NURSING LEVEL III

NTQF Level III

LEARNING GUIDE #54

Unit of Competence: Promote and manage comprehensive Family Planning Service

Module Title: Promoting and managing comprehensive Family Planning Service

LG Code: HLT NUR3 M05 LO3- LG-53

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LO3. Provide family planning services

Instruction sheet # 1 learning guide # 1

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- National family planning guideline
- Describing “REDI” frame work
- Family planning methods
- Natural family planning methods
- Artificial family planning methods
- Permanent methods
- Emergency family planning methods
- Postpartum and post-abortal family planning
- Managing side effects
- Misconceptions, and compliance
- Counseling and follow ups

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Providing counsel on method mix for advantages, side effects, misconceptions, and compliance on continual usage to clients based on national family planning guideline of FMOH
- Supplying method mix (OCP, injectables, implants, IUCD, barrier methods) for clients according to family planning protocol of FMOH and client’s preference.
- Managing side-effects and problems occurred from the method mix.
- Managing side-effects and problems occurred from the method mix.
- Referring Clients preference of permanent methods to the next higher health facility according to the standard procedure

- Providing continuous follow up to family planning clients based on the standard guidelines

Learning Instructions:

Read the specific objectives of this Learning Guide.

1. Follow the instructions described in number 2 to 57.
2. Read the information written in the “Information Sheets 3”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
3. Accomplish the “Self-check” in page 56.
4. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
5. If you earned a satisfactory evaluation proceed to “Information Sheet 4”. However, if your rating is unsatisfactory, see your teacher for further instructions.
6. Submit your accomplished Self-check. This will form part of your training portfolio.
7. Your teacher will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory you can proceed to Learning Guide # 53.

Information Sheet-1 National family planning guideline

3.1. National family planning guideline

The Health Policy of Ethiopia boldly states that the health needs of women and children deserve particular attention. The policy recommends decentralizing services and “enriching the concept and intensifying the practice of family planning for optimal family health and planned population dynamics.” Access to voluntary family planning and reproductive health services for everyone, inclusive of women, men, couples, and

adolescents, supports the health and well-being of individuals and can have positive economic, environmental, and social benefits for families and communities. Thus, high-quality family planning services and the people who deliver them respect, protect, and fulfill the human rights of all their clients. **Non-discrimination:** Respect every client's needs and wishes. Set aside personal judgments and any negative opinions. Promise yourself to give every client the best care you can. **Availability of contraceptive information and services:** The family planning methods available and how to provide them. Help make sure that supplies stay in stock. Do not rule out any method for a client, and do not hold back information.

Accessible information and services: Help make sure that everyone can use your facility, even if they have a physical disability. Participate in outreach, when possible. Do not ask clients, even young clients, to get someone else's permission to use family planning or a certain family planning method. **Acceptable information and services**: Be friendly and welcoming, and help make your facility that way. Put yourself in the client's shoes. Think what is important to the client **Privacy and confidentiality**: Do not discuss your clients with others except with permission and as needed for their care. When talking with clients, find a place where others cannot hear. **Participation**: Ask clients what they think about family planning services. Act on what they say to improve care

Information Sheet-1 Describing "REDI" frame work

3.2. Describing "REDI" frame work

Definition: REDI stands for Rapport building, Exploration, and Decision making, and Implementing the decision.

The REDI framework:

- Emphasizes the client's right and responsibility for making decisions and carrying them out
- Provides guidelines to help the counselor and client consider the client's circumstances and social context

- Identifies the challenges a client may face in carrying out their decision
- Helps clients build skills to address those challenges

The REDI framework moves away from traditional FP counseling that relies on routinely giving detailed information about every FP method. It avoids over loading clients with unnecessary information and instead emphasizes the client's preferences, individual circumstances, and sexual relationships and knowledge. In this way, the provider can help clients narrow down their FP method choices more quickly and better tailor the information to clients' needs. This not only saves time, it also meets clients' needs more effectively. The REDI framework helps address the differing needs of clients: those who are new and have already chosen a method and those who have not, and those who are returning clients, whether they are experiencing problems or changes in personal circumstances or are merely visiting the facility for a re-supply of contraceptives.

Phases and steps of REDI

Step 1: **Rapport Building**

- Greet client with respect
- Make introductions (identify category of the client—i.e., new, satisfied return, or dissatisfied return)
- Assure confidentiality and privacy
- Explain the need to discuss sensitive and personal issues

Step 2: **Exploration**

1. Explore in depth the client's reason for the visit (This information will help determine the client's counseling needs and the focus of the counseling session.)

For new clients:

2. Explore client's future RH-related plans, current situation, and past experience
- Explore client's reproductive history and goals, while explaining healthy timing and spacing of pregnancy (HTSP)

- Explore client's social context, circumstances, and relationships
- Explore issues related to sexuality
- Explore client's history of STIs, including HIV
- Explain STI risk and dual protection, and help the client perceive his or her risk for contracting and transmitting STIs

3. Focus your discussion on the method(s) of interest to client: discuss the client's preferred method, if any, or relevant FP options if no method is preferred, give information as needed, and correct misconceptions

4. Rule out pregnancy and explore factors related to monthly bleeding, any recent pregnancy and medical conditions

For returning clients: Explore the client's satisfaction with the current method used. Confirm if clients were given all the options while they made the decision. If not, tell all the available options.

Confirm correct method use

Ask the client about changes in his or her life (i.e., plans about having children, STI risk and status, and so on)

For dissatisfied clients only: explore the reasons for the client's dissatisfaction or the problems, including the issue, causes, and possible solutions such as switching methods as well as other options (if the client decides to switch methods, continue with Phase 3, Steps 2–5)

Step 3**: Decision Making**

- Identify the decisions the client needs to confirm or make (for satisfied clients, check if client needs other services; if not, go to Phase 4, Step 5)
- Explore relevant options for each decision
- Help the client weigh the benefits, disadvantages, and consequences of each option (Provide information to fill any remaining knowledge gaps)

- Encourage the client to make his or her own decision

Step 4: **Implementing the Decision**

- Assist the client in making a concrete and specific plan for carrying out the decision(s) (obtaining and using the FP method chosen, risk reduction for STIs, dual protection, and so on)
- Have the client develop skills to use his or her chosen method and condoms
- Identify barriers that the client might face in implementing his or her decision
- Develop strategies to overcome the barriers
- Make a plan for follow-up and/or provide referrals as needed

Information Sheet-1 Family planning methods

3.3. Family planning methods

Family planning methods are broadly categorized into two: Natural Family Planning Methods and Modern Family Planning Methods.

3.4. Natural family planning methods

Natural family planning refers to methods used to prevent or postpone pregnancy by giving attention to natural reproductive events related to fertility

- All natural methods except for LAM require partners' cooperation. Couple must be committed to abstaining or using another method on fertile days.
- Couple/client must stay aware of body changes or keep track of days, according to rules of the specific method.
- Methods do not have side effects or health risks.

These methods include:

- Withdrawal method
- Fertility awareness method
- Rhythm /calendar method
- Standard days method
- Symptom based methods

- Lactational amenorrhea method

3.4.1. Withdrawal Method

The man withdraws his penis from his partner's vagina before ejaculation and ejaculates outside the vagina, keeping his semen away from her external genitalia. The method is also known as coitus interruptus and "pulling out."

Mechanism of action:

Withdrawal method works by keeping the sperm out of the woman's body.

Effectiveness:

- Effectiveness of withdrawal method largely depends on the user: Risk of pregnancy

  is greatest when the man does not withdraw his penis from the vagina before he ejaculates with every act of sex.
- Withdrawal is one of the least effective methods, as commonly used.
- As commonly used, about 27 pregnancies per 100 women whose partner uses withdrawal over the first year. This means that 73 of every 100 women whose partners use withdrawal will not become pregnant.
- When used correctly with every act of sex, about 4 pregnancies per 100 women whose partners use withdrawal over the first year will occur.

❖ **Key points:**

- If the man has ejaculated recently, he should urinate and wipe the tip of his penis before sex. This is to remove any sperm remaining
- Always available in every situation. Can be used as a primary method or as a backup method.
- Requires no supplies and no clinic or pharmacy visit.
- One of the least effective contraceptive methods. Some men use this method effectively, however. Offers better pregnancy protection than no method at all.
- Promotes male involvement and couple communication.
- No protection against sexually transmitted infections.

3.4.2. Fertility Awareness Methods

- Fertility awareness means that a woman knows how to tell when the fertile time of her menstrual cycle starts and ends. (The fertile time is when she can become pregnant.)
- It is sometimes called periodic abstinence or natural family planning.
- A woman can use several ways, alone or in combination, to tell when her fertile time begins and ends.
- Fertility awareness methods are divided into two broad categories: Calendar based and symptom based methods
- A woman can use several ways, alone or in combination, to tell when her fertile time begins and ends.
- Fertility awareness methods are divided into two broad categories: Calendar based and symptom based methods
- Calendar-based methods involve keeping track of days of the menstrual cycle to identify the start and end of the fertile time.
    - Examples: Standard Days Method and calendar rhythm method.
- Symptoms-based methods depend on observing signs of fertility.
- Cervical secretions: When a woman sees or feels cervical secretions, she may be fertile. She may feel just a little vaginal wetness.
- Basal body temperature (BBT): A woman's resting body temperature goes up slightly after the release of an egg (ovulation), when she could become pregnant. Her temperature stays higher until the beginning of her next monthly bleeding.
    - Examples: BBT method, ovulation method (cervical mucus method or
- Billings method), and the sympto-thermal method.
- Generally, fertility awareness methods work primarily by helping a woman know when she could become pregnant.The couple prevents pregnancy by avoiding unprotected vaginal sex during these fertile days-usually by abstaining or by using condoms or a diaphragm.
- Return of fertility after use of fertility awareness methods is immediate.
- There is no protection against sexually transmitted infections.

Some women say they like fertility awareness methods for the following reasons:

- Have no side effects
- Do not require procedures and usually do not require supplies
- Help women learn about their bodies and fertility
- Allow some couples to adhere to their religious or cultural norms about contraception
- Can be used to identify fertile days by both women who want to become pregnant and women who want to avoid pregnancy.

3.4.3. Rhythm Method

- The Rhythm method is a method by which a woman calculates the fertile days of her menstrual period and the couple avoids vaginal sex, or uses temporary methods during the fertile time.
- This method does not protect from STIs including HIV.
- Return of fertility after stopping the method is immediate.

Mechanism of action:

- Rhythm method works primarily by helping a woman know on which days of the menstrual cycle she is fertile or can become pregnant. The couple prevents pregnancy by avoiding unprotected vaginal sex during these fertile days-usually by abstaining or by using condoms or a diaphragm.

Effectiveness:

- With consistent and correct use, about 9 pregnancies per 100 women in the first year of use will occur. This means more than 90 women will avoid potential unplanned pregnancy in the first year of use.

How to Use Rhythm Method:

- Before relying on Rhythm method, a woman records the number of days in each menstrual cycle for at least 6 months. The first day of monthly bleeding is always counted as day 1.
- The woman subtracts 18 from the length of her shortest recorded cycle. This tells her the estimated first day of her fertile time. Then, she subtracts 11 days from

the length of her longest recorded cycle. This tells her the estimated last day of her fertile time.

- The couples avoid vaginal sex, or use condoms or a diaphragm, during fertile time. They can also use withdrawal or spermicides, but these are less effective.
- She updates these calculations each month, always using the 6 most recent cycles.

Example:

- If the shortest of her last 6 cycles was 27 days, 27 –18 = 9. She starts avoiding unprotected sex on day 9.
- If the longest of her last 6 cycles was 31 days, 31 – 11= 20 She can have unprotected sex again on day 21.
- Thus, she must avoid unprotected sex from day 9 through day 20 of her cycle.

❖ **Key points**:

- The client records/recalls her menstrual cycles for at least six months. The woman subtracts 18 days from the shortest recorded cycle and 11 days from the longest recorded cycle. This tells her the estimated fertile days.
- The couple avoids unprotected vaginal sex in the fertile days or uses other temporary methods.
- No medical conditions prevent the use of this method.
- The method does not need resources or supplies (unless the couple uses condoms or other barrier methods during fertile days of the cycle).

3.4.4. Standard Days Method (SDM):

- Standard Days Method is a calendar-based method which can be used by women who have regular cycles that are 26 – 32 days long. The woman calculates the fertile periods and avoids unprotected vaginal sex or use temporary method.

How to Use Standard days Method:

Remember: A woman can use the Standard Days Method if most of her menstrual cycles are 26 to 32 days long. If she has more than 2 longer or shorter cycles within a

year, the Standard Days Method will be less effective and she may want to choose another method.

- A woman keeps track of the days of her menstrual cycle, counting the first day of monthly bleeding as day 1.
- Avoid unprotected sex on days 8–19
  - Days 8 through 19 of every cycle are considered fertile days for all users of the Standard Days Method.
  - The couple avoids vaginal sex or uses condoms or a diaphragm during days 8 through 19. They can also use withdrawal or spermicides, but these are less effective.
  - The couple can have unprotected sex on all the other days of the cycle-days 1 through 7 at the beginning of the cycle and from day 20 until her next monthly bleeding begins.
    - Use memory aids if needed
      - The couple can use Cycle Beads, a color-coded string of beads that

    indicates fertile and non-fertile days of a cycle, or they can mark a calendar or use some other memory aid.

❖ **Key points:**

- A woman can use the Standard Days Method if most of her menstrual cycles are 26 to 32 days long.
- Avoid unprotected sex on days 8–19 from LMP or use other temporary methods like condoms in this fertile time period.
- No medical conditions prevent the use of this method.

3.4.5. Symptoms-Based Methods

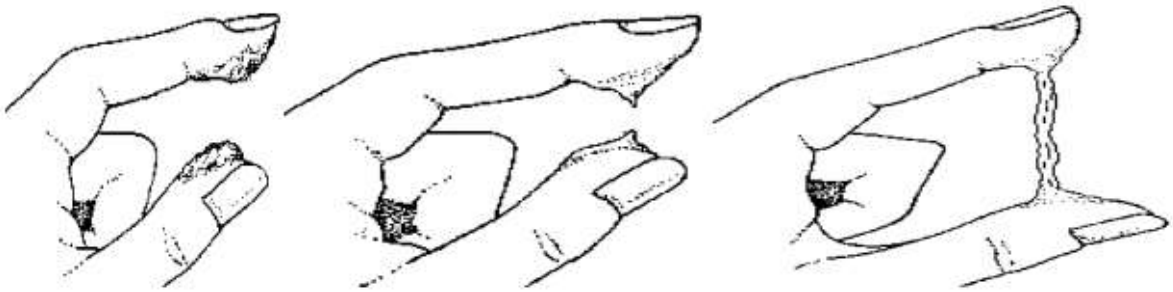
The following three methods are collectively termed as symptoms-based methods:

- Cervical mucus method
- Basal body temperature method
- Symptom-thermal method

- All women can use symptoms-based methods. No medical conditions prevent the use of these methods, but some conditions can make them harder to use effectively.
- Caution means that additional or special counseling may be needed to ensure correct use of the method.
- Delay means that use of a particular fertility awareness method should be delayed until the condition is evaluated or corrected. Give the client another method to use until she can start the symptoms-based method.

Cervical Mucus Method- CMM (Billings Ovulation Method)

- Cervical Mucus Method is a symptoms-based fertility awareness method. The method relies on the woman's ability to predict her fertile days by following the characteristics of cervical mucus.



Early Mucous	Transitional Mucous	Highly Fertile Mucous
• Slight amount • Thick • White • Sticky • Holds its shape	• Increasing amounts • Thinner • Cloudy • Slightly stretchy	• Profuse • Thin • Transparent • Stretchy

Effectiveness

With consistent and correct use, 3 pregnancies per 100 women using cervical mucus method will get pregnant in the first year. This means that 97 of every 100 women relying on cervical mucus method will not become pregnant.

Important: If a woman has a vaginal infection or another condition that changes cervical mucus, this method may be difficult to use.

Check cervical secretions daily: The woman checks every day for any cervical secretions on fingers, underwear, or tissue paper or by sensation in/ around the vagina.

Avoid unprotected sex on days of heavy monthly bleeding: Ovulation might occur early in the cycle, during the last days of monthly bleeding, and heavy bleeding could make mucus difficult to observe.

Resume unprotected sex until secretions begin: Between the end of monthly bleeding and the start of secretions, the couple can have unprotected sex, but not on 2 days in a row. (Avoiding sex on the second day allows time for semen to disappear and for cervical mucus to be observed.)

It is recommended that they have sex in the evenings, after the woman has been in an upright position for at least a few hours and has been able to check for cervical mucus.

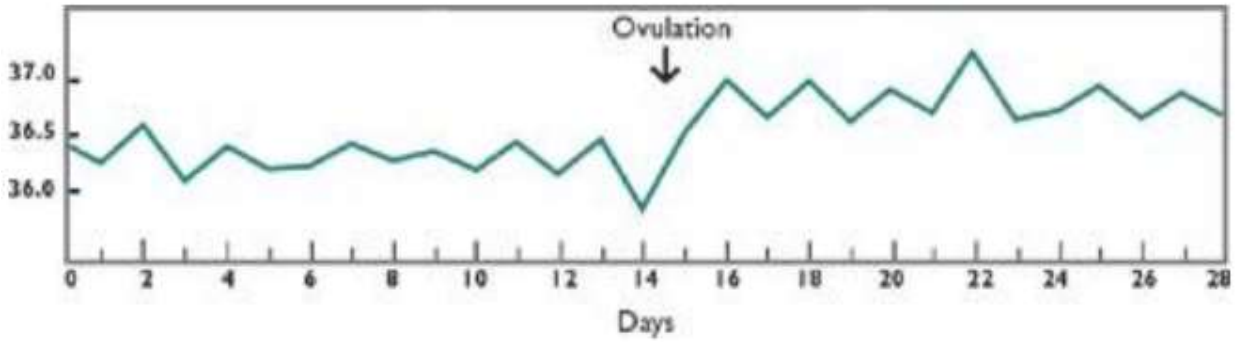
Avoid unprotected sex when secretions begin and until 4 days after "peak day":

As soon as she notices any secretions, she considers herself fertile and avoids unprotected sex. She continues to check her cervical secretions each day.The secretions have a "peak day"—the last day that they are clear, slippery, stretchy, and wet. She will know this has passed when, on the next day, her secretions are sticky or dry, or she has no secretions at all. She continues to consider herself fertile for 3 days after that peak day and avoids unprotected sex.

- **Key points:**
  - Avoid unprotected sex when cervical secretions begin to appear and until 4 days after the 'peak day'.
  - Almost all women can use the method provided they don't have conditions that change the characteristics of cervical secretions.
  - Method does not need resources or supplies (unless condoms or other barrier methods are used during the fertile days).

Basal Body Temperature-BBT Method

- The BBT method is a symptom-based method that relies on the woman's ability to notice a slight increase in her body temperature. The elevation in the temperature is as a result of hormonal changes that result in ovulation.



Mechanism of action

- The method works primarily by helping a woman to identify days when she could become pregnant. And, the couple avoids unprotected vaginal sex from the first day of menstruation until 3 days after the woman's temperature has risen above her regular temperature.
- **Important**: If a woman has a fever or other changes in body temperature, the BBT method will be difficult to use.
- **Take body temperature daily:** The woman takes her body temperature at the same time each morning before she gets out of bed and before she eats anything. She records her temperature on a special graph. She watches for her temperature to rise slightly—0.2° to 0.5° C—just after ovulation (usually about midway through the menstrual cycle).
- **Avoid sex or use another method until 3 days after the temperature rise:** The couple avoids vaginal sex, or uses condoms or a diaphragm from the first day of monthly bleeding until 3 days after the woman's temperature has risen above her regular temperature. They can also use withdrawal or spermicides, but these are less effective.
- **Resume unprotected sex until next monthly bleeding begins:** When the woman's temperature has risen above her regular temperature and stayed higher

for 3 full days, ovulation has occurred and the fertile period has passed. The couple can have unprotected sex on the 4th day and until her next monthly bleeding begins.

❖ **Key points :**

- Watch for a slight rise in temperature at about midway between the menstrual cycles.
- Avoid unprotected vaginal sex from the first day of monthly bleeding until 3 days after the woman's temperature has risen above her regular temperature.
- All women can use the BBT method except those with fever.

Sympto-thermal Method

- The symptom-thermal method is a method that uses a combination of cervical mucus (ovulation) method and BBT method to prevent unwanted pregnancy.
- Method does not protect from STIs including HIV.
- Return of fertility after stopping the method is immediate

❖ **Key points :**

- Method uses a combination of ovulation method and BBT method.
- The woman looks for the presence of mucus and identifies the 'peak day'. She also records her body temperature every day.
- The couple avoids unprotected vaginal sex from the first day of menses until either the fourth day after 'peak' cervical secretions or the third full day after the rise in temperature (BBT), whichever happens later.

3.4.6. Lactational Amenorrhea Method-LAM

4. A temporary family planning method based on the natural effect of breastfeeding on fertility. ("Lactation" means related to breastfeeding. "Amenorrhea" means not having monthly bleeding.)

The lactation amenorrhea method (LAM) requires 3 conditions. All 3 conditions must be met:

- The mother's monthly bleeding has not returned
- The baby is fully or nearly fully breastfed and is fed often, day and night
- The baby is less than 6 months old

5. “Fully breastfeeding” includes both exclusive breastfeeding (the infant receives no other liquid or food, not even water, in addition to breast milk) and almost exclusive breastfeeding (the infant receives vitamins, water, juice, or other nutrients once in a while in addition to breast milk).

NB: The infant should suckle not less than 8 times in 24 hours and at least 1 of the feeds should be during the night.

6. “Nearly fully breastfeeding” means that the infant receives some liquid or food in addition to breast milk, but supplementation never replaces or delays a breastfeed.

Mechanism of action

LAM works primarily by preventing the release of eggs from the ovaries (ovulation).

Frequent breastfeeding temporarily prevents the release of the natural hormones that cause ovulation. Suckling causes increased prolactin, which inhibits estrogen production and ovulation.

Characteristics:

- LAM does not provide protection against sexually transmitted infections.
- It is a natural family planning method.
- It supports optimal breastfeeding, providing health benefits for the baby and the mother
- It has no direct cost for family planning or for feeding the baby.

❖ **Key points**:

Lactation Amenorrhea Method –LAM:

- A family planning method based on breast feeding. LAM provides contraception for the mother and is best feeding for the baby.
- Can be effective for up to 6 months after childbirth, as long as menstrual bleeding has not returned and the woman is fully or nearly fully breastfeeding.
- Requires breastfeeding often, day and night. All of the baby’s feedings should be breast milk (even if sometimes some small amounts of other liquids or food are added to breast milk feeding).
- Provides an opportunity to offer a woman an ongoing method that she can continue to use after 6 months.

Self-Check -1 **Written Test**

- **I- Multiple Choices: Choose the best answer**.

1. W/c one of the following is not natural family planning method
   A. Cervical mucus method
   B. Withdrawal method
   C. Fertility awareness method
   D. Intra uterine contraceptive device
2. W/c one of the following is the least effective contraceptive methods
   A. coitus interruptus
   B. Rhythm method
   C. Abstinence
   D. Billings ovulation method

ANSWER SHEET

Name: _____ Date: _____

I - **Multiple choices**

1._____

2. _____

6.3. Artificial family planning methods

6.3.1. Barrier Methods

Condoms

Condoms were first used to prevent STIs in the British royalty in the 18th century. Condoms were first made from gut intestine of sheep/goat. There are two types of condoms: the male condom which is made of latex and the female condom which is made of plastic.

'Dual protection' (also known as 'dual use') implies consistent and correct use of

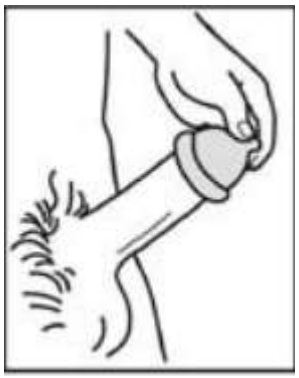
condoms (male or female condoms) in addition to other contraceptive methods (also called “dual method use”), or the consistent and correct use of condoms alone, to effectively prevent pregnancy as well as STIs including HIV. Dual protection is critical in reducing transmission of STIs and HIV.

Male Condoms:

- Sheaths, or coverings, that fit over a man’s erect penis.
- Most are made of thin latex rubber.

Proper use of condom

- Use a new condom for each act of sex
- Check the condom package. Do not use if torn or damaged. Avoid using a condom past the expiration date-do so only if a newer condom is not available.
- Tear open the package carefully. Do not use fingernails, teeth, or anything that can damage the condom.
- Before any physical contact, place the condom on the tip of the erect penis with the rolled side out
    - For the most protection, put the condom on before the penis makes any genital, oral, or anal contact.



- **Unroll the condom all the way to the base of the erect penis**
- The condom should unroll easily. Forcing it on could cause it to break during use.
- If the condom does not unroll easily, it may be on backwards, damaged, or too old. Throw it away and use a new condom.

- If the condom is on backwards and another one is not available, turn it over and unroll it onto the penis.

- **Immediately after ejaculation, hold the rim of the condom in place and withdraw the penis while it is still erect**
- Withdraw the penis.
- Slide the condom off, avoiding spilling semen.
- If having sex again or switching from one sex act to another, use a new condom.

- Dispose of the used condom safely
- Wrap the condom in its package and put in the rubbish or latrine or pit. Do not put the condom into a flush toilet, as it can cause problems with plumbing.

❖ **Key points**:

- Male condoms help protect against sexually transmitted infections, including HIV.
- Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.

- Require correct use with every act of sex for greatest effectiveness.
- Require both male and female partner's cooperation. Talking about condom use before sex can improve the chances condom will be used.

Female condoms: A female condom enables a woman to control its use to prevent pregnancy and STIs including HIV.

- Have flexible rings at both ends
- One ring at the closed end helps to insert the condom
- The ring at the open end holds part of the condom outside the vagina
- Lubricated with a silicone-based lubricant on the inside and outside.
- Latex female condom is available in Ethiopia

❖ **Key points:**

Female condoms:

- Help protect against sexually transmitted infections, including HIV.
- Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.
- Require correct use with every act of sex for greatest effectiveness.
- A woman can initiate female condom use, but the method requires her partner's cooperation.
- May require some practice. Inserting and removing the female condom from the vagina becomes easier with experience.

Spermicidal:

- Sperm-killing substances inserted deep in the vagina, near the cervix, before sex.
- Nonoxynol-9 is the most widely used spermicide
- Others include chlorhexidine, octoxynol-9
- Available in foaming tablets, melting or foaming suppositories, jelly and cream
- Jellies, creams, and foam from cans can be used alone, with a diaphragm, or with condoms.
- Films, suppositories, foaming tablets, or foaming suppositories can be used alone or with condoms.

Mechanism of action

Spermicides work by causing the membranes of sperm cells to break, killing them or slowing their movement. This keeps sperm from meeting an egg.

All women can safely use spermicides except those who:

- Are at high risk for HIV infection
- Have HIV infection
- Have AIDS

How to insert spermicide into the vagina:

- Check the expiration date and avoid using spermicides past their expiration date.
- Wash hands with mild soap and clean water, if possible.
- Foam or cream: Shake cans of foam hard. Squeeze spermicide from the can or tube into a plastic applicator. Insert the applicator deep into the vagina, near the cervix, and push the plunger.
- Tablets, suppositories, jellies: Insert the spermicide deep into the vagina, near the cervix, with an applicator or with fingers.
- Do not wash the vagina (douche) after sex
- Douching is not recommended because it will wash away the spermicide and also increase the risk of sexually transmitted infections.
- If you must douche, wait for at least 6 hours after sex before doing

❖ **Key points**:

- Spermicides are placed deep in the vagina shortly before sex
- Requires correct use with every act of sex for greatest effectiveness
- One of the least effective contraceptive methods
- Can be used as a primary method or a as back up method.
- Not a good method for women at risk of HIV or with HIV/AIDS

Diaphragms:

- A soft latex cup that covers the cervix. Plastic diaphragms may also be available.
- The rim contains a firm, flexible spring that keeps the diaphragm in place.
- Used with spermicidal cream, jelly, or foam to improve effectiveness.
- Comes in different sizes and requires fitting by a specifically trained provider.

Mechanism of action

- Diaphragm works by blocking sperm from entering the cervix; spermicide kills or disables sperm. Both keep sperm from meeting an egg.

❖ **Key points :**

- The diaphragm is placed deep in the vagina before sex. It covers the cervix.
- Spermicide provides additional contraceptive protection.
- A pelvic examination is needed before starting use. The provider must select a diaphragm that fits properly.
- Require correct use with every act of sex for greatest effectiveness.

3.3.6. Oral Contraceptive Pills

Oral contraceptive pills include combined oral contraceptive pills (COCs) and progestin only pills (POPs) are contraceptive methods that contain either two or one female sex hormones. The hormones are synthetic estrogens and synthetic progesterone.

The estrogen hormones include:

- Ethinyl estradiol
- Mestranol

The progestins include

- Norethindrone
- Norgestimate

- Gestodene
- Desogestrel

In addition to their contraceptive effect, OCPs provide other non-contraceptive health benefits. OCPs are not expensive and are widely used all over the world. OCPs can be used as emergency contraceptives where a dedicated product is not available. Oral contraceptive pills can be used in settings where clinical judgment is limited. Hormonal methods do not protect against STIs, including hepatitis B and HIV. Therefore, individuals with risky sexual behavior should use a barrier method (condom) for dual protection against pregnancy and STIs.

Combined contraceptive pills (COCs)

Pills that contain low doses of two hormones – a synthetic progestin and a synthetic estrogen –like the natural hormones progesterone and estrogen in a woman's body. Combined oral contraceptives (COCs) are also called "the Pill," low-dose combined pills, OCPs, and OCs. Over the years the doses of hormone in the pill have decreased to lower and safer levels, with consequent decrease in occurrence of side effects.

High-dose COCs are now defined as those containing 50 micrograms or more of estrogen and they are not used for ongoing contraception any longer, just for

emergency contraception. Low-dose pills contain less than 50 micrograms of estrogen. The most common available COCs in Ethiopia contain 30-35 micrograms.

Mechanism of action

Work primarily by preventing the release of eggs from the ovaries (ovulation). COCs prevent synthesis of gonadotropins from the pituitary. Hence, ovarian follicles do not mature and ovulation does not occur.

Characteristics

- In almost all clients, fertility returns following COC discontinuation.
- Can be stopped at any time without a provider's help
- Do not interfere with sex
- COCs are controlled by the woman.
- Must be taken every day, whether or not a woman has sex that day.
- Reduce the risk of ectopic pregnancy.
- Side effects include lighter bleeding and fewer days of bleeding, irregular bleeding, infrequent bleeding, amenorrhea, dizziness, headache, nausea, abdominal pain, mood changes, breast tenderness, acne and weight changes.
- Other physical changes include slight increases in blood pressure. When the increase in BP is due to COCs, blood pressure declines quickly after use of COCs stops.
- Help protect against:
  - Risks of pregnancy
  - Cancer of the lining of the uterus (endometrial cancer)
  - Cancer of the ovary
  - Symptomatic pelvic inflammatory disease
  - Ovarian cysts
  - Iron-deficiency anemia
- Reduce:
  - Menstrual cramps (dysmenorrheal)
  - Menstrual bleeding problems
  - Ovulation pain

- Symptoms of endometriosis
- Excess hair on face or body

❖ **The three forms of low-dose COCs:**

- **Monophasic** - each active pill contains the same amount of estrogen and progestin, e.g., Microgynon, Prudence, Nordette.
- **Biphasic** - the active pills in the packet contain two different dose-combinations of estrogen and progestin. For example in a cycle of 21 active pills, 10 may contain one combination while 11 contain another.
- **Triphasic** - the active pills contain three different dose combinations of estrogen and progestin. Out of a cycle of 21 active pills, 6 may contain one combination, 5 another combination, while 10 pills contain other combinations of the same two hormones.

❖ **Do not provide COCs if a woman:**

- If a woman is less than three weeks after delivery of a baby. In this case, you can give her COCs and tell her to start taking them 3 weeks after childbirth (if she is not breastfeeding)
- If she is breastfeeding a baby less than 6 months old, delay COC initiation until baby is 6 months old, or when breast milk is no longer the baby's main food – whichever comes first.
- Takes anti-epileptic drugs and rifampicin. Effectiveness may be lowered when these drugs are taken concurrently. The anti-epileptic drugs include barbiturates, carbamazepine, oxcarbazepine, phenytoin, primidone or topiramate. The drugs can make COCs less effective. Help the woman choose another method without hormones.
- Ever had heart attack, heart disease due to blocked or narrowed arteries, or stroke, do not provide COCs. Help her choose a method without estrogen but not progestin-only injectables. Also if she ever had or currently has a blood clot in the deep veins of the legs or lungs (not superficial clots), do not provide COCs and help her choose a method without hormones.

- Has serious active liver disease (jaundice, active hepatitis, severe cirrhosis, liver tumor), do not provide COCs. Help her choose a method without hormones (She can use monthly injectables if she has had jaundice only with past COC use.).
- Is 35 years of age or older and smokes, do not provide COCs. Urge her to stop smoking and help her choose another method.
- Has high blood pressure and
  - If you cannot check blood pressure and she reports a history of high blood pressure, or if she is being treated for high blood pressure, do not provide COCs. Refer her for a blood pressure check if possible or help her choose a method without estrogen.
  - Check blood pressure if possible:
- If her blood pressure is below 140/90 mm Hg, provide COCs.
- If her systolic blood pressure is 140 mm Hg or higher or diastolic blood pressure is 90 or higher, do not provide COCs. Help her choose a method without estrogen, but not progestin-only injectables if systolic blood pressure is 160 or higher or diastolic pressure is 100 or higher.

❖ **COCs for women with HIV:**

- ❖ Women who are infected with HIV and/or have AIDS can safely use COCs.
- ❖ Women who are on antiretroviral (ARV) therapy generally can safely use COCs, unless their ARV regimen contains ritonavir or ritonavir-boosted protease inhibitors. In such cases do not provide COCs and help her choose another method.
- ❖ Urge these women to use condoms along with COCs. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs. Condoms also provide extra contraceptive protection for women on ARV therapy. Some ARV medications reduce the effectiveness of COCs.
- ❖ **Explain how to use COCs**

- **Give pills**: Give as many packs as possible—even as much as 3 months'supply (3 packs).

- **Explain pill pack**: Show which kind of pack –21 pills or 28 pills. With 28-pill packs, point out that the last 7 pills are a different color and do not contain hormones.
    - Show how to take the first pill from the pack and then how to follow the directions or arrows on the pack to take the rest of the pills.
- **Give key instruction:**
    - Take one pill each day —until the pack is empty.
    - Discuss cues for taking a pill every day. Linking pill-taking to a daily activity may help her remember.
    - Taking pills at the same time each day helps to remember them. It also may help reduce some side effects.
- **Explain starting next pack:**
    - 28-pill packs: When she finishes one pack, she should take the first pill from the next pack on the very next day.
    - 21-pill packs: After she takes the last pill from one pack, she should wait 7 days and then take the first pill from the next pack.
    - It is very important to start the next pack on time. Starting a pack late risks pregnancy.
- **Provide backup method and explain use**
    - Sometimes she may need to use a backup method, such as when she misses pills.
    - Backup methods include abstinence, male or female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. Give her condoms, if possible.

❖ **Managing missed pills**

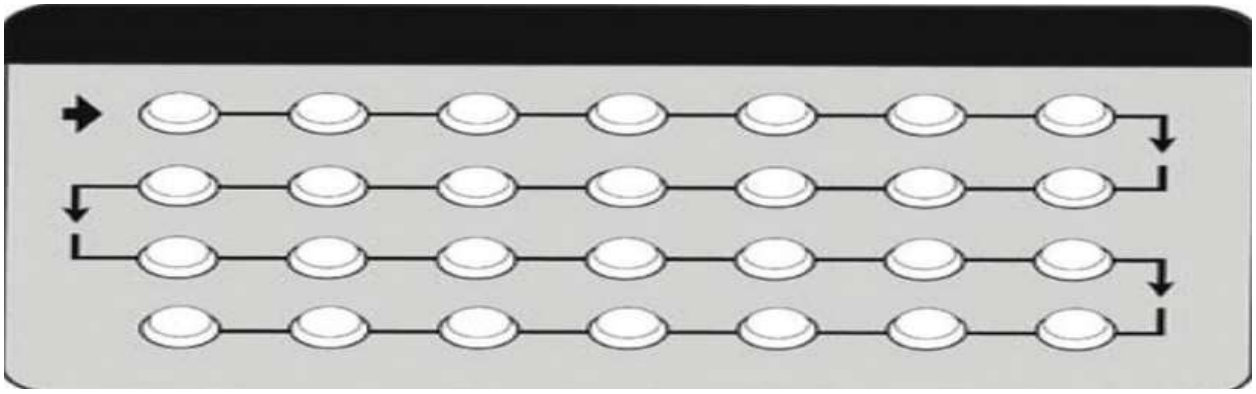
- Take a missed hormonal pill as soon as possible.
- Keep taking pills as usual, one each day. (She may take 2 pills at the same time or on the same day.)

❖ **Key points:**

- Take one pill every day: For greatest effectiveness a woman must take pills daily and start each new pack of pills on time.
- Side effects may occur but they are not harmful: Some women will experience irregular bleeding for the first few months and then lighter and more regular bleeding.
- Other side effects also diminish after the first three months.
- Take any missed pill as soon as possible: Missing pills risks pregnancy and may make some side effects worse.
- Can be given to women at any time to start later: If pregnancy cannot be ruled out, a provider can give her pills to take later, when her monthly bleeding begins.

Progestin-only pills (POPs)

- POPs are pills that contain very low doses of a progestin like the natural hormone progesterone in a woman's body.
- POPs do not contain estrogen, and so can be used throughout breastfeeding and by women who cannot use methods with estrogen.
- Progestin-only pills (POPs) are also called "minipills" and progestin-only oral contraceptives.



- POPs contain 0.025 mg –0.030 mg progesterone of different chemical composition.

Mechanism of action

POPs primarily prevent pregnancy by:

- Thickening cervical mucus. Thick cervical mucus blocks passage of sperm through the cervical canal and meeting the ovum (egg).
- Disrupting the menstrual cycle, including preventing the release of eggs from the ovaries (ovulation).

Characteristics

- POPs do not contain estrogens. Therefore, they do not cause many of the side effects associated with COC use. Progestins do not suppress production of breast milk, which makes them an ideal contraceptive method for breastfeeding women.
- Return of fertility after stopping POPs is immediate.
- Does not provide protection against sexually transmitted infections (STIs) including hepatitis B and HIV/AIDS and, therefore, individuals at risk should practice 'dual method use' (a barrier method in addition to POPs) to ensure protection against STIs/HIV/AIDS.
- Can be stopped at any time without a provider's help
- Do not interfere with sexual intercourse
- POPs are controlled by the woman.
- Must be taken every day, whether or not a woman has sexual intercourse that day.
- Reduce the risk of ectopic pregnancy.
- Side effects include spotting or bleeding between periods (more common), amenorrhea, headaches and breast tenderness, nausea, abdominal pain and mood changes

POPs are safe and suitable for nearly all women.

Nearly all women can use POPs safely and effectively, including women who:

- Are breastfeeding (starting as soon as 6 weeks after childbirth)
- Have or have not had children
- Are not married
- Are of any age, including adolescents and women over 40 years old
- Have just had an abortion, miscarriage, or ectopic pregnancy

- Smoke cigarettes, regardless of woman's age or number of cigarettes smoked
- Have anemia now or had in the past
- Have varicose veins
- Have goitre
- Are infected with HIV, whether or not on antiretroviral therapy

Do not provide POPs if a woman:

- Takes anti-epileptic drugs and rifampicin. The anti-epileptic drugs include barbiturates, carbamazepine, oxcarbazepine, phenytoin, primidone or topiramate. The drugs can make POPs less effective.
- Reports a current blood clot in legs (deep vein thrombosis) or lungs do not provide POPs.
- Has serious active liver disease (jaundice, active hepatitis, severe cirrhosis, liver tumor), do not provide POPs. Help her choose a method without hormones.
- Has history of breast cancer.

Explain how to use POPs

- Give pills: Give as many packs as possible.
- Explain pill pack:
  - Show which kind of pack—28 pills or 35 pills.
  - Explain that all pills in POP packs are the same color and all are active pills, containing a hormone that prevents pregnancy.
  - Show how to take the first pill from the pack and then how to follow the directions or arrows on the pack to take the rest of the pills.
- Give key instruction:
  - Take one pill each day —until the pack is empty.
  - Discuss cues for taking a pill every day. Linking pill-taking to a daily activity may help her remember.
  - Taking pills at the same hour each day helps to remember them.
- Explain starting next pack

- When she finishes one pack, she should take the first pill from the next pack on the very next day.
- It is very important to start the next pack on time. Starting a pack late risks pregnancy.

- Provide backup method and explain use
- Sometimes she may need to use a backup method, such as when she misses pills.
- Backup methods include abstinence, male or female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. Give her condoms, if possible.

- Explain that effectiveness decreases when breastfeeding stops
- Without the additional protection of breastfeeding itself, POPs are not as effective as most other hormonal methods.
- When she stops breastfeeding, she can continue taking POPs if she is satisfied with the method, or she is welcome to come back for another method.

➢ **Key message :**

- Take a missed pill as soon as possible.
- Keep taking pills as usual, one each day (this means that the woman may have to take 2 pills at the same time or on the same day.)

- If the woman has regular monthly bleeding:
  - The woman should also use a backup method for the next 2 days.
  - Also, if she had sex in the past 5 days, can consider taking ECPs:
    - ✓ Emergency Contraceptive Pills.

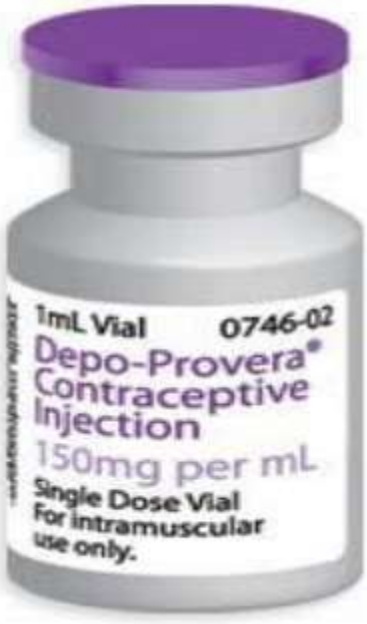
❖ **Key points:**

- Take one pill every day. No breaks between packs. All pills are active pills.
- Safe for breastfeeding women and their babies. Progestin only pills do not affect milk production.
- Add to the contraceptive effect of breastfeeding. POP use and breastfeeding together provide effective pregnancy protection.

- Bleeding changes are common but not harmful. Typically, pills lengthen the time where breastfeeding women have no monthly bleeding. For women having monthly bleeding, frequent or irregular bleeding is common.
- Can be given to a woman at any time to start at a later date. If pregnancy cannot be ruled out, a provider can give her pills to take later, when her monthly bleeding begins.

Progestin Only Injectables

The contraceptive injection, also known as 'the shot', contains progestogen or a combination of estrogen and progestogen. The injectable contraceptives depot medroxyprogesterone acetate (DMPA) and norethisterone enanthate (NET-EN) each contain a progestin like the natural hormone progesterone in a woman's body. In contrast, monthly injectables contain both estrogen and progestin.



- Injectables that do not contain estrogen can be used throughout breastfeeding and by women who cannot use methods with estrogen. DMPA, the most widely used progestin-only injectable, is also known as Depo or Depo Provera.

Mechanism of action

- **Inhibits Ovulation**- After a 150 mg injection of DMPA, ovulation does not occur for at least 13 to 14 weeks. Levels of the follicle stimulating hormone (FSH) and luteinizing hormone (LH) are lowered and a LH surge does not occur.
- **Thickens the Cervical Mucus** - the cervical mucus becomes thick, making sperm penetration difficult.
- **Thins the Endometrial Lining**- because of the high progestin and low estrogen levels, the endometrium changes, making it unfavorable for implantation. However, due to the changes in the cervical mucus and an ovulation, fertilization is extremely unlikely to occur.

Characteristics of DMPA

- Highly effective.
- Safe.
- Long acting (three months).
- Completely reversible (an average of 4 months' delay in return to fertility after discontinuing DMPA).
- Suitable for women who are not eligible to use an estrogen-containing contraceptive.
- Suitable for breastfeeding women (after 6 weeks postpartum).
- Provides immediate post partum (in non-breastfeeding women) or post-abortion contraception.
- The prolonged absence of menses is an advantage for many women.
- Protects against ectopic pregnancy since ovulation does not occur.
- There are menstrual changes for almost all women.
- Increased appetite causing weight gain for some women (0.5 kg, on the average, in the first year).
- Women who stop using DMPA take an average of four months longer than usual to get pregnant (compared to discontinuing other contraceptives such as oral contraceptives or IUCDs).This is because residual levels of DMPA exist for several months after the end of contraceptive protection from the last injection.

- DMPA is completely reversible and does not cause infertility.
- Since DMPA is long acting, it cannot easily be discontinued or removed from the body if a complication occurs or if pregnancy is desired immediately.

Progestin-only injectables safely and effectively, including women who:

- Are breastfeeding (starting as soon as 6 weeks after childbirth)
- Are infected with HIV, whether or not on antiretroviral therapy

Women who Should Not Use Injectables (DMPA)

- Breastfeeding a baby less than six weeks old.
- Severe decompensate cirrhosis
- Blood pressure higher than 160/100 mm Hg.
- Diabetes more than 20 years of duration or diabetes with vascular complications.
- History or current heart attack or stroke
- Current blood clot in leg (deep venous thrombosis) or lungs (pulmonary embolism)
- Undiagnosed abnormal vaginal bleeding (postpone injection until bleeding can be evaluated)
- History or current breast cancer

Timing of the First Injection

DMPA may be given at any time when it is reasonably certain the woman is not pregnant:

- During the first seven days after the start of menses.
- Immediately or within 7 days following a spontaneous or induced abortion.
- Immediately postpartum or up to 28 days after delivery if the woman is not breastfeeding (because postpartum women don't ovulate for at least 28 days). Between six weeks and six months for fully breastfeeding women whose menses have not returned postpartum. (Full breastfeeding is a reliable method of contraception up to six months postpartum if a woman has not menstruated.) Full breastfeeding means: Intervals between feeds should not exceed 4 hours

during the day, 6 hours at night, and supplementation should not exceed 5 - 15% of all feeding episodes, preferably fewer. (DMPA is generally not given before an infant is six weeks old, because of the theoretical concern that the liver of the neonate may not be mature enough to metabolize DMPA.)

- When a woman has not had intercourse since her last menses and cannot, therefore, be pregnant.
- When a woman is reliably using another effective method of contraception (COCs, IUCD, and barrier).

❖ **Key points:**

- Bleeding changes are common but not harmful. Typically, irregular bleeding for the first several months and then no monthly bleeding
- Return for injections regularly. Coming back every 3 months (13 weeks) for DMPA or every 2 months for NET-EN is important for greatest effectiveness.
- Injection can be given as much as 2 weeks early or 4 weeks late. Client should come back even if later.
- Gradual weight gain is common.
- Return of fertility is often delayed. It takes several months longer on average to become pregnant after stopping progestin only injectables than after other methods

Contraceptive implants (Norplant)

Hormonal implants are thin, flexible, matchstick-sized rods made of soft plastic. The rods contain hormone progestin (similar to the natural hormone progesterone in a woman's body) and are surgically placed beneath the skin of client's upper arm by a trained provider. They are highly effective, very safe, simple, convenient, and quickly reversible forms of contraception that are provided easily in an outpatient setting. Three new implants, Jadelle® (a two-rod system labeled as effective for five years), SinoImplant (II)® (a two-rod system labeled as effective for five years) and Implanon® (a one-rod system labeled as effective for three years), are even easier to insert and remove than the previously available implant, Norplant ®(a six-capsule system no longer in production that was labeled as effective for 7 yrs).

The Norplant implant system consists of a set of 6 small, plastic capsules. Each capsule is about the size of a small matchstick. The capsules are placed under the skin of a woman's upper arm. Norplant capsules contain a progestin (called levonorgestrol), similar to a natural hormone that a woman's body makes. It is released very slowly from all 6 capsules. Thus the capsules supply a steady, very low dose of progestin. Norplant contains no estrogen.

Fig 2: Implanon® package

Mechanism of Action:

- Implants continually release a small amount of progestin steadily into the blood.
- Increased viscosity of the cervical mucus making it harder for sperm to swim through (effect starts within48-72 hours after insertion of implants). Inhibition of ovulation in about 50% of menstrual cycles.
- Suppression of endometrial growth so that it is less receptive to implantation.

Precautions

Category -4: Because the combination of this method with certain conditions poses a health risk, do not use implants in the presence of the following conditions:

- Current breast cancer.
- Serious liver disease
- Current DVT
- Unexplained vaginal bleeding

Category -3: A condition where the theoretical or proven risks usually outweigh the advantages of using the method. Use of method not usually recommended unless other more appropriate methods are not available or not acceptable. These conditions are:

- Breastfeeding less than 6 weeks postpartum
- Acute deep venous thrombosis (DVT)
- Unexplained vaginal bleeding
- Severe cirrhosis
- Hepato-cellular adenoma
- Hepatoma
- Women with a history of breast cancer and no current evidence of disease

Side effects:

- Most side effects and other problems associated with the use of implants are not severe. The most common side effect is that of changes in menstrual bleeding patterns.

❖ Some users report changes in bleeding patterns including:

➢ First several months:

- Lighter bleeding and fewer days of bleeding
- Irregular bleeding that lasts more than 8 days
- Infrequent bleeding
- No monthly bleeding
- After about one year:
- Lighter bleeding and fewer days of bleeding
- Irregular bleeding
- Infrequent bleeding

❖ Key Points for Providers and Clients

- Implants are small flexible rods that are placed just under the skin of the upper arm.
- Provide long-term pregnancy protection. Very effective for 3 to 5 years, depending on the type of implant. Immediately reversible.
- Require specifically trained provider to insert and remove.

- A woman cannot start or stop implants on her own.
- Little required of the client once implants are in place.
- Avoids user errors and problems with resupply.
- Bleeding changes are common but not harmful. Typically, prolonged irregular bleeding over the first year, and then lighter, more regular bleeding, infrequent bleeding, or no bleeding.

- **Equipment and Instruments for Implanon Insertion:**

- Examining table for the client to rest her arm on
- Marker pen/optional/.
- Soap for washing the arm.
- Gloves.
- One bowl for antiseptic solution
- Antiseptic solution (iodine).
- Sterile syringe with needle.
- 2ml of lidocaine (1% without adrenaline)
- Preloaded sterile Implanon and applicator containing a single rod
- Ordinary band-aid or bandage.
- Gauze/cotton ball.
- Safety box

IUCDs

Common types of IUCDs available worldwide are:-

- Copper - bearing, which include the Cu-T 380A, Cu-T 380A with safe load, Cu-T 200C, Multiload (MLCu 250 and 375), and the Nova T
- Medicated with a steroid hormone, such as the levonorgestrel containing Mirenal US (intrauterine system)

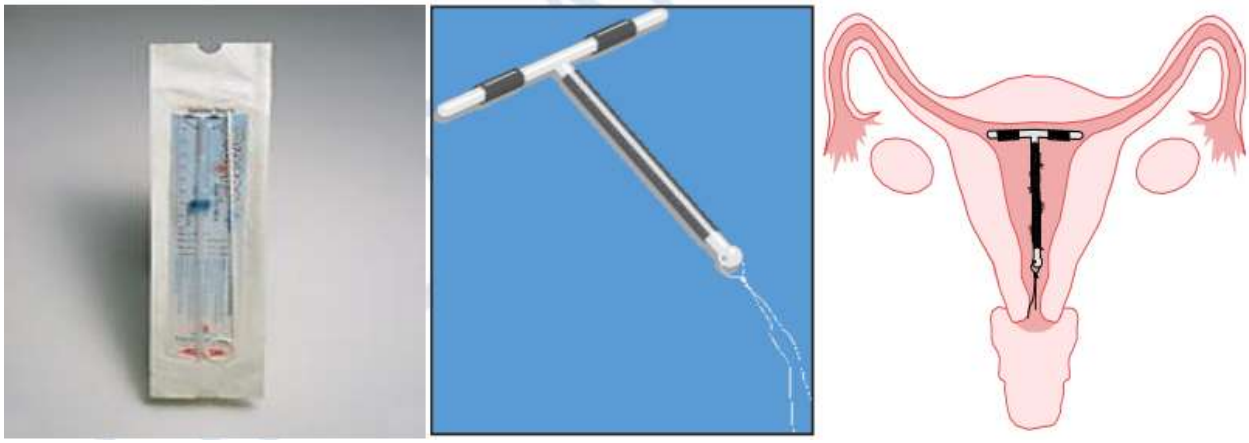


Fig. Intrauterine device

- **Mechanism of Action**:

The copper bearing IUCDs' principal mechanism of action (MOA) is to interfere with fertilization. Normally the uterine cavity and fallopian tubes are a good environment for sperm to swim and fertilize the egg. But, the IUCD creates a "spermicidal environment." This environment becomes inhospitable to sperm cells. The sperms are killed or damaged, so they cannot swim and reach the egg. The IUCDs, which contain progesterone, also cause the thickening of cervical mucus, which stops the sperm from entering the uterus. IUCDs' contraceptive effect is not abortificient.

IUCDs are an appropriate choice for a client who:

- Has a healthy reproductive tract (the client does not have any signs of infection or cancer, or reproductive tract abnormalities that would make insertion difficult).
- Wants to delay first pregnancy or space her children.
- Also very appropriate for women that have completed childbearing and do not want
- Voluntary Surgical Contraception/VSC (IUCDs are highly suitable for older women until menopause).
- Wants an effective method, but precaution (s) exist for hormonal methods such as COCs. (IUCDs have little or no effect on body systems other than reproductive tract.)

- Is breastfeeding. (IUCDs do not affect lactation)
- Is immediately postpartum (from delivery of placenta to 48 hours) and wants an effective method that won't interfere with breastfeeding.

Common IUCD (CU-T 380A) side effects and complications

Side effects may include:

- Cramping.
- Prolonged and heavy menstrual bleeding
- Irregular bleeding.

Self-Check -2 **Written Test**

- **I- Multiple Choices: Choose the best answer**.

1. All natural family planning methods are requiring partners' cooperation except.
   A. calendar method
   B. Standard days method
   C. Lactation amenorrhea method
   D. Withdrawal method

2. W/c one is the temporary family planning method based on effect of breastfeeding
   A. Spermicidal
   B. Oral contraceptive pills
   C. Progestin-only pills
   D. Lactation amenorrhea method

3. One of the following is **Not** contains estrogen hormone
   A. Combine oral contraceptives
   B. Depo- perovera contraceptive injection
   C. Contraceptive implants
   D. Emergency Contraceptive Pills

ANSWER SHEET

Name: _____ Date: _____

I - **Multiple choices**

1._____

2. _____

3. _____

3.3.3. **Permanent Family Planning Methods**

Permanent FP methods, also called voluntary surgical contraception (Bilateral Tubal Ligation and Vasectomy), are among the most effective, popular and well-established contraceptive method options available for men and women who desire no more children. For individuals and couples desiring no more children, it provides the most effective protection against pregnancy. The risk of complications is small if the procedure is performed according to accepted medical standards. It offers the advantage over other contraceptive methods that it is a once-only procedure**.**

Mechanism of action

The voluntary surgical contraception (VSC) procedure blocks either the sperm ducts (Vasa deferentia) or the oviducts (fallopian or uterine tubes) to prevent the meeting of sperm and ovum, which makes fertilization and pregnancy impossible.

Types of Permanent FP methods

A. Bilateral tubal ligation/Minilaparotomy

B. Male Sterilization/Vasectomy

Bilateral tubal ligation with Mini laparotomy (BTL/ ML)

Bilateral tubal ligation with Mini-laparatomy (BTL/ML), generally referred to as “minilap,” is a permanent contraception method for females done through an abdominal surgical approach to the fallopian tubes by means of an incision less than 5cm/mostly 3cm/ in length under local anesthesia. The fallopian tubes (oviduct) are permanently occluded so that the egg cannot travel through them to meet the sperm. Bilateral tubal ligation is the world’s most widely used modern family planning method and one of the fastest growing, including in developing regions and in many developed countries such as the United States. It is safe, highly effective, relatively simple, surgical means of contraception that can usually be provided in an outpatient setting and is intended to be permanent.

Surgical approaches for bilateral tubal ligation

a. **Mini-laparatomy**: A simplified laparatomy approach using an incision of 2 cm - 5 cm in length.

b. **Laparoscopy:** uses endoscopic equipment through a tiny incision under the umbilicus.

c. **Laparotomy** is an incision of the abdominal wall that extends over 5 cm in length to be used when BTL is performed in conjunction with caesarean section or another gynecological operation.

Timing of procedure

The following timings are all equally acceptable when performed according to Guidelines:

Interval bilateral tubal ligation

This implies BTL which is done any time when one is sure that the client is not pregnant, or beyond four weeks of delivery or abortion

Postpartum bilateral tubal ligation

This implies BTL which is done within the first seven days postpartum, at which time the uterus is still an abdominal organ

Post-abortion bilateral tubal ligation

This implies BTL which is done within the first seven days post-abortion

NB. There is no medical reason that would absolutely restrict a woman's eligibility for bilateral tubal ligation.

Vasectomy:

Vasectomy is a permanent method of contraception for men involving a minor surgical procedure whereby both tubes are cut and tied. The procedure usually takes 5 to 20 minutes to perform.

Mechanism of action

The Vas deferens through which sperm travel from the testes to the penis are cut or blocked so that sperm can no longer enter the semen that is ejaculated.

Safety

Vasectomy is very safe if done using a strict aseptic technique.

Advantages:

- Vasectomy is one of the most effective contraceptive methods. It is over 99% effective; in the first year, 1 failure would occur in 700 men.
- Vasectomy is meant to be permanent.
- Vasectomy can be performed at any time
- Vasectomy is simple and safe.
- Vasectomy can be performed quickly.
- Vasectomy has very low mortality and morbidity.
- A man who has Vasectomy no longer has to worry about causing a woman to become pregnant. The man and his partner do not have to use other family planning methods.

Disadvantages:

- Does not protect against STI including HIV/AIDS.
- Vasectomy is a minor surgical procedure, with risk similar to any minor surgical procedure.
- Some men have a little pain, soreness, bruising, or swelling after vasectomy. These problems usually go away by themselves or with simple treatment or pain medicine. There is a small chance that the operation will not succeed and the man's partner may become pregnant.
- It is considered irreversible.
- Requires specialized training, aseptic conditions, medications, and clinical assistance.
- Is not immediately effective; must use another contraceptive method for the first 20 ejaculations or the first 3 months—whichever comes first.

Side effects and complications occasionally occur:

- Bleeding at the incision site or internal
- Infection at the incision site or internally
- Injury to abdominal organs
- Pain and skin discoloration in area of incision
- Swelling and discoloration of scrotum

- Blood clots in scrotum

3.3.5. Emergency family planning methods

Despite the availability of highly effective methods of contraception, many pregnancies are unplanned and unwanted. Many of these unplanned pregnancies can be avoided by using family planning. Family planning is the use of either hormonal pills (estrogen and progestin or progestin alone) or a copper-bearing IUCD to prevent an unintended pregnancy following exposure to unprotected intercourse.

Emergency contraceptive pills (ECPs) are hormonal methods of contraception that can be used to prevent pregnancy following an unprotected act of sexual intercourse.

ECPs are sometimes referred to as “morning after” or “postcoital” pills.These terms have been replaced by the term “emergency contraceptive pills” because they do not accurately convey the correct timing of use. ECPs can be used up to five days following unprotected intercourse (120 hours). ECPs should not be used as a regular or on-going method of contraception. They are intended for “emergency” use only.

Two types of emergency contraceptive pills:

- Pills containing a combination of a progestin (levonorgestrel or norgestrel) and an estrogen (ethinyl estradiol).
- Pills containing a progestin only (levonorgestrel or norgestrel).

  Mechanism of action:

  - ECPs are thought to prevent ovulation, fertilization, and/or implantation. ECPs are not effective once the process of implantation of a fertilized ovum has begun.
  - ECPs will not cause an abortion and have no known adverse effects on (the growth and development of) an established pregnancy.

Overall, ECPs are less effective than regular contraceptive methods. Because the ECP pregnancy rate is based on a onetime use, it cannot be directly compared to failure rates of regular contraceptives, which represent the risk of failure during a full year of use. If ECPs were to be used frequently, the failure rate during a full year of use would be higher than those of regular hormonal contraceptives. Therefore, ECPs are not recommended for regular use. Additional factors determining effectiveness are

timing of the two doses and exposure to repeated unprotected intercourse following ECP therapy before the return of menses.

IUCD

IUCDs are highly effective as ECs. After unprotected sexual intercourse, less than 1% of women are reported to become pregnant if they use a copper releasing IUCD as an EC.

Safety:

- The short exposure to estrogens and/or progestins does not appear to increase
- women's risk for blood clots as may occur with longer use of combined oral contraceptives (COCs).
- Hormones in ECPs (as well as in other COCs or POPs) have not been associated
- with any fetal malformations or congenital defects, so if woman who is already pregnant accidentally uses ECPs, it is not harmful.
- ECPs do not increase woman's risk for ectopic pregnancy.

  When to Use Emergency Contraception:

  ECPs are indicated to prevent pregnancy within five days (120 hours) of unprotected sexual intercourse, including:

  - When no contraceptive has been used.
  - When there is a contraceptive accident or misuse, including:
- Condom rupture, slippage, or misuse.
- Diaphragm or cap dislodgment, breakage or tearing, or early removal.
- Failed coitus interruptus, withdrawal, (e.g. Ejaculation in vagina or on external genitalia).
- Miscalculation of the periodic abstinence method.
- IUCD expulsion.
- Returned for DMPA injection later than four weeks
- After sexual assault.

IUCD as an EC is indicated when:

- Within 7 days of unprotected intercourse. .
- When the time of ovulation can be estimated, she can have an IUCD inserted up
- to 5 days after ovulation, even if it is more than 5 days after unprotected intercourse.
- The client prefers using an IUCD for continuous, long-term contraception.

Eligible Clients to Use IUCD as an EC

Screening

- Check if woman is within 12 days from the start of her monthly bleeding.
- If more than 12 days have passed, check if her only unprotected intercourse was not more than 7 days ago.
- Screen for conditions which may preclude safe IUCD insertion (as described in the section on IUCD)
- Record the medical and gynecological history.
- Record present illnesses, including history of STIs and risk factors for STIs, such as multiple sexual partners.

Common side effects and their management

Nausea:

- To minimize nausea and vomiting, use progestin-only ECPs whenever possible, instead of COCs. Progestin-only regime is also more effective as well as better tolerated.

Vomiting:

If vomiting occurs within one hours of taking ECPs, the dose should be repeated. In cases of severe vomiting, vaginal administration of the pills can be used.

Irregular uterine bleeding:

Inform women that ECPs do not bring on menses immediately. Her next menstrual period may start a few days earlier or later than expected. If there is a delay in menstruation of more than one week, a pregnancy test should be performed.

Other side effects of ECP use include breast tenderness, headache, abdominal pain, dizziness, and fatigue. These side effects usually do not last more than a few days after treatment and most do not last more than 24 hours.

Instructions to client using IUCD:

- Advise the client that cramping or pain may occur for the first 24-48 hours after insertion of the device. If she experiences this, she should take pain-relief tablets such as aspirin, ibuprofen or paracetamol.
- If the client does not plan to keep the IUCD for regular contraception, instruct her to come back during or soon after menstruation for removal of IUCD and initiation of her preferred contraceptive method.
- If the client plans to keep the IUCD for regular contraception, inform her that: some bleeding or spotting may occur immediately after insertion and spotting may continue for the next few months.
- Vaginal discharge may occur during the first few weeks. This should not be cause for concern.
- She should return to the clinic, if she is experiencing any of the following signs and symptoms which might, indicate possible complications: fever and/or chills; pelvic pain or tenderness; purulent vaginal discharge, excessive abnormal bleeding absence of menses, or if the IUCD thread cannot be felt.
- She should use condoms to protect herself from the risk of STIs, including HIV.

Self-Check -3 **Written Test**

- **I- Multiple Choices: Choose the best answer**.

1. One of the following is very safe if done using a strict aseptic technique
   A. Vasectomy
   B. Tubal ligation
   C. Female Sterilization
   D. All
2. W/c one of the following is **Not** advantages of vasectomy
   A. Vasectomy has very low mortality and morbidity
   B. Vasectomy can be performed at any time
   C. Vasectomy is simple and safe.

D. It is considered irreversible

ANSWER SHEET

Name: _____ Date: _____

I - **Multiple choices**

1._____

2. _____

3.3.5**. Postpartum and post- abortion family planning**

Post partum family planning is the initiation and use of family planning methods in the first year after delivery to prevent unintended pregnancy particularly in the first 1-2 years after childbirth, when another pregnancy can be harmful to the mother or a breastfeeding baby.

The initiation of family planning during the period following delivery includes:

- Post-placental insertion of IUCD- within 10 minutes following delivery of the placenta.
- Immediate post partum -within 48 hours after delivery (usually performing VSC or inserting an IUCD)
- Postpartum before discharge(PPBD) –within 48 hours after delivery and before the woman leaves the facility where she delivered
- Early postpartum period – 48 hours to 6 weeks after delivery
- Extended postpartum – beyond the 6 weeks after delivery up to one year

Post-abortion family planning

Post-abortion family planning is the initiation and use of family planning methods, most often immediately after treatment for abortion - within 48 hours, or before fertility returns (2 weeks post abortion).

The aim is to prevent unintended pregnancies, particularly for women who do not want to be pregnant and may undergo a subsequent unsafe abortion if contraception is not made available during this brief and vulnerable interval.

Postpartum Infertility

During pregnancy, ovulation is suppressed.

After the delivery of the placenta, the inhibiting effects of estrogen and progesterone are removed so that levels of Follicle Stimulating Hormone and Luteinizing Hormone gradually rise and ovarian function begins again.

Most non-lactating women resume menses within four to six weeks of delivery; however, approximately 33% of first cycles are an ovulatory and a high proportion of first ovulatory cycles have luteal-phase defects; therefore pregnancy is less likely than with normal cycles. In non-lactating women, the first ovulation occurs on average around 45 days postpartum.

Postpartum:

During the early postpartum period, a combination of abstinence and/or lactational amenorrhea may prevent the woman from conceiving. However, many women at risk for pregnancy are not using contraception.

Despite the documented demand for postpartum contraception, many postpartum women do not receive the family planning information or services they need to delay or prevent subsequent pregnancies. About half of the postpartum women who want family planning do not succeed in starting a method in the first year after delivery, clearly an unmet need that puts women and their babies at risk due to unintended, untimely pregnancy.

Post-abortion

Many women are trapped in a cycle of repeated unwanted pregnancy and abortion (either safe or unsafe). Although the importance of linking the treatment of incomplete abortion care and family planning services is well documented, in many countries they are not offered together. This results in:

- Women being denied convenient access to the means of preventing future unwanted pregnancies.
- A lack of comprehensive reproductive health services linking family planning, post abortion care, and treatment for infertility and sexually transmitted infections.

3.9. Managing side effects

Side-effect & its management of spermicidal

Vaginal irritation	▪ Check for vaginitis and GTIs. If caused by spermicide, switch to another spermicide with a different chemical composition or help client choose another method.
Penile irritation and discomfort	▪ Check for GTIs. If caused by spermicide, switch to another spermicide with a different chemical composition or help client choose another method.

Side-effect & its management of diaphragm

Urinary tract infections (UTIs)	▪ Treat with appropriate antibiotic. If client has frequent UTIs and diaphragm remains her first choice for contraception, advise emptying bladder (voiding) immediately after intercourse.
Suspected allergic reaction (diaphragm)	▪ Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous. If symptoms of vaginal irritation, especially after intercourse and no evidence of GTI, help client choose another method.
Suspected allergic reaction (spermicide)	▪ Allergic reactions, although uncommon, can be uncomfortable and possibly dangerous. If symptoms of vaginal irritation, especially after intercourse and no evidence of GTI, provide another spermicide or help client choose another method.
Vaginal discharge and odor if left in place for more than 24 hours	▪ Check for GTI or foreign body in vagina (tampon, etc.). If no GTI or foreign body is present, advise client to remove diaphragm but not less than 6 hours after last act. (Diaphragm should be gently cleaned with mild soap and water after removal.

Side-effect & its management of COCs

Nausea and dizziness	▪ Assess for pregnancy; counsel about side effects, advise to take pills with meals or at a bed time.

Irregular bleeding	▪ If irregular bleeding continues beyond the first three months or starts after several months of regular cycles, assess for other possible causes (infection, cancer, or other gynecological conditions) ▪ Encourage to take pills at the same time each day. ▪ For modest short-term relief, use 800 mg ibuprofen 3 times daily after meals for 5 days or other non-steroidal anti-inflammatory drug (NSAID), beginning when irregular bleeding starts.
Amenorrhea	▪ Assess for pregnancy; if negative, counsel that this is one of the side effects of COC use.
Breast tenderness	▪ Recommend that the woman wear a supportive bra (including during strenuous activity and sleep). ▪ Try hot or cold compresses. ▪ Suggest aspirin (325–650 mg), ibuprofen (200–400 mg),paracetamol (325–1000 mg), or other pain reliever.

Side-effect & its management of POPs

Amenorrhea:	▪ Reassure that amenorrhea is a common side effect of POPs, especially if she is breastfeeding. If she is not breastfeeding and there are reasons to suspect pregnancy (e.g. she missed pills), assess for pregnancy. If pregnant, stop use of POPs and discuss on subsequent actions; if not pregnant, reassure and continue POPs.
Abnormal vaginal Bleeding:	▪ Client should be evaluated (refer as necessary), including VIA/ VILI and Pap Smear; refer as necessary for management.
Headache&	▪ Painkillers can be taken for pain relief. If developed, or

dizziness:	worsened while taking POPs, determine cause. If no cause, counsel; if severe and no cause help client select alternative method; refer if persistent.
Mood changes or nervousness:	▪ Counsel; if it worsens, help client select alternative methods.

3.10. Misconceptions and compliance

4. Misconceptions can lead to discontinuation of FP methods. Thus, correcting misconceptions is an important step in ensuring continued use.

If clients understand why misconceptions are untrue, they are more likely to believe the correct information.

A Client's Misconception:

- Ask clients what they have heard about FP methods and what concerns they have about the methods.
- Take the client's concern or misconception seriously.
- Try to find out where the client heard the misconception or rumor.
- Explain tactfully why the misconception or rumor is not true.
- Find out what the client needs to know to have confidence in the FP method. Find out who the client will believe.
- Give the correct information. Be aware of traditional beliefs about health because they can help you both understand rumors and explain health matters in ways that clients can more easily understand and accept.
- Encourage clients to check with a service provider if they are not sure about what they hear about their method of choice or other methods after they leave the health care facility.

3.11. Counseling and follow ups

Family planning counseling is defined as a continuous process that you as the counselor provide to help clients and people in your village make and arrive at informed choices about the size of their family i.e. the number of children they wish to have.

In order to allow people to make an informed choice about family planning, you must make them aware of all the available methods, and the advantages and disadvantages of each. They should know how to use the chosen method safely and effectively, as well as understanding possible side-effects.

Information should be provided regarding all available methods of contraception, advantages of each method, and expected contraceptive side effect, as well as the steps to be taken if and when the clients have side effects. Knowledge of the common misconceptions about each method is an added advantage to the counselor and efforts should be made to address clients concerns and fears about specific methods.

FP workers should ensure confidentiality and privacy to potential clients. After counseling on all available methods, clients should be helped to make an informed decision.

There are the important principles and conditions necessary for effective counseling:

- Privacy — find a quiet place to talk.
- Take sufficient time.
- Maintain confidentiality.
- Conduct the discussion in a helpful atmosphere.
- Keep it simple — use words people in your village will understand.
- First things first — do not cause confusion by giving too much information.
- Say it again — repeat the most important instructions again and again.
- Use available visual aids like posters and flip charts, etc.

Follow-up counseling is to discuss and manage any problems and side effects related to the given contraceptive method. This also gives you the opportunity to encourage the continued use of the chosen method, unless problems exist.

Operation sheet -1	**Implanon insertion**

Procedure:

Step 1: Greet client respectfully and with kindness.

Step 2: Review Client Screening Checklist and further evaluate client,

Step 3: Tell client what is going to be done and encourage her to ask questions.

Step 4: Ask about allergies to antiseptic solution and local anesthetic agent.

Step 5: Check to be sure client has thoroughly washed and dried her entire arm.

Step 6: Help position and allow the client on table to lie on her back with her non-dominant arm (the arm, which the woman does not use for carrying pitcher or for writing) on the arm rest of the table turned outwards and bent at the elbow.

Step 7: Determine insertion site at the inner side of the upper arm (non-dominant arm) about 6-8 cm above the elbow

Step 8: Mark the insertion site on arm with a marker/pen (optional)

Step 9: Open sterile Implanon package by pulling apart sheets of the pouch completely without touching the preloaded applicator and place on the work table.

10: Carefully remove the sterile disposable applicator carrying Implanon rod from the sterile blister and remove the needle cap/shield.

Step 11: Always hold the applicator in the upward position (i.e. with the needle pointed upwards) until the time of insertion. This precaution is to prevent the implant from dropping out.

Step 12: Visually verify the presence of the implant inside the metal part of the cannula (the needle). The implant can be seen as a white tip inside the needle. If the implant protrudes from the needle, return to its original position by tapping against the plastic part of the cannula.

Note: Keep the needle and the implant sterile. Do not touch the needle of the cannula or the implant inside the applicator with anything, including client skin before insertion. If contamination occurs, a new package with a new sterile applicator must be used.

Step 13: Stretch the skin around the insertion site with thumb and index

Self-Check -4 **Written Test**

I- Multiple Choices: Choose the best answer (more than one answer may be correct)

1. Which of the following is/are traditional family planning method(s):

A. Lactational ammenorrhea

B. Calendar method

C. Rhythm method

D. Basal body temperature method

E. Abstinence?

2. The common types of combined oralcontraceptive pills in Ethiopia:

A. Have 21 hormonal pills in each pack

B. Are biphasic

C. Are monophasic

D. Are multiphase

E. Have the same amount of progesterone and estrogen.

3. Advantage/s of COCs include:

A. Trained non medical person can provide them

B. They are user dependant

C. They are highly effective when used correctly

D. They do not protect against STDs

E. They are convenient and easy to use.

4. Minipills contain:

A. Only estrogen

B. Only progesterone

C. Both estrogen and progesterone equally

D. More progesterone than estrogen

E. More estrogen than progesterone.

5. The preferable contraceptive method for breast feeding mother is:

A. Depo-provera

B. IUCD

C. Progesterone only pills

D. High estrogenic pills

E. Combined oral contraceptive pills.

ANSWER SHEET

Name: _____ Date: _____

I - **Multiple choices**

1. _____
2. _____
3. _____
4. _____
5. _____

Reference:

1. Federal Democratic Republic of Ethiopia Ministry Of Health 2012, Participant‘s Handout Basics in Family Planning and Short acting Family Planning Methods
2. Federal Democratic Republic of Ethiopia Ministry Of Health 2012, Participant‘s Handout, counseling for family planning use

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