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REFERENCE MANUAL FOR INJECTABLE CONTRACEPTIVE (MPA)

March 2016

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

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Government of India, Nirman Bhawan, New Delhi -110101

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सचिव
B.P. SHARMA
Secretary

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भारत सरकार
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स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health & Family Welfare

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 Injectiables 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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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)

CONTENTS

ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANM	Auxillary Nurse Midwife
ASHA	Accredited Social Health Activist
BCC	Behaviour Change Communication
CHC	Community Health Centre
CPR	Contraceptive Prevelance Rate
DCGI	Drug Controller General of India
DFWO	District Family Welfare Officer
DH	District Hospital
DLHS	District Level Household Survey
MPA	Depo MedroxyProgestrone 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
SC	Sub Cutaneous
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 MPA in the National Family Planning Program. The growing availability and use of MPA 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 MPA 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 MPA 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 (MPA) 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 MPA. 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 MPA 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 whichin turn will help to improve the acceptance and continuation rates leading to client satisfaction.

SECTION I:
Technical Aspects of Injectable Contraceptive (MPA)

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. MPA (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 MPA for premature labour subsequently had a marked delay in return of fertility. This observation led to the development of MPA as a fertility-regulating agent. In the mid 1960s, Upjohn got a contraceptive product licence for marketing MPA as a contraceptive in many countries. Since then MPA 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

MPA 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 MPA in their government-run family planning programs which contributes significantly to their contraceptive method mix. MPA 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 MPA 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 MPA 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

MPA 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 MPA 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 MPA 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 MPA 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 MPA services through their health facilities.

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

However, the lone efforts of the private sector to offer MPA to women has not been able to cause any significant change in the overall contraceptive use as number of MPA 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 (MPA) – (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 (MPA) 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 MPA.

WHO recommends MPA for-

1) Women aged 18 to 45 years of age; there should be no restrictions on the use of MPA, 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 MPA generally outweigh the theoretical safety concerns regarding fracture risk (MEC Category 2).
3) There should be no restriction on the use of MPA among women who are otherwise eligible to use this method, including on duration of use.
4) There are no restrictions on the use of MPA 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 (MPA) – (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 (MPA) should be reviewed every 2 years to assess the benefits and potential risks.
8) Users of MPA should be supported in their choice of whether or not to continue using MPA 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 MPA 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 (AZCOG); 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 (MPA) – 3 monthly Injection.
   b) Norethisteroneenanthate (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, MPA injectable contraceptive have been added to the basket of choice and henceforth MPA will be discussed in this manual.

1.4.2 Routes of MPA Injectable Contraceptive

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

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

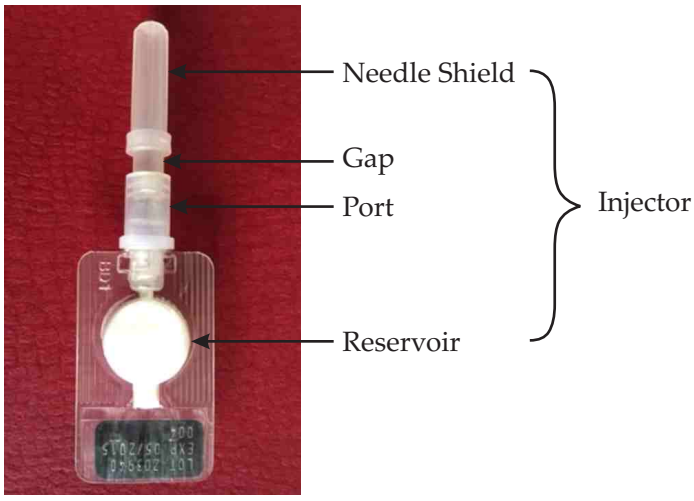


Fig 1: Subcutaneous Medroxy Progesterone Acetate in Uniject system

1.4.2.1 Key Features of Uniject Injection System

This Uniject system has a thermoformed plastic laminate reservoir with ultra-thin needle attached by a polyethylene port. It is designed for single use and immediate disposal as it has a one-way valve and collapsible reservoir that cannot be re-filled.

1.4.2.2 Advantages of Uniject Injection System

- It is easy to use because it is prefilled and very easy to inject as squeezing the bulb pushes fluid into the needle.
- It is non-reusable, hence one to one transmission of blood borne pathogens through needle reuse is eliminated.
- It provides logistical benefits because Uniject is compact and smaller than a syringe and vial, it is easier to transport and store. A study commissioned by PATH found that MPA-SC in Uniject is 62 percent lighter and 25 percent less voluminous than MPA-IM packed with vial and syringe.
- The formulation for subcutaneous injection provides slower and more sustained absorption of the progestin than intramuscular MPA. This enables a 30 percent lower dose of progestin (104 versus 150 mg) and reduces peak blood levels by half, but with the same duration of effect as intramuscular MPA.

A waste management assessment showed that SC- MPA in Uniject generates 70 percent less waste by volume than the standard auto-disable syringe with an empty MPA vial.

1.4.3 Comparing MPA Subcutaneous with MPA Intramuscular

Features	MPA-SC	MPA-IM
Packaging	Available in single dose prefilled auto disabled injection device **(Uniject)**	Available in single dose vials
Dosage	Single dose contains 104 mg / 0.65 ml of Medroxy Progesterone Acetate, to be administered every 3 months.	Single dose contains 150 mg / ml of Medroxy Progesterone Acetate, to be administered every 3 months.
Site of Administration	Administered subcutaneously in outer anterior portion of thigh, abdomen or upper outer portion of arm.	Administered intramuscularly in upper arm, hip or outer side of thigh.
Mode of Administration	1. Pierces the epidermal and dermal layers of the skin and delivers drug in loose subcutaneous tissue. 2. Short needle 3. Ease of administration- more surface area available & fewer landmarks needed for SC injection.	1. Given deep intra muscular 2. Longer needle 3. Ease of administration-less surface area and particular landmarks needed to locate specific muscle.

Medroxy Progesterone Acetate (MPA)

2.1 Composition

Injectable Contraceptive (MPA) is an aqueous suspension of microcrystal for depo injection of pregnane 17 alfa – hydroxyprogesterone – derivative progestine medroxyprogesterone acetate. MPA is a Progestogen-only Injectable (POI) given deep intra-muscular every three months

- Intramuscular one dose = one vial of 150 mg per 100 ml, aqueous suspension of MPA
- Subcutaneous one dose =104 mg per 0.65 ml suspension of MPA

Fig. 2 Injectable Contraceptive MPA (Antara) in the National Family Planning Program

2.1.1 Mechanism of Action of MPA

MPA 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

MPA 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 MPA use give reassurance that MPA presents no overall risks for cancer, congenital malformation or infertility. Also extensive research has found that MPA 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 MPA 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 MPA 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 reducepre-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 MPA and antibiotics/enzyme-inducing drugs.

2.4 Limitations

MPA 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

MPA 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 MPA use or women's age.

2.6 Initiation

2.6.1 When to Start MPA Injection

A MPA 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 MPA.

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

Woman's situation	When to start
Having menstrual cycles or switching from a non hormonal method	• Can be started any day within 7 days of menstrual cycle with no need for a backup method. • 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. • Can be started immediately, if she is switching from an IUCD. • If starting after 7 days of menstrual cycle, she will need a backup method (e.g. Condom) for next 7 days.
Switching from a hormonal method	• 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.

Woman's situation	When to start
Post-Partum Women breastfeeding	
Less than 6 months postpartum	• Wait until 6 weeks postpartum and then start MPA. • 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. • 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 MPA injection. • If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.
More than 6 months postpartum	• 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 MPA injection. • If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.
Post-Partum Women not breastfeeding	
Less than 4 weeks after giving birth	• Can be started at any time. No need for a backup method.
More than 4 weeks after giving birth	• 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. • If her monthly bleeding has returned, she can start injectable as advised for women having menstrual cycles.
Other situations	
No monthly bleeding (not related to childbirth or breastfeeding)	• 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.
After miscarriage or abortion	• Can be started immediately after abortion or within 7 days of first or second-trimester miscarriage/abortion, with no need for a backup method. • 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.
After taking Emergency Contraceptive Pills (ECPs)	• Can be started on the same day as the ECPs. • 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.

2.6.2 Switching from MPA- SC to MPA- IM or Vice Versa

As the active ingredient in the IM and SC is identical, it is safe to switch back and forth between IM and SC every three months with the same level of contraceptive protection. This switching is safe and it does not decrease effectiveness, though switching should not be a routine practice. If switching is necessary, the injection of the alternate mode should be administered on the due date and duly recorded. Clients need to be explained and told about changed mode of administration i.e. SC to IM or vice versa and the scheduled date for next injection.

Note: MPA-SC should not be used for IM administration and similarly MPA-IM should not be used for MPA-SC administration.

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 MPA 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 MPA 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 MPA 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 MPA

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

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 MPA, 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 MPA 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 MPA, 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 MPA 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 MPA (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 MPA?	**No,** irregular bleeding with MPA 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?	MPA 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?	**No,** 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 MPA, monthly bleeding stops because the bodily preparation for conception comes to a halt. When the woman discontinues using MPA, 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?	**No,** there is no connection between a woman's eye sight and period.
5.	Will stoppage of period mean untimely menopause?	**No,** MPA does not cause menopause. It only temporarily stops period from occurring every month and once MPA use is discontinued, period resume after few months.
6.	Will stoppage of period lead to infertility?	**No,** MPA does not cause infertility. After discontinuing MPA, 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 MPA safely except in certain physiological or medical conditions. Therefore, assessment as per Medical Eligibility Criteria (MEC) is important.

4.1 Eligibility Criteria

MPA 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 MPA 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 reasonablycertain that the woman is not pregnant

There are only few medical and physiological conditions in which MPA 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 MPA, it is important for the provider to ascertain if the method can be given to her or not (Annexure1, 2).

4.2 Clinical Assessment and Screening of Clients

MPA 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 MPA can be given to that woman or not.

Fig. 3 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 MPA Vials

MPA injection vials are to be stored preferably at room temperature between 15^0 to 30^0 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 Site of Injection

The injection site for MPA - IM is the upper arm (deltoid muscle), the buttocks (gluteal muscle, upper outer portion) or thigh (outer anterior) (Fig. 4).The preferred, easily accessible and acceptable site is deltoid muscle.

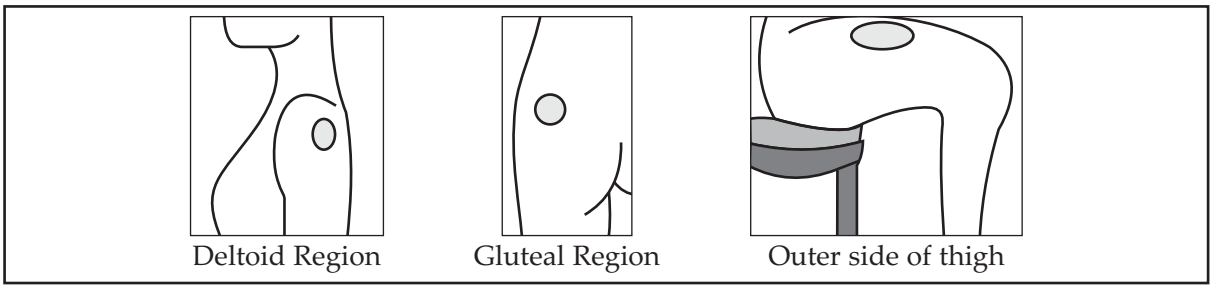


Fig. 4 : Site of administration of MPA - IM

The injection site for MPA - SC is subcutaneous fat of abdomen (Below Umblicus), anterior outer part of thigh or upper and outer part of arm. Avoid bony areas and the umbilicus. (Fig. 5)

The preferred, easily accessible and acceptable site should be taken into consideration before administration of injection. Change the injection site with each injection. The area of skin must be free from scars and skin conditions such as eczema or psoriasis.

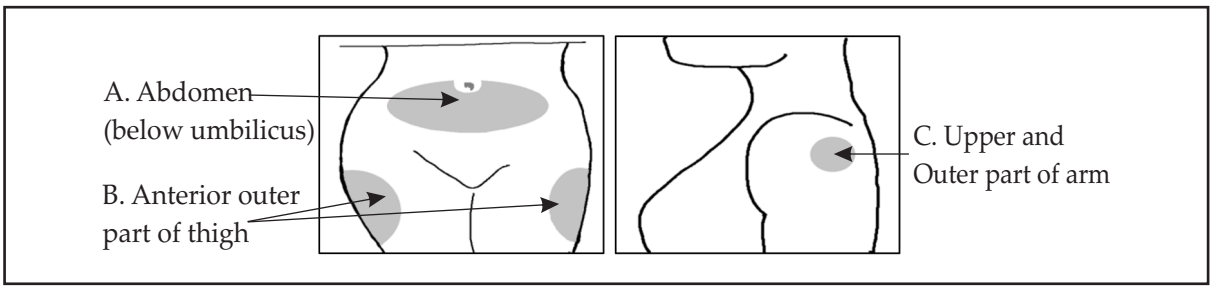


Fig 5: Sites of administration of MPA- SC

5.3 Administration

5.3.1 MPA - IM

5.3.1.1 Pre-Injection Preparation

- Ensure client is properly counselled and has chosen MPA.
- 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.
- 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.

5.3.1.2 Administering the Dose/ 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.

5.3.2 MPA-SC

5.3.2.1 Pre-Injection Preparation

- Ensure client is counselled and expiry date of unject has been checked.
- Use an antiseptic swab to wipe the skin in the injection area, chosen by the client.
- Allow the skin to dry.

5.3.2.1.1 Preparing the Injector

When provider is ready to administer the injection, carefully tear open the foil pouch and remove the injector. Do not remove the needle shield at this stage.

Check the injector as follows

- The needle shield should be in the position shown in the diagram below (Fig 5).
- There should be a gap between the needle shield and the port.
- If there is no gap discard the injector and use a new one.
- If the needle shield has come off the needle or is missing altogether, discard the injector and use a new one.

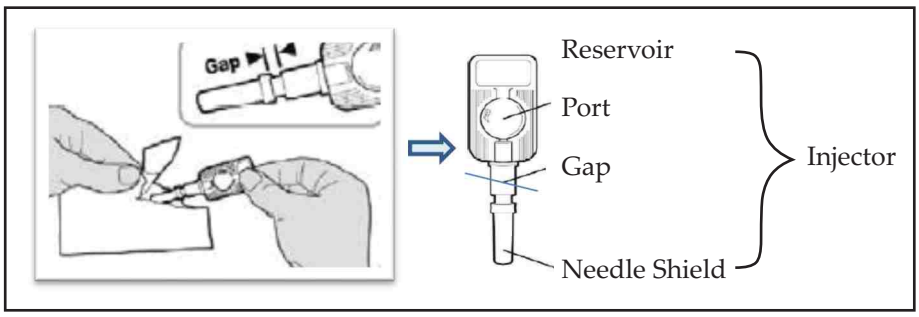
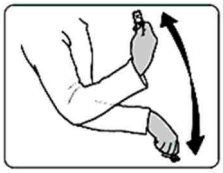


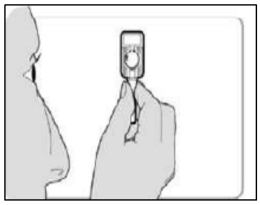
Fig 6: Diagrammatic representation of parts of Uniject

5.3.2.1.2 Mixing MPA-SC in Reservoir



- Hold the injector firmly by the port.
- Shake the injector vigorously for 30 seconds to mix the medicine thoroughly.

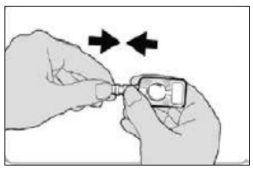
- If there is any delay between mixing the medicine and proceeding through the next step, repeat the mixing procedure as above.
- Check the injector. The liquid contents should appear white to off white and uniform. There should be no leakage from any part.

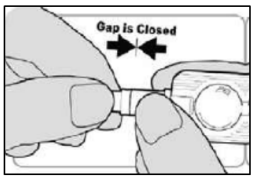


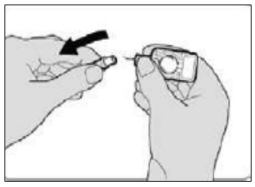
- If any problem is observed discard the injector and use a new one.

5.3.2.1.3 Activating the Injector

- Hold the injector firmly by the port with one hand.Take care not to squeeze the reservoir.
- Hold the needle shield with other hand. Gap will be visible between the port and the end of the needle shield.
- Push the needle shield towards the port. Continue to push firmly until gap is closed between needle shield and the port.The injector is now activated.
- Continue to hold the injector firmly by the port.
- Pull the needle shield away to remove it from needle and discard.

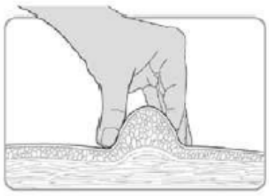


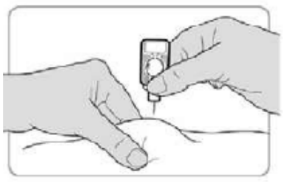


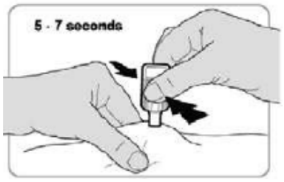


5.3.2.2 Administering/Injecting the Dose

- Gently grasp and squeeze a large area of skin in the chosen area between thumb and fore finger, pulling it away from body.
- Hold the injector by port. Keep it as upright as possible with needle pointing downwards.
- Insert the needle into the skin so that the needle tip is in the subcutaneous tissue and the port just touches the skin.
- Hold the reservoir firmly between the thumb and the forefinger. Squeeze the reservoir slowly to inject the medicine. It should take 5-7 seconds.
- After the dose has been completely injected and the reservoir has collapsed, gently pull the needle out of the skin.
- It is important that the full dose of medicine is given, however small traces of white liquid may remain visibile inside the edge. This is normal.







5.4 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.

- Check whether any medicine has leaked out of the injector or has appeared on the skin.
- If complete dose has not been administered then additional dose should not be given. Advise client to use back up contraceptive method.
- Do not replace the needle shield after use.
- Use a clean cotton swab to press lightly on the injection area for a few seconds. Do not rub or massage the injection site.
- Follow safe practice for disposal of used injector and needles. The MPA-SC Uniject syringe, after use, should be placed in the container/box for disposal of sharps. The injector is for a single injecion only. It should be never reused.

5.5 Post Injection Instructions

- Instruct client that she must come after 90 days for a repeat injection and give her the scheduled date. Hand over the MPA Client Card 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 or abortion. 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 has 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

Chapter 6

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 MPA 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 MPA 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	• Give MPA injection • No back up required	• Encourage her to come on time for next injection as per the date given on the MPA client card. • Discuss if she is having any side effects and counsel accordingly.

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 upto 4 weeks later from the scheduled date).

Time of visit	Action to be taken	Points for reinforcement
2 weeks earlier or up to 4 weeks later from the scheduled date (within grace period)	• Give MPA injection • No back up required	• Counsel her on the importance of coming on time for next injection, as per the date given on the MPA 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). • Discuss if she is having any side effect and counsel accordingly.

6.2.3 Follow Up of Drop Outs

A dropout is a MPA 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
More than 4 months from the date of last injection.	• Rule out pregnancy • If not pregnant, give MPA Injection • Advise back up method (e.g. Condom) for next 7 days	• Ask reason for coming late. • If returning within 4 months is a problem for the client, discuss other contraceptive methods of FP.

Management of Side Effects

7.1 Introduction

The client satisfaction on continuing use of MPA 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 MPA due to fear and misunderstanding about side effects. To help clients continue using MPA, it is important to counsel and manage the associated side effects, especially menstrual changes.

There are no serious side effects of MPA, 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 MPA.

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 MPA

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 MPA, listen to her concerns, give her appropriate advice/treatment. If problems continue or the client wishes, help her choose another method.

Chapter 8

Special Issues on MPA

8.1 MPA & 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 MPA 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 MPA's interference with the production of the hormone estradiol, which is involved in bone mineral density development. The use of MPA is associated with temporary decrease in bone mineral density (BMD), which is reversible on discontinuation of MPA . There is no increase in fractures. Routine bone mineral density monitoring is not recommended in any population using MPA.

8.1.1 MPA in Adolescents

Concerns are raised about the effects of MPA 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 MPA 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 MPA can be used safely in adolescence.

8.2 MPA 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 MPA 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, MPA is safe and an effective available option for high risk women of over 35 years.

In healthy non-smoking peri-menopausal women, MPA 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 MPA should be reviewed every 2 years to assess the benefits and risks. Users of MPA should be supported in their choice of whether or not to continue using MPA beyond 45 years of age.

8.3 MPA 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 MPA 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 MPA after 6 weeks post-partum, if a woman is fully or partially breast feeding. If the woman is not breast feeding, she may start MPA at 4 weeks post-partum.

8.4 MPA in HIV Positive Women

WHO recommends that there is no contraindication to the use of MPA 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 MPA. There is also no definitive evidence on the possible interaction between MPA and anti-retroviral drugs. MPA represents preferable contraceptive choice for women taking any antiretroviral treatment.

8.5 MPA and Cancer

MPA 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 MPA (Thomas 1991). There is no association between MPA use and the risk of ovarian and cervical cancer.

8.6 MPA and Cardio Vascular Diseases

There is insufficient data to indicate whether there is any relation between MPA 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 (MPA). MPA 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 MPA.

8.6 MPA 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 MPA because of weight gain. Some MPA 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

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

Chapter 9

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 MPA, 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:

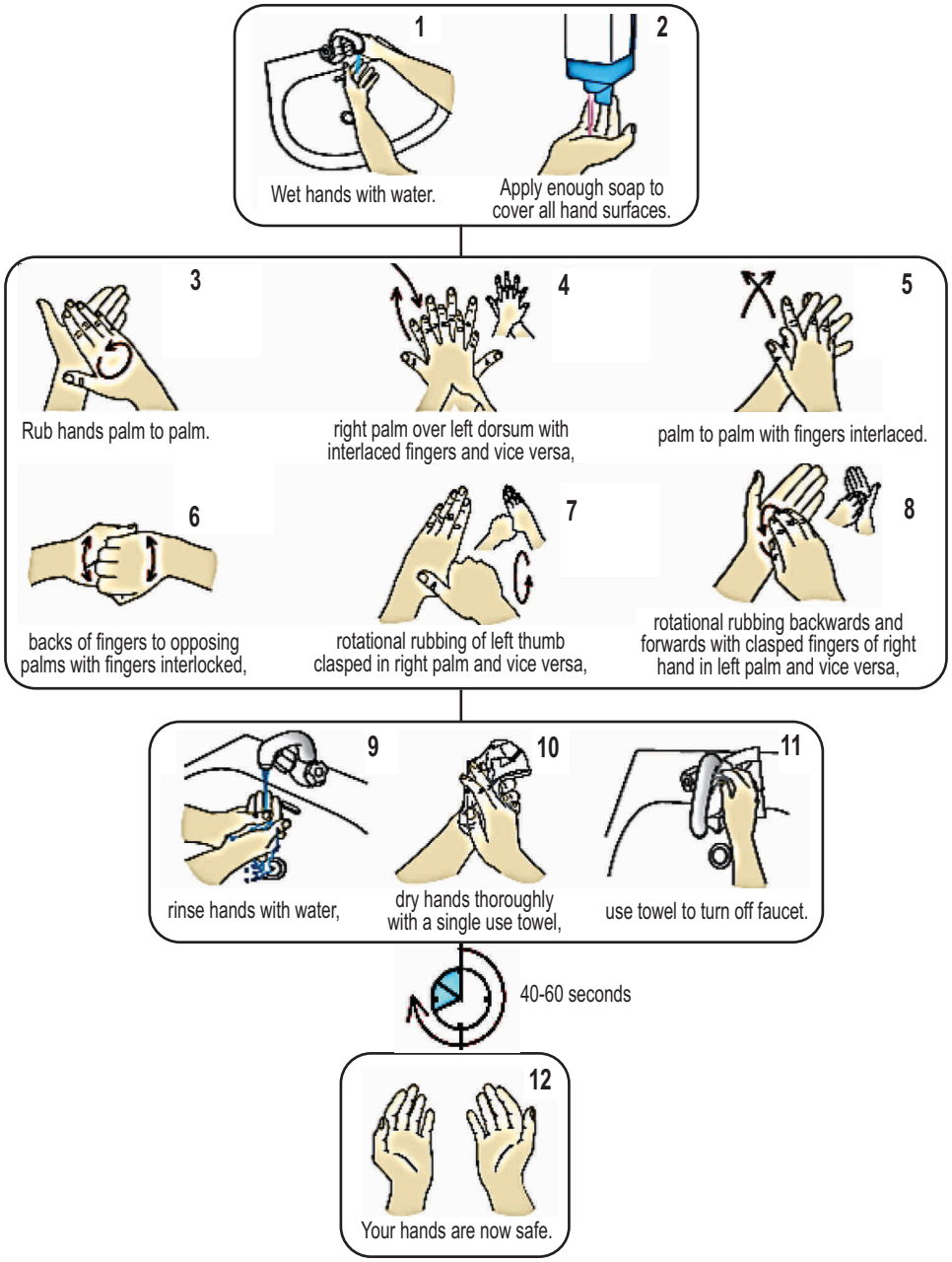


Fig. 4: Adapted from *WHO guidelines on hand hygiene in health care (advanced draft): A summary*, World Alliance for Patient Safety, World Health Organization, 2005

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% active chlorine in powder) x 1000 = gm of powder/litre of water. So, for bleaching powder with 35% available chlorine, the formula will be: (0.5/35) x 1000 = 14.3/15 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 3/4th 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-

a) 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.

b) 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.

c) Solid anatomical or pathological waste like placenta, body parts, swabs, bandages, dressings etc. are to be collected in yellow plastic bins/bags.

d) 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. 7: 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 MPA 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 (MPA) 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 MPA 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 MPA. 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 MPA 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 MPA 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 MPA 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 MPA 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 (MPA 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 (MPA 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 MPA injection should be recorded along with facility parameters. Subsequent

doses of MPA 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 MPA 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 MPA 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 MPA Services

Quality assurance is an inbuilt system for monitoring the implementation of standards and practices of MPA 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 MPA 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 MPA client cards
- Availability of counselling tools e.g. flipbook and pamphlets
- Availability of reporting formats and registers
- IEC materials on MPA along with other contraceptives

There are no major complications/side-effects in case of MPA 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 MPA. The section 10.4 indicates the key areas and the standards to be addressed for measuring the performance for MPA injectable contraceptive services for achieving the desired quality of care.

10.4 Key Areas and Standards for MPA Services

Key Areas	Standards for MPA Services
Infrastructure and Human Resources	• Availability of trained providers for FP services. • Availability of trained personnel for counselling services. • The facility has adequate clean space for providing counselling and services. • The facility has sufficient supplies of MPA injection. • The facility has Infection Prevention supplies including source of running water. • The facility has adequate light source (at least equivalent to three cell torch light). • Good storage principles are applied to contraceptives, essential drugs and medical supplies. • The facility has record keeping and reporting materials for MPA services.
Client Focused IEC Materials	• The facility has informational posters on MPA-Injectable Contraceptive . • There is information on client's rights regarding family planning. • The facility has flip charts/IEC material and samples of family planning methods for counselling particularly on MPA.
Management Systems	• There are written routine protocols/instructions for the delivery of MPA services. • Screening and client cards are available for MPA clients. • The facility has GoI prescribed MPA formats and registers in which record of each MPA client is maintained . • The records are reviewed and analysed regularly.
Infection Prevention Practices	• There is clean running water available in the facility (tap or a tank with tap). • Facility for hand washing is readily available. • The availability and use of antiseptics for skin as per the standards. • The waste disposal system is according to standards guidelines, GoI.

Key Areas	Standards for MPA Services
Family Planning Services	
FP Counselling	• There is a dedicated private space for counselling. • The first port of call for all women coming for ANC, Immunization of children and postnatal visits, should be the counsellor. • The counsellor uses job-aids, BCC material etc. for counselling. • The provider gives information about all the contraceptive methods available in the facility, with its benefits, side effects and limitation.
Providing Injectable Contraceptive to a New Client	• Ensures client's correct understanding about the method, including possible side effects and delayed return to fertility. • The provider rules out pregnancy. • The provider assesses the woman's eligibility for administering MPA injection. • Performs the pre injection tasks and gives injection as per guidelines. • Provide post injection instructions and advice for the return and/or follow up visits. • Record of client is duly filled up & client card given to her
Follow Up/ Management of Side Effects	• The provider finds out about the client's satisfaction with MPA • Identifies and manages the side effects or problems as per standard guidelines and refers, if required.
Continuation of MPA Services	• Reminders for timely administration of subsequent injections are given on phone or by field worker e.g. ASHA. • Repeat dose of MPA is given as per the protocols as per the duration after which client comes for it.
Change of the Method	• Identifies and documents the reasons for discontinuation, if any. • Counsel on other family planning methods and ensure switch over.

SECTION III:
Capacity Building of Service Providers on MPA

Chapter 11

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 MPA in basket of FP Services.

11.2.4 Equipment and Supplies for Training Sites

- Reference Manual for Injectable Contraceptives (MPA)
- Samples of all contraceptive methods including MPA injectable contraceptive
- Syringes 2 ml, with needles 21-23 gauze
- 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 MPA 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 MPA.
- Demonstrate appropriate counselling for MPA.
- Assess client's eligibility for MPA 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 MPA clients.
- Describe management of side effects/other issues related to MPA.
- Demonstrate correct record keeping and reporting of new and continuing MPA 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 MPA 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 (MPA), 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 with in 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	• Welcome & Introduction, • Participants' Expectations & Group Norms
9:30-9:50am	20 minutes	• Pre Course Knowledge Assessment
9:50-10:20am	30 minutes	• National Family Planning Programme and Need For Expanding Contraceptive Choices
10:20-11:20am	60 minutes	• Technical Aspects of MPA Injectable Contraceptive (IM and SC) • Special Issues with Injectable Contraceptives
Tea Break-11:20-11:30 am		
11:30-12:30pm	60 minutes	• Counselling Clients on Family Planning Methods • General Principles of Counselling • Method Specific Counselling for MPA • Practice by Participants through Role Play, using Competency Based Checklist
12:30-1:15 pm	45 minutes	• Eligibility Criteria and Client's Assessment for MPA Contraceptive using WHO MEC
1:15-2:00 pm	45 minutes	• Administering Injectable Contraceptives (IM and SC)
Lunch-2:00-2:45 pm		
02:45-3:45 pm	60 minutes	• Follow up care and Management of Side Effects of Injectable Contraceptives
03:45-4:00 pm	15 minutes	• Infection Prevention & Safe Injection Practice
Tea Break-4:00-4:10 pm		
04:10-4:25 pm	15 minutes	• Review Pre Course Knowledge Assessment
04:25-4:55 pm	30 minutes	• Program Management & Quality Assurance Capacity Building of Providers
04:55-5:10 pm	15 minutes	• Record Keeping and Reporting Formats
05:10-5:40 pm	30 minutes	• Post Course Knowledge Assessment, Course evaluation & closure

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 MPA

To determine if the client is medically eligible to use MPA, 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 MPA. Proceed to questions 8–13.

If the client answered YES to any of the questions 1–3, she is not a good candidate for MPA. Counsel about other available methods or refer. If the client answered YES to any of questions 4–6, MPA 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 MPA 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

YES	8. Did your last menstrual period start within the past 7 days?	NO
YES	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?	NO
YES	10. Have you abstained from sexual intercourse since your last menstrual period or delivery?	NO
YES	11. Have you had a baby in the last 4 weeks?	NO
YES	12. Have you had a miscarriage or abortion in the last 7 days?	NO
YES	13. Have you been using a reliable contraceptive method consistently and correctly?	NO

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 MPA now. If the client had her last menstrual period within the past 7 days, she can start MPA-IMmediately. No additional contraceptive protection is needed. If the client had her last menstrual period beyond 7 days, she can be given MPA 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 MPA. 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:

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

CONDITION	CATEGORY
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	
AGE a) Menarche to < 18 years b) 18 to 45 years c) > 45 years	 2 1 2
PARITY a) Nulliparous b) Parous	 1 1
BREASTFEEDING a) < 6 weeks postpartum b) > or equal 6 weeks to < 6 months postpartum (primarily breast-feeding) c) > or equal 6 months postpartum	 3 1 1
POSTPARTUM (NON- BREASTFEEDING WOMEN) a) < 21 days b) > or equal 21 days	 1 1
POST ABORTION a) First trimester b) Second trimester c) Immediate post-septic abortion	 1 1 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^2 BMI	1
b) Menarche to < 18 years and > or equal 30 kg/m^2 BMI	1
CARDIOVASCULAR DISEASES	
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)	
i) systolic 140 - 159 or diastolic 90 - 99 mm Hg	2
ii) systolic > or equal 160 or diastolic > or equal 100mm Hg	3
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 IS CHAEMIC HEART DISEASE	3
STROKE (HISTORY OF CEREBROVASCULAR ACCIDENT)	3
KNOWN DISLIPIDAEMIAS 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
HIV/AIDS	
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
OTHER INFECTIONS	
SCHISTOSOMIASIS	
a) Uncomplicated	1
b) Fibrosis of the liver (if severe, see cirrhosis)	1
TUBERCULOSIS	
a) Non-pelvic	1
b) Pelvic	1
MALARIA	1
ENDOCRINE CONDITIONS	
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
THROID DISORDERS	
a) Simple goiter	1
b) Hyperthyroid	1
c) Hypothyroid	1
GASTROINTESTINAL CONDITIONS	
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	1
b) Past-COC related	2
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) b) Lamotrigine	 1 1
ANTIMICROBIAL THERAPY a) Broad-spectrum antibiotics b) Antifungals c) Antiparasitics d) Rifampicin or rifabutin therapy	 1 1 1 1

*I=Initiation, C=Continuation

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

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

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)

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

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

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

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

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

Date of Injection
Type of Inj-(✓): IM SC
Weight BP
Menstrual Changes(✓):N Y
Advice
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	Type (IM/SC)	LMP	Weight	Blood Pressure	Timing of injection - PP/PA/interval	Due Date of next injection

Record of MPA Injection

MPA Injection	Due Date of Injection	Date of Injection	Type (IM/SC)	Weight	BP	Menstrual Changes	Any Complaint	Advice, if any complaint
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)

Eligibility Criteria and Client Assessment:

1. **Can a woman who is breastfeeding safely use MPA?**

   Answer: Yes. This is a good choice for a breastfeeding mother. Injection MPA 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.

2. **Can a woman who is at risk of Sexually Transmitted Infections (STIs) use Injection MPA?**

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

3. **Can Injection MPA be given to a woman who wants protection from unwanted pregnancy only for 6 months?**

   Answer: No, Injection MPA will not be a suitable method in such a situation due to delayed return of fertility (average 7-10 months after the last injection of MPA), even after one injection. There are other more suitable FP methods to delay pregnancy.

4. **Can MPA be given to a hypertensive woman who had Eclampsia during pregnancy?**

   Answer: Yes, MPA can be given to a woman who had eclampsia during pregnancy provided that hypertension is in control. However, it cannot be given to women having uncontrolled hypertension with B.P. 160/100 or more.

5. **What are the FP options for spacing for a woman with uncontrolled high blood pressure?**

   Answer: The spacing options that can be given are IUCD, Centchroman, condoms, POPs. The Combined hormonal Methods (COC like Mala N) and MPA are not to be given in such a case (WHO MEC Category 3)

6. **Can MPA be given to women with uncontrolled diabetes?**

   Answer: Yes, MPA can be given to women with diabetes, but it cannot be given if diabetes is of more than 20 years duration or is vascular in nature accompanied with complications like kidney, eye or nerve damage. Diabetic women should be counselled for need to consult an endocrinologist for evaluation of any complication and proper management of diabetes.

7. **What is the guideline for use of MPA by a woman who had eclampsia and was on ventilator with cerebral infarct (CT scan confirmed) but not a clear stroke?**

   Answer: The specific condition is considered to be a cerebrovascular accident and falls under WHO MEC Category 3, which means the use of method is generally not recommended unless other more appropriate methods are not available or acceptable.

8. **Can MPA-SC be administered to those women who cannot be given MPA-IM and vice-versa?**

   Answer: No, SC-MPA cannot be administered to those women who are not eligible to take MPA-IM and vice versa.

Administering MPA Injection:

9. Why is MPA started at 6 weeks postpartum for breastfeeding women whereas POPs can be given immediately after birth?

Answer: The reason for not giving Injectable -MPA to breast feeding mothers during first 6 weeks postpartum is due to a theoretical risk of the infant getting exposed to the steroid hormone, which the newborn's immature system may not be able to metabolize (WHO MEC -5th edition 2015). Injection MPA has a higher dose of the hormone, as compared to POPs, which contain very less amount of progestin.

10. When can MPA be administered after a spontaneous or surgical abortion?

Answer: If it is a first or second trimester abortion, MPA can be given on the same day or within next 7 days and no back up method is required. If a woman comes after 7 days of abortion, MPA can still be given if there is no history of contact since abortion. In this case, back up method for next 7 days will however be required.

11. When can MPA be administered in case of a Medical Abortion?

Answer: For 1st trimester Medical Abortion with Mifepristone and Misoprostol, MPA can be administered on 3rd day of Medical Abortion protocol, i.e the day on which Misoprostol is to be given.

(Source: Post Abortion Family Planning Technical Update Family Planning Division, Ministry of Health and Family Welfare, Government of India)

12. Can air be introduced into MPA vial for smooth aspiration of the fluid from the vial into the syringe?

Answer: No, atmospheric air should not be introduced into the vial as it may cause micro-organisms present in the air to enter the sterile vial and contaminate the drug. This point is applicable for single or multi dose vials of any drug.

13. Can Intramuscular MPA be administered subcutaneously as the chemical composition is same for both the variety?

Answer: No, Intramuscular MPA should not be administered subcutaneously and vice versa. The dose and size of needle for MPA-IM is different than that of MPA- SC.

14. What will happen if subcutaneous injectable contraceptive Medroxy Progesterone Acetate is administered intramuscularly?

Answer: To ensure three months of contraceptive protection, Subcutaneous Injectable Contraceptive Medroxy Progesterone Acetate must be administered subcutaneously only. If MPA is given in a muscle, it may not provide protection for full three moths. However, the needle of MPA-SC is smaller (3/8 inches) than the MPA-IM needle, so it is not likely to reach the muscle hence giving MPA-SC by IM route is practically not possible.

15. Will administering 150 mg of intramuscular MPA through subcutaneous route not increase the duration of action?

Answer: No, administering intramuscular dose through subcutaneous route does not increase the duration of action. For every drug, including hormonal contraceptives, its optimal dose needs to be given so that effectiveness is high and side effects are minimal. Increasing or decreasing the optimal dose would affect effectiveness and side effects.

16. Is activation of Uniject system for MPA-SC necessary and how it is done?

Answer: Yes, "activation" of Uniject system is necessary to ensure free flow of aqueous suspension of MPA from the reservoir into the needle while giving the subcutaneous injection. "Activation" is done by pushing the needle shield towards the port so that the diaphragm inside the port is pierced by the needle bud and a free passage is made for the liquid to flow freely into the needle while pressing the bulb reservoir during SC administration.

17. If MPA-SC has longer plateau level in vivo, why is it administered every three months like MPA-IM?

Answer: Blood level of progesterone after SC – MPA attains shorter peak compared to IM – MPA and its clearance is slower and steady, but in both the routes the blood level of progesterone will drop down to < 1mmol/L after 120 to 200 days. Therefore in both the routes MPA needs to be administered at 90 days interval.

18. Is there any difference in duration of effectivity of MPA-SC and MPA-IM?

Answer: No, there is no difference as they both are 3 monthly contraceptive injections.

Follow up Care and Management of Side Effects of MPA:

19. Why back up is required for next 7 days if MPA is given after Day 7 of MC?

Answer: There is a possibility that ovulation has already occurred by 7th day of the cycle, and also the contraceptive effectiveness of MPA will require 12 to 24 hrs after the first injection. Therefore if MPA is given after 7 day of the menstrual cycle, back up is necessary to protect her from unwanted pregnancy.

20. If a client develops an abscess at the site of MPA injection and abscess is drained, then when should next dose be administered?

Answer: If a client develops an abscess at the site of MPA injection and abscess is drained, it is likely that the drug may get drained out partially or completely from the site. Hence the contraceptive protection cannot be guaranteed and an additional contraceptive is required.Give a back-up method till her next menstrual cycle and then provide next dose or the method she chooses to use.

21. If a woman does not have monthly bleeding while using MPA, does this mean that she is pregnant?

Answer: No, Most women using MPA 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.

22. Does Injectable MPA cause abortion?

Answer: No, Research on MPA, indicates that it does not disrupt an existing pregnancy nor cause an abortion. DMPA should not be used to try to cause abortion.

23. Does Injectable MPA cause birth defects? Will the foetus be harmed if a woman accidentally uses MPA while she is pregnant?

Answer: No. Evidence shows that MPA neither cause birth defects nor does it harm the foetus if a woman becomes pregnant while using MPA or accidentally starts MPA when she is already pregnant.

24. Does Injectable MPA make a woman infertile?

Answer: No, Injectable MPA does not make a woman infertile however there may be delay in regaining fertility after discontinuing MPA.

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

Answer: Women who discontinue MPA have to wait for on an average 4-6 months longer on average to become pregnant than women who have used other methods. This means they 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 MPA makes no difference to how quickly she becomes pregnant once she stops having injections. After stopping MPA a woman may ovulate before her monthly bleeding returns and thus can become pregnant.

26. What if a woman returns for her next injection late or early?

Answer: In 2008 WHO revised its guidelines based on new research findings. The new guidelines recommends giving a woman her next MPA 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 MPA should be planned for 3 months later.

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

27. If a woman comes for her next MPA injection after the scheduled date but within the grace period of 4 weeks, can the injection be given to her? If yes, will a backup method be required?

Answer: Yes, next injection can be given to her and there is no need for a backup method as she has come within the grace period. She should also be counselled and encouraged to come on the scheduled date in future.

28. If a woman is given her next injection of MPA after the scheduled date but within the grace period of 4 weeks, will she be reported as a continued client, defaulter, drop out or new user of MPA?

Answer: As the next dose has been given within the grace period, the woman will be considered as a continued user. She is a defaulter for this particular dose because she has taken it within the grace period and not on scheduled date. (Grace period is 2 weeks earlier and upto 4 weeks later than the scheduled date).

29. If a woman comes for the next injection after the grace period of 4 weeks is over (i.e. more than 4 months have passed since the last injection), can the injection be given to her? If yes, will a back-up method be required?

Answer: Yes, she can be given MPA if there is no history of contact after grace period ended. A back up method for next 7 days will also be required.

30. If a woman is given MPA after the grace period of 4 weeks is over (i.e. more than 4 months have passed since the last injection), how will the case be recorded? Will it be considered as a continuing client or a drop out?

Answer: This case will be recorded as a new client and not a continuing client. She is a drop out client for previous MPA use, due to passage of more than 4 months since last MPA injection.

31. Should pregnancy test be advised to an MPA client who is having amenorrhea and is worried that she might have become pregnant?

Answer: No, there is no need for pregnancy test on a routine basis as amenorrhea is a reversible and

harmless effect of MPA. The Client should be counselled about this effect. However if a woman is anxious even after follow up counseling and examination, pregnancy test can be done to allay her anxiety.

32. If irregular bleeding in a breastfeeding woman on MPA does not improve with NSAIDs, can POPs be given to manage the bleeding?

Answer: The chance of irregular bleeding with MPA in breastfeeding women is rare. Still, if there is such a case and she does not improve with NSAIDs, examine and rule out any other cause of bleeding. Then reassure her that bleeding will reduce or will stop after a few months.

Progestin Only Pills can be given but they produce only moderate improvement in irregular/prolonged bleeding. It is the Estrogen pills which are most effective in reducing irregular bleeding following MPA, though they are to be avoided during first six months of breastfeeding. However next dose of MPA can be administered 2 weeks before the scheduled date to build higher progesterone level which will stop the bleeding and make the woman amenorrheic.

33. Since high dose of progesterone is used to control DUB, can POP be given to control irregular bleeding after MPA, just to increase the level of progesterone and make the woman amenorrheic?

Answer: No, administration of POP will have no effect as it contains small amount of Progesterone and no Estrogen. The preferred drug is Estrogen to control irregular bleeding after MPA.

34. Are the menstrual changes with MPA-SC different from those of MPA-IM?

Answer: No, both MPA-IM and MPA-SC cause similar menstrual changes as the hormonal level in blood is same.

Special Issues on MPA:

35. Does MPA cause cancer?

Answer: No, MPA 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.

36. How does injectable MPA affect bone density?

Answer: Injectable MPA use decreases bone density. Research has not found that MPA 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.

37. Should BMD be measured periodically after giving MPA, say every 2 years?

Answer: No, there is no such guideline/protocol mandating BMD assessment every 2 years. However based on clinical judgment providers may recommend for same in some cases.

38. What would be the status of BMD in women who become pregnant after stopping MPA?

Answer: There is no definitive evidence that BMD loss is more in women who became pregnant after stopping MPA. There is slight loss of BMD during pregnancy (2-8 %) breastfeeding (3-5 %) and with

use of MPA injectable contraceptive (5-6% in 5 years) which is reversible and can be compensated with supplements.

By using an effective contraceptive method of choice, like MPA, a woman is protected from closely spaced unwanted pregnancy and its consequences. (Please Refer to chapter 8 Special issues on MPA of Reference Manual for Injectable Contraceptive MPA)

39. What would be MPA's effect on BMD during lactation?

Answer: There is no definitive evidence that MPA during lactation causes increased BMD loss. There is slight loss of BMD during lactation (3-5 % over 6 months) and with use of MPA injectable contraceptive (5-6% in 5 years) which is reversible and can be compensated with supplements. (Please Refer page 27 of Reference Manual for Injectable Contraceptive DMPA)

40. After how many injections of MPA will the protective effect against endometrial cancer continue for 8 years after stopping method?

Answer: A study has shown that after using MPA for one year (at least 4 doses), the risk of endometrial cancer reduces by 80% and this protective effect continues for at least 8 years after MPA use is stopped.(Source: JFAM Pract. Nov.2004)

41. How does MPA reduce sickle cell crisis?

Answer: Progesterone hormone in MPA decreases sickling by stabilizing the cell membrane and preventing RBCs from breaking down and clogging the blood vessels during the crisis and suppressing the pain due to it.

42. How does MPA reduce epileptic seizures?

Answer: Progesterone seems to have a calming effect on the brain and thereby reduces epileptic seizures.

43. Is there any drug interaction between MPA and anticonvulsants/ rifampicin or antipsychotics?

Answer: No, there is no known drug interaction between MPA and anticonvulsants or rifampicin or antipsychotic drugs. The parenteral route of the progesterone in MPA bypasses the hepatic circulation, thus there is no interaction with the hepatic enzymes. Therefore MPA can be given safely to women on these drugs.

Oral Pills like COCs and POPs cannot be given to women on these drugs due to drug interaction with these drugs.

44. How much weight do women gain when they use MPA?

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

45. Does Injectable MPA change women's mood or sex drive?

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

46. Does MPA specifically cause depression?

Answer: No, MPA specifically does not cause depression, however it may cause mood swings in some women. No study has shown it to cause or increase depression.

47. What is the correlation with use of Injectable MPA and risk of CA breast?

Answer: As per WHO MEC criteria MPA is not to be administered in women with recent or past h/o breast cancer. Studies have shown that there is no correlation between use of MPA and increased incidence of breast cancer. Few studies have shown that incidence of breast cancer with MPA use or within 10 yrs. after stoppage of the drug are similar to COCs.

48. Does MPA-SC have a different effect on Bone Mineral Density compared to MPA-IM?

Answer: No, the effect of MPA-SC on bone density is similar to MPA-IM. Most studies have found that women lose BMD while using MPA but regain all or partial BMD after discontinuation. According to WHO, for women aged 18 to 45 years, there should be no restrictions on the use of MPA, including no restrictions on the duration of its use; and the advantages for adolescents younger than 18 years of using MPA generally outweigh the theoretical or proven risks, so they can also be given MPA.

49. Does Body Mass Index (BMI) affect the efficacy of MPA-SC?

Answer: No, Clinical studies to date demonstrate that the contraceptive efficacy of the active ingredient in MPA-SC is not affected by body mass index (weight-to-height ratio).

Infection Prevention and Safe Injection Practices:

50. If hub /needle cutter is not available can puncture proof box be used for disposal of syringe and needle?

Answer: Yes, if hub/needle cutter is not available puncture proof box can be used for segregation and storage of used syringes. Before putting in puncture proof box, do not remove needle from syringe. A puncture proof box can be prepared out of thick card board box or a plastic bottle can be used. Do not use a glass container, as it can break. Dispose off puncture proof box safely when it is ¾ full.

51. Is antiseptic scrub as equally effective as washing hands with soap and water.

Answer: Yes, antiseptic scrub is equally as effective as washing hands with soap and water, but if hands are visibly dirty, hand wash with soap and water should be done.

52. Do we have to wash our hands before and also after giving MPA injection?

Answer: Yes, hands should be washed both times, before and after giving MPA injections.

53. Should we use gloves while giving MPA injections?

Answer: No, one need not wear gloves while giving IM or SC injections of MPA but hands should be washed properly following all six steps before and after giving injection.

54. What should be used to clean the injection site before administration of MPA injection?

Answer: Injection area should be cleaned with a swab of antiseptic.

55. Can we use spirit or povidone iodine for cleaning injection site before administration of MPA?

Answer: Yes, both spirit or povidone iodine can be used as antiseptic solution. If spirit is used, it is advised to wait till it dries and if Povidone iodine is used, wait for 2 minutes, so that free iodine is released to make it effective.

Program Management:

56. How is MPA-SC different from MPA-IM?

Answer: There is no difference between MPA-SC and MPA-IM in terms of composition, mechanism of action, safety, efficacy, benefits and side effects, except for the amount of drug and route of administration. However, Uniject system of subcutaneous injectable contraceptive provides ease of administration which minimizes chances of infection transmission and the potential to benefit system-level logistics in terms of storage, transport, distribution and waste management.

57. Can a woman switch between MPA-IM and MPA-SC?

Answer: Yes, if necessary, because the active ingredient in the IM and SC formulations is identical, it is safe to switch back and forth between these two formulations on a regular dosing schedule (i.e., every three months) with the same level of contraceptive protection. Switching injectable is safe, and it does not decrease effectiveness. If switching is necessary, the first injection of the new injectable should be given when the next injection of the old formulation was due. Clients need to be informed and explained about the name of the new injectable, and its injection schedule.

58. Is MPA-SC as effective as MPA-IM for contraceptive protection?

Answer: Yes, MPA-SC is as effective as MPA-IM. Studies have demonstrated that subcutaneous injectable contraceptive Medroxy Progesterone Acetate (MPA-SC) provides efficacy, safety and immediacy of contraceptive effect equivalent to the MPA-IM. In clinical trials, it effectively suppressed ovulation for at least three months in all subjects regardless of ethnicity, race and body mass index.

59. Why do we need to keep the MPA I/M vial in an upright position?

Answer: MPA is an aqueous suspension of microcrystals which may stick around the cap area or in deep corners of vial and may be unavailable during filling of the drug in the syringe, if the vial is not kept straight.

60. Which type of supply of MPA-IM is currently available in public health facilities?

Answer: MPA-IM is available in single dose vial with disposable syringe & needle in public health facilities.

61. How MPA vials should be stored in extremes of temperature (hilly cold terrains and hot zones in summer)?

Answer: In cold terrains MPA vials are to be stored in wooden cupboard in closed room away from extreme temperature, if needed some heating of the room can be done periodically. In hot zones, the vials are to be stored in a well ventilated room away from direct sunlight and if needed some cooling of the room could be done periodically.

62. If a woman receives first dose in a district hospital, can she take subsequent doses at a facility near her place of residence?

Answer: Injectable Contraceptive MPA is being rolled out in a phase wise manner. For the first phase it is upto DH and Medical Colleges and gradually will be rolled down to the SC level. Once it is available

at all level of facilities, it can be taken at any level of facility as per convenience.

63. Can ANM/LHV/SN give treatment for irregular bleeding after MPA injection?

Answer: ANM/LHV/SN can give treatment under the supervision of trained doctor

64. Is there any Telephonic Helpline for MPA clients?

Answer: Yes, the existing helpline under JSK has been strengthened for the same which bears the telephone number1800 116 555

65. Why MPA register does not have a column for date of next injection?

Answer: MPA register format been kept simple with bare minimum information to avoid cluttering of format. However date of next injection has been included in MPA card.

66. Can Nurses/LHVs become trainers for MPA?

Answer: Yes, the nurses & LHVs with prior experience of training, good communication, training skills and attitude for conducting training be trained as trainer for MPA training as they are eligible to administer the injections, counsel and follow up care

67. Whose responsibility is to provide Reference Manuals for the trainings?

Answer: Government of India approved sufficient budget for the printing of Reference Manuals and conduction of training in each State PIPs, and respective state Govt has the responsibility to provide all the Reference Manuals to the districts and its service providers.

68. What is the minimum number of trainers required for the trainings of MPA?

Answer: At least two trainers should be present throughout any training and facilitate it.

Myths and Misconceptions about MPA

Myths/Misconceptions	Facts and Realities
MPA causes infertility	MPA users can expect to become pregnant within a year after discontinuing their last injection. In a large study in Thailand, almost 70% of former MPA 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.
MPA causes cancer	Research has clearly proven that MPA 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.
MPA causes nausea	Nausea is not common with MPA. In fact, many women on injectable contraceptive reported increase in appetite.
MPA decreases amount of breast milk	Studies have shown that the amount of breast milk does not decrease when breastfeeding women use MPA. It has no effect on the composition of breastmilk, initiation or duration of breastfeeding.
MPA affects women health by causing Amenorrhea	Amenorrhea is an expected result of using MPA 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.
MPA causes abnormal or deformed babies.	There is no evidence that MPA causes any abnormalities in infants. Studies done on infants who were exposed to MPA 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 MPA was recognized as a contraceptive it was used in pregnant women to prevent miscarriage.
Clients need to stop using MPA and have a 'rest' after several injections.	There is no limit to the number of years MPA can be continuously used. Among healthy women it can be given until menopause, when contraception is no longer needed.
MPA causes abortion	MPA prevents ovulation. If no egg is released, no fertilization takes place hence there are no chances of abortion.

Myths/Misconceptions	Facts and Realities
MPA 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 MPA use is due to the thinning of the endometrium resulting from an increased level of progesterone.
MPA causes anaemia	During the first 3 - 6 months of MPA 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 MPA. Since the bleeding is minimal, it rarely results in anaemia. Anaemia, which is caused by blood loss or iron deficiency, is actually prevented by MPA.
MPA causes masculine characteristics in females	Studies have shown that the use of MPA does not cause any masculinizing effect.
MPA causes blood toxicity due to amenorrhoea.	Amenorrhoea is caused by MPA use since it results in an atrophic endometrium.
MPA causes decrease in libido.	There may be other factors that result in a decrease in libido (e.g., antihypertensive drugs, and exhaustion). However, MPA 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 MPA banned in the India because it was not considered safe?	No, in 1993 the MCRI approved MPA for use as a contraceptive, and it is available as a safe contraceptive. The decision to approve MPA came after an extensive review of the method as well as the unanimous recommendation by an expert advisory medical panel.
MPA has just been approved in public sector, it is still in the 'experimental' stage	MPA 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 MPA, over 100,000 women have used it for more than 10 years, and currently between 8 and 9 million rely on MPA for contraceptive protection.
MPA causes onset of menopause.	MPA does not affect menopause. The amenorrhea experienced with it only occurs while using MPA. When a client discontinues using MPA, 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 MPA Role Plays

Counselling of Client

6.3.1 Role Play No. 1

A 35-year-old woman who smokes has heard that MPA may be a good method of family planning. She asks that the service provider gives her information about MPA 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 MPA. She had a baby three months ago. The service provider will use the MPA 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 MPA 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 MPA causes permanent sterility. The service provider responds.

6.3.5 Role Play No. 5

A 24-year-old woman has been using MPA 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 MPA Case Studies

Selection of Client

6.6.1 MPA 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 MPA 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 MPA?

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

Management of Side Effects

6.6.3 MPA Case Study No. 3

Meenakshi is 20 years old and has a 1-year-old child. She started MPA 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 MPA if she wishes to get pregnant in two years?

6.6.4 MPA 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 MPA 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 MPA.

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 MPA Case Study No. 5

Kunti is on MPA 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 MPA Case Study No. 6

Deepa is on MPA. 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 MPA Case Study No. 7

Farzana is on MPA 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 MPA 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 MPA					
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.				
Pre procedure assessment					
16	Screens client using '*checklist for screening clients who want to initiate Injectable*'. Asks all questions on checklist.				
MPA specific tasks					
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.				
Post-injection tasks					
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 MPA 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 MPA 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 MPA. 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 MPA, provides injection only if: • She has not had sex since 2 weeks after she should have had her last injection, or • 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.				

Step / tasks		Cases			Comment
If the client is more than 4 weeks late for MPA 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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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?

9. Please share how you will be using the knowledge gained in workshop to include MPA Services in your work place?

10. What support you will need to provide MPA services in your work place?

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 identifiedwith 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)	1st/2nd/3rd	
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	Client's Age	Client's 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	Timing of Injection I			Injection II					Injection III					Injection IV					Reason for Discontinuation	Remarks, if any
														Post-partum	Post-abortal	Interval	Type of MPA Administered (IM/SC)	Date of Injection	Follow up Finding			Type of MPA Administered (IM/SC)	Date of Injection	Follow up Finding			Type of MPA Administered (IM/SC)	Date of Injection	Follow up Finding				
																			Menstrual Cycle	Body Weight	Any Other finding			Menstrual Cycle	Body Weight	Any Other finding			Menstrual Cycle	Body Weight	Any Other finding		

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).

Duration	Session Title	Training Objectives	Resource Materials
LCD projector, laptop, screen, flip charts for throughout the training			
30 min	Welcome & Introduction, Participants' Expectations & Group Norms	• Open course with welcome of participants by organizers, lead trainers facilitate the introductions of all participants and trainers. • Ask participants' expectations and put up on a flip chart, enlist the norms to be followed by brainstorming. • Orient participants to the material in kit e.g. Reference Manual for Injectable Contraceptive (MPA), pamphlets, sample of counselling aid etc.	• ·Welcome note, • Flipchart and markers • Name badges • Paste it papers
20 min	Pre Course Knowledge Assessment.	• Distribute the Pre-course knowledge assessment and tell its importance. Allow 15 minutes for completing it.	• Copies of Pre-Test questionnaire
30 min	National Family welfare programme and need for expanding contraceptive choice	• Using the PPT, discuss/explain National Family Welfare Program and need for expanding contraceptive choice. Global use of MPA in National Family Welfare Program	• PPT
60 min	Technical Aspects of MPA Injectable Contraceptive (IM and SC) Special Issues with MPA	• Share historical background and types of injectable contraceptives. Discuss and explain technical aspects of MPA(Both IM and SC): Mechanism of action, safety & effectiveness, contraceptive and non-contraceptive benefits & limitations 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. • Explain initiation of MPA, including use of Pregnancy Checklist to be reasonably certain that the woman is not pregnant. • Explain issues related to Adolescents, women of age >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.	• PPT • Handouts • Pregnancy Screening Checklist • Sample of all contraceptives
Working Tea			
60 min	Counselling clients on Family Planning methods	• ·Review importance and purpose of counselling. Emphasise that provider's attitude towards clients have an effect on the quality ofcounselling and quality of care provided to clients. Review the basic principles of counselling. Discuss GATHER approach including General principles of counselling	• PPT • Role Play

Duration	Session Title	Training Objectives	Resource Materials
	• General principles of counselling • Method specific counselling for MPA Practice by Participants through Role Play, using Competency Based Checklist	• Explain points for Method specific counselling related to MPA, as given in Reference Manual for Injectable Contraceptive (MPA). 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. • Ask participants to open the Competency –Based checklist for Counselling from Reference Manual for Injectable Contraceptive (MPA) and quickly go through it upto point # 15. Emphasise that each point is important while counselling. • Project Role Play situation on FP counselling from Reference Manual for Injectable Contraceptive (MPA). 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. • After participants' feedback, trainer to provide necessary feedback, as required.	• Copies of checklists and Reference manuals
45 min	Eligibility criteria and client assessment for injectable contraceptives using WHO MEC	• 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. • 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. • Introduce the MEC Wheel, explain how it is used while screening women for MPA or any other method • Now discuss screening checklist for use of MPA (Annexure 1 in Reference Manual for Injectable Contraceptive (MPA) which is based on WHO MEC.	• PPT • Hand outs • Pregnancy Screening Checklist • WHO MEC wheel

Duration	Session Title	Training Objectives	Resource Materials
45 min	Administering Injectable Contraceptive (IM and SC)	• Ask questions to participants to share their experience in giving IM and SC injections. • Discuss the following: Storage of MPA vials, pre injection preparation, site of injection (Both IM and SC). • Explain in details the preparation of injector, activation and administration in case of SC Injectable • 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.	• PPT • All supplies/items for giving injection including sample of MPA
		Lunch	
60 min	Follow Up Care of MPA Clients and Management of Side Effects	• 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. • Discuss that side effects are the most common cause of discontinuation and need to be managed timely in appropriate manner. • List the possible side effects of MPA (refer from Reference Manual for Injectable Contraceptive (MPA)). • 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. • Explain management of menstrual changes one by one through PPT. • 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.	• MPA Client card

Duration	Session Title	Training Objectives	Resource Materials
15 min	Prevention of Infection & Safe Injection practices Side	• Facilitate a recap of the general concepts of infection prevention as they relate to provision of MPA services	• Flip charts Reference manual
		10 Min Tea Break	
15 min	Review Pre course knowledge assessment.	• Read out the questions for which incorrect response have been written. Take a note of incorrect responses and explain to the participants.	• Filled pretest Questionnaire
30 min	Program management & QA Capacity building of providers	• Start the session by explaining the GoI plan to roll out new contraceptives. Explain the plan for phase wise roll out of Injectables MPA. • Brainstorm on the determinants of quality family planning services. Show slides on program determinants. Explain each determinant. • Highlight the eligibility criteria for service providers in case of MPA. • 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. • 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 • 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.	• Flip charts • Reference manual for Injectable

Duration	Session Title	Training Objectives	Resource Materials
15 min	• Record Keeping and Reporting Formats	• Explain the importance of Record keeping. • Share formats of register and MPA client card and discuss how to fill them up. Trainers may use an example for the same • 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.	• Formats of Register and MPA client card from Reference Manual for Injectable Contraceptive (MPA)
30 min	• Post-Test, Course Evaluation and closure	• Have participants fill-out and submit the course evaluation forms. • Closing remarks by training organizers.	• Post Test questionnaire • Answer sheets Evaluation forms

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