GUIDELINES TO SERVICE PROVIDERS ON
THE USE OF THE DMPA INJECTABLE CONTRACEPTIVE

1. Introduction

Depot Medroxy Progesterone Acetate (DMPA) is a temporary hormonal family planning method containing a long acting progesterone suspension which has a contraceptive action for 90 days. A single dose consisting of 150mg of DMPA in 1ml (one vial) is given deep intramuscularly. The hormone is then released slowly into the blood stream.

2. How is a pregnancy prevented by using the DMPA injectable?

i. By inhibiting ovulation.

ii. By thickening of cervical mucous- thereby making it difficult for sperms to pass through the uterine cervix.

iii. By making the environment unsuitable for the implantation of the fertilized ovum through changes made in the inner wall of the uterus (endometrium).

3. What is the success rate of the DMPA injectable?

If used correctly according to instructions the success rate is more than 99% (i.e. less than one out of hundred DMPA uses has a risk of becoming pregnant).

Even if pregnancy occurs rarely as a result of a failure of DMPA use, it would not affect the foetus.

4. Whom is it most suitable for?

i. Women who are breast feeding (six weeks after the delivery)

ii. Women who want to space their children

iii. Women who want to limit their family

iv. Women who need to use a temporary method till they accept a permanent family planning method

v. Women where oestrogen containing family planning methods are contraindicated (E.g. Endometrial cancer, deep vein thrombosis)

vi. Any other woman who faces the risk of being pregnant (E.g. married, widowed, separated from husband)
5. When can a woman start taking the DMPA injectable?

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<td>5.4</td>
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<tr>
<td><strong>5.4.1</strong> First DMPA injectable can be given on any day within first 6 weeks of delivery but the lochia / bleeding may be increased when given during the 1st 6 weeks</td>
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<td><strong>5.4.2</strong> After 6 weeks of delivery DMPA could be given provided pregnancy can be excluded (refer annexure).</td>
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<td><strong>5.4.3</strong> Also, advice should be given to use an additional FP method (e.g. use of condoms) or to avoid sexual contact for the next 7 days.</td>
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<td><strong>5.6.1.1</strong> If she has used the pills correctly and continuously, DMPA injectable can be given and the pill stopped on the same day. No additional FP method is necessary.</td>
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<tr>
<td><strong>5.6.1.2</strong> If she has <em>not</em> used the pills correctly and continuously DMPA injectable should be given only if pregnancy can be excluded (refer annexure).</td>
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<td><strong>5.6.1.3</strong> Also, advice should be given to use an additional FP method (e.g. use of condom) or to avoid sexual contact for the next 7 days.</td>
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<td><strong>5.6.2</strong> After being on a hormonal implant</td>
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<td><strong>5.6.2.1</strong> The first DMPA injectable should be given on the day of the removal of implant. No additional FP method is necessary.</td>
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<tr>
<td><strong>5.7.1.1</strong> The DMPA injectable can be given within the first seven days of menstruation. No additional FP method is necessary.</td>
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<tr>
<td><strong>5.7.1.2</strong> The IUD can be removed at the same time.</td>
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<tr>
<td><strong>5.7.2</strong> After the first 7 days of the menstrual cycle</td>
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<tr>
<td><strong>5.7.2.1</strong> She can be given the DMPA injectable on any day, but the IUD is best removed during the next menstrual period. If the IUD is removed on the day of giving DMPA, advice should be given to use an additional FP method (e.g. use of condom) or to avoid sexual contact for the next 7 days.</td>
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6. Giving the DMPA injectable

6.1 Items necessary

i. One vial of DMPA (150mg /1ml)

ii. Sterile cotton swabs

iii. A sterile syringe (1-3 ml) with a 22G (0.7x32mm) or 21G (0.8 x 40mm) needle.

6.2 Steps to be followed when giving the injectable

i. Wash both hands using soap and water.

ii. If injection site is dirty, wash it with soap and water. Clean the site (the deltoid region of the upper arm) with a piece of dry sterile cotton swab- use a circular motion from the injection site outward.

iii. Check expiry date of vial.

iv. Shake the vial vigorously till the contents are well mixed.

v. Pierce top of vial with sterile needle and draw the contents of the vial into the syringe completely (1 ml). Ensure that DMPA is not remaining inside the vial. For every injection a separate sterilized syringe and needle must be used.

vi. Stretch skin over deltoid muscle and insert needle at 90º, deep into the upper arm and inject all contents of the syringe (see picture). Withdraw needle.

vii. **DO NOT massage the injection site.** Also, tell the client not to massage or rub the injection site. Explain that this could cause DMPA to be absorbed too fast and be less effective.

viii. Dispose used syringe and needle safely in a sharps disposal container.

7. When is the next DMPA injectable due?

- The next DMPA injectable should be given in 90 days. However, the injectable could be given 14 days before or 28 days after the 90th day. An additional family planning method is not required.

- For women who come after 28 days, the DMPA injectable can be given provided pregnancy can be excluded (see Annexure). In such an instance, advice should be given to use an additional family planning method (e.g. use of condoms) or to avoid sexual contact for the next seven days.
8. Can the DMPA injectable be used for a long period?

- If a woman does not have any contraindications, she can use DMPA continuously even up to her menopause.
- However, women using DMPA should be referred to a medical officer for an annual check up.

9. How long does it take to return to fertility after stopping the DMPA injectable?

- Once the DMPA injectable is stopped the time taken to return to fertility varies for each individual.
- In general, the return to fertility is about 7 months after the effective period of the last injection (or 10 months after the last injection date).

10. Additional Health benefits

Helps protect against:
- Cancer of the lining of the uterus (endometrial cancer)
- Uterine fibroids

May help protect against:
- Symptomatic pelvic inflammatory disease
- Iron deficiency anaemia

Reduces:
- Symptoms of endometriosis (pelvic pain, irregular bleeding)

11. Side Effects

i. Irregularities of the menstrual cycle

- Spotting: slight bleeding occurring between menses from time to time this is seen mostly in the first 3-6 months
- Amenorrhoea: absence of menstruation – most clients would stop having their periods after some time
- Menorrhagia: excessive menstrual bleeding – this may occur in some clients but if this occurs especially after a period of normal bleeding or amenorrhoea other causes need to be excluded.

ii. Increase in body weight due to increase in appetite

11.1 Management of side effects

Having excluded other physical causes for the irregular bleeding by history & examinations

**For spotting or light bleeding**

i. Counsel and reassure
ii. Advise to consume iron containing foods
iii. Provide Iron/Folate and Vitamin C tablets
iv. If problem persists refer to a Medical Officer

For excessive menstrual bleeding (more than 8 days or twice as much as her menstrual period) - Refer to a Medical Officer for further management (see below).

i. Prescribe nonsteroidal anti-inflammatory drugs for 5-7 days (such as Mefenamic acid 500 mg twice daily after meals for 5 days).

ii. Prescribe 1-2 cycles of low dose, monophasic Oral Contraceptive Pills (containing 0.03mg of Ethinyl Oestrodiol and 0.15mg of Levonorgestrel)

iii. If bleeding continues for more than one month refer to a Consultant Obstetrician and Gynaecologist for further management or discontinue DMPA and offer another method.

### 12. Absolute contraindication for DMPA injectable

| Pregnancy and post partum period | • Pregnancy or a suspicion of pregnancy  
|                                 | • Until 6 weeks after delivery (post partum) |
| Diseases of the heart and the circulatory system | • Women having multiple risk factors for cardiac diseases (E.g. Over 35 years of age, smoking, diabetics and hypertension – having more than one of the above)  
|                                               | • Blood pressure more than 160/100 mm Hg  
|                                               | • History of strokes  
|                                               | • Current and past Ischemic heart disease  
|                                               | • Current thrombo embolic disorder |
| Diabetes | • Diabetes with complications (Retinopathy, Neuropathy or Nephropathy)  
|          | • Diabetes for more than 20 years |
| Liver disease | • Cirrhoses of the liver  
|              | • Tumours and cancer of the liver |
| Breast cancer | • Past history of breast cancer  
|               | • Current breast cancer |
| Vaginal bleeding patterns | • Unexplained abnormal vaginal bleeding |

For further information refer to *WHO Medical Eligibility Criteria Wheel for Contraceptive Use (adapted for Sri Lanka) 2009*

### Special situations
DMPA injectable could be given to sexually active women without children, after proper counselling (including the possibility of delay in returning to fertility).
13. When providing DMPA the service providers should pay attention to the following

- Clients along with the spouse should be well counselled by using the tool ‘Flash cards for family planning counselling’. Good counselling will help to minimise discontinuation of a method.

- The service provider should be friendly and courteous towards the client/couple. The client/couple should feel free to ask any questions and clear any doubts regarding the family planning method.

- Information on benefits, side effects (menstrual irregularities), re-visits for the next DMPA injectable etc. should be provided.

- Confidentiality should be maintained. The client’s decision to use DMPA should be an informed and independent choice.

- Before providing the client with DMPA injectable the service provider (E.g. Public Health Midwife-PHM) should use the following check list to assess the client’s suitability.

  **Check list for DMPA use**

<table>
<thead>
<tr>
<th>DO YOU</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>1. Think you are pregnant?</td>
<td></td>
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<tr>
<td>2. Breastfeed an infant below 6 weeks?</td>
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<tr>
<td>3. Have high blood pressure?</td>
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<tr>
<td>4. Have/had a stroke, heart disease or blood clots in legs or other organ?</td>
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<tr>
<td>5. Have Diabetes?</td>
<td></td>
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<tr>
<td>6. Have/had any liver disease (E.g. Cirrhosis or Tumour)?</td>
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<tr>
<td>7. Have/had any lumps or any other abnormality in the breast?</td>
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<tr>
<td>8. Have vaginal bleeding that is unusual for you?</td>
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If ‘Yes’ is the answer to one or more questions it is advisable to counsel her to use another family planning method or refer the client to a Medical Officer with medical records if available.

**Advice to the Medical Officer:**

Check whether the client is eligible to use DMPA [refer to WHO Medical Eligibility Criteria Wheel for Contraceptive Use (adapted for Sri Lanka) 2009] or counsel client to use another suitable FP method.

14. Follow up

The purpose of follow up should be to address any problems/queries that the clients may encounter and encourage continuity of use.
14.1 **In the Field**

- After giving the injectable, during the **first** 3 months, the PHM must visit the client at home **once a month**. Thereafter, follow up home visits should be carried out every 3 months.

- Inquiries regards side effects should be made and relevant details should be recorded in the FP Field Record (H-1154) & FP Client Record (H-1155)

14.2 **In the Clinic**

- Clients continuing DMPA should have an annual medical examination to identify any risk conditions such as hypertension, diabetes etc.

- When a woman visits the clinic for her DMPA injectable inquiries must be made regarding side-effects.

- If any complications have occurred they must be entered in the Family Planning Clinic Record (H-1153) and also reported in the ‘Return on contraceptive failures, complications & poor quality products’. Side effects should be managed as mentioned in section 10.1.

15. **Service Provision**

15.1 **Service Providers**

- Medical Officers (including Consultant Obstetrician and Gynaecologist & Medical Officer of Health-MOH)
- Registered Medical Officer (RMO)
- Public Health Nursing Sisters (PHNS)
- Supervising Public Health Midwives (SPHM)
- Public Health Midwives (PHM)

15.2 **Places where the injectable is available**

- Government family planning clinics (Hospitals, MOH Offices and Field)
- Estate (Plantation) Family Planning Clinics
- FP clinics conducted by Non Governmental Organizations (E.g. FPA, PSL, SLAVSC)
- Private hospitals and private medical centres

DMPA is available **free of charge** at Government and Estate Family planning clinics.

15.3 **Storage**

- DMPA vials should be kept upright, at room temperature (15-30°C) in a secure, cool, dry place, away from direct sunlight.

- The vials should **not be frozen**.
16. Situations when DMPA may fail

Failure of DMPA use leading to subsequent pregnancy may occur in the following situations;

- Delay in taking the DMPA (Failure to attend the clinic on time, non availability etc.)
- Injecting incorrect dose (less than 1ml)
- Injecting poor quality DMPA (e.g. vials exposed to high or freezing temperatures)

All situations mentioned above are avoidable.

References:

ANNEXURE

How can the service provider be satisfied that a woman is not pregnant?

The service provider can be satisfied that the woman is not pregnant, if the woman does not have any signs and symptoms of pregnancy and she is in any situation that is listed below.

1. When sexual contact has not taken place after the last regular menstrual period
2. When a family planning method was used correctly and continuously
3. Within the first 7 days of menstruation
4. Within the first 7 days after an abortion
5. Within the first 4 weeks post partum
6. Within 6 months of the delivery, menstruation has not commenced, and the woman is exclusively breast feeding the baby
7. If the client does not fit into any of the above criteria advice her not to have any unprotected sexual contact for 3 weeks and confirm non pregnancy state by doing a urine test for pregnancy.

<table>
<thead>
<tr>
<th>Early signs &amp; symptoms of pregnancy</th>
<th>Later signs &amp; symptoms of pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Delayed menstrual periods</td>
<td>Larger breasts</td>
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<tr>
<td>2. Nausea/ Vomiting</td>
<td>Darker nipples</td>
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<tr>
<td>3. Recent breast tenderness/fullness</td>
<td>Increased vaginal discharge</td>
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<tr>
<td>4. Increased urine frequency</td>
<td>Enlarged abdomen</td>
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<tr>
<td>5. Changed eating habits</td>
<td>Movements of baby</td>
</tr>
<tr>
<td>6. Weight changes</td>
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<tr>
<td>7. Mood changes</td>
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</table>

• It is not always necessary to do a urine test to diagnose pregnancy.
• Furthermore, pregnancy cannot be diagnosed by a urine test until about five weeks after the last menstrual periods.