmful
- Use backup method (like condom) if injection is taken after 7 days of menses

Contact health provider in following conditions:

- Irregular bleeding or amenorrhea
- Abnormal weight gain
- Headache
- Mood swings



**MPA CARD**  
(Antara Program)



(To be kept in facility)

**Intramuscular/Subcutaneous (Tick ✓ the type of MPA administered)**

OPD/IPD Number.....  
Name of Facility.....  
Client's Name.....  
Client's Address.....  
.....Tel. No.....  
Client's Age..... Parity.....  
Date of Last Child Birth/abortion.....  
Family Planning Method used earlier (Tick✓)

Oral Pills	Condom	IUCD	Not used
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### Must Know: Instructions for Provider

- 1) Each injection gives protection for 90 days (3 months). Decide on next date of Injection with client.
- 2) MPA does not affect breast milk.
- 3) MPA does not cause infertility. Women can become pregnant after 7-10 months of last injection.
- 4) Menstrual irregularities are normal while using MPA and are not dangerous.
- 5) Do not massage injection site.
- 6) Do not give hot fomentation at the injection site.
- 7) Ask the client to use a backup method if injection is given after 7 days of menses, provide condom to such client.
- 8) Ask the client to report in following conditions:
  - Irregular bleeding or amenorrhea
  - Abnormal weight gain
  - Headache
  - Mood swings



# MPA CARD (Antara Program)



Client Card (To be issued to client)

Intramuscular/Subcutaneous (Tick ✓ the type of MPA administered)

OPD/IPD Number.....

Name of Facility.....

Client's Name.....

Client's Address.....

.....Tel. No.....

Client's Age..... Parity.....

Date of Last Child Birth/abortion.....

Date of Injection		Date of Injection	
Type of Inj- (✓): IM	SC	Type of Inj- (✓): IM	SC
Weight	BP	Weight	BP
Menstrual Changes (✓): N Y		Menstrual Changes (✓): N Y	
Advice		Advice	
Due Date of next injection		Due Date of next injection	

Date of Injection		Date of Injection	
Type of Inj- (✓): IM	SC	Type of Inj- (✓): IM	SC
Weight	BP	Weight	BP
Menstrual Changes (✓): N Y		Menstrual Changes (✓): N Y	
Advice		Advice	
Due Date of next injection		Due Date of next injection	

Record of First MPA Injection (The first injection should be given under the guidance of trained doctor)

Date of Injection	LMP	Weight	Blood Pressure	Timing of injection - PP/PA/interval	Due Date of next injection

## Record of MPA Injection

DMPA Injection	Due Date of Injection	Date of Injection (IM/SC)	Weight	BP	Menstrual Changes	Any Complaint	Advice, if any
2nd							
3rd							
4th							
5th							
6th							

## Mid-course Follow up Visit

Sno.	Date of Follow up	Weight	Blood Pressure	Menstrual Changes	Other Complaint	Advice



## Frequently Asked Questions (FAQs)

### 1. Can a woman who is at risk of Sexually Transmitted Infections (STIs) use DMPA?

**Yes**, women at risk for STIs can use DMPA. However, it does not protect against STI. A user of DMPA who may be at risk for STIs should be advised to use condoms correctly and consistently during every sexual intercourse.

### 2. If a woman does not have monthly bleeding while using DMPA, does this mean that she is pregnant?

**No**, most women using DMPA will not have monthly bleeding after getting her injections on time and there are less chances of becoming pregnant. Reassurance to client may help but if required offer her pregnancy test. Despite all this if she so desires help her choose another method.

### 3. Can a woman who is breastfeeding safely use DMPA?

**Yes**, this is a good choice for a breastfeeding mother. DMPA is safe for both the mother and the baby starting as early as 6 weeks after childbirth. It does not affect the quality and quantity of milk production.

### 4. How much weight do women gain when they use DMPA?

Women may gain on an average 1-2 kg per year when using DMPA. This weight gain may be related to age, diet or sedentary lifestyle. At the same time, some users of DMPA lose weight or have no significant change in weight.

### 5. Does DMPA cause abortion?

**No**, research on DMPA, indicates that it does not disrupt an existing pregnancy nor cause an abortion. DMPA should not be used to try to cause abortion.

### 6. Does DMPA make a woman infertile?

**No**, DMPA does not make a woman infertile however there may be delay in regaining fertility after discontinuing DMPA.

### 7. How long does it take to become pregnant after discontinuing DMPA?

Woman who discontinue DMPA have to wait for on an average 4-6 months longer on average to become pregnant than woman who have used other methods. This means she become pregnant about 7-10 months from date of last injection. A woman should not be worried if she has not conceived for as long as even 12 months after discontinuation. The length of time a woman has used DMPA makes no difference to how quickly she becomes pregnant once she stops having injections. After stopping DMPA a woman may ovulate before her monthly bleeding returns and thus can become pregnant.

### 8. Does DMPA cause cancer?

**No**, DMPA does not cause cancer. In fact it has been demonstrated that it protects against endometrial and ovarian cancer. A WHO collaborative study of neoplasia and steroid contraceptives found no overall increased risk of breast cancer, no increased risk of invasive cervical cancer and no increased risk of ovarian or liver cancer.

#### **9. How does DMPA affect bone density?**

DMPA use decreases bone density. Research has not found that DMPA users of any age are likely to have more broken bones, however, when it is discontinued, bone density is restored for women of reproductive age and after 2 to 3 years their bone density appears to be similar to that of women who have not used it. In adolescents, it is not clear whether the loss in bone density prevents them from reaching their potential peak bone mass.

#### **10. Does DMPA cause birth defects? Will the foetus be harmed if a woman accidentally uses DMPA while she is pregnant?**

**No**, evidence shows that DMPA neither cause birth defects nor does it harm the foetus if a woman becomes pregnant while using DMPA or accidentally starts DMPA when she is already pregnant.

#### **11. Does DMPA change women's mood or sex drive?**

**Generally No**, some women using DMPA report these complaints. The great majority of DMPA users do not report any such changes. However, it is difficult to tell whether such changes are due to DMPA or other reasons. Providers can help a client with these problems. There is no evidence that DMPA affect women's sexual behaviour.

#### **12. What if a woman returns for her next injection late or early?**

In 2008 WHO revised its guidelines based on new research findings. The new guidelines recommends giving a woman her next DMPA injection, if she is up to 4 weeks late, without the need for further evidence that she is not pregnant. Some women return even later for their repeat injection, in such cases providers should assess for pregnancy, whether a woman is late for reinjection or not, her next injection of DMPA should be planned for 3 months later.

If she comes upto 2 week earlier, counsel her on the importance of coming on time for next injection, as per the date given on the DMPA card (If she comes 2 week earlier then the follow up date will be calculated 2 week earlier from the next follow up date and 4 week later if she comes four weeks late).

## Myths and Misconceptions about DMPA

Myths/Misconceptions	Facts and Realities
DMPA causes infertility	DMPA users can expect to become pregnant within a year after discontinuing their last injection. In a large study in Thailand, almost 70% of former DMPA users conceived within the first 12 months following discontinuation. Moreover, 92% conceived within 24 months, compared with 93% of IUCD users and 94% of COC users. There is no difference in the time it takes fertility to return between long-term and short-term users and no difference between women with and without amenorrhea.
DMPA causes cancer	Research has clearly proven that DMPA does not cause cancer. In fact, it has been demonstrated that it protects against endometrial cancer. A WHO collaborative study of neoplasia and steroid contraceptives found no overall increased risk of breast cancer, no increased risk of invasive cervical cancer and no increased risk of ovarian or liver cancer.
DMPA causes nausea	Nausea is not common with DMPA. In fact, many women on injectable contraceptive reported increase in appetite.
DMPA decreases amount of breast milk	Studies have shown that the amount of breast milk does not decrease when breastfeeding women use DMPA. It has no effect on the composition of breastmilk, initiation or duration of breastfeeding.
DMPA affects women health by causing Amenorrhea	Amenorrhea is an expected result of using DMPA because women do not ovulate. This kind of amenorrhea is not harmful. It helps prevent anaemia and free women from the discomfort and inconvenience of monthly bleeding.
DMPA causes abnormal or deformed babies.	There is no evidence that DMPA causes any abnormalities in infants. Studies done on infants who were exposed to DMPA in utero showed no increase in birth defects. These infants were followed until they were teenagers and the research found that their long-term physical and intellectual development was normal. It is worth noting that before DMPA was recognized as a contraceptive it was used in pregnant women to prevent miscarriage.
Clients need to stop using DMPA and have a 'rest' after several injections.	There is no limit to the number of years DMPA can be continuously used. Among healthy women it can be given until menopause, when contraception is no longer needed.
DMPA causes abortion	DMPA prevents ovulation. If no egg is released, no fertilization takes place hence there are no chances of abortion.

Myths/Misconceptions	Facts and Realities
DMPA causes amenorrhea, resulting in pregnancy or a tumour.	There is amenorrhea in pregnancy but not all amenorrhea is due to pregnancy. The amenorrhea experienced with DMPA use is due to the thinning of the endometrium resulting from an increased level of progesterone.
DMPA causes anaemia	During the first 3 - 6 months of DMPA use, irregular bleeding may be experienced in the form of spotting or minimal bleeding. But this usually stops within a few months of continuous use of DMPA. Since the bleeding is minimal, it rarely results in anaemia. Anaemia, which is caused by blood loss or iron deficiency, is actually prevented by DMPA.
DMPA causes masculine characteristics in females	Studies have shown that the use of DMPA does not cause any masculinizing effect.
DMPA causes blood toxicity due to amenorrhoea.	Amenorrhoea is caused by DMPA use since it results in an atrophic endometrium.
DMPA causes decrease in libido.	There may be other factors that result in a decrease in libido (e.g., antihypertensive drugs, and exhaustion). However, DMPA has a very minimal effect on libido. On the contrary, the sense of security of not getting pregnant may increase the libido of the client.
Was DMPA banned in the India because it was not considered safe?	No, in 1993 the MCRI approved DMPA for use as a contraceptive, and it is available as a safe contraceptive. The decision to approve DMPA came after an extensive review of the method as well as the unanimous recommendation by an expert advisory medical panel.
DMPA has just been approved in public sector, it is still in the 'experimental' stage	DMPA as a contraceptive method was developed in the 1960's. It has been approved as a long-acting contraceptive method and is marketed in more than 130 countries. To date, over 42 million women have used DMPA, over 100,000 women have used it for more than 10 years, and currently between 8 and 9 million rely on DMPA for contraceptive protection.
DMPA causes onset of menopause.	DMPA does not affect menopause. The amenorrhea experienced with it only occurs while using DMPA. When a client discontinues using DMPA, normal menstruation will return.

# Role Play and Case Studies

## 6.1 Role Play

In a role-play two or more individuals enact parts in a scenario related to a training topic. The role-play technique allows participants to 'play' the role of one or more individuals in a real life situation. The role-play directly involves the participants in the training session. When the role-play involves situations that participants are likely to encounter on their job. It can build self-confidence in training situation hence are better prepared to deal with such incidents.

Since participants have a chance to put themselves in the other person's position. By doing so, they can empathize and at the end of the exercise is typically a practical doable answer and a real world solutions. It provides an opportunity for learners to see how others might feel/ behave in a given situation helps to change participants' attitude and enables participants to see the consequences of their actions on others. It is stimulating and fun. It engages the group's attention and simulates the real world

The role-play is not without its disadvantages as it is done in an unreal or artificial atmosphere and some participants may have difficulty visualizing themselves in an imaginary situation. The trainees may feel very uncomfortable portraying any type of role. Without proper knowledge and understanding in advance, the role-play is nothing more than a game. This method is much more time consuming than other types of training. Role-plays may be made more effective if the participants are given time to prepare.

## 6.2 Process of Conducting Role Play

Select any three participants for the role play. One to enact the role of a 'client', another as a 'counsellor' and the third person to be the 'observer'. Select any of the sample role plays to be enacted out from the options given below. Prepare the participants to understand the situation and their respective roles, allowing only the 'client' to read through the case study.

Arrange the stage for optimal viewing and ensure that actors speak loudly and clearly. The 'counsellor' should enact the situation by assisting the client in the decision making process. Respect, care, honesty and confidentiality should be emphasized and form the basis of the interaction with the client.

The appointed 'observer' should share their observations about the role play which has been enacted. Thank the actors and ask for their feedback. Finally ask the audience for their observations of the role play and highlight the key principles as evinced from the play.

## 6.3 Sample DMPA Role Plays

### Counselling of Client

#### 6.3.1 Role Play No. 1

A 35-year-old woman who smokes has heard that DMPA may be a good method of family planning. She asks that the service provider gives her information about DMPA before making a decision.

### 6.3.2 Role Play No. 2

A 27-year-old woman with one daughter comes to see you because she has heard about the new “FP Injection” and wants to try it. She has an IUCD in place but doesn't like the menstrual cramps and prolonged bleeding she is experiencing each month. The service provider responds.

#### Selection of Client

### 6.3.3 Role Play No. 3

A 19-year-old comes to your facility requesting DMPA. She had a baby three months ago. The service provider will use the DMPA checklist to screen her and see if it is an appropriate method for her.

#### Management of Side Effects

### 6.3.4 Role Play No. 4

A 20-year-old woman who had her first DMPA injection elsewhere three months ago comes to see you. On the one hand, she likes the ‘Injection’ because she can use it without her mother-in-law's knowledge. However, she is having a lot of menstrual irregularity about which she was not forewarned, and she has heard that DMPA causes permanent sterility. The service provider responds.

### 6.3.5 Role Play No. 5

A 24-year-old woman has been using DMPA very successfully since the birth of her daughter three years ago. She has not had menses for the last two years. She and her husband want to discuss the possibility of having another child. The service provider responds.

## 6.4 Case Study

A case study is a written description of a hypothetical situation that is used for analysis, discussion and problem solving. It can be used to discuss common problems in a typical situation. It provides a safe opportunity to develop problem-solving skills and promote group discussion.

The case study is another important technique that trainers should become familiar with and know how to use properly. The case study is an actual presentation, either written or verbal, of an incident that either did or could happen in related areas.

After having read or being given the case, small groups typically spend a prescribed period of time discussing it and its possible solutions fully. Since the case should be an incident of relevance to the training situation, its ‘real world’ application is obvious. The case study should be realistic so that learner can relate to the situation. The trainers can select or write cases that are of relevance and concern to the group at hand. If the case study does not reflect a real-life situation, trainees may view the case as being too theoretical.

## 6.5 Process of Discussing Case Studies

- Introduce the case study
- Give the participants time to familiarize themselves with the case
- Present questions for the discussion or the problem to be solved

- Give participants time to solve the problem/s
- Have some participants present their solutions/answers
- Ask the participants what they have learned from the exercise
- Ask them how the case might be relevant to their own environment, to their job experience
- Summarize

## 6.6 Sample DMPA Case Studies

### Selection of Client

#### 6.6.1 DMPA Case Study No. 1

Kavita is 20 years old. She delivered her second child 6 weeks ago and is breastfeeding. Her first child died of diarrhea and dehydration at age of 8 months after Kavita weaned the baby from breast milk to bottle when she was pregnant with the second child. Kavita has never used a contraceptive method and now wishes to postpone her next pregnancy for three years. She has heard about the new 'injection' and thinks this method may be a good one for her. Her husband does not believe in using contraceptives and would like to conceive again soon to try and have a son.

#### Discussion Questions

1. Is DMPA an appropriate method for this woman? Why?
2. When could you give this woman her first injection?
3. What other spacing methods are appropriate for a 6 weeks postpartum woman?
4. What other spacing methods are appropriate for breastfeeding woman?
5. What are the advantages of DMPA?

#### 6.6.2 DMPA Case Study No. 2

Neetu is a 23 year old mother of an 18 months old girl. She has been taking the OCP for 3 months but noticed she has nausea on the first day of starting a new pack. She would like to switch to another method because of this. She plans to become pregnant again in about 6 months. She has heard that DMPA is a good method for women who suffer from OCP side effects and would like you to advise her on this.

#### Discussion questions:

1. Is DMPA an appropriate method for this woman? Why?
2. What advice you would give her?
3. What are the disadvantages of DMPA?

### Management of Side Effects

#### 6.6.3 DMPA Case Study No. 3

Meenakshi is 20 years old and has a 1-year-old child. She started DMPA six months ago but was not given any information about side effects. She is due for her third injection today but missed her menstrual period last month. She is very worried that she is pregnant even though



she has no symptoms of pregnancy. Otherwise, she likes the method and does not plan on getting pregnant for at least two more years.

#### **Discussion Questions**

1. What advice would you give her about her missed period?
2. When should she stop using DMPA if she wishes to get pregnant in two years?

#### **6.6.4 DMPA Case Study No. 4**

Kiran is a 35-year-old woman with four children. She and her husband think they do not want any more children but are not entirely certain, so she has been using DMPA for 6 months. In the past 3 months she has noticed a lot of light bleeding which hampers her day-to-day activities such as cooking, social visits, coitus etc. She requests your advice. Apart from this, she and her husband are very comfortable with DMPA.

#### **Discussion Questions:**

1. Is spotting or light bleeding dangerous to health?
2. What advice will you give her? Give her three options.
3. Would you give her the same advice if she told you she was bleeding very heavily?
4. What advice would you give her if this were the case?

#### **6.6.5 DMPA Case Study No. 5**

Kunti is on DMPA since 2 months. She is having irregular bleeding /spotting. She is anxious about it and visits her doctor.

#### **Discussion Questions:**

1. How should Kunti's case be managed?

#### **6.6.6 DMPA Case Study No. 6**

Deepa is on DMPA. She was having irregular bleeding after first injection, for which Mefenamic Acid was given to her. After 12 days, she comes to the doctor's clinic again, saying that bleeding is continuing. Deepa and her husband are very anxious about it.

#### **Discussion Questions:**

1. How should Deepa's case be managed?

#### **6.6.7 DMPA Case Study No. 7**

Farzana is on DMPA since one year. Initially she had irregular bleeding for which you had reassured her. Now she comes to your clinic and says that she has not had her menses since 2 months. Farzana is very worried that she might have become pregnant and visits her doctor.

#### **Discussion Questions:**

1. How should Farzana's case be managed?

# Competency-Based Checklist for Counselling and Technical Skills for DMPA Injection

Rate the performance of each step or task observed using the following rating scale:

- 1 Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted
- 2 Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed: Step or task performed efficiently and precisely in proper sequence (if necessary)

Step / tasks		Cases			Comment
Initial interview (client reception area)		1	2	3	
1	Greets woman respectfully, makes her comfortable and establish rapport.				
2	Establishes purpose of the visit and answer questions.				
3	Assures necessary privacy.				
4	Provides general information about family planning.				
5	Asks client about reproductive goals, to space or limit births. Any method used currently or in past.				
6	Give the woman information about the contraceptive choices available and the risks and benefits for each. Explain the difference between reversible and permanent contraception. Correct rumors or misinformation about all methods.				
7	Helps client to make an informed choice.				
Method specific counselling for DMPA					
8	Asks her if she knows about Injectable Contraceptive s. Corrects any myths, rumours or misinformation she may express.				
9	Asks her past experience with Injectable ( if any)				
10	Explains contraceptive & non-contraceptive benefits of injectable.				
11	Briefly explains how injectable works.				
12	Explains potential common side effects of the injectable contraceptive. Tells her that she may experience few (or possibly none) of these but they can all be managed.				
13	Reassures client that these side effects are not serious and many will decrease or stop after a few months of use.				

Step / tasks		Cases			Comment
14	Describes the injection process and what the client should expect during and after the procedure.				
15	Responds to any questions or concerns the client may have.				
<b>Pre procedure assessment</b>					
16	Screens client using ' <i>checklist for screening clients who want to initiate Injectable</i> '. Asks all questions on checklist.				
<b>DMPA specific tasks</b>					
17	Explains all sites where injection can be administered and asks her preference. (Arm or buttock or thigh)				
18	Shows sealed bottle and expiration date on label to client.				
19	Performs hand hygiene.				
20	Cleans injection site with alcohol or antiseptic swab.				
21	Rub bottle between palms or shakes gently. If vial is cold, warm to skin temperature before giving the injection.				
22	Opens 2 ml sterile package of syringe with 21-23 gauge intramuscular needle (attaches needle if needed).				
23	Wipe rubber cover with an antiseptic. Inserts needle into rubber cover of vial				
24	Fills syringe with contents of the bottle. Expels air from syringe.				
25	Locates the exact site for injection preferred by client. Wipe the site with an antiseptic.				
26	Inserts needle deep into the muscle. Aspirate first to ensure that the needle is not in the vein.				
27	Gently presses the injection site with a clean cotton ball.				
28	Places the used syringe into the sharps container.				
29	Performs hand hygiene.				
30	Instructs the client not to massage the site.				
<b>Post-injection tasks</b>					
31	Ensure that vital signs of client are monitored.				
32	Tells the name of injection to client.				
33	Calculate reinjection date (3 months or 13 weeks) and agree on a date for next injection.				
34	Assures her she is welcome to come back anytime if she has problems, questions or wants another method.				
35	Ensure that vital signs of client are monitored.				

Step / tasks		Cases			Comment
Waste management					
36	Ensure that disposal of disposable needles and syringes are as per guideline.				
Post Injection Instruction					
37	Emphasize on importance of DMPA client card and date of return for injection.				
38	Emphasize on important instructions and asks the client to repeat instructions.				
39	Advise the client not to do hot fomentation.				
40	Instructs client to return early if she has questions or concerns.				
41	Provides back-up method, if appropriate.				
Counselling at the time of repeat Injection Visits					
42	Asks how the client is doing with the method and whether she is satisfied. Asks if she has any questions or anything to discuss.				
43	Asks especially if she is concerned about bleeding changes. Gives her any information or help that she needs.				
44	Gives her the injection of DMPA if she is up to 4 weeks late or is up to 2 weeks early.				
45	Plans for her next injection. Agrees on a date for her next injection (in 3 months or 13 weeks for DMPA. Reminds her that she should try to come on time but she should come back no matter how late she is.				
46	Checks her blood pressure, if possible.				
47	Asks a long-term client if she has had any new health problems. Address problems as appropriate.				
For new health problems that may require switching methods,					
48	Asks a long-term client about major life changes that may affect her needs particularly plans for having children and STI/HIV risk. Follow up as needed.				
Counselling a client who is more than 4 months late for injection					
49	A client who is more than 4 weeks late for DMPA, provides injection only if: <ul style="list-style-type: none"><li>• She has not had sex since 2 weeks after she should have had her last injection, or</li><li>• She has used a backup method or has taken emergency contraceptive pills (ECPs) after any unprotected sex since 2 weeks after she should have had her last injection.</li></ul>				

Step / tasks		Cases			Comment
If the client is more than 4 weeks late for DMPA and she does not meet above criteria					
50	Takes additional steps to be reasonably certain that she is not pregnant.				
51	Discusses with the client why she was late and provides solutions.				
52	If coming back on time is often a problem, discusses using a backup method when she is late for her next injection, taking ECPs or choosing another method.				

## Pre/Post - Test Questionnaire

Name: Time: 15 min

Designation:

Place of posting:

Date:

Pretest/Posttest: Please encircle

Please encircle most appropriate answer for each question. Please do not encircle more than one answer

### 1. MPA is composed of

- a. Estrogen and progesterone
- b. Synthetic progestin medroxyprogesterone acetate
- c. Norethindrone enanthate
- d. Synthetic estrogen derived from the natural hormone estrogen

### 2. Which of the following is NOT a mechanism of action for MPA?

- a. Suppression of ovulation
- b. Immobilizing sperms
- c. Thickening of cervical mucus
- d. Thinning of inner lining of uterus

### 3. The effectiveness of MPA if used correctly and consistently is:

- a. 97%
- b. 99.7%
- c. 99%
- d. 97.9%

### 4. The standard regime (dose and schedule) of MPA, given as Intramuscular injection or as Subcutaneous injection, is

- a. the same i.e. 150 mg of Medroxy Progesterone Acetate/ml to be given every 3 months
- b. the same i.e. 200 mg of Medroxy Progesterone Acetate/ml to be given every 3 months.
- c. for IM, it is 150 mg of Medroxy Progesterone Acetate/1ml every 3 months and for SC it is 104 mg/0.65 ml every 3 months
- d. for IM, it is 150 mg. of Medroxy Progesterone Acetate/ml to be given every 3 months and for SC it is 204 mg/ml every 3 months

### 5. Which of the following statements is true?

- a. Subcutaneous MPA causes less side effects than Intramuscular MPA
- b. Subcutaneous MPA causes less delay in return to fertility than Intramuscular MPA
- c. Subcutaneous MPA acts for a longer duration than Intramuscular MPA
- d. Subcutaneous MPA has same characteristics as those of Intramuscular MPA

**6. Which of the following contraceptive methods is nearly as effective as MPA?**

- a. Combined Oral contraceptives
- b. IUCD
- c. Spermicides
- d. Condoms
- e. Standard Days Method

**7. MPA may be appropriate for women who**

- a. Smoke cigarettes regardless of age or the number of cigarettes.
- b. Have uncomplicated diabetes of less than 20 years
- c. Are not married
- d. Have just had an abortion or miscarriage
- e. Have abnormal vaginal bleeding
- f. All of above
- g. Options - a, b, c & d

**8. If a breast feeding woman comes for her first MPA injection 4 months after giving birth, and her menses have not returned , can MPA be given to her today?**

- a. No because it can be given only after she has her first menstrual period
- b. If she is fully breastfeeding i.e. 3 conditions of LAM are being met, MPA injection can be given today and backup method is not required.
- c. If the 3 conditions of LAM are being met, MPA injection can be given BUT backup method is required till her menses return.
- d. No because it can be given only after her baby is 6 months old.

**9. When does fertility return after taking the last injection of MPA?**

- a. 7-10 months after taking the last injection of MPA
- b. 5-6 months after taking the last injection of MPA
- c. immediately after stopping the injection
- d. fertility does not return as woman becomes infertile

**10. Health benefits of MPA are:**

- a. Protects against endometrial cancer
- b. Helps prevent Iron deficiency Anaemia
- c. May reduce incidence of symptomatic PID
- d. All of the above
- e. None of the above



**11. What monthly changes are not expected in menstrual cycle of clients who use MPA?**

- a. No change in bleeding pattern
- b. Amenorrhoea
- c. Irregular bleeding
- d. Prolonged/heavy bleeding

**12. In which of the following situations can next dose of MPA be given?**

- a. Woman comes for next MPA injection after two and half months
- b. Woman comes for next MPA injection after three months and five days
- c. Woman comes for next MPA injection after four months
- d. Woman comes for next MPA injection at four months and ten days and gives negative H/O unprotected of intercourse,
- e. Next dose can be given in all situations

**13. Amenorrhea caused by MPA calls for**

- a. Discontinuation of method because woman is menopausal
- b. Concern that it may be causing complications
- c. Ruling out pregnancy and reassuring client
- d. Giving women an estrogen tablet or injection

**14. If a woman comes for MPA injection on day 10 of her menstrual cycle, can it be given to her?**

- a. No, she needs to come for MPA during day 1-7 of her next menstrual period
- b. Yes, MPA can be given if there is no history of unprotected sex since her last period. Backup method is also required for next 7 days.
- c. Yes, but she needs to be given a higher dose of MPA
- d. Yes, she can be given MPA injection and no back up method is required

**15. BMD loss with MPA**

- a. BMD decreases by 8-10% with five years of use and loss is irreversible
- b. BMD decreases by 5-6% with five years of use and loss is reversible
- c. BMD decreases by 10-15% with five years of use and is reversible
- d. Huge loss of BMD, which can cause osteoporosis

**16. In which of the following situations can next injection of MPA be given?**

- a. Woman comes for next MPA injection after two and a half months
- b. Woman comes for next MPA injection after three months on scheduled date
- c. Woman comes for next MPA injection after three months and five days
- d. Woman comes for next MPA injection just after completing four months
- e. Next dose can be given in all situations

**17. Hepatitis-B has the .....% chance of transmission by sharps injury?**

- a. 3–4%
- b. 10–30%
- c. 10–12%
- d. 50–60%

**18. Informed written consent signed by client is required for providing**

- a. COC Pill
- b. POP
- c. Emergency contraceptive Pill
- d. Injection MPA
- e. Centchroman
- h. IUCD
- f. All of the above
- g. None of the above

**19. What are the post injection instructions to be given by the provider to MPA client?**

- a. Do not massage injection site
- b. Do not apply hot fomentation
- c. Expect menstrual changes and do not get unduly alarmed
- d. To come on scheduled date for next injection
- e. All of the above

**20. Sharps (Needles and Vials) should be disposed off in**

- a. Red bins/bags
- b. Black bins/bags
- c. Blue or white bins/bags
- d. Yellow bins/bags

# Answer Key Pre/Post - Test Questionnaire

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- d. All of the above**
- e. None of the above

**11. What monthly changes are not expected in menstrual cycle of clients who use MPA?**

- a. **No change in bleeding pattern**
- b. Amenorrhoea
- c. Irregular bleeding
- d. Prolonged/heavy bleeding

**12. In which of the following situations can next dose of MPA be given?**

- a. Woman comes for next MPA injection after two and half months
- b. Woman comes for next MPA injection after three months and five days
- c. Woman comes for next MPA injection after four months
- d. Woman comes for next MPA injection at four months and ten days and gives negative H/O unprotected of intercourse,
- e. **Next dose can be given in all situations**

**13. Amenorrhea caused by MPA calls for**

- a. Discontinuation of method because woman is menopausal
- b. Concern that it may be causing complications
- c. **Ruling out pregnancy and reassuring client**
- d. Giving women an estrogen tablet or injection

**14. If a woman comes for MPA injection on day 10 of her menstrual cycle, can it be given to her?**

- a. No, she needs to come for MPA during day 1-7 of her next menstrual period
- b. **Yes, MPA can be given if there is no history of unprotected sex since her last period. Backup method is also required for next 7 days.**
- c. Yes, but she needs to be given a higher dose of MPA
- d. Yes, she can be given MPA injection and no back up method is required

**15. BMD loss with MPA**

- a. BMD decreases by 8-10% with five years of use and loss is irreversible
- b. **BMD decreases by 5-6% with five years of use and loss is reversible**
- c. BMD decreases by 10-15% with five years of use and is reversible
- d. Huge loss of BMD, which can cause osteoporosis

**16. In which of the following situations can next injection of MPA be given?**

- a. Woman comes for next MPA injection after two and a half months
- b. Woman comes for next MPA injection after three months on scheduled date
- c. Woman comes for next MPA injection after three months and five days
- d. Woman comes for next MPA injection just after completing four months
- e. **Next dose can be given in all situations**

**17. Hepatitis-B has the .....% chance of transmission by sharps injury?**

- a. 3–4%
- b. 10–30%**
- c. 10–12%
- d. 50–60%

**18. Informed written consent signed by client is required for providing**

- a. COC Pill
- b. POP
- c. Emergency contraceptive Pill
- d. Injection MPA
- e. Centchroman
- h. IUCD
- f. All of the above
- g. None of the above**

**19. What are the post injection instructions to be given by the provider to MPA client?**

- a. Do not massage injection site
- b. Do not apply hot fomentation
- c. Expect menstrual changes and do not get unduly alarmed
- d. To come on scheduled date for next injection
- e. All of the above**

**20. Sharps (Needles and Vials) should be disposed off in**

- a. Red bins/bags
- b. Black bins/bags
- c. Blue or white bins/bags**
- d. Yellow bins/bags

# Evaluation of Training

Name\_\_\_\_\_Designation\_\_\_\_\_

Date\_\_\_\_\_District\_\_\_\_\_

Put (Tick ✓) in front of your response

S. No.	Item	Excellent	Very Good	Good	Satisfactory	Poor
1	Organization of the workshop					
2	Subject matter covered					
3	Duration of workshop					
4	Effectiveness of facilitators					
5	Overall evaluation of workshop					

6. Please share with us the sessions you found most useful (include reasons why)?

7. Please share with us the sessions that you found least useful (include reasons why)?

8. Please share any suggestions on how to improve the workshop or a particular session?

- ## 11. Other Comments



# Post Training Follow Up Checklist

## Instructions to trainer:

- Complete one form per trainee during follow up (Telephonic/Visit). Form has three parts: Part I- General assessment, Part II-Clinical Performance Assessment and Part III-Action Plan
- At the end of assessment review gaps identified with trainee and share the actions recommended.

## Part I: General Assessment

State	District	Facility Name
Facility type:	Date of Trainings:	Date of follow up:
No. of this Follow up (Tick (✓) one Choice)	1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup>	
Person conducting follow up Name: Designation:		
Name of the Trainee		Designation:
Trainee is providing injectable contraceptive services? (Tick (✓) one Choice) Yes /No		
What are the numbers of services/procedures that were performed?		
Procedure	Last month	Last quarter
Counselling		
Injectable		
If you are not providing any of the services, what difficulties have prevented you? Tick (✓) all that apply		
1.	Lack of supply of vials	
2.	Lack of supply of syringes	
3.	Lack of demand or clients seeking for the service	
4.	Time constraint due to excess workload	
5.	Service is not provided in the facility	
6.	Lack of confidence in skill	
7.	Other (specify) .....	
If you are providing services, have you experienced any difficulties during service provision? If yes, Tick (✓) accordingly		
1.	Shortage of Supplies	
2.	Low case load	
3.	High case load	
4.	Lack of confidence in skill	
5.	Other (specify) .....	

## Part II: Clinical Performance Assessment:

Observe the procedure based on the competency based checklist (in case a client is available), rate trainee's performance by checking in the appropriate box for the procedure. Please refer the competency checklist as in Annexure 7. Based on assessment draw a plan of action

## Part III: Action Plan

Table below should be utilized by trainer for developing action plan based on gaps identified from above assessment for remedial actions and share with the trainee.

Trainers Action Plan				
S.No.	Gaps identified	Support required	Timeline	Remarks
1.				
2.				
3.				
4.				
5.				
Signature of the trainer				

## Format of Facility Register for MPA (Antara Program)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Annual S. No	OPD No/IPD No. (whichever applicable)	Clients' Name	Clients' Age	Clients' Address	Telephone Number	Number of Living Children	Last Child Birth	LMP (in case of lactating women write LA)	Initial Body Weight	Blood Pressure	Any Significant Medical History	Type of MPA Administered (Intramuscular- IM/Sub Cutaneous-SC)	Date of Injection	Post-partum	Post-abortion	Interval	Type of MPA Administered (IM/SC)	Date of Injection	Menstrual Cycle	Body Weight	Any Other finding	Type of MPA Administered (IM/SC)	Date of Injection	Menstrual Cycle	Body Weight	Any Other finding	Type of MPA Administered (IM/SC)	Date of Injection	Menstrual Cycle	Body Weight	Any Other finding	Reason for Discontinuation	Remarks, if any

### Instruction Sheet:

**Column 1:** Fill the annual serial number, the number will be different for all the clients.

**Column 2:** Fill the OPD or IPD number, whichever is applicable for the client.

**Column 3-7:** Fill in the information of the client.

**Column 8:** Mention the period (Month and Year) of last child birth.

**Column 9:** Mention the (Date, Month & Year) LMP. For women who are in Lactational Amenorrhoea please write LA in the respective column.

**Column 10-11:** Write the findings for Body weight (in kg) and Blood Pressure.

**Column 12:** Write any significant medical history.

**Column 13, 18, 23, 28:** Write IM/SC for the type of MPA administered

**Column 14, 19, 24 and 29:** Write the date of second, third and fourth injection (dd/mm/yy).

**Column 15-17:** Tick (✓) the appropriate column.

**Column 20-22; 25-27; 30-32:** Write the follow up findings- (Menstrual Cycle-Irregular bleeding, prolonged bleeding and amenorrhea) (Write body weight in kg) (Any other finding-Write any significant finding, Write NAD in case of no significant finding).

**Column 33:** Note the reasons for discontinuation.

**Column 34:** Note the additional remarks (in case the client discontinues injectable, write the contraceptive suggested).

# Course Outline (Session Plans) for MPA Training

Duration	Session Title	Training Objectives	Resource Materials
<b>LCD projector, laptop, screen, flip charts for throughout the training</b>			
30 min	Welcome & Introduction, Participants' Expectations & Group Norms	<ul style="list-style-type: none"> <li>Open course with welcome of participants by organizers, lead trainers facilitate the introductions of all participants and trainers.</li> <li>Ask participants' expectations and put up on a flip chart, enlist the norms to be followed by brainstorming.</li> <li>Orient participants to the material in kit e.g. Reference Manual for Injectable Contraceptive (DMPA), pamphlets, sample of counselling aid etc.</li> </ul>	<ul style="list-style-type: none"> <li>Welcome note,</li> <li>Flipchart and markers</li> <li>Name badges</li> <li>Paste it papers</li> </ul>
20 min	Pre Course Knowledge Assessment.	<ul style="list-style-type: none"> <li>Distribute the Pre-course knowledge assessment and tell its importance. Allow 15 minutes for completing it.</li> </ul>	<ul style="list-style-type: none"> <li>Copies of Pre-Test questionnaire</li> </ul>
30 min	National Family welfare programme and need for expanding contraceptive choice	<ul style="list-style-type: none"> <li>Using the PPT, discuss/explain National Family Welfare Program and need for expanding contraceptive choice. Global use of MPA in National Family Welfare Program</li> </ul>	<ul style="list-style-type: none"> <li>PPT</li> </ul>
60 min	Technical Aspects of MPA Injectable Contraceptive (IM and SC) Special Issues with MPA	<ul style="list-style-type: none"> <li>Share historical background and types of injectable contraceptives. Discuss and explain technical aspects of MPA (Both IM and SC): Mechanism of action, safety &amp; effectiveness, contraceptive and non-contraceptive benefits &amp; limitations</li> <li>Emphasize on the Return of fertility. Explain that return of fertility may take 7-10 months from date of last injection (average 4-6 months after 3 months effect of last injection is over) and studies show that ovulation/fertility return is not affected by duration of MPA use or women's age.</li> <li>Explain initiation of MPA, including use of Pregnancy Checklist to be reasonably certain that the woman is not pregnant.</li> <li>Explain issues related to Adolescents, women of age &gt;35, post-partum women and failure of pregnancy. Bone mineral density, cancer risk, HIV risk, metabolic effects and cardiovascular effects, MPA failure one by one and clarify doubts if any.</li> </ul>	<ul style="list-style-type: none"> <li>PPT</li> <li>Handouts</li> <li>Pregnancy Screening Checklist</li> <li>Sample of all contraceptives</li> </ul>
<b>Working Tea</b>			
60 min	Counselling clients on Family Planning methods	<ul style="list-style-type: none"> <li>Review importance and purpose of counselling. Emphasise that provider's attitude towards clients have an effect on the quality of counselling and quality of care provided to clients. Review the basic principles of counselling. Discuss GATHER approach including General principles of counselling</li> </ul>	<ul style="list-style-type: none"> <li>PPT</li> <li>Role Play</li> </ul>

Duration	Session Title	Training Objectives	Resource Materials
	<ul style="list-style-type: none"> <li>General principles of counselling</li> <li>Method specific counselling for MPA</li> </ul> Practice by Participants through Role Play, using Competency Based Checklist	<ul style="list-style-type: none"> <li>Explain points for Method specific counselling related to MPA, as given in Reference Manual for Injectable Contraceptive (DMPA). Project through PPT each myth related to MPA and ask the group for the fact. Then trainer should project the fact and explain. Now explain how women can be counselled for menstrual changes in a simple non alarming way, by dispelling myths and explaining why menstruation occurs and why it stops with MPA.</li> <li>Ask participants to open the Competency –Based checklist for Counselling from Reference Manual for Injectable Contraceptive (DMPA) and quickly go through it upto point # 15. Emphasise that each point is important while counselling.</li> <li>Project Role Play situation on FP counselling from Reference Manual for Injectable Contraceptive (DMPA). Get volunteers to enact in front of all the participants. Remaining participants and trainer should observe the role-play through checklist and after the role-play, facilitate a discussion about what was done well, what was not done and what could be done differently.</li> <li>After participants' feedback, trainer to provide necessary feedback, as required.</li> </ul>	<ul style="list-style-type: none"> <li>Copies of checklists and Reference manuals</li> </ul>
45 min	Eligibility criteria and client assessment for injectable contraceptives using WHO MEC	<ul style="list-style-type: none"> <li>Discuss that once woman chooses MPA or any other method, provider needs to be sure she can be given the method chosen. For this purpose, WHO has clear guidelines called MEC for contraceptive use.</li> <li>Explain 4 categories of WHO MEC. Point out that sometimes providers unwittingly create medical barriers for contraceptive use by denying methods in conditions where they can be given.</li> <li>Introduce the MEC Wheel, explain how it is used while screening women for MPA or any other method</li> <li>Now discuss screening checklist for use of MPA (Annexure 1 in Reference Manual for Injectable Contraceptive (DMPA) which is based on WHOMEK.</li> </ul>	<ul style="list-style-type: none"> <li>PPT</li> <li>Hand outs</li> <li>Pregnancy Screening Checklist</li> <li>WHO MEC wheel</li> </ul>

Duration	Session Title	Training Objectives	Resource Materials
45 min	Administering Injectable Contraceptive (IM and SC)	<ul style="list-style-type: none"> <li>• Ask questions to participants to share their experience in giving IM and SC injections.</li> <li>• Discuss the following: Storage of MPA vials, pre injection preparation, site of injection (Both IM and SC).</li> <li>• Explain in details the preparation of injector, activation and administration in case of SC Injectable</li> <li>• Explain/Demonstrate the correct procedure for giving injection and each participants to explain/demonstrate the actual injection procedures, post-injection care/post injection instructions to the client.</li> </ul>	<ul style="list-style-type: none"> <li>• PPT</li> <li>• All supplies/items for giving injection including sample of MPA</li> </ul>
<b>Lunch</b>			
60 min	Follow Up Care of MPA Clients and Management of Side Effects	<ul style="list-style-type: none"> <li>• Explain the importance of follow up care to clients and how it helps to continue using the method. Discuss ways for reminding clients to return for repeat dose on time. Explain protocols for client coming on time, defaulters and dropouts.</li> <li>• Discuss that side effects are the most common cause of discontinuation and need to be managed timely in appropriate manner.</li> <li>• List the possible side effects of MPA (refer from Reference Manual for Injectable Contraceptive (DMPA)).</li> <li>• 3 Case Studies: Divide participants into small groups. Give one case study (out of 3) to each group. Give 5-7 min to discuss management of case. Trainer to discuss each case one by one and add when necessary.</li> <li>• Explain management of menstrual changes one by one through PPT.</li> <li>• End the session by emphasizing that for side effects, reassurance and correct management can help clients to continue using the method and decrease drop outs.</li> </ul>	<ul style="list-style-type: none"> <li>• MPA Client card</li> </ul>

Duration	Session Title	Training Objectives	Resource Materials
15 min	Prevention of Infection & Safe Injection practices Side	<ul style="list-style-type: none"> <li>Facilitate a recap of the general concepts of infection prevention as they relate to provision of MPA services</li> </ul>	<ul style="list-style-type: none"> <li>Flip charts</li> <li>Reference manual</li> </ul>
<b>10 Min      Tea Break</b>			
15 min	Review Pre course knowledge assessment.	<ul style="list-style-type: none"> <li>Read out the questions for which incorrect response have been written. Take a note of incorrect responses and explain to the participants.</li> </ul>	<ul style="list-style-type: none"> <li>Filled pretest Questionnaire</li> </ul>
30 min	Program management & QA Capacity building of providers	<ul style="list-style-type: none"> <li>Start the session by explaining the GoI plan to roll out new contraceptives. Explain the plan for phase wise roll out of Injectables MPA.</li> <li>Brainstorm on the determinants of quality family planning services. Show slides on program determinants. Explain each determinant.</li> <li>Highlight the eligibility criteria for service providers in case of MPA.</li> <li>Highlight that regular uninterrupted supply is important for quality services. Ask them to share what is to be done to ensure regular supplies at state and district level. Explain the role of demand estimation for Injectable and Oral contraceptives.</li> <li>Discuss how to procure and maintain stock of MPA and oral contraceptives and clarify that in case of Injectable there is hardly any adverse event and if any they are similar to any normal injection. Emphasize role of SQAC/DQAC</li> <li>For MPA ask them the key areas and standards to be met for quality MPA services. Explain each key area with help of power point slides. Share the reporting formats for both contraceptives. Refer to reference manuals.</li> </ul>	<ul style="list-style-type: none"> <li>Flip charts</li> <li>Reference manual for Injectable</li> </ul>

Duration	Session Title	Training Objectives	Resource Materials
15 min	<ul style="list-style-type: none"> <li>Record Keeping and Reporting Formats</li> </ul>	<ul style="list-style-type: none"> <li>Explain the importance of Record keeping.</li> <li>Share formats of register and MPA client card and discuss how to fill them up. Trainers may use an example for the same</li> <li>Discuss the importance of assigning the one nodal person in the health facility who will ensure that record of each new and repeat client is recorded correctly in a timely manner.</li> </ul>	<ul style="list-style-type: none"> <li>Formats of Register and MPA client card from Reference Manual for Injectable Contraceptive (DMPA)</li> </ul>
30 min	<ul style="list-style-type: none"> <li>Post-Test, Course Evaluation and closure</li> </ul>	<ul style="list-style-type: none"> <li>Have participants fill-out and submit the course evaluation forms.</li> <li>Closing remarks by training organizers.</li> </ul>	<ul style="list-style-type: none"> <li>Post Test questionnaire</li> <li>Answer sheets</li> <li>Evaluation forms</li> </ul>



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