
UNIT 25 CONVENTIONAL CONTRACEPTIVE METHODS

Structure

- 25.0 Objectives
- 25.1 Introduction
- 25.2 Guidelines for Dealing with Clientels
- 25.3 Natural Methods of Contraception
- 25.4 Barrier Contraception
 - 25.4.1 Condom
 - 25.4.2 Vaginal Contraceptives
 - 25.4.3 Vaginal Contraceptive Sponge (Today)
 - 25.4.4 Diaphragm
 - 25.4.5 Cervical Vault/Cap
- 25.5 Non-hormonal Oral Contraception (Centchroman)
 - 25.5.1 Pharmacology of Centchroman
 - 25.5.2 Counselling
 - 25.5.3 Client Selection
 - 25.5.4 Guidelines for Instruction and Follow Up
- 25.6 Factors Affecting Contraceptive Efficacy
- 25.7 Newer Methods of Barrier Contraception
- 25.8 Let Us Sum Up
- 25.9 Answers to Check Your Progress
- 25.10 Further Readings

25.0 OBJECTIVES

After reading this unit, you should be able to:

- follow the general guidelines for the family planning visit;
- enumerate various methods of conventional contraception;
- describe the mode of action, advantages, disadvantages and side effects of above methods;
- advise on the practical use of above methods;
- schedule follow up visits and do follow up of clients; and
- treat side effects/change to other methods if required.

25.1 INTRODUCTION

The risk associated with contraception are much less than risk of pregnancy and childbirth. Though risks of medical termination of pregnancy (MTP) is more than that of the contraception, still, its risk is less than pregnancy complications and childbirth. Many women who say they have completed their desired family size do not practice contraception in spite of awareness about various contraceptive methods. This may be due to lack of access to health facilities, poor quality of services offered or due to socio-cultural reasons. Some of these problems can be tackled at your level to enable women to have their choice of contraception method to avoid unwanted pregnancies. This may also

enable women to use contraceptive methods rather than opting for medical termination of pregnancy as a contraceptive method as is practiced by many clients these days.

Contraception includes all methods used to prevent conception and thus regulate fertility. Each method prevents pregnancy in a different way and no one choice will suit every woman. These methods can be broadly classified into:

- a) reversible for delaying first pregnancy or spacing; and
- b) irreversible for permanent contraception after achieving the desired family size.

You have already learnt the benefits of family planning in Unit 24 of this block. In this unit, we will discuss how conventional methods of birth control works, their advantages and disadvantages and effectiveness. Conventional Methods include natural methods and barrier methods. For the sake of Convenience non-hormonal oral contraceptive is included in this unit.

25.2 GUIDELINES FOR DEALING WITH CLIENTELS

You may follow the steps explained below during the client's first family planning visit or any time the client wishes to change her contraceptive methods.

The important first step to follow are summarised below:

- Greet the client, offer her a seat, make her comfortable, tell your name and ask for her name.
- Establish support, show concern, respect privacy and confidentiality.
- Let her get the feeling that you are there to help her.
- Ask what MCH/FP services she/he is seeking.
- Explain what will happen from beginning to the end of the visit.
- Discuss all available methods so the client can make an informed choice.
- Follow procedures for the specific method chosen.

Subsequent steps, once the client has chosen any of the one method are as follows:

- Step 1** Discuss the client's past experience with the method. If she has no past experience with the method, discuss and clarify any rumors or mistaken ideas the client may have about the method.
- Step 2** Explain in detail what the method is and how it works. If appropriate, a sample can be provided. She may examine it and handle it. Encourage her to ask questions or any clarification about any information you have provided.
- Step 3** Describe the advantages and disadvantages of the method both contraceptive and non-contraceptive. Encourage her to remove doubts about disadvantages.
- Step 4** Explain the appropriateness of the method for the client through history and physical examination.

After history and examination, if the method is not appropriate, inform her why the method is not appropriate for her. Help the client make an informed choice of another appropriate method.

- Step 5** Insert, fit or inject the method.

Be sure that the timing is correct. If the timing is not, explain the problems that can arise. Prepare the necessary equipment, explain to the client what will be done. Observe aseptic techniques and reassure to the client after completing the procedure that everything has gone as per the plans.

- Step 6** Explain the instructions to the client for use of the method. Encourage to repeat the 40 instructions in their own words. If she has misunderstood or omitted any instruction, go over the information again with her.
- Step 7** Plan for the return visit. Explain and schedule the next visit. Remind client about warning signals and tell them to return sooner than planned in case of presence of warning signals.
- Step 8** Follow procedures for the return visit.
- Ask during the follow up visit, whether they are happy with their chosen method.
- For satisfied clients, ensure that the instructions are followed correctly for the use of the method.
 - Remind warning signals again.
 - Dispense supplies where appropriate.
 - Plan for next return visit.
 - For dissatisfied clients, manage the side effects as necessary or remove the method and help the client to make an informed choice of another method.

25.3 NATURAL METHODS OF CONTRACEPTION

The following methods are included in the natural methods of contraception:

- a) Breastfeeding.
- b) Customary separation or abstinence of marital partners after birth of baby.
- c) Sex without penile vaginal intercourse.
- d) Coitus interruptus (Withdrawal method)
- e) Fertility awareness methods

a) **Breastfeeding**

Breastfeeding can be used as an effective method of contraception for 6 months provided she practices exclusive breastfeeding i.e. no substitute breastmilk and interval between feeds not more than 6 hours and menstrual period has not returned. (Bleeding in the first 56 days post partum is not considered menstrual bleeding).

Mechanism of action: Frequent sucking causes high level of prolactin secretion in the mother. High level of prolactin is associated with suppression of ovulation. After 6 months, many women will begin to ovulate even if their menses have not returned. Hence breastfeeding can no longer be effective after 6 months post partum.

Effectiveness: 98% during first 6 months post partum if menses have not resumed and if she is providing exclusive breastfeeding.

Advantages: Economical, effective if used properly, promotes bonding between mother and baby.

Disadvantages: Effectiveness greatly decreases in following situations:

- When breastfeeding is no longer exclusive (i.e. liquids or food are substituted for a breast meal) or any two breastfeeding are more than 6 hours apart.
- After 6 months post partum even if amenorrhoeic.
- When menses returns.

b) **Customary Separation or Abstinence of Marital Partners after Birth of Baby**

In certain communities, by observing social customs, the separation of marital partners after birth of baby for varying periods, conception is avoided.

Mechanism of action: By abstinence

Effectiveness: 100%

Advantages: Mother can devote more time to baby and regain her strength. The baby, develops greater closeness to mother.

Disadvantages: May not be conducive to modern pattern of living. May disrupt marital relationship.

c) **Sex Without Penile Vaginal Intercourse**

Expression of caring and fondness of partners without penis in or near the vagina e.g. touching, feeling, hugging, masturbating.

Mechanism of action: Sperms never reach the vagina.

Effectiveness: 100%

Advantages: No possibility of pregnancy if ejaculation does not occur in or near the vagina-(e.g. between thighs). Can be practiced when there is pain, infection being treated or after surgery. Offer protection against STD and AIDS.

Disadvantages: Objection by one or both the partners.

d) **Coitus Interruptus (Withdrawal Method)**

During sexual intercourse, erect penis is withdrawn just before ejaculation. Semen is discharged outside the vagina. It is the widely practiced method all over the world, in all cultures and by people of all regions.

Mechanism of action: It works by depositing the sperms outside the vagina.

Effectiveness: 70-85%. High failure rate is due to deposition of sperm through pre-ejaculate secretions or occasionally deposition of small quantity of semen in vagina before withdrawal.

Advantages: Acceptable to many religious groups and societies, cost effective and used widely all over the world. Responsibility for contraception is shared by the male partner. No physical side effects are caused.

Disadvantages: Not suitable for those with premature ejaculation, who cannot control their build up to ejaculate and the adolescents. It does not offer protection against STD, AIDS.

e) **Fertility Awareness Methods**

Women learn to recognize the fertile days of the menstrual cycle over several months and avoid intercourse or use the barrier methods on those days. Fertility awareness methods include the following:

- i) Calendar method
- ii) BBT (Basal Body Temperature)
- iii) Cervical mucous method
- iv) Sympto-thermal method.

Mechanism of Action: Fertilisation is avoided by abstinence or, when barrier method is used, preventing the sperm from entering the cervix and uterus during the fertile phase of the cycle.

Effectiveness: 80-90%. It increases up to 98% if intercourse is avoided during first half of cycle and until 48 hours after ovulation.

Advantages: No physical side effects; free and inexpensive, responsibility shared by both partners, acceptable to all religions and cultures; effectiveness and use increased by using with barrier method during pre-ovulatory phase (first half of cycle) and fertile period. Training the couple in these methods also increases awareness and knowledge about reproduction.

Disadvantages: It does not offer protection against STD and AIDS. Training in the method by a counsellor is required for 3-6 months, careful records need to be kept initially.

Abstinence need to be practiced for 10-15 days each cycle or use barrier method during this period. Demand commitment from both partners. It is not effective with irregular cycle and infection. Spermicidal use interfere with mucous method. Febrile conditions interfere with BBT method.

Selection of Clientele: Fertility awareness method requires conscientious adherence and a commitment to abstinence by both partners. They should be used only after the woman is able to identify her fertile period. The practicing couple must recognize that the methods have high failure rates.

Selection of Procedure: The periodic abstinence depends on the couple's ability to learn the method and willingness to adhere to it. The temperature (BBT) or mucous method and sympto-thermal method are more reliable than the calendar method alone.

- a) **Calendar (Rhythm) method:** The woman keeps record of 6 menstrual cycles and then calculate the fertile days. From the record, the longest and shortest cycles are chosen. Subtract 20 from the shortest cycle and 10 from the longest cycle (some use 18 and 11 days respectively) e.g. shortest cycle is 26 days and longest cycle is 34 days (26-20=6 and 34-10=24). So abstinence or barrier method has to be practiced from day 6 to day 24 of the cycle.
- b) **Basal body temperature (BBT):** This method identifies the day of ovulation but not the beginning of fertile period. Hence, for the effectiveness of this method, intercourse is to be avoided during first half of cycle until 3 days after the temperature has risen; or use backup barrier method. Record the temperature every morning before getting up from bed as soon as the woman is awake. The special BBT thermometer is useful. Record tile temperature on BBT chart as a dot and connect the dots with a line. When BBT has risen 0.2-0.5° F and remains elevated for 3 days, the fertile phase is over.
- c) **Cervical mucous method:** Fertile period is indicated by a sensation of wetness at vulva or when mucous is observed. To observe mucous, one can wipe vulva with a tissue paper when one feels or sees mucous unless tile partner uses condom till 4 days after the peak symptom day. Peak symptom day is the day of maximum mucous. During period, sex is to be avoided as blood may mask mucous. If unsure of presence of mucous, use of condom by male partner is essential. Spermicides, vaginal infection, drugs and intercourse can affect normal pattern of a woman's cervical mucous. Mucous can be recorded on a daily basis in a chart.
- d) **Sympto-thermal method:** This method combines cervical mucous method and BBT. Beginning of fertile period is indicated by cervical mucous or even by calendar method and the end of fertile period by BBT. Fertile period ends 4 days after peak mucous or 3 days after sustained rise of BBT whichever is later.

Check Your Progress 1

- 1) List three natural methods of contraception.

.....

.....

.....

.....

.....

2) Name the fertility awareness methods.

.....
.....
.....
.....

3) Under what conditions can breastfeeding be used as an effective contraceptive method?

.....
.....
.....

25.4 BARRIER CONTRACEPTION

You may be already aware that the most important non-contraceptive benefit of family planning is reducing the spread of HIV transmission. Prevention of HIV transmission is currently the only hope of reducing spread of AIDS. Barrier methods of contraception especially condoms and also spermicide help preventing HIV transmission during intercourse. Barrier contraceptives cause virtually no health problems, yet provide protection against STD and AIDS. They also protect against some of the consequences of STDs including infertility, ectopic pregnancy and cervical cancer.

Barrier contraception that will be described in this section include the following:

- a) Condom (Male barrier contraception)
- b) Vaginal contraceptives
- c) Vaginal contraceptive sponge (today)
- d) Diaphragm

25.4.1 Condom

It is a sheet of rubber which is put on the hard erect penis immediately before intercourse. It collects the semen and prevents the sperm from entering the women’s vagina. About 1 cm. of condom is left slack to hold the semen (condom with a teat). After ejaculation, as penis is withdrawn, the condom is hold at the base of the penis to prevent it from slipping off and spilling the semen. A new condom must be used during each act of intercourse.

Mechanism of action: It prevents disposition of sperm in the vagina.

Effectiveness: 88-98%. Effectiveness increases to 98% if used with a spermicide.

Advantages: Easily available, easy to carry; cheap; protects against STD and AIDS; ensures male participation; no prescription is needed; no systemic side effects; help men with premature ejaculation; effective when used with a spermicide, help in prevention of cancer cervix in female partner.

Disadvantages: Interrupts sexual intercourse as condom has to be put on an erect penis. Penile sensitivity sometime decreases unless it is used with a water based lubricant. It may tear off or slip off during intercourse and can fall if not removed correctly. Latex condoms are damaged by any oil based lubricants. Condom may deteriorate in too much heat or light or if stored for more than 3 years.

Selection of condom: Condoms are available in large variety of sizes, thickness, colours, textures as well as in the form of lubricated or non-lubricated. Warning signs that a user should know is that if he is allergic to latex or lubricants, local irritation could occur.

Condom is best indicated under the following conditions:

- Best for partners at risk of exposure to STD's and AIDS.
- As a backup method, when pills are forgotten for more than 2 days.
- When other effective methods are contraindicated for a woman e.g. heart disease, liver disease, or the woman is unwilling to use other effective methods.
- Woman who is breastfeeding and needs a contraceptive.

Common brands of condoms available in India are:

Brand	Pieces/pack	Owner	Price per pack (in Rs.)
Nirodh	3's	Govt. of India	0.50
Nirodh Deluxe	5's	Govt. of India	1.50
Nirodh Super Deluxe	4's	Govt. of India	3.00
Sawan	4's	Parivar Sewa Sanstha	3.00
Sawan	10's	Parivar Sewa Sanstha	6.00
Bliss	4's	Parivar Sewa Sanstha	6.00
Masti	4's	Internationa Population Service	6.00
Masti	10's	Internationa Population Service	7.00

25.4.2 Vaginal Contraceptives

All the vaginal contraceptives i.e. foams, creams, jellies, tablets and suppositories are chemical substances containing spermicides. Before intercourse, the contraceptive is inserted into the vagina where it spreads over vagina and cervix. They inactivate sperm and mechanically prevent sperm from entering cervix and uterus.

Mechanism of action: Spermicides used in vaginal contraceptives is non-oxanol 9 which inactivates the sperm and mechanically prevents sperm from entering uterus.

Effectiveness: For all types of vaginal contraceptives, it is about 79-97%

Advantages: Being chemical agents, protect against certain STDs and AIDS; inexpensive, can be used by most women, do not require prescription.

Disadvantages: Vaginal contraception is a relatively unreliable method which must be used 10-15 minutes before each act of intercourse; may interrupt spontaneity of sexual intercourse; in rare cases cause genital irritation. Some client complain about the messiness of the method. If not used exactly as directed, the products may not form a good barrier to the cervix and uterus.

Selection of procedure: Foams are considered less messy and slightly more reliable than jellies and creams. Tablets and suppositories are reliable but must be used 10-15 minutes before each intercourse. Warning signs that a user should know is that genital irritation may indicate an allergic reaction.

25.4.3 Vaginal Contraceptive Sponge (Today)

Vaginal contraceptive sponge is soft, round, about 2" in diameter, and made of a synthetic substance impregnated with spermicide. Before intercourse, the sponge is moistened with water to activate the spermicide and inserted in the vagina to cover the cervix. The spermicide halts sperm activity and sponge acts as a barrier to block sperm from entering the uterus. Sponge is used for one time use only over a 24 hour period. It is never reused or used during menstruation.

Mechanism of action: Spermicide halts sperm activity and sponge acts as a barrier to sperm from entering cervix and uterus.

Effectiveness: 7.2-97%.

Advantages: Sponge is easy to insert and may be inserted immediately prior to intercourse. Intercourse may be repeated within a 24 hour period. It may protect against certain Sills. No fitting is required. It can be purchased without prescription.

Disadvantages: Sponge can cause an allergic reaction which disappear when sponge is discontinued. Removal problem can occur. If the loop cannot be located or if the sponge cannot be found or removed or if it breaks, it should be medically removed (removed by a health care provider). Sponge is never left in the vagina for more than 24 hours and is never used during menstruation.

Selection of clientele: Any woman who can use a tampon can use sponge. Women with short, finger may have problem in insertion and removal. Local irritation may occur in some women. Risk of pregnancy is high in women with lax vaginal walls and pelvic relaxation.

Selection of method: Only one brand of sponge is available today. Warning signs that a user should know is that she should seek medical care if local irritation occurs, has persistent unpleasant odor: has unusual discharge from vagina.

25.4.4 Diaphragm

It is a soft rubber cap with a stiff but flexible rim around the edge. Contraceptive cream or jelly is put on the surface which surrounds the cervix. Diaphragm is inserted in the woman's vagina before intercourse. Diaphragm covers the entrance to uterus and the crease/jelly halt sperm movement. The user must be carefully fit for the diaphragm and should be trained to put it in vagina and take it out. It should remain in place at least 6 hours after sex. If sex is repeated after 6 hours, additional jelly/cream is to be applied without removing the diaphragm. It should not be worn for more than 24 hours. Diaphragm must be periodically checked to determine that the rubber has not deteriorated or ripped and the size is still correct. Size of uterus changes after full term pregnancy, abortion beyond 3 months pregnancy, pelvic surgery or with weight change of 10 lbs or more.

Mechanism of action: Diaphragm lies diagonally across the cervix, vaginal vault and muscles of anterior vaginal wall. It acts as a barrier to the receptive alkaline cervical mucus and the cream/jelly acts as a blockade to sperm movement. Thus sperms are prevented from entering uterus.

Effectiveness: 72-97%.

Advantages: The diaphragm has no dangerous side effects; can be inserted well in advance of the beginning of sexual activity: is reliable if used conscientiously and properly. It appears to protect against certain STDs and cervical cancer.

Disadvantages: Some women who use diaphragm are more prone to urinary infection. Allergic reaction to rubber, cream/jelly can occur. Women with short finger may need an insertion: diaphragm may become dislodged during intercourse if woman is on top or she has relaxed vagina due to prior childbirth. The diaphragm must be cleaned and checked for weak spots or pinholes from tune to tune and diaphragm must be periodically replaced. Cultural aversion to touching genital area may limit its popularity.

Selection of clientele: Diaphragm should not be recommended to women with poor vaginal muscle tone, relaxed vaginal wall, uterine prolapse and vaginal obstructions.

Selection of procedure: Diaphragm requires fitting and use with a spermicide. Warning signs that a user should know are—Local irritation due to allergic to rubber germ or jelly may develop: urinary treat symptoms may be a sign of infection.

25.4.5 Cervical Vault/Caps

The cervical vault/caps are meant to stay in place by suction which makes it possible that barrier effect is more important to their contraceptive action than is the case with diaphragm. They can be used for woman with poor muscle tone. They are unlikely to produce urinary symptoms. Fitting is unaffected by changes in size of vagina or due to change in body weight. The cervix must be healthy and not torn. Cervical/Vault caps are

also used after applying spermicidal jelly/cream around the inside and along the rim. The cervical cap should remain in; place for at least 8 hours after sex and cap should remain in place up to 48 hours. Wearing diaphragm and cervical/vault cap are no longer recommended because of possible risk of toxic shock syndrome.

Check Your Progress 2

1) Enumerate the barrier contraceptive methods.

.....
.....
.....

2) List four important advantages of condom.

.....
.....
.....
.....

3) Name the spermicidal agent used in contraceptive creams, jelly and sponge.

.....
.....
.....

25.5 NON-HORMONAL ORAL CONTRACEPTION (CENTCHROMAN)

25.5.1 Pharmacology of Centchroman

Centchroman is a non-steroidal, once-a-week contraceptive developed by the Central Drug Research Institute, Lucknow. Many years of research has shown that the drug is very effective in preventing pregnancy and has minimal side effects. The product was made available in the market at a subsidised price by Hindustan Latex Limited, a public sector undertaking, under the trade name “Saheli”. The product is one of the socially marketed contraceptives of the Government of India.

The product, initially introduced in Uttar Pradesh and Delhi, was made available in other parts of India. The post-marketing surveillance study of 1996, done all over the country, involving senior obstetricians and gynaecologists, has shown that about 100,000 women have been using ‘Saheli’ and have not reported any serious side effects. The increasing acceptability of the method has prompted large scale community based studies in other areas of India such as the study in Medak in Andhra Pradesh. The findings of the study have further corroborated the earlier findings about efficacy of the product and fewer side effects.

Mechanism of Action

Centchroman acts by inhibition of implantation of embryo in the uterus. Synchrony between the development of embryo and its movement into uterine cavity and the changes in the uterine lining is essential for implantation of the embryo.

Centchroman acts by:

i) Suppression of uterine proliferation and decidualisation and alteration of biochemical parameters of implantation

Family Planning

- ii) Mild stimulation in tubal transport of embryo (that causes the embryo to move into the uterine cavity before it is ready to receive the embryo) and blastocyst development and delayed shedding of Zona Pellucida (the covering of the ovum)

The above changes cause asynchrony between the embryo and changes in the uterus, critical for nidation (embedding)

Effectiveness

It is very effective when taken correctly and consistently. The failure rate is 1-2 per 100 women years of use.

Advantages of Centchroman

- i) It is a non-steroidal contraceptive
- ii) Very effective
- iii) Minimal side effects as it is non-steroidal, has no effect on ovulation and does not cause any hormonal change

Disadvantages

- i) Once-a-week pill, hence the chances of forgetting the pill are higher
- ii) Menstrual changes such as delayed menses
- iii) More expensive than COC
- iv) Fertility returns only after six months of stopping the pill

25.5.2 Counselling

a) *Method-specific Counselling*

Once a client has chosen Centchroman for family planning, then method specific counselling is done as follows. Counselling is done every time a client comes for re- supply. Ensure that privacy and confidentiality are maintained all the time. Wherever possible spouse/ partners should be counselled.

- i) Establish rapport with the client.
- ii) Ask the client whether she has heard about Centchroman ('Saheli'). If she knows about Centchroman, ask about rumours (if any) and past experience with Centchroman (in case of clients who have used the pill)
- iii) Provide information as relevant and clarify doubts. If the client is new, repeat the information on the following. Show a Racket of Centchroman.
 - Mechanism of action
 - Advantages, disadvantages
 - Effectiveness
 - When to start taking the pill (in relation to menstrual period)
 - The importance of taking the pill everyday and what to do if the pill is missed
- iv) If the client is still convinced about the decision to use Centchroman, conduct an assessment of the client for medical eligibility as detailed in Section 4. Record history and findings.
- v) If found eligible as described in Section 3, demonstrate the use of the pill as advised in Section 5. Ask the client to repeat instructions. Record the supply of the pill.
- vi) Tell the client about likely side effects and what to do in such situations.
- vii) Tell the client to use condoms (by spouse/partner) if the pill is, missed, in case of severe vomiting or diarrhoea and if there is any chance of exposure to STDs and demonstrate how to use condoms. Ask the client to repeat the instructions.

- viii) Tell the client how to store the pill.
- ix) Tell the client to return for follow up in a month's time (before the last pill is over and to bring the packet of pills).
- x) Tell the client where to get the pills and the price.
- xi) Provide a packet of condoms for use in conditions listed above (vii).

b) ***Counselling on Return Visit***

General Guidelines

Every time a client comes for follow-up, it is important to counsel the client to ensure continuation of the method.

- i) Ask the client whether she and her spouse/partner are satisfied with the method
- ii) Ask about problems and reassure as required.
- iii) Ask about any history of pelvic pain or discharge per vagina or any history suggestive of STDs in the spouse/partner
- iv) Assess the client (history and examination) to confirm problems or for any new conditions that are contra-indications for use.
- v) Manage problems as discussed under Section 6.
- vi) If the client has developed conditions that are contra-indications for Centchroman use, counsel for other methods of family planning.
- vii) If the client is still eligible for continuing with Centchroman, ask to repeat how to take the pill.
- xii) Repeat reasons for contacting the health worker and when to return for follow up.

Guidelines for Second Follow Up Visit (After Three Months of Starting the Pill)

In addition to the above, tell the client to take the pill once- a - week, on a specific day instead of twice- a - week.

Counselling Clients who want to stop using the Centchroman

It is important to counsel clients who wants to stop using the Centchroman, because of request by the client or because of contra-indications.

- i) If the client wants another child, tell that the fertility will return only after six months. Provide information on antenatal care, care during delivery and about post-partum family planning.
- ii) If the client is stopping the Centchroman due to delayed menses, reassure the client. If not reassured, advise to discontinue the Centchroman. Counsel about other methods of family planning.
- iii) If the client is stopping the Centchroman because of dissatisfaction with the method, counsel (repeat benefits, side effects and their duration). If still not convinced, counsel about other methods of family planning.
- iv) If the client develops conditions that are contra-indications for use of Centchroman, counsel about other methods of family planning,

25.5.3 Clint Selection

a) ***Eligibility Criteria for Use of Centchroman***

Indications

Appropriate for:

- i) Any woman in the reproductive age group, who desires a highly effective contraceptive with minimal side effects,
- ii) Immediately after abortion

Precautions

Absolute Contraindications:

Centchroman should not be given in the following conditions:

- i) History of jaundice or diseases of liver now or in the last 6 months
- ii) History of polycystic ovarian disease
- iii) Cervical dysplasia

Relative Contraindications:

Centchroman should be considered carefully in the following conditions:

- i) History of tuberculosis
- ii) History of kidney disease
- iii) Lactating mothers in the first six months postpartum

b) *Client Assessment*

i) *History Taking*

History should be taken very carefully. History should include the following:

- Date of last menstrual period and details of menstrual cycle
- Parity, date of last child birth/abortion
- Whether breast feeding (if breast feeding, age of the child and whether breast feeding is full or partial)
- History of jaundice and liver disease currently or in the last six months
- History of kidney problems
- Any swelling of the face and feet currently or in the past
- History of cancer of the cervix
- Any bleeding between periods or after intercourse
- Whether on treatment for tuberculosis or convulsions or taking antibiotics for long

If any contraindication, confirm by relevant physical and pelvic examination. Do not provide Centchroman.

ii) *General and Systemic Examination*

General physical: Weight, pallor, jaundice, oedema, blood pressure
Abdomen: Liver (whether enlarged, tender), any mass, tenderness in the lower abdomen, check for renal tenderness and mass

iii) *Pelvic Examination*

Conduct the following examinations as described in Annexure IV.

- Examination of external genitalia for evidence of STDs
- Speculum examination for evidence of vaginal and cervical infection, and cervical growth/ulcers
- Bimanual examination for determining the uterine size, consistency, adnexal mass (ovarian cyst/cancer) and for ruling out PID

iv) *Laboratory Examination*

It is advisable to get the haemoglobin and urine for sugar, albumin and microscopy checked.

Do a Pap smear if possible and a vaginal smear for infections if indicated.

v) *Records*

Record the findings.

25.5.4 Guidelines for Instruction and Follow Up

a) *Guidelines for Instructing a Client on Use of Centchroman*

Steps for Instructing a Client

- i) Show the packet of Centchroman to the client as instructions are being given.
- ii) Explain the timing of starting the pill and the schedule to be followed.
 - Take the first tablet on the first day of the menstrual period.
 - Take the second tablet on the fourth day.
 - Take the subsequent tablets twice a week on the same days of the week (recommend Wednesday and Sunday) for the first 3 months.
 - After the first 3 months, take the tablet once a week on the same day of the week.
- iii) Explain that the periods may be delayed.
- iv) Explain what to do if the pill is forgotten.
 - If one pill is forgotten, take it the next day as soon as you remember it.
 - If you forget it for 2 or more days, but less than 7 days, continue normal schedule, but use condoms to be sure of preventing pregnancy.
 - If forgotten for more than 7 days, discontinue and start allover again beginning with the next menstrual period. Meanwhile use condoms as a backup method.
- v) Use condoms in the following situations:
 - in case of severe vomiting and diarrhoea
 - in case of exposure to STDs or HIV
- vi) Advise where to get the Centchroman and the price.
- vii) Advise to keep the pills in a cool, dry place, away from the reach of children.
- viii) Provide a packet of condoms. Demonstrate the use of condoms if the client does not know how to use. Ask the client to repeat the demonstration.
- ix) Give instructions for follow up.
 - Return to the clinic before the last pill is over. Bring the packet (even the empty ones). (This is to be sure that the pills are being taken regularly).
 - Return to the clinic before the scheduled date if:
 - not satisfied with the method
 - develops jaundice
 - started on treatment for tuberculosis
 - if cervical displasia or cancer is diagnosed or has intermenstrual or post-coital bleeding
 - if pregnancy suspected
 - if at risk of STD/HIV

b) *Follow Up Schedule*

During each follow up visit, the client should be counselled.

The Medical Officer should instruct the HW(F) that during her routine field visits she should enquire about any problems and advise clients for follow-up.

The recommended schedule for follow-up assessment is as follows:

First visit - After one month of prescribing Centchroman

Second visit - After three months of prescribing the Centchroman Subsequent visits - Yearly

Do a complete assessment during the yearly visits. Record findings.

Do haemoglobin and urine for albumin.

The client must be instructed about taking 'the pill' regularly.

c) *Management of Side Effects and Other Complications*

Always counsel clients who have side effects and other complications as described previously. If the Centchroman is stopped, counsel for other methods of family planning.

Delayed menses

- i) Rule out pregnancy by history and examination.
 - If pregnant and do not want to continue with the pregnancy, refer for Medical Termination of Pregnancy (MTP).
 - If pregnant and want to continue with the pregnancy, reassure that the pills taken so far won't affect the foetus. Advise about antenatal care.
- ii) If the pill is being taken regularly and there is no evidence of pregnancy, reassure the client. Explain that it is common to have delay in menses with Centchroman.

Check Your Progress 3

- 1) List the advantages of Centchroman.
.....
.....
- 2) How should the Centchroman be taken?
.....
.....
- 3) List the absolute contraindications for Centchroman.
.....
.....

25.6 FACTORS AFFECTING CONTRACEPTIVE EFFICACY

The three most important factors to be considered for any contraceptive method are — effectiveness, safety (freedom from health risk) and independence from intercourse. Maximum effectiveness and independence from intercourse go together and tend to be inversely linked to safety (freedom from health risk). The common methods could be divided in two groups on the basis of these three parameters as below:

Maximum safety	Maximum effectiveness Maximum independence from intercourse
Less effectiveness Less independence from intercourse	Less safety
Examples in order of safety (freedom from health risk): <ul style="list-style-type: none"> • Coitus interruptus • Fertility awareness • Condoms* • Diaphragm* • Sponge* 	Example in order of efficacy: <ul style="list-style-type: none"> • Injectibles/Implants • Combined pill • Intrauterine device • Progesterone only pill

*These also provide some protection against STDs including AIDS.

25.7 NEWER METHODS OF BARRIER CONTRACEPTION

These methods are not yet marketed in our country. They are under various phases of clinical trial/marketed in foreign countries.

a) Methods for Women

- 1) **Female Condom:** Latex condom have been designed for use by woman, thus women do not have to depend on men using condom for protection against STDs and AIDS. Two types of female condoms are loose sheaths that fit inside the vagina, the third type is a latex panty with a built in condom. Female condoms are not recommended for reuse. They are costly as compared to male condom.
- 2) **Herbal Cream:** Cream containing neem seeds extract have been tried as contraceptive. Neem seeds extracts are found to be bactericidal. It is still in clinical trial phase.

b) Methods for Men

Oral gossipol has been tried in China. It carries irreversible infertility in 10% of cases. Various plant compounds have shown promise. They interfere with sperm maturation and motility. Hormonal injections like testosterone enanthate 200 mg weekly results in oligospermia in 90% with pregnancy rate of 1.4%. Long acting testosterone buccinate 600 mg 3 monthly injections are being tested.

c) Methods for both Men and Women

Attempts have been made to develop antifertility vaccines, These vaccines are intended to be used by both men and women. The anti HCG vaccine for women have entered phase II clinical trial. For men, FSH and anti GnRH vaccine are being tried.

25.8 LET US SUM UP

In this unit, the general guidelines for family planning visit have been outlined. Natural methods, barrier methods, and oral non-hormonal methods of contraception are dealt in detail. After reading this unit, you will be able to help your clients in choosing any conventional method suitable to them.

25.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1)
 - Breastfeeding;
 - Coitus interruptus (withdrawal method);
 - Fertility awareness method
- 2) Fertility awareness methods are:
 - Rhythm (Calendar) method
 - Cervical mucous method
 - BBT
 - Symptothermal method
- 3) Breastfeeding can be used under following conditions:
 - Mother is exclusively breastfeeding (no extra substitute meal is given to baby).
 - She is amenorrhoeic
 - For 6 months post partum

Check Your Progress 2

- 1) Barrier contraceptives are:
 - Men: Condom
 - Women:
 - Vaginal contraceptive jelly/cream
 - Vaginal sponge
 - Diaphragm
 - Female condom
- 2) Advantages of condom are:
 - Provides protection against STDs and AIDS
 - No systematic side effects
 - Help men with premature ejaculation
 - Help prevent cancer cervix in female partner
- 3) Non oxynol

Check Your Progress 3

- 1) Advantages of Centchroman:
 - i) Non-steroidal contraceptive
 - ii) Very effective
 - iii) Minimal side effect as it is non-steroidal; has no effect on ovulation and does not cause any hormonal change.
- 2) First tablet is taken on Day 1 of cycle and the second tablet on Day 4 of cycle. Subsequent tablets are taken—one tablet twice weekly for 3 months followed by one tablet once a week till contraception is desired. Tablets should be taken at fixed time (e.g. bedtime).

- 3) Absolute contraindications for Centchroman
- i) History of jaundice or diseases of liver now or in the last 6 months.
 - ii) History of polycystic ovarian disease
 - iii) Cervical dysplasia.

25.10 FURTHER READINGS

Guidelines for Clinical Procedures in Family Planning Programme for International Training in Health (INTRAH), School of Medicine, University of North Carolina, 2nd edition, 1993.

Guillebaud, John, *Contraception -Your Questions Answered*, Churchill Livingstone, Second edition, 1993.