Indira Gandhi National Open University
SCHOOL OF HEALTH SCIENCE

BNS-042

Primary Health Care in Common Conditions

Reproductive Health and Adolescent Health

3

Indira Gandhi
National Open University
School of Health Sciences

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Primary Health Care in Common Conditions

Block

3

REPRODUCTIVE HEALTH AND ADOLESCENT HEALTH

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BLOCK INTRODUCTION

As a Mid Level Health care Provider at Sub-centre level, you have to provide care to people during wellness and illness in general and women and adolescent girls in particular. You may come across various cases of gynecological conditions/ problems which you need to manage at subcentre and refer high risk cases. You also need to create awareness among eligible couples about various family planning methods and counsel them accordingly, so that they will be able to take appropriate decision in adopting various health and family welfare measures.

As a leader of health care team you have to supervise ASHA, ANMs and Aanganwari workers while they provide services to the beneficiaries. The major challenge for you would be to deal with adolescent group in need of counseling on sensitive issues such as sexual abuse, voilence, decision making on sexual and or reproductive health matters. This block will enable to develop knowledge and skills related to various aspects of reproductive and child health, adolescent health and teenage pregnancy.

This block comprises five units as given below

Unit 1 deals with Gynecological Conditions

Unit 2 focuses on Family Planning Methods, Spacing Techniques and Counseling

Unit 3 explains Medical Abortion and MTP Act

Unit 4 describes Counseling in Reproductive and Sexual Health including Problems of Adolescents

Unit 5 relates to Management of Teenage Pregnancy

We hope the information given in this block would strengthen your knowledge and skills to provide comprehensive primary healthcare related to reproductive health and adolescent health at sub centre level based on protocols of subcentre.

We hope you will get motivated by reading this block.

UNIT 1 GYNAECOLOGICAL CONDITIONS

Structure

1.0 INTRODUCTION

In Block 2, you learned normal phenomenon of adolescent and women's health. Here you will learn about common gynaecological problems of adolescent and adult women.

More emphasis will be given to the following conditions:

- Dysmenorrhoea
- Pre Menstrual Syndrome (PMS)

- Vaginal discharge
- Mastitis
- Breast lump
- Pelvic pain
- Pelvic organ prolapse

1.1 OBJECTIVES

After completing this unit, you should be able to:

- enumerate common gynaecological problems;
- describe dysmenorrhoea;
- discuss pre menstrual syndrome;
- identify the causes of vaginal discharge;
- discuss the breast pain;
- identify the breast lump;
- discuss the management of pelvic pain; and
- discuss the management of pelvic organ prolapse.

1.2 DYSMENORRHOEA

Dysmenorrhoea is a menstrual condition characterised by severe and frequent menstrual cramps and pain associated with menstruation. Pain may occur with menses or precede menses by 1 to 3 days. Pain tends to peak 24 hour after onset of menses and subside after 2 to 3 days. It is usually sharp but may be cramping, throbbing, or a dull constant ache; it may radiate to the legs.

While most women experience minor pain during menstruation, dysmenorrhoea is diagnosed when the pain is so severe as to limit normal activities, or require medication.

1.2.1 Types of Dysmenorrhoea

There are two types of dysmenorrhoea – primary and secondary dysmenorrhoea.

Primary Dysmenorrhoea: Often it begins soon after teen ages starts having periods. Pain is severe and frequent menstrual cramping caused by severe and abnormal uterine contractions. Symptoms may include backache, leg pain, nausea, vomiting, diarrhoea, headache and dizziness.

Risk factors for primary dysmenorrhoea are:

- early age at menarche (<12 year),
- nulliparity,
- heavy or prolonged menstrual flow,
- smoking,
- alcohol,
- positive family history and obesity or overweight.

Secondary Dysmenorrhoea: Secondary dysmenorrhoea has causes other than menstruation and natural production of prostaglandins. Secondary dysmenorrhoea is caused by medical problem(s) such as endometrriosis, adenomyosis, pelvic inflammatory disease, uterine fibroids, cervical narrowing, uterine malposition, tubo-ovarian abscess, ovarian torsion, ovarian cysts, pelvic tumors or an IUD (intra-uterine device). This condition usually occurs in older women.

1.2.2 Pathophysiology and Signs and Symptoms

During menstrual cycle, the endometrium thickens in preparation for potential pregnancy. After ovulation, if the ovum is not fertilised and there is no pregnancy, the built-up uterine tissue is not needed and thus shed.

Molecular compounds called prostaglandins are released during menstruation, due to the destruction of the endometrial cells, and the resultant release of their contents. Release of prostaglandins and other inflammatory mediators in the uterus cause the uterus to contract. These substances are thought to be major factor in primary dysmenorrhoea. When the uterine muscles contract, they constrict the blood supply to the tissue of the endometrium, which, in turns, breaks down and dies. These uterine contractions continue as they squeeze the old, dead endometrial tissue through the cervix and out of the body through the vagina. These contractions, and resulting temporary oxygen deprivation to nearby tissues, are responsible for the pain or "cramps" experienced during menstruation.

Compared with other women, females with primary dysmenorrhoea have increased activity of the uterine muscle with increased contractility and increased frequency of contractions.

Signs and symptoms

You should educate the adolescents or young women that symptoms of dysmenorrhoea may resemble other conditions or medical problems. Always consult physician for a diagnosis.

The main symptoms of dysmenorrhoea are:

- pain concentrated in the lower abdomen
- in the umbilical region or
- the suprapubic region of the abdomen
- right or left abdomen
- may radiate to the thighs and lower back.

Other symptoms may include:

- nausea and vomiting
- diarrhoea or constipation
- headache
- dizziness
- disorientation
- hypersensitivity to sound
- smell
- fainting and fatigue.

Symptoms of dysmenorrhoea often begin immediately following ovulation and can last until the end of menstruation. This is because dysmenorrhoea is often associated with changes in hormonal levels in the body that occur with ovulation. The use of certain types of birth control pills can prevent the symptoms of dysmenorrhoea, because the birth control pills stop ovulation from occurring.

1.2.3 Diagnosis and Management

Your role here is mainly assisting for diagnosis. As diagnosis begins with a gynaecologist evaluating a female's medical history and a complete physical examination including a pelvic examination. A diagnosis of dysmenorrhoea can only be certain when the physician rules out other menstrual disorders, medical conditions, or medication that may be causing or aggravating the condition. In addition, some procedures mainly used in secondary dysmenorrhoea are:

Ultrasound: A diagnostic imaging technique which uses high-frequency sound waves and a computer to create images of blood vessels, tissues, and organs. Ultrasounds are used to view internal organs as they function, for any presence of lesions like fibroid, adenomyosis and ovarian cysts. It also helps to assess the blood flow through various vessels.

Magnetic resonance imaging: An MRI uses a combination of large magnets, radiofrequencies, and a computer to produce detailed images of organs and structures within the body. May be used if ultrasound is inconclusive and an organic lesion is suspected.

Laparoscopy: A minor surgical procedure in which a laparoscope, a thin tube with a lens and a light, is inserted through a small incision near umblicus in the abdominal wall. Using the laparoscope to see in the pelvic and abdomen area, the physician can often detect abnormal growths. It is useful to diagnose endometriosis.

Hysteroscopy: A visual examination of the canal of the cervix and the interior of the uterus using a viewing instrument (hysteroscope) inserted through the vagina. It is useful in diagnosis of sub mucous fibroids or polyps.

Laboratory studies: The investigations to be performed should be chosen based on clinical diagnosis. Complete blood count (with differential), for evidence of infection, urinalysis, to exclude urinary tract infection, quantitative human chorionic gonadotropin level, to exclude ectopic pregnancy, gonococcal/ chlamydial cultures, enzyme immunoassay (EIA), and DNA probe testing, to exclude sexually transmitted infections (STIs)/pelvic inflammatory disease (PID), stool guaiac, to rule out GI bleeding and Erythrocyte sedimentation rate (ESR)for subacute salpingitis.

Management of primary and secondary dysmenorrhoea:

For treatment of primary dysmenorrhoea, most doctors prescribe antiprostaglandin drugs or NSAIDS (non-steroidal anti-inflammatory drugs) such as aspirin, ibuprofen, ketoprofen or naproxen. These drugs inhibit synthesis of prostaglandins, lessen the contractions of the uterus and reduce the menstrual flow. These drugs should be started at the onset of bleeding to avoid inadvertent use during early pregnancy and taken for 2–3 days. Oral contraceptives are another alternative especially if the woman needs a contraceptive method. By stopping ovulation and decreasing prostaglandin levels, they may eliminate cramps.

Treatment of secondary dysmenorrhoea depends on the cause. Endometriosis is the most common cause of secondary dysmenorrhoea. Depending on the stage of

this disease and the women's age and desire to have children, the treatment methods vary from conservative drug therapy (oral contraceptives, androgens, progestins, and gonadotropin-releasing hormone agonists) to surgical procedures.

If the problem is adenomyosis, a hysterectomy may be necessary. Pelvic inflammatory disease may be treated with antibiotics. Uterine fibroids, fibroid tumors and pelvic tumors and often treated surgically. Cervical narrowing can be corrected with surgery as well.

Occasionally, an IUD (intra-uterine device) may be the cause, and if so, the doctor may prescribe anti prostaglandin drugs, and suggest removing the device and using another form of birth control only if the patient is not responding to NSAIDS.

Several nutritional supplements have been indicated as effective in treating dysmenorrhoea, including omega-3 fatty acids, magnesium, vitamin E, zinc and thiamine (vitamin B1). Several non-drug therapies for dysmenorrhoea have been studied, including behavioural, acupuncture, acupressure, and chiropractic care.

Nursing Management

For relief of painful menstrual cramps and their associated discomforts, start with a hot bath. The water helps relax the uterus and other tensions that may be contributing to the problem. Place a heating pad on abdomen. The flow of heat can provide soothing, temporary pain relief. Exercise regularly. Aerobic exercise such as walking, swimming, running, bicycling, and aerobic dance may diminish cramping symptoms. For some women, exercise may inhibit prostaglandins or help release endorphins, the brain's natural painkillers.

When the women reports with painful periods, you should knew

1) **When to refer** – When pain is not relieved by above mentioned steps advised by you.
2) **Medication** – It can be prescribed as per protocol.
3) **Where to refer** – Considering the unchanging condition of the patient, she should be referred to the next higher medical facility (PHC/CHC/DH) nearby.
4) **Follow up** – It is necessary to follow up of the cases referred by you and inquire regarding the condition and relief of systems.

1.3 PREMENSTRUAL SYNDROME (PMS)

You should educate adolescents and young women that premenstrual syndrome (PMS) or premenstrual tension (PMT) is a combination of physical, psychological, emotional and mood disturbances that occur after a woman's ovulation and typically ending with the onset of her menstrual flow.

The most common mood-related symptoms are irritability, depression, crying, oversensitivity, and mood swings with alternating sadness and anger. The most common physical symptoms are fatigue, bloating, breast tenderness (mastalgia), acne, and appetite changes with food cravings. An estimated 3 of every 4 menstruating women experience some form of premenstrual syndrome. These problems tend to peak in your late 20s and early 30s.

A more severe form of PMS, known as premenstrual dysphoric disorder (PMDD), also known as late luteal phase dysphoric disorder occurs in a smaller number of

women and leads to significant loss of function because of unusually severe symptoms.

1.3.1 Cause and Risk Factors

Exactly what causes premenstrual syndrome is unknown, but several factors may contribute to the condition:

Cyclic changes in hormones : PMS appears to be caused by multiple endocrine factors (eg, hypoglycemia, other changes in carbohydrate metabolism, hyperprolactinemia, fluctuations in levels of circulating estrogen and progesterone, abnormal responses to estrogen and progesterone, excessive aldosterone or ADH. Estrogen and progesterone can cause transitory fluid retention, as can excess aldosterone or ADH. Signs and symptoms of premenstrual syndrome change with hormonal fluctuations and disappear with pregnancy and menopause.

Chemical changes in the brain: Fluctuations of serotonin, a brain chemical (neurotransmitter) that is thought to play a crucial role in mood states, could trigger PMS symptoms. Insufficient amounts of serotonin may contribute to premenstrual depression, as well as to fatigue, food cravings and sleep problems.

Preliminary studies suggest that up to 40% of women with symptoms of PMS have a significant decline in their circulating serum levels of beta-endorphin. Endorphins are “feel good” hormones. Normal cheerful happy moods and also make people less sensitive to pain. A small amount of these “feel good endorphins usually circulate in the body, but these levels drop-during the luteal phase of the menstrual cycle. In some women, falling endorphin levels may lead to nausea, and various types of pain.

Depression: Some women with severe premenstrual syndrome have undiagnosed depression, though depression alone does not cause all of the symptoms. Low serotonin levels are commonly associated with depression.

Poor eating habits: Some PMS symptoms have been linked to low levels of vitamins and minerals. Low level vitamin A, Vitamin B6, and Vitamin E may play a role in PMS. Other possible contributors to PMS include eating a lot of salty foods which may cause fluid retention, drinking alcohol and caffeinated beverages which may cause mood and energy level disturbances.

Genetic factors: Genetic factors also seem to play a role, as the concordance rate is two times higher in monozygotic twins than in dizygotic twins.

Other risk factors: Increasing age, tobacco use, family history and stress may participate condition.

1.3.2 Pathophysiology and Signs and Symptoms

Let us learn how changes in the uterus takes place and signs and symptoms follows as given below:

Premenstrual syndrome occurs during the luteal phase of the menstrual cycle.

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This phase occurs immediately after an egg is released from the ovary and lasts from day 14 through day 28 of a normal menstrual cycle.

⇩

During the luteal phase, hormones from the ovary cause the lining of the uterus to grow thick and spongy.

⇩

At the same time, an egg is released from the ovary. If the egg meets sperm, it may impart in the lining of the uterus and grow.

⇩

At this time, the level of the hormone called progesterone rises in the body, while the level of another hormone, estrogen, begins to drop.

⇩

The shift from estrogen to progesterone may cause some of the symptoms of PMS.

Signs and symptoms

A great variety of symptoms have been attributed to PMS. Women can have PMS of varying duration and severity from cycle to cycle.

A. **Emotional and Behavioural Symptoms**

- Tension or anxiety
- Depressed mood
- Crying spells
- Anger and irritability
- Oversensitivity
- Dysphoria (unhappiness)
- Mood swings
- Food cravings (craving for sweets)
- Appetite changes with overeating
- Trouble falling asleep (insomnia)
- Social withdrawal
- Poor concentration

B. **Physical Signs and Symptoms**

- Joint or muscle pain
- Headache
- Fatigue
- Weight gain from fluid retention
- Abdominal bloating (due to fluid retention)
- Abdominal cramps
- Breast tenderness
- Acne flare-ups
- Constipation or diarrhoea
- Changes in libido

- Sleep disturbances with sleeping too much or to little (insomnia)
- Appetite changes with overeating or food cravings

1.3.3 Diagnosis and Management

You can help an adolescent or adult woman in diagnosis by educating that the most helpful diagnostic tool is the menstrual dairy, which documents physical and emotional symptoms over month. If the changes occur consistently around ovulation (mid cycle, or days 7–10 into the menstrual cycle) and persist until the menstrual flow begins, then PMS is probably the accurate diagnosis. Keeping a menstrual dairy not only helps the health care provider to make the diagnosis, but it also promotes a better understanding by the patient of her own body and moods. Once the diagnosis on PMS is made and understood, the patient can better cope with the symptoms.

The diagnosis of PMS can be difficult because many medical and psychological conditions can mimic or worsen symptoms of PMS. There is no laboratory test to determine if a woman has PMS. When laboratory tests are performed, they are used to exclude other conditions that can mimic PMS.

Management

The management of PMS can sometimes be a challenging as making the diagnosis of PMS. Various treatment approaches have been used to treat this condition. There is no cure for PMS, but eating a healthy diet, exercise regularly and taking medicine may help.

General management includes a healthy lifestyle as given below:

- Aerobic exercise
- Avoid salt before the menstrual period
- Reduce caffeine intake
- Quit smoking
- Reduce intake of refined sugars
- Increase of fiber intake
- Reduce alcohol intake
- Adequate rest and sleep

All of above have been recommended and may help to reduce symptoms in some women. Furthermore, some studies suggest that vitamin B6, vitamin E, calcium and magnesium supplements may have some benefit, to reduce PMS.

Commonly prescribed medications for premenstrual syndrome

A variety of medications are used to treat the different symptoms of PMS. Medications include diuretics, pain killers, oral contraceptive pills, drugs that suppress ovarian function, and antidepressants. Let us go through in brief about these drugs:

- **Diuretics:** When exercise and limiting salt intake aren't enough to reduce the weight gain, swelling and bloating of PMS, taking diuretics, water pills, can help body shed excess water through kidneys. Spironolactone is a diuretic that can help ease some of the symptoms of PMS.

- **Analgesics:** These are commonly given for menstrual cramps, headache and pelvic discomfort. The most effective group of analgesics appears to be the nonsteroidal anti-inflammatory medications (NSAIDs). Examples of these are ibuprofen (Advil), naproxen (Anaprox) and mefenamic acid (ponstel).
- **Oral contraceptives:** These prescription medications stop ovulation and stabilise hormonal swings, thereby offering relief from PMS symptoms. Yaz, a type of birth control pill containing the progestin drospirenone, which acts similarly to the diuretic. Spironolactone has been shown to be given more effective than regular birth control pills are reducing the physical and emotional symptoms of PMS.
- **Ovarian suppressors:** Drugs like danazol (donocrine) have been prescribed to suppress ovarian hormone production. For severe PMS or PMDD, Depo-Provera (Medroxy-progesterone acetate) injection can be used to temporarily stop ovulation.
- Complete suppression of ovarian function by a group of drugs called gonadotropin-releasing hormone (GnRH) analogs has been found to help some women with PMS.
- **Antidepressants:** Used if there is associated depression. Selective serotonin re-uptake inhibitors (SSRIs), which include fluoxetine (Prozac, Sarafem), paroxetine (Paxil). Sertraline (Zoloft) and others, have been successful in reducing symptoms such as fatigue, food cravings and sleep problems and are the first line agent for treatment of severe PMS or PMDD. These drugs are generally taken daily. But for some women with PMS, use of antidepressants may be limited to the two weeks before menstruation begins.

Prevention

Preventive measures are usually life style changes required to be taken as follows:

1) Engage in atleast 30 minutes of brisk walking, cycling, swimming or other aerobic activity during most days of the week. Regular daily exercise can help improve your overall health and alleviate symptoms such as fatigue and depresses mood.
2) Learn and use stress management techniques such as progressive muscle relaxation, deep breathing, and meditation, a warm bath, listening to music, or yoga in day.
3) Eat smaller, more frequent meals to reduce bloating and the sensation of the fullness.
4) Limit salt and salty food to reduce bloating and fluid retention.
5) Choose foods high in complex carbohydrates, such as fruits, vegetables and whole grains.
6) Choose food rich in calcium. If you cannot tolerate dairy products or aren't getting adequate calcium in your diet, you may need a daily calcium supplement.
7) Take a daily multivitamin supplement.
8) Limit caffeine and alcohol. Caffeine can make breast tenderness worse and increase headaches.

Vitamin Therapy

1) Vitamin B6– 100 mg per day maximum (larger doses sometimes cause serious side effects) you can also take a B- complex that includes all the B vitamins. Vitamin B6 may take the edge off irritability and reduce fatigue and depression.

2) Vitamin E - 400 IU per day (maximum) may be helpful in reducing breast tenderness.

3) Calcium - 1,000 – 1,200 mg per day of the elemental calcium (the labels on foods and supplements give the amount of elemental calcium they contain) may reduce bloating, body aches, anxiety, or depression.

4) Magnesium - 400 mg per day in combination with vitamin B6 may reduce pain, water, retention, and negative mood.

Nursing Management

For relief of signs and symptoms of premenstrual syndrome (PMS), encourage / advise aerobic exercises, increase in fibre intake, reduced caffeine and salt intake, adequate rest and sleep. You can prescribe vitamin and calcium supplements to relieve.

Symptoms

1) **When to refer** – If PMS is not relieved by above measures then refer

2) **Medication** – Prescribe medication as per protocol
   - Diuretics
   - Oral contraceptigves
   - Antidepressants
   - Analgesics
   - Ovarian suppressors

3) **Where to refer** – considering the no change in the condition of the patient she should be referred to the next higher medical facility (PHC/CHC/DH), nearby.

4) **Follow Up** – It is necessary to do follow up. If the case referred by you then enquire regarding the condition and relief of symptoms and further course of action must be discussed.

Check Your Progress 1

1) List main symptoms of Dysmenorrhoea.

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2) List laboratory studies for diagnosis.

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3) Explain the term PMS.

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4) Discuss preventive measures for PMS.

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1.4 VAGINAL DISCHARGE

Vaginal discharge refers to secretions from the vagina and such discharge can vary in:

Consistency (thick, pasty, thin), colour (clear, cloudy, white, yellow green) and smell (normal, odourless, bad odour).

Fluid made by glands inside the vagina and cervix carries away dead cells and bacteria. This keeps the vagina clean and helps prevent infection. Vaginal discharge that suddenly differs in colour, odour, or consistency, or significantly increases or decreases in amount, may indicate an underlying problem like an infection.

1.4.1 Type of Vaginal Discharge and Their Possible Cause

Type of Discharge	What it might Mean	Other Symptoms
Bloody or brown	Irregular menstrual cycles, Or cervical or uterine cancer	Abnormal vaginal bleeding, pelvic pain
Cloudy or yellow	Gonorrhoea	Lower abdominal pain, bleeding between periods, urinary incontinence
Frothy, yellow or greenish with a bad smell	Trichomoniasis	Pain and itching while urinating
Pink	Shedding of uterine lining after childbirth (lochia)	
Thick, white, cheesy	Yeast infection	Swelling and pain around the vulva, itching, painful sexual intercourse
White, gray or yellow	Bacterial vaginosis with fishy odour	Itching or burning, redness and swelling of the vagina or vulva

1.4.2 Causes and Risk Factors, Sign and Symptoms

One of the most frequently experienced medical symptoms of girls and women is abnormal vaginal discharge. Possible cause for an increase in the amount of normal vaginal discharge include :

- emotional stress

- ovulation
- pregnancy
- breastfeeding, and sexual excitement
- Antibiotic or steroid use
- Vaginitis
- Birth control pills
- Cervical or vaginal cancer
- Diabetes
- Douches, scented soaps or lotions, bubble bath
- Pelvic infection after surgery
- Pelvic inflammatory disease (PID)
- Vaginal atrophy
- Forgotten tampon or foreign body
- Sexually transmitted diseases.

Signs and symptoms

Some signs that may indicate an abnormal vaginal discharge and infection include:

- Changes in colour, consistency, or amount
- Constant, increased vaginal discharge
- Presence of itching, discomfort or any rash
- Vaginal burning during urination
- The presence of blood when it is not your period time
- Cottage cheese-like vaginal discharge
- A foul odour accompanied by yellowish, greenish, or grayish white discharge.

1.4.3 Prevention for Abnormal Vaginal Discharge

Many factors can play a role in the occurrence of vaginal infections and discharge. You should advice for practicing these simple tips which significantly may reduces risk of getting a vaginal infection: These are as given below:

Table 1.1 : Do's and Don'ts for prevention of abnormal vaginal discharge

Do's	Don'ts
Always wear cotton panties. Cotton allows genital area to breathe. Helping it stay dry. It's also a good idea to wear panties only during the day and not a night when you are sleeping.	Don't use vaginal douches.
If you are being treated for a vaginal infection, use all the medication as directed, even you think you are better.	Never use petroleum jelly or oils for vaginal lubrication. This can create a breeding ground for bacteria to grow.

Do's	Don'ts
Avoid vaginal contact with products that can irritate the vagina, such as feminine hygiene products, perfumed or deodorant soaps, powders, lotions, and bubble baths.	Don't have sexual intercourse during treatment for a vaginal infection. Wait until you have no more symptoms.
Avoid wearing tight-fitting clothing's, such as bathing suits, exercise wear, pantyhose for prolonged periods of time.	Many times, vaginal infections cause intense itching-don't scratch, scratching infected, inflamed areas will only make things worse.
Always use condoms during sexual intercourse unless patient is in a long-term monogamous relationship.	If patients are self-treating a vaginal infection and symptoms have not improved after treatment, see health care providers, for a vaginal exam. Don't use any vaginal products or treatments for 48 hours before appointment.
Always wipe from front to back after urination or having a bowel movement. Improper wiping easily spreads bacteria to the vagina and may lead may to vaginal discharge and infection.	

Nursing Management

For relief of signs and symptoms of vaginal discharge, you need to understand the causes as discussed in Sub-section 1.4.2 above.

Counsel the patient to wear cotton undergarments, avoid wearing tight fitting clothings, maintain perineal hygiene, use condom during sexual intercourse. When you see that the patient has no relief from vaginal discharge, you should follow the following steps:

1) **When to refer** – When there is no relief from vaginal discharge after follow up the advice.

2) **Medication** – to be prescribed as per protocol.

3) **Where to refer** – If the condition of the patient with vaginal discharge does not improve refer the case to next higher medical facility nearby.

4) **Follow up** – Follow up the cases that have been referred from your health centre and assess the present condition.

1.5 MASTITIS

Mastitis is an infection of the tissue of the breast that occur most frequently during the time of breastfeeding. This infection causes pain, swelling, redness, and increases temperature of the breast. It can occur when bacteria, often from the baby's mouth, enter milk duct through a crack in the nipple. This causes an infection and painful inflammation of the breast.

Breast infections most commonly occur one to three months after the delivery of a baby, but they can occur in women who have not recently delivered as well as in women after menopause. Other causes of infection include chronic mastitis and a rare form of cancer called inflammatory carcinoma. A breast infection that leads to an abscess (a localised pocket or collection of pus) is a more serious type of infection. If mastitis is left untreated, an abscess can develop in the breast tissue.

1.5.1 Types of Mastitis

There are normally two types of Mastitis, one is puerperal mastitis, occurs in pregnancy, during lactation or weaning. It is due to blocked milk or excess milk whereas non puerperal mastitis is not related to these situations. Another one is non puerperal mastitis. The term nonpuerperal mastitis describes inflammatory lesions of the breast occurring unrelated to pregnancy and breastfeeding. Names for non-puerperal mastitis are not used very consistently and include Mastitis, Subareolar Abscess, Duct Ectasia, Periductal Inflammatory, Zuska's Disease and others.

1.5.2 Cause, Risk Factors and Sign and Symptoms

Teach the community about causative and risk factors of breast problems. It is now recognised that mastitis is most often caused by "milk stasis". This is when milk "backs up" because it is being made faster than it is removed. Bacteria from baby's mouth and skin enter the breast through cracks or break in the skin of the nipple or through the opening to the milk duct of the nipple. This can lead to a superficial small area of inflammation (frequently from streptococcal bacteria) or a deeper walled-off infection or abscess (frequently from staphylococcal bacteria). After entry they start growing there and cause pain, swelling and redness of the affected breast. It is more common within six weeks after the delivery. Hormonal changes in the body can cause the milk ducts to become clogged with dead skin cells and debris. These clogged ducts make the breast more prone to bacterial infection. This type of infection tends to come back after treatment with antibiotics.

Other causes of mastitis include:

- complications during delivery and
- inability to breastfeed the baby soon after birth,
- engorgement that doesn't return to normal,
- feeding to a strict routine,
- high level of maternal stress or fatigue or even trauma to the breast, which all can cause milk stasis leading to mastitis. Also, the chances of getting mastitis increase if women use only one position to breastfeed or wear a tight-fitting bra, which may restrict milk flow. Women with diabetes, chronic illness, AIDS, or an impaired immune system may be more susceptible to the development of mastitis and breast pain.

Sign and symptoms

Infection: Breast infections may cause pain, redness, and warmth of the breast along with the following symptoms:

- Inflammation or swelling of the breast.
- Skin redness, often in a wedge-shaped pattern.
- Breast may be tender and warm to touch.
- Pain or a burning sensation continuously or while breastfeeding.
- Body aches
- General malaise or ill feeling
- Fatigue
- Breast engorgement
- Fever and chills (101^{o}C or higher in acute mastitis)
- Rigor or shaking.

Abscess: Sometimes a breast abscess can complicate mastitis. Harmless, noncancerous masses such as abscesses or more often tender and frequently feel mobile beneath the skin. The edge of the mass is usually regular and well defined. Indications that this more serious infection has occurred include the following:

Tender lump in the breast that does not get smaller after breastfeeding a newborn.

Mass may be moveable and/or compressible.

Pus draining from the nipple.

Persistent fever and no improvement of symptoms within 48–72 hours of the treatment.

1.5.3 Diagnosis and Management

The diagnosis of mastitis and breast abscess can usually be made based on a physical examination, taking into account signs and symptoms of fever, chills and the painful area in the breast. If it is unclear whether a mass is due to a fluid-filled abscess or to a solid mass such as a tumor, a test such as an ultrasound may be done. Cultures may be taken, either or breast milk or of material aspirated (taken out through a syringe) from an abscess, to determine the type of organism causing the infection. Non-breastfeeding women with mastitis, or those who do not respond to treatment, may require a mammogram or breast biopsy. This is a precautionary measure because a type of breast cancer can produce symptoms of mastitis.

Management : Let us now go through management for mastitis which includes medication, surgery and nursing care.

A. **Medications**

- Pain medication: Administer acetaminophen (such as Tylenol) or ibuprofen (such as Advil) for pain. These medicines are safe while breastfeeding and will not harm breastfeeding baby.
- Antibiotic therapy: Treating mastitis usually requires a 10 to 14 days course of antibiotics. For simple mastitis without an abscess, oral antibiotics are prescribed. Cephalexin (keflex) and dicloxacillin (dycill) are two of the most common antibiotics chosen, but a number of others are available. Erythromycin may be used if a women is allergic to the commonly used antibiotics. Chronic mastitis in non-breastfeeding women can be complicated.

Recurrent episodes of mastitis are common. Occasionally, this type of infection responds poorly to antibiotics. Therefore, close follow-up with doctor is mandatory. If the infection worsens in spite of the oral antibiotics or if the patients have a deep abscess requiring surgical treatment, may be admitted to the hospital for IV antibiotics.

B. **Surgery**

If an abscess is present, it must be drained. After injection of local anaesthetic, the doctor may drain an abscess near the surface of the skin either by aspiration with a needle and syringe or by using a small incision. If the abscess is deep in the breast, however may require surgical drainage in the operating room. This procedure is usually done under general anaesthesia to minimise the pain and completely drain the abscess. Antibiotics and heat on the area are also used to treat abscess.

C. **Nursing Management**

Advice mother for the following measures:

- Encourage frequent breastfeedings;
- Do not stop breastfeeding from the affected breast, even though it will be painful. Frequently emptying of the breast prevents engorgement and clogged ducts that can only make mastitis worse.
- Apply a warm compress the breast before and after feeding can often provide some relief. A warm bath may work as well. If heat is ineffective, ice packs applied after feedings may provide some comfort and relief.
- Avoid using ice packs just before breastfeeding because it can slow down milk flow.
- Encourage to take a mild pain reliever, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin, others) for to reduce pain and inflammation if necessary.
- Encourage the patient to drink plenty of water – atleast 10 glasses a day.
- Eat well balanced meals and add 500 extra calories a day while breastfeeding. Dehydration and poor nutrition can decrease milk supply and make feel worse.
- If pus is draining from infected breast, instruct the patient to wash the nipple gently and let it air dry before putting bra back on.

Referral and follow up – When a patient with mastitis does not get any relief from the measures mentioned above you should do the following:

1) On no relief of symptoms you should refer the case for further management.
2) Medication should be given as per the protocols.
3) If no relief from symptoms, you should refer the case to next higher medical facility nearby.
4) You should follow up the cases who have to be referred/transferred to higher medical authority and know her present condition.

Prevention of Mastitis

- Breastfeeding should be equally from both breasts.
- Empty breast completely to prevent engorgement and blocked ducts.

- Use good breastfeeding techniques to prevent sore, cracked nipples.
- Avoid dehydration by drinking plenty of fluids.
- Maintain breastfeeding routine and use varied positions to breast-feed.
- Wear a supportive bra.
- Get a much rest as possible.
- Apply warm compress to the breast or take a warm shower before breast-feeding.
- Practice careful hygiene: Hand washing, cleaning the nipples, keeping baby clean, will prevent mastitis and breast pain.

1.6 BREAST LUMP

Let us now learn another important condition i.e. breast lump in details.

Fibrocystic breasts are characterised by plumpiness and usually discomfort on one or both breasts. Fibrocystic breast disease (FBD), now referred to as fibrocystic changes, cystic mastitis or fibrocystic breast condition, is the most common cause of "lumpy breasts" in women and affects more than 60% of women.

Fibrocystic changes occur during ovulation and just before menstruation. During these times, hormone level changes often cause the breast cells to retain fluid and develop into nodules or cysts, which feel like a lump when touched. The nodules or cysts can spread throughout, the breast, may be located in one general area or simply appear as one or more large cysts. If the lump is not filled with fluid, it is called a fibroadenoma. A fibroadenoma is a solitary, firm distinct lump, composed of a mass or lump of fibrous tissue.

Fibrocystic breast disease is the most common benign lesion. It is generally observed between 20–50 years of age.

The etiology is not known. It may be due to altered estrogen: progesterone ratio or relative decrease in progesterone or else, the breast tissues are more sensitive to Prolactin. Stress factor may at times be related.

Histologically a fibrocystic mass is characterised by adenosis, fibrosis, ductal epithelial proliferation and papillomatosis. Two types are observed: localised and diffuse. Vast majority (70%) are non-proliferative lesions. Of the proliferative lesions only few (4%) present with cellular atypia where the risk of breast cancer is high (five-fold). Risk factors are nulliparity and delayed menopause.

The patients are usually premenopausal. The patient complains of the breast pain present throughout the cycle but aggravated premenstrually (cyclic). The pain is either dull continuous or intermittent and severe.

Examination reveals affect of both the breasts; one side more than the other. One palpation, coarsely nodular areas resembling ill-defined lumps either localised or diffused, is felt. These are prominent in premenstrual phase.

The patients become anxious of malignancy and the physicians too are confused to negate it. Careful palpation, mammography, ultrasound and aspiration biopsy is helpful to exclude malignancy.

1.6.1 Causes, Risk Factors and Sign and Symptoms

The cause of breast lump is not known, but the symptoms and signs are linked to the women's hormone patterns. The most significant contributing factor to fibrocystic breast condition is a normal hormonal variation during monthly cycle. Many hormonal changes occur as a women's body prepares each month for a possible pregnancy. The most important of these hormones are estrogen and progesterone. These two hormones directly affect the breast tissues but causing cells to grow and multiply. As hormone level rise just before menstruation and mammary blood vessels swell, ducts and alveoli expand, and cell growth proliferates. Breast tissue retains fluid and grows larger. After menstruation, these process reverse.

A diet high in fat and excessive caffeine intake is considered to make the condition worse and heredity plays an important role in causing breast lumps.

Sign and symptoms

The common symptoms of breast lump are:

- Tenderness in one or both breast with pressure on touch
- Breast pain or discomfort
- Breast may feel swollen
- An intermittent or persistent sense of breast engorgement, associated with dull, heavy pain and tenderness
- Intermittent appearance of cysts or lump that form and then resolve within a few weeks
- A dense, pebbly consistency to breast tissue
- Formation of persistent cyst or lumps
- Nipple discharge or inflammation.

These symptoms can range from mild to severe. Many women notice monthly cyclic patterns, with symptoms most severe just before each menstrual period.

1.6.2 Diagnosis, Management and Treatment

Breast lump is usually diagnosed on routine checkup or when tenderness or a lump that was probably discovered during breast self-examination. The doctor will examine the breast and sometimes recommend a mammogram, an ultrasound exam and (rarely) a needle aspiration.

Management

There are no specific treatments for breast lump, other than those to minimise discomfort. Doctors may recommend the following:

1) **Relief of symptoms:** Adequate support of the breasts and perhaps wearing a bra at night, may provide relief from many of the symptoms of fibrocystic breast condition. Anti-inflammatory medications, including acetaminophen, and nonsteroidal anti-inflammatory medications (NSAIDs) often reduce the breast pain significantly.

   Avoid caffeine and chocolate, eliminate excessive dietary fat and limit salt intake and increase dose of vitamin. There are reports suggesting that a variety

of vitamins may be of benefit in relieving the symptoms of fibrocystic breast condition. These have included vitamin C, vitamin E, vitamin B6 and vitamin A, among others.

2) **Hormonal therapy:** Birth control pills regulate estrogen and progesterone levels. Danocrine, a synthetic version of the male hormones testosterone, works by shutting down the menstrual cycle. Bromocriptine reduces prolactin release and suppresses breast milk production after pregnancy, will reduce the breast lump.

Be sure to: Educate women to:

1) Perform monthly breast self-exams.
2) Have a yearly breast exam by a doctor.
3) Have regular mammograms when recommended by your health care provider.
4) See the doctor whenever new lumps appear, if an existing lump changes in any way, or if unexplained symptoms develop.

Treatment

- Assurance and re-examination at intervals.
- To wear a well fitting brassiere day and night.
- Acetaminophen or NSAIDs may be helpful.
- To reduce the intake of methylxanthines (coffee, tea, chocolates, caffeinated soda) and tobacco.
- Vitamin E 400 mg daily may be helpful.
- In refractory cases, any of the following may be tried:
  - Cyclic combined estrogen-progesterone preparations.
  - Danazol 200 mg daily in divided doses.
  - Bromocriptine-2.5–5 mg daily at bed time.
  - Surgery- rarely indicated.

Nursing Management

This includes relief of symptoms by use of anti-inflamatory medication, proper fitting brassiere, vitamin supplement, reduce intake of coffee, tea and tobacco. In case of no relief, you should :

1) Refer the case to higher facilities for further management.
2) Give medication as prescribed as per protocol.
3) Follow up the case which were referred for their present condition.

Check Your Progress 2

1) Define Vaginal Discharge.

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2) Explain preventives measures for abnormal vaginal discharge.

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3) List signs and symptoms of mastitis.

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4) Describe nursing management for mastitis.

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5) List common signs and symptoms for breast lump.

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1.7 PELVIC PAIN

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Pelvic pain is a common symptom in gynecology. It may be present in acute form or in chronic form. It should be remembered that the pain is just a symptom of an underlying disorder. Whereas, it is often easy to find out the underlying cause of acute pain, it is often difficult to find out the cause of chronic pelvic pain. Sensation of pain is found to depend on many factors in an individual: e.g. subjective feel. Emotional status, genetic factors, experience, gender, pain threshold, anxiety and expectations. Women have lower pain threshold and tolerance. Assess the type of pain, reassure the clients and educate about management of pain.

Educate the women about the site and cause of pain to help in assessment. Impulse generated due to depolarisation of a peripheral nerve ending (transduction)? transmission of the nerve impulse? Modulation (control of impulse transmission to neurons by neurotransmitters)? perception of pain.

Table1.2: Localisation of Referred Pain

Organs	Site for Referred Pain
Body of uterus	Hypogastrium, anterior and medial aspect of thighs
Fallopian tubes and ovaries	Above the mid- inguinal point
Cervix	Upper sacral region
Uterosacral ligament	Lower sacral region

Unlike somatic structures, which are well represented in the cerebral cortex in terms of localisation, visceral structures are poorly localised in the cerebral cortex. Thus, the pain arising from the pelvic organs is often localised not to the organ but referred to the skin area supplied by the same spinal nerve. Various neuromodulators (prostaglandins, endorphins) and neurotransmitters

(norepinephrine, serotonin) are involved to modify the pain sensation in the brain. Visceral pain may be due to distention, stretching, hypoxia, necrosis, chemical irritants or inflammation of the viscera. Pelvic pain may be direct or referred.

1.7.1 Acute Pelvic Pain

Acute pain is of the short duration and generally the symptoms are proportionate to the extent of tissue damage. In chronic pelvic pain, the onset is insidious and the degree of pain is not proportionate to the extent of structural tissue damage.

Most often, the basic mechanism of acute pain is due to irritation of the peritoneum by either blood or infection. The cause of the acute pelvic pain are appendicitis, ectopic pregnancy, endometriosis, ovarian cyst, ovarian torsion.

Diagnosis: A meticulous history taking and examination – systemic, abdominal and pelvic, most often help in diagnosis of pelvic pain.

Guidelines in clinical diagnosis:

- Pain of gynecologic origin usually starts in the lower abdomen and then spreads to the entire abdomen.It is usually aggravated during menstruation.
- Pain preceded by amenorrhoea is usually obstetrically related-disturbed ectopic pregnancy should be kept in mind.
- Anorexia, nausea and vomiting are usually correlated well with gastrointestinal problems.
- Frequency of micturition, dysuria with or without fever point to the diagnosis of urinary tract infection.
- Fever with chills and rigour is most often associated with acute PID.
- Pain with syncopal attacks with collapse suggests intraperitoneal haemorrhage.
- Abdominopelvic lump along with more or less stable vital signs points towards complicated pelvic tumor.

Investigations

Basic investigations to substantiate the clinical diagnosis as when indicated include:

Blood: Complete haemogram is done. An increase in white cell count may indicate infection. Decreased haemoglobin level with low haematocrit value indicates hypovolemia.

Midstream urine for microscopic examination and culture is to be done to diagnose UTI. Presence of pus cells, bacteria and red blood cells suggests UTI.

Urine for immunological test of pregnancy, ultrasonography to rule out ectopic pregnancy.

With these protocols, diagnosis is established in majority and for those remaining undiagnosed cases; the following are to be employed.

X-ray abdomen- (upright, supine and lateral decubitus film) is to be done to diagnose-intestinal obstruction or perforation. Perforation of air-filled viscous is evident by presence of free air under the diaphragm. Free fluid suggests ruptured cyst. Calculus can be evident from X-ray.

Sonography (transvaginal) is helpful to detect pelvic mass or pregnancy-uterine or tubal.

1.7.2 Chronic Pelvic Pain

Chronic pelvic pain (CPP) is defined as the noncyclic pain (non-menstrual) of 6 month duration or more localised to the pelvis, anterior abdominal wall below the pelvis or lower back, severe enough to cause functional disability that require medical or surgical treatment.

Diagnosis: While it is comparatively easy to diagnose the cyclic chronic pelvic pain, it is difficult at times to pinpoint the diagnosis of acyclic and non-gynaecologic group. However, meticulous history taking and through clinical examinations- abdominal and vaginal with the possibility in mind, helpful in diagnosis.

Table 1.3 : Causes of Chronic Pelvic Pain

Gastrointestinal	• irritable bowel syndrome • appendicitis • constipation • diverticulitis
Urological	• interstitial cystitis • urethral syndrome • calculi
Orthopaedic	Disease of the bones, ligaments, muscles of the lumbosacral region
Neurological	Nerve compression
Hernias	Inguinal, femoral
Gynaecological	PID, Endometriosis, Adenomyosis

Treatment:

Principles: Guide patients for treatment:

- To have a definite diagnosis of the underlying disorders.
- To establish the relationship between the pathology and the symptoms.
- To evaluate psychosomatic factors-cases or effect.
- Multidisciplinary approach involving a psychologist is ideal especially when no pathology could be detected.

In detectable pathology: conservative or radical surgery is to be done to remove the offending pathology. Hysterectomy is ideal for women with pelvic endometriosis or adenomyosis, when she has complete child bearing. Discuss with the patients the suitable treatment and refers to appropriate doctor.

Medical Management of Pain

- Assurance and sympathetic handling often help to reduce the pain.
- **NSAIDs:** Ibuprofen, Naproxen: COX_2 inhibitors – Celecoxib, Ketorolac.

- **Neurolytic agents:** Tricyclic antidepressants- Amitriptyline line, Imipramine, **Serotonin uptake inhibitors:** Sertraline, Fluoxetine, Paroxetine, ion **channel Blockers:** Gabapentin, Carbamazepine.
- **Narcotics (under supervision):** Codeine, Methadone.
- **Others:** OC pills, progestogens, Danazol or even GnRH analogues are indicated in young patients with minimal endometriosis, spasmodic dysmenorrhoea or midmenstrual pain.
- **Minimal invasive surgery** includes laser therapy in pelvic endometriosis or laparoscopic adhensiolysis. Laparoscopic presacral neurectomy (PSN) and uterine nerve ablation (LUNA) are considered for midline dysmenorrhoea when conservative management has failed.
- **Surgery** like ventrosuspension, placation of round ligaments in deep dyspareunia or even presacral neurectomy may be employed.
- **Hysterectomy** should be contemplated judiciously in selected cases.
- **Intractable pain of malignant origin:** Apart from narcotic analgesics , symptomatic treatment, reassurance may relieve pain for few months, refer well in time to territory care hospital for further treatment.

Nursing Management

When you find that the patient has no relief of pelvic pain inspite of following the medical management, you should

1) Plan to refer the case for further management.
2) Give medication as per protocol.
3) Refer the case to next higher medical facility nearby.
4) Follow up the cases that are referred to know their present condition.

1.8 PELVIC ORGAN PROLAPSE (POP)

Pelvic organ prolapse (POP) is one of the common clinical conditions met in day-to-day gynaecological practice especially among the parous women.

The uterus is normally placed in anteverted and anteflexed position. It lies in between the bladder and rectum. The cervix pierces the anterior vaginal wall almost at right angle to the axis of the vagina.

1.8.1 Etiology of Pelvic Organ Prolapse

There are predisposing factors to explain causes of POP.

Predisposing factors

a) **Acquired** – trauma of vaginal delivery causing injury to:

   1) Ligaments
   2) Endopelvic Fascia
   3) Levator Muscle
   4) Nerve and muscle damage due to repeated child birth

b) **Congenital**

1) Inborn weakness of supporting structures
2) Postmenopausual atrophy
3) With-age
4) Increased intra-abdominal pressure due to constipation
5) Weight lifting
6) Undernutrition
7) Obesity
8) Fibroids
9) Weakness (pelvic floor)
10) Genetic weakness of supporting structure

Table 1.4 : Causes of Pelvic Organ Prolapse (POP)

Anatomical Factors	Clinical Factors	
	Predisposing Factors	**Aggravating Factors**
• Gravitational stress due to human bipedal posture • Anterior inclination of pelvis directing the force more anteriorly • Stress of parturition (internal rotation) causing maximum damage to puborectal fibers of levator ani • Pelvic floor weakness due to urogenital hiatus and the direction of obstetrics axis through the hiatus • Inherent weakness of the supporting structures (genetic)	**A. Acquired** Trauma of vaginal delivery causing injury (tear or break) to: 1. Ligaments 2. Endopelvic fascia 3. Levator muscle (myopathy) 4. Perineal body 5. Nerve (pudendal) and muscle damage due to repeated child birth **B. Congenital** Inborn weakness of supporting structures	• Postmenopausal atrophy • Poor collagen tissue repair with age • Increased intra-abdominal pressure as in chronic lung disease and constipation • Occupation (weight lifting) • Asthenia and undernutrition • Obesity • Increased weight of the uterus as in fibroid or myohyperplasia These factors possibly operate where the supports of the genital organs are already **weak.**

1.8.2 Types of Pelvic Organ Prolapse

The genital prolapse is broadly grouped into:

- Vaginal prolapse
- Uterine prolapse

While vaginal prolapse can occur independently without uterine descent, the uterine prolapse is usually associated with variable degrees of the vaginal descent.

Types of Genital Prolapse

A Vaginal Prolapse

1) Anterior wall
   - Cystocele (upper 2/3)
   - Urethrocele (lower 1/3)
   - Cystourethrocele (combined)
2) Posterior wall
   - Relaxed perineum
   - Rectocele
3) Vault prolapse
   - Enterocele
   - Secondary
     - Abdominal hysterectomy
     - Vaginal hysterectomy

B Uterine Prolapse

1) Uterovaginal
2) Congenital

Let us discuss these types one by one:

A) **Vaginal Prolapse**

1) **Anterior Wall consist of following**

- **Cystocele**- The cystocele is formed by laxity and descent of the upper two-third of the anterior vaginal wall. As the bladder base is closely related to this area, there is herniation of the bladder through the lax anterior wall.
- **Urethrocele-** When there is laxity of the lower-third of the anterior vaginal wall, the urethra herniates through it. This may appear independently or usually along with cystocele and is called cystourethrocele.

2) **Posterior Wall**

- **Relaxed perineum -** Torn perineal body produces gaping with bulge of the lower part of the posterior vaginal wall.
- **Rectocele -** There is laxity of the middle-third of the post vaginal wall and adjacent recto-vaginal septum. As a result, there is herniation of the rectum through the lax area.

3) **Vault Prolapse**

- **Enterocele** – laxity of the upper- third of the posterior vaginal wall results in herniation of the pouch of Douglas. It may contain omentum or even loop of small bowel and hence, called enterocele. Traction enterocele is secondary to uterovaginal prolapse. Pulsion enterocele is secondary to chronically raised intra-abdominal pressure.
- **Secondary vault prolapse** – This may occur following either vaginal or abdominal hysterectomy. Undetected enterocele during initial operation or inadequate primary repair usually results in secondary vault prolapse.

B. Uterine Prolapse

There are two types:

1) **Uterovaginal prolapse** is the prolapse of the uterus, cervix and upper vagina.

   This is the commonest type. Cystocele occurs first followed by traction effect on the cervix causing retroversion of the uterus. Intra-abdominal pressure has got piston like action on the uterus thereby pushing it down into the vagina.

2) **Congenital**

   There is usually no cystocele. The uterus comes down along with inverted upper vagina. This is often met in nulliparous women and hence called nulliparous prolapse. The cause is congenital weakness of the supporting structures holding the uterus in position.

Degree of Uterine Prolapse : There are three degree of prolapse.

Three degrees are described as :

First degree: The uterus descends from its anatomical position (external os at the level of ischial spines) but the external os still remains inside the vagina.

Second Degree: The external os protrudes outside the vaginal introitus but the uterine body still remains inside the vagina.

Third degree: (syn: Procidentia, complete prolapse)- The uterine cervix and body descends to lie outside the introitus.

Procidentia involves prolapse of the uterus with eversion of the entire vagina.

Symptoms: Identify the symptoms of prolapse like:

- Feeling of something coming down vagine, especially while she is moving about.
- There may be variable discomfort on walking when the mass comes outside.
- Backache or dragging pain in the pelvis.

The above two symptoms are usually relieved on lying down.

- Dyspareunia

Urinary symptoms (in presence of cystocele) include following:

- Difficulty in passing urine, more the strenuous effort, the less effective is the evacuation. The patient has to elevate the anterior vaginal wall for evacuation of the bladder.
- Incomplete evacuation may lead to frequent desire to pass urine.
- Urgency and frequency of micturition may also be due to cystitis.
- Painful micturition is due to infection.
- Stress incontinence is usually due to associate urethrocele.
- Retention of urine may rarely occur.

Bowel symptoms (in presence of rectocele) include following:

Difficulty in passing stool. The patient has to push back the posterior vaginal wall in position to complete the evacuation of faeces. Faecal incontinence may be associated.

Excessive white or blood-stained discharge per vaginum is due to associated vaginitis or decubitus ulcer.

1.8.3 Clinical Examination and Diagnosis of POP

Assist the doctor in diagnosis of POP as follows:

- A composite examination – inspection and palpation. Vaginal, rectal, rectovaginal or even under anaesthesia may be required to arrive at the correct diagnosis.
- General examination – details, including BMI signs of myopathy or neuropathy, features of chronic airway disease or any abdominal mass should be done.
- Pelvic organ prolapse (POP) is evaluated by pelvic examination in both dorsal and standing positions. The patient is asked to strain as to perform a Valsalva maneuver during examination. This often helps to demonstrate a prolapse which may not be seen at rest.
- A negative finding on inspection in dorsal position should be reconfirmed by asking the patient to strain on squatting position.
- Prolapse in one organ (uterus) is usually associated with prolapse of the adjacent organs (bladder, rectum).
- Etiological aspect of prolapse should be evaluated.

Cystocele: There is bulge of varying degree of the anterior vaginal wall, which increases when the patient is asked to strain. This may be seen on inspection. In others, to elicit this, one may have to separate the labia or depress the posterior vaginal wall with fingers or using sims' speculum, placing the patient in lateral position.

The mucosa over the bulge has got transverse rugosities. The bulge has got impulse on coughing, with diffuse margins and is reducible.

Cystourethrocele: The bulging of the anterior vaginal wall involves the lower-third also. One may find the urine to escape out through the urethral meatus when the patient is asked to cough-stress incontinence. To elicit the test, the bladder should be full.

Relaxed perineum: There is gaping introitus with old scar of incomplete perineal tear. The lower part of the posterior vaginal wall is visible with or without straining.

Rectocele and anterocele: When two conditions exist together, there is bulging of the posterior vaginal wall with a transverse sulcus between the two. The midvaginal one being rectocele with defuse margins and reducible. This is visualised by retracting the anterior vaginal wall by London's retractor. Ultimate differentiation of the two entities is by rectal or rectovaginal examination. In enterocele, the bulging is close to the cervix and cannot be reached by the finger inside the rectum.

Uterine Prolapse: In second or third degree of prolapse, infection can relieve a mass protruding out through the introitus, the leading part of which is the external. In first degree of uterine descent, the diagnosis is made through speculum examination when one finds the cervical descent below the level of ischial spines on staining. In others, however, the external os is visible on separating the labia.

Palpation is essential to diagnose a third degree prolapse; the entire uterus comes below the introitus.

There may be evidences of decubitus ulceration and dark pigmented areas.

Differential Diagnosis

Cystocele: The Cystocele is often confused with a cyst in the anterior vaginal wall.

Management of Prolapse

- Preventive
- Conservative
- Surgery

Preventive

The following guidelines may be prescribed to prevent or minimise genital prolapse.

Adequate Antenatal and Intranatal Care: Provide adequate perineal support.

To avoid injury to the supporting structures during the time of vaginal delivery either spontaneous or instrumental.

- Check type of injury, inspect meticulously
- Check if episiotomy is required
- If it is required to prevent tear, then give episiotomy under aseptic precautions
- Suture episiotomy in layers
- Ensure to control bleeding
- If there is a tear, they are usually lacerated, approximate and stich the tear to avoid complication later.

Adequate postnatal Care

- Encourage early ambulation
- Encourage pelvic floor exercise by squeezing the pelvic floor muscles in the puerperium.

General Measures

- To avoid strenuous activities, chronic cough, constipation and heavy weight lifting.
- To avoid future pregnancy too soon and too many by contraceptive practice.

Conservative

Indications of Conservative Management are:

- Asymptomatic women.
- Mild degree prolapses.
- POP in early pregnancy.

Meanwhile, following measures may be taken:

- Improvement of general measures.
- Estrogen replacement therapy may improve minor degree prolapse in postmenopausal women.
- Pelvic floor exercises in an attempt to strengthen the muscles.
- Pessary treatment.

Pessary Treatment

It should be emphasised that the pessary cannot cure prolapse but relieves the symptoms by stretching the hiatus urogenitalis, thus preventing vaginal and uterine descent. Indications of use are:

- Early pregnancy- The pessary should be placed inside up to 18 weeks when the uterus becomes sufficiently enlarged to sit on the brim of the pelvis.
- Puerperium- To facilitate involution.
- Patients absolutely unfit for surgery especially with short life expectancy.
- Patient's unwillingness for operation.
- While waiting for operation.
- Additional benefits: Improvement of urinary symptoms (voiding problems, urgency).

Surgical Treatment

Educate and refer for surgical treatment:

- Surgery is the treatment of symptomatic prolapse where conservative management has failed or is not indicated.
- Surgical procedures may be:
    - Restorative-(1) correcting her own support tissues (2) compensatory-using permanent graft material.
    - Extirpative-removing the uterus and correcting the support tissues.
    - Obliterative- closing the vagina.
- Meticulous examination, even under anaesthesia, is necessary to establish the correct diagnosis of the organ prolapsed so that effective and appropriate repair can be carried out.
- There is no single procedure for all types of prolapse. Factors determining the choice of surgery are: patient's age: parity, degree of prolapse, any prior surgery for prolapse, type of prolapse (Cystocele, enterocele) and associated factors (urinary/fecal incontinence, PID), any associated comorbid condition (cardiac disease).

Check Your Progress 3

1) List the investigation required to diagnose acute pelvic pain.

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2) Tabulate the cause of chronic pelvic pain.

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3) Summarise the types of POP.

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4) Explain the guidelines for prevention of prolapse of uterus.

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1.9 LET US SUM UP

You have learnt common gynaecological conditions, their pathophysiology, causes and risk factors, signs and symptoms, diagnostic procedures and management. Nursing management becomes easy when you know the background of the patient, your interaction with the woman suffering from these conditions would definitely help them with your appropriate advices which are explained after each condition. Hence, recall from your previous experience of dealing such conditions in clinical set up and utilise this knowledge in the community as and when patient is in need.

1.10 MODEL ANSWERS

Check Your Progress 1

1) The main symptoms of dysmenorrhoea are :
   - pain concentrated in the lower abdomen
   - in the umbilical region or
   - the suprapubic region of the abdomen.
   - right or left abdomen.
   - may radiate to the thighs and lower back.

2) **Laboratory studies:** The investigations to be performed should be chosen based on clinical diagnosis.
   - complete blood count (with differential), for evidence of infection or neoplastic process
   - urinalysis, to exclude urinary tract infection
   - quantitative human chorionic gonadotropin level, to exclude ectopic pregnancy, gonococcal/chlamydial cultures
   - enzyme immunoassay (EIA), and DNA probe testing, to exclude sexually transmitted infections (STIs)/pelvic inflammatory disease (PID)
   - stool guaiac, to rule out GI bleeding and
   - erythrocyte sedimentation rate (ESR), for subacute salpingitis.

3) Premenstrual syndrome (PMS) or premenstrual tension (PMT) is a combination of physical, psychological, emotional and mood disturbances that occur after a woman's ovulation and typically ending with the onset of her menstrual flow.

   The most common mood-related symptoms are irritability, depression, crying, oversensitivity, and mood swings with alternating sadness and anger. The most common physical symptoms are fatigue, bloating, breast tenderness (mastalgia), acne, and appetite changes with food cravings.

4) Prevention: Preventive measures are usually life style changes required to be taken as follows:

   - Engage in the least 30 minutes of brisk walking, cycling, swimming or other aerobic activity during most days of the week. Regular daily exercise can help improve your overall health and alleviate symptoms such as fatigue and depresses mood.
   - Learn and use stress management techniques such as progressive muscle relaxation, deep breathing, and meditation, a warm bath, listening to music, or yoga in day.
   - Eat smaller, more frequent meals to reduce bloating and the sensation of the fullness.
   - Limit salt and salty food to reduce bloating and fluid retention.
   - Choose foods high in complex carbohydrates, such as fruits, vegetables and whole grains.
   - Choose food rich in calcium. If you cannot tolerate dairy products or aren't getting adequate calcium in your diet, you may need a daily calcium supplement.
   - Limit caffeine and alcohol. Caffeine can make breast tenderness worse and increase headaches.

Check Your Progress 2

1) Vaginal discharge refers to secretions from the vagina and such discharge can vary in:

   Consistency (thick, pasty, thin), colour (clear, cloudy, white, yellow, green) and smell (normal, odourless, bad odour).

2) Many factors can play a role in the occurrence of vaginal infections and discharge. You should advice for practicing these simple tips which significantly may reduces risk of getting a vaginal infection: These are as given below:

   a) Always wear cotton panties. Cotton allows genital area to breathe. Helping it stay dry. It's also a good idea to wear panties only during the day and not a night when you are sleeping.

   b) Don't use vaginal douches.

   c) Never use petroleum jelly or oils for vaginal lubrication. This can create a breeding ground for bacteria to grow.

   d) If you are being treated for a vaginal infection, use all the medication as directed, even you think you are better.

e) Don't have sexual intercourse during treatment for a vaginal infection. Wait until you have no more symptoms.

f) Avoid vaginal contact with products that can irritate the vagina, such as feminine hygiene products, perfumed or deodorant soaps, powders, lotions, and bubble baths.

g) Avoid wearing tight-fitting clothing's, such as bathing suits, exercise wear, pantyhose for prolonged periods of time.

h) Many times, vaginal infections cause intense itching- don't scratch scratching infected, inflamed areas will only make things worse.

i) If patients are self-treating a vaginal infection and symptoms have not improved after treatment, see health care providers, for a vaginal exam. Don't use any vaginal products or treatments for 48 hours before appointment.

j) Always use condoms during sexual intercourse unless patient is in a long-term monogamous relationship.

k) Always wipe from front to back after urination or having a bowel movement. Improper wiping easily spreads bacteria to the vagina and may lead may to vaginal discharge and infection.

Of course, good hygiene, getting plenty of sleep, and a well-rounded diet with an appropriate fluid intake are always a good idea for vaginal health, as well as for overall health and well-being.

3) **Infection**

Breast infections may cause pain, redness, and warmth of the breast along with the following symptoms:

- Inflammation or swelling of the breast.
- Skin redness, often in a wedge-shaped pattern.
- Breast may be tender and warm to touch.
- Pain or a burning sensation continuously or while breastfeeding.
- Body aches
- General malaise or ill feeling
- Fatigue
- Breast engorgement
- Fever and chills (101^{o}F or higher in acute mastitis)
- Rigour or shaking

Abscess: Sometimes a breast abscess can complicate mastitis. Harmless, noncancerous masses such as abscesses or more often tender and frequently feel mobile beneath the skin. The edge of the mass is usually regular and well defined. Indications that this more serious infection has occurred include the following:

Tender lump in the breast that does not get smaller after breastfeeding a newborn

Mass may be moveable and/or compressible.

Pus draining from the nipple.

Persistent fever and no improvement of symptoms within 48–72 hours of the treatment.

4) **Nursing Management**

Advice mother for the following measures:

- Encourage frequent breastfeedings;
- Do not stop breastfeeding from the affected breast, even though it will be painful. Frequently emptying of the breast prevents engorgement and clogged ducts that can only make mastitis worse.
- Apply a warm compress to the breast before and after feeding can often provide some relief.
- A warm bath may work as well. If heat is ineffective, ice packs applied after feedings may provide some comfort and relief. Avoid using ice packs just before breastfeeding because it can slow down milk flow.
- Encourage to take a mild pain reliever, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin, others) for to reduce pain and inflammation if necessary.
- Encourage the patient to drink plenty of water– atleast 10 glasses a day.
- Eat well balanced meals and add 500 extra calories a day while breastfeeding. Dehydration and poor nutrition can decrease milk supply and make feel worse.

If pus is draining from infected breast, instruct the patient to wash the nipple gently and let it air dry before putting bra back on.

5) The common symptoms of breast lump are:

- Tenderness in one or both breast with pressure on touch.
- Breast pain or discomfort
- Breast may feel swollen
- An intermittent or persistent sense of breast engorgement, associated with dull, heavy pain and tenderness.
- Intermittent appearance of cysts or lump that form and then resolve within a few weeks.
- A dense, pebbly consistency to breast tissue
- Formation of persistent cyst or lumps
- Nipple discharge or inflammation

These symptoms can range from mild to severe. Many women notice monthly cyclic patterns, with symptoms most severe just before each menstrual period.

Check Your Progress 3

1) Basic investigations to substantiate the clinical diagnosis as when indicated include:

    - **Blood:** Complete haemogram is done. An increase in white cell count may indicate infection. Decreased haemoglobin level with low haematocrit value indicates hypovolemia.

Midstream urine for microscopic examination and culture is to be done to diagnose UTI. Presence of pus cells, bacteria and red blood cells suggests UTI.

Urine for immunological test of pregnancy, utrasonography to rule out ectopic pregnancy.

With these protocols, diagnosis is established in majority and for those remaining undiagnosed cases; the following are to be employed.

X-ray abdomen- (upright, supine and lateral decubitus film) is to be done to diagnose-intestinal abstruction or perforation. Perforation of air-filled viscous is evident by presence of free air under the diaphragm. Free fluid suggests ruptured cyst. Calculus can be evident from X-ray.

Sonography (transvaginal) is helpful to detect pelvic mass or pregnancy-uterine or tubal.

2) Causes of Chronic Pelvic Pain

Gastrointestinal	• irritable bowel syndrome • appendicitis • constipation • diverticulitis
Urological	• interstitial cystitis • urethral syndrome • calculi
Orthopaedic	Disease of the bones, ligaments, muscles of the lumbosacral region
Neurological	Nerve compression
Hernias	Inguinal, femoral
Gynaecological	PID, Endometriosis, Adenomyosis

3. Types of Genital Prolapse

(A) Vaginal

1) Anterior wall
   - Cystocele (upper 2/3)
   - Urethrocele (lower 1/3)
   - Cystourethrocele (combined)

2) Posterior wall
   - Relaxed perineum
   - Rectocele

3) Vault prolapse
   - Enterocele
   - Secondary following
     - Abdominal hysterectomy
     - Vaginal hysterectomy

(B) Uterine

1) Uterovaginal

2) Congenital

4) The following guidelines may be prescribed to prevent or minimise genital prolapse.

Adequate Antenatal and Intranatal Care: Provide adequate perineal support.

To avoid injury to the supporting structures during the time of vaginal delivery either spontaneous or instrumental.

Adequate postnatal Care

- Encourage early ambulance.
- Encourage pelvic floor exercise by squeezing the pelvic floor muscles in the puerperium.

General Measures

- To avoid strenuous activities, chronic cough, constipation and heavy weight lifting.
- To avoid future pregnancy too soon and too many by contraceptive practice.

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UNIT 2 FAMILY PLANNING METHODS, SPACING TECHNIQUES AND COUNSELLING

Structure

2.0 INTRODUCTION

In the previous unit, you have learnt about various gynaecological conditions, risk factors, signs, symptoms and management. This unit deals with family planning method, techniques and counselling.

India launched its first Family Planning Programme in 1952 in response to high fertility and population growth rate with an aim to achieve population stabilisation and reduce maternal, infant and child mortality and morbidity.

The National Population Policy 2000 provided a framework for prioritising the strategies to achieve net replacement levels of Total Fertility Rate (TFR) by 2010 through a comprehensive package of reproductive and child health services. Over the years TFR has constantly declined to a current value of 1.9 as per National Family Health Survey (NFHS III) data.

The factors that affect the population growth are Unmet Need of Family Planning (21.3% as per DLHS III), age at marriage and first child birth and spacing between the births. In India, 5.6% deliveries are contributed by girls between 15–19 years of age and 22.1% of girls are married at less than 18 years of age. Spacing between the births increases the chances of survival of infants and thus impact on the fertility. An ideal spacing of three years is recommended, however data from SRS 2013 shows that in 59.3% of births, the ideals spacing is not followed.

2.1 OBJECTIVES

After completing this unit, you will be able to:

- enlist various temporary and permanent methods of contraception along with the benefits, side effects and contraindications of each;
- detect complications, if any, at the earliest following each method for appropriate management and timely referral;
- provide support through counselling to the adopters (couples) of family planning method, their family and community; and
- supervise the ASHAs and ANMs while they offer services to the beneficiaries.

2.2 CURRENT FAMILY PLANNING PROGRAMME UNDER PUBLIC HEALTH

Both NFHS and DLHS data shows that the small family norm is widely accepted nationwide and the general awareness of contraception is almost universal (98% among women and 98.6% among men). However the use of contraceptive among married women (age 15–49 years) has been reported to be as low as 56.3% in NFHS III, though an increase of 8.1% has been reported as against the NFHS II data.

Thus to narrow down the gap between the knowledge and use of contraceptives, Government of India under Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH Plus A) Programme has widened the basket of choice of contraceptives under its ambit, that are being provided at various levels, at no or minimum cost. The available methods of contraceptives can be divided into: (Table 2.1)

1) Temporary (Spacing) Methods for delaying first pregnancy or spacing the child births.

2) Permanent (Limiting) Methods for limiting the family after achieving the desired family size.

Table 2.1: List of Contraceptive Methods available Under RMNCH+A Programme

Spacing Methods	**Limiting Methods**
IUCD 380 A and Cu IUCD 375	**Female Sterilisation:**
Injectable Contraceptive DMPA (Antara)	Laparoscopic
Combined Oral Contraceptive (Mala-N)	Minilap

Spacing Methods	Limiting Methods
Centchromen (Chhaya)	
Emergency Contraceptive Pill (Ezy Pill/E-Pill)	**Male Sterilisation:**
Progesterone-Only Pill (POP)	No Scalpel Vasectomy (NSV)
Male Condoms (Nirodh)	Conventional Vasectomy

The manpower has been trained to provide all the services at various health facilities as per the guidelines.The Spacing and Limiting methods are provided at various health facilities by various health care providers as per the following guidelines: (Table 2.2)

Table 2.2

Methods	Location where the Service has to be Provided	Service Provider
SPACING METHODS		
IUCD 380 A, IUCD 375	Sub centre & higher levels	Trained & certified ANMs, LHVs, SNs and doctors
Oral Contraceptive Pills (OCPs)	Village level Sub centre & higher levels	Trained ASHAs, ANMs, LHVs, SNs and doctors
Condoms	Village level Sub centre & higher levels	Trained ASHAs, ANMs, LHVs, SNs and doctors
LIMITING METHODS		
Minilap	PHC & higher levels	Trained & certified MBBS doctors & Specialist Doctors
Laparoscopic Sterilisation	Usually CHC & higher levels	Trained & certified MBBS doctors & Specialist Doctors
NSV: No Scalpel Vasectomy	PHC & higher levels	Trained & certified MBBS doctors & Specialist Doctors
Emergency Contraceptive Pills (ECPs) Nurses	Village level Sub centre & higher levels	Through trained ASHAs, ANMs, LHVs, Staff and Medical Officers.

Emergency Contraception Pills (ECPs): This is not a regular method of Family Planning. It works by possibly inhibiting ovulation, thickening cervical mucous and affecting transport of sperm or egg depending on the phase of the menstrual cycle. Single dose is taken as soon as possible after an unprotected intercourse. These tablets are available at Village level, Sub-centre & higher levels through Trained ASHAs, ANMs, LHVs, SNs and doctors at a minimal cost of Rs 2 per pack. ASHA also delivers a pack of 3 condoms and a cycle of OCPs at the rate of Rs 1 each. (Fig. 2.1)

Fig. 2.1: Emergency Contraception Pills (ECPs)

2.3 NATURAL METHODS OF FAMILY PLANNING

The natural methods of family planning have also been included in the basket of choice under the programme for the couples that are do not want to opt for the hormonal or barrier methods.

2.3.1 Lactational Amenorrhoea Method (LAM)

This method can be used for only first 6 months after delivery as long as the woman exclusively breastfeeds her baby including night feeds and also if her menses have *not* returned. This method is effective however 1 to 2 pregnancies per 100 women using this method during first six months have been reported. The additional benefits of this method are:

i) Immediate and Exclusive breastfeeding (EBF) promotes health benefits to the infant and increases the survival by providing additional protection against infections.

ii) Beneficial for the mother as it helps the uterus of the mother to return to normal size faster thus reducing the amount of blood loss besides promoting a bond between mother and infant.

Iii) Has no systemic side effects hence no supervision is required. It also does not interfere with intercourse.

iv) Women who are infected with HIV or who have AIDS or taking antiretroviral (medicines for AIDS) can use LAM, however there is a chance that some percentage of infants will get HIV through breast milk.

This method is not suitable for women who are not exclusively breastfeeding, postpartum women whose menses have returned and those women who are more than six months postpartum.

2.3.2 Fertility Based Awareness Method

These methods are based on the awareness regarding body signs that change during menstrual cycle as a result of hormonal changes and release of ovum.

There are several methods by which a women can predict the time of her ovulation. This can be done by:

a) **Basal Body Temperature (BBT) Method:** The temperature of body at rest is called as Basal Body Temperature (BBT). In most women, temperature of body increases by 0.5–1°F during ovulation and remains high till the end of her menstrual cycle. And thus her most fertile days start from 2–3 days before the increase in temperature. The women should be instructed to chart her temperature early morning before leaving her bed.

b) **Cervical Mucous Method:** This method is also known as Billings Method or the Ovulation Method. In this method, the women's fertile days can be predicted by the pattern of mucous discharge from the vagina. The women can be instructed to wipe the opening of the vagina with a clean tissue before urinating or insert a clean finger into her vagina to study the pattern of mucous. The 3-4 days around ovulation are the unsafe days when the mucous will be copious, slippery and clear like white of a raw egg. The women can also chart her pattern of mucous on a calendar.

c) **Calender Method:** The women should circle first day of her period on a calendar and count the total number days of the cycle for atleast 8 cycles. Mark the number of days in the longest and shortest cycle. Subtract 18 and 11 from the shortest and longest cycle respectively. The period between these days is fertile and thus unsafe period. e.g. If the longest cycle of a women is 30 days and shortest is 26 days then 30–11 and 26–18 i.e. her fertile period will be between day 8 upto day 19 during which she should use a method of contraception. (Fig. 2.2)

The above three methods are known as Symptothermal Method and are most effective if used together.

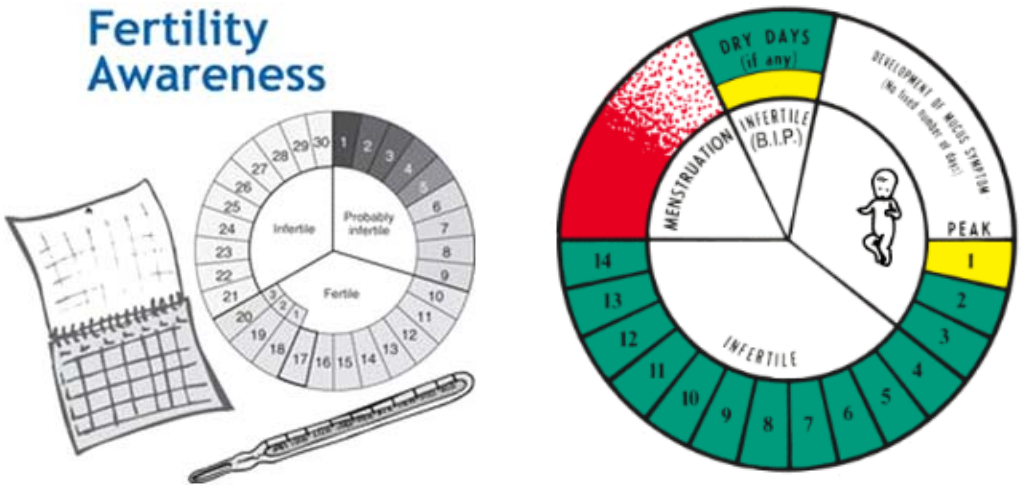

Fig. 2.2 : Calender Method

d) **Standard Days Method:** The women can be trained to keep a track of her menstrual cycles and abstain from unprotected intercourse during fertile days.

Fig. 2.3 : Standard Days Method

Special string of beads can be used to track the cycles. There are 33 coloured beads and a rubber ring on the string. The first bead is black with a white arrow, followed by red. Next six are brown in colour. Then are 12 white (Unsafe Days) followed by 13 brown beads (Safe Days). Each bead represents a day except the black one. The women should put the ring on the red bead on the first day of her period. Then she should move the ring in the direction of the arrow each day. Whenever the red band is on the white bead, the couple must use a contraceptive method whereas when the ring is on the brown bead, the couple can safely have unprotected vaginal intercourse. (Fig. 2.3)

But to use this method, the cycles of the women must be regular, and ranging between 26 and 32 days.

All the methods involving Fertility Awareness are based on client support her educational status and regularity, thus may not be very effective for long term use.

2.4 ARTIFICIAL METHODS OF FAMILY PLANNING

Let us learn the artificial or basic methods which are used for male and female as condom.

2.4.1 Condoms

There are Condoms for use by both men and women however only Male Condoms (Nirodh) are available under the programme. These are most effective when combined with spermicides. (Fig. 2.4)

Condoms are barrier contraceptive that do not allow the semen to come into contact with vagina. These are put on erect penis immediately before intercourse and are for one time use only. The client should be advised to leave about 1cm loose at the end of the condom to collect the semen after ejaculation, after which it should be carefully removed holding from the base of the penis ensuring that the semen doesn't spill.

The advantages of Condoms are:

1) Besides increasing male participation, these are easily available, cheap and easy to carry.

2) Has triple protection against Sexually Transmitted Disease (STDs), pregnancy and HIV(Human Immunodeficiency Virus) and also thus has an indirect role in prevention against cancer cervix.

Disadvantages are:

1) It has high rates of failure due to slippage/breakage during intercourse or deterioration of quality in case of improper storage conditions like excess light and heat.

2) Some men may not find it convenient as it decreases the penile sensitivity and needs to interrupt the intercourse to be worn of the erect penis.

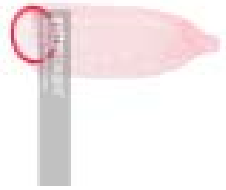

Fig. 2.4: Condom

Female Condoms: These are not available under the programme, however are available over the counter and can be purchased from the chemist for use during intercourse. It has a triple advantage of preventing unwanted pregnancy, reducing the risk of STDs and HIV. It is a pre-lubricated plastic polyurethane tube that has a closed end. It functions by collecting sperm before, during and after ejaculation. (Fig. 2.5)

The advantages of Female condoms are safe, simple, and convenient. Both men and women can benefit from the use of female condoms for a variety of reasons, include:

- The sharing of responsibility as it relates to STD's.
- Can be conveniently purchased from pharmacies and some supermarkets.
- Can be inserted by either partner before intimacy.
- They are a substitute for those with allergies to latex.
- They can be used with both oil and water based lubricants.
- Remains in place with or without an erect penis.

However, the disadvantages attached to these are that they do not feel natural, may cause slippage of penis causing a pause in intercourse. Sometimes, it may also cause irritation to the vagina or penis.

Fig. 2.5: Female Condom

2.4.2 Intrauterine Devices (IUD)

There are two basic types of IUDs: Non Medicated and Medicated. The non medicated IUDs are made up of polyethylene or other polymers whereas in addition, medicated ones also have either metal ions(copper) or hormones (progesterone).

2.5 HORMONAL CONTRACEPTIVES

Hormonal Contraceptives are the safe and reversible methods of contraception wherein either estrogen and progesterone are used in combination or only progesterone can be used (Progesterone Only Pill-POP) through oral or injectable route.

2.5.1 Oral Contraceptive Pills (OCPs)

The commonly available combined pills are Mala D and Mala N. Mala N is available free of cost through all the PHCs, subcentres, urban family welfare centres and at a nominal rate of Rs 1 per pack through ASHAs in the community. It contains Levonorgestrel 0.15mg and Ethinyl estradiol 0.03 mg. Each packet contains 28 pills (21 white pills of contraceptive and 7 brown pills of iron).These tablets are given for a period of 21 days starting from the fifth day of the menstrual cycle followed by a break for 7 days during which the menstruation occurs. Since the menstruation occurs because of withdrawal of hormones, this is also called as 'withdrawal bleeding' and the loss of blood is much less than that occurs during normal menstruation. (Fig. 2.6)

The tablets should be consumed at the same time every day; preferably in the morning so that in case the women forgets to take them on some day, she can consume it over the day and can carry on with her normal schedule the next day. If a female missed two tablets on two consecutive days, she must use an alternative method of contraception for the cycle.

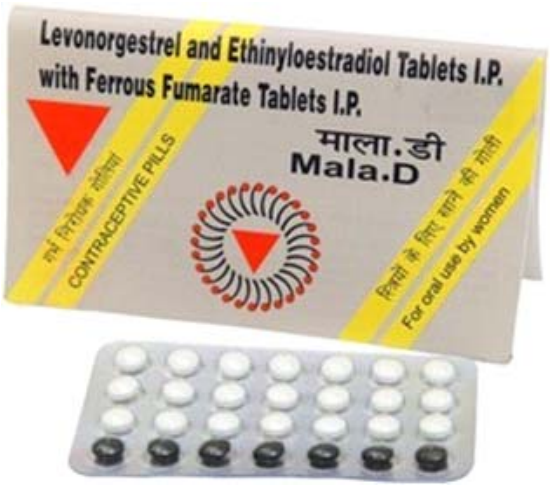

Fig. 2.6: Oral Contraceptive Pills (OCPs)

The mechanism of action of combined pills is to prevent the release of ovum from the ovary. Progesterone only pills (also known as Mini Pills) make the cervical mucous thick thus preventing the entry of sperms into the uterine cavity. These also inhibit tubal motility and thus delay the transfer of sperms in the tubes.

If taken as per the prescribed regimen, combined pills are almost 100% efficacious. Certain positive health benefits like prevention against Iron deficiency anaemia, Pelvic inflammatory disease, ectopic pregnancy, ovarian cancers and cysts and benign tumours of breast like fibroadenoma have also been reported in women consuming OCPs.

However since the mechanism of action of OCPs is by altering the hormonal mileu, these may have some adverse effects if consumed over very long time. The adverse effects could be

i) Increased predisposition to cardiovascular events like Myocardial Infarction, thrombosis etc.

ii) Metabolic Effects like alteration in serum lipid levels, blood clotting and carbohydrate metabolism.

iii) Liver disorders like hepatocellular adenomas, cholestatic jaundice and gall stones.

Accordingly the use of OCPs may be contraindicated in patients suffering from liver diseases, history of thromboembolism, cancer of breast or genitals, hyperlipidemia, cardiac diseases and abnormal uterine bleeding. Special caution may be taken in case the OCPs are being prescribed in women more than 40 years of age, smokers more than 35 years, mild hypertension, epilepsy, chronic renal disease, migraine, diabetic women, lactating mothers with child less than 6 months of age, gall bladder disease, amenorrhoea, history of infrequent bleeding.

Thus women who is being prescribed OCPs for the first time thus needs to be screened for any of the factors/conditions mentioned above by the Medical Officer/Doctor/Nurse/trained health workers for fitness. A checklist has been developed for screening the women by the health worker before prescribing OCPs. And then the pills for subsequent cycles can be procured from ASHAs in the community or subcentre. Thereafter annual checkups are advised for continuation of the pills.

2.5.2 Injectable Contraceptives

There are two types of injectable contraceptives-Progesterone only injections and once a month combined injectables. These have an advantage of being highly effective, reversible, long acting.

i) Progesterone only Injections: These are estrogen free preparations in which single administration suffices for several months or years. These are given during the first five days of the menstrual period via deep intramuscular route in the gluteus muscle. The most suitable ones are:

A) DMPA (Depot Medroxy Progesterone Acetate): It gives protection in 99% of women for atleast three months and is given by intramuscular route in the dose of 150 mg every three months. It also acts through suppression of ovulation, effect of cervical mucous, endometrium and tubal motility. However it has no effect on lactation thus is suitable for women in post partum period. (Fig. 2.7)

Its use has adverse effects like weight gain, prolonged infertility and irregular menstrual bleeding.

Fig. 2.7: DMPA (Depot Medroxy Progesterone Acetate)

B) NET-EN (Norethisterone Enanthate):NET EN is given every 60 days in the dose of 200 mg through intramuscular route and mechanism of action is similar to DMPA.

C) DMPA-SC 104 mg: is a low dose formulation given at three months interval. The injections are given in the upper thigh or abdomen subcutaneously.

The adverse effects of these injectable preparations are similar. These may cause disruption of normal menstrual cycle like episodes of unpredictable bleeding and prolonged amenorrhoea.

These should not be prescribed to women with cancer breast and genitals, undiagnosed abnormal uterine bleeding, suspected malignancy, high blood pressure(systolic>160,diastolic>100), history of disease of heart, liver and blood vessels, nursing mothers and deep vein thrombosis.

Certain other long acting contraceptives containing levonorgestrel have also been found to be effective like **Norplant and Vaginal rings.** Norplant is a subdermal implant that consists of six silastic capsules containing 35 mg of levonorgestrel each. These are implanted beneath the skin of upper arm or fore arm.These are effective for 5 years, however surgical procedure necessary to insert and remove them and irregularities in menstrual cycle are some disadvantages of the method.

The levonergestrel containing vaginal rings can be worn for three weeks of the cycle and removed for the fourth. An additional advantage is that the hormone is absorbed via mucosal route thus preventing the systemic side effects.

2.6 NON HORMONAL ORAL CONTRACEPTIVES

A non steroidal, non hormonal entity centchroman are available as ‘Chaaya’ and ‘Saheli’ under the programme. This is an anti implantation agent that exhibits weak estrogenic and potent ant estrogenic activity. These are available as 30 mg tablets. (Fig. 2.8)

The first tablet is taken on the first day of the menstrual cycle and then one tablet biweekly for three months followed by one tablet weekly till the client does not want to get pregnant. The tablet should preferably be taken at the same time. The missed dose should be taken as soon as possible. In case a dose is missed by 2 or more days but less than 7 days, use a barrier method till next cycle. In case of a miss more than 7 days, the dosage regimen should be started a fresh; biweekly for 3 months and weekly thereafter.

The advantages of non hormonal contraceptive tablets are that no hormone related adverse effects like amenorrhoea, nausea are reported as seen with other OCPs. However a few subjects have reported prolongation of menstrual cycle with its continuous use and missed doses due to irregular schedule.

Fig. 2.8 : Non Hormonal Oral Contraceptives

These pills should not be given to women with recent history or clinical evidence of jaundice/severe hepatic dysfunction, cervical hyperplasia, polycystic ovarian disease, chronic illness like tuberculosis and renal disease. It should also be avoided in women with known hypersensitivity to centchroman and nursing mothers in first 6 weeks postpartum.

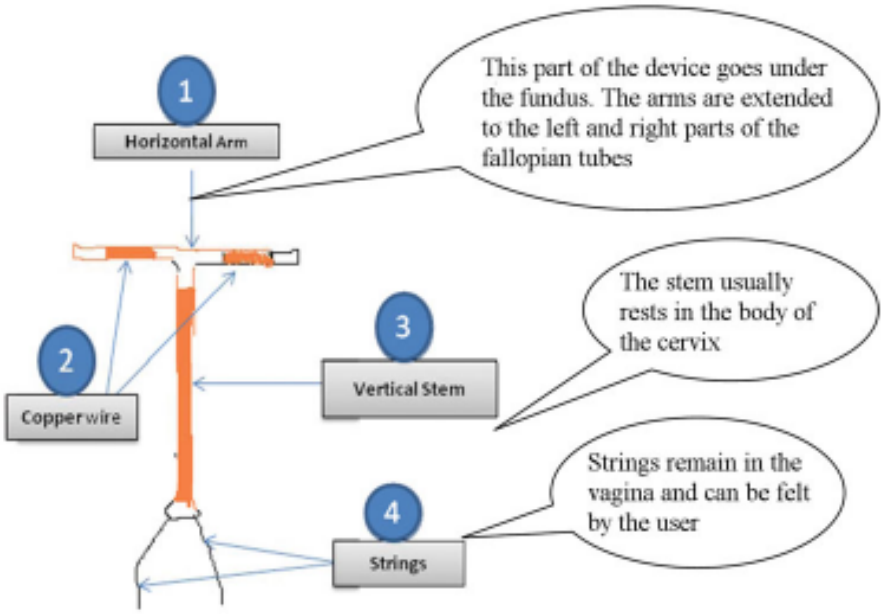

Fig. 2.9: Parts of Copper T

Under National Family Welfare Programme, Cu T 200B was being used initially that has an efficacy of three years, however CuT 380A has been introduced from the year 2002 with an efficacy up to 10 years. Cu T 375 (Multiload) is also available under the programme with an efficacy of 5 years. These are T shaped devices made of polyethylene and copper wire is wrapped on the limbs of the 'T', that has an anti fertility effect. The numbers included in the names of devices refer to the surface area of the copper on the device.

Another type of IUDs (Progestasert and LNG-20/Mirena) based on the principle of release of progesterone hormone are available for use by women that contains levonorgestrel. These reduce the menstrual blood loss in the users, have low pregnancy rates and lessen the chances of ectopic pregnancy.

Please refer Course 3, Block 5 Unit 2 for insertion and removal of IUD – details practical.

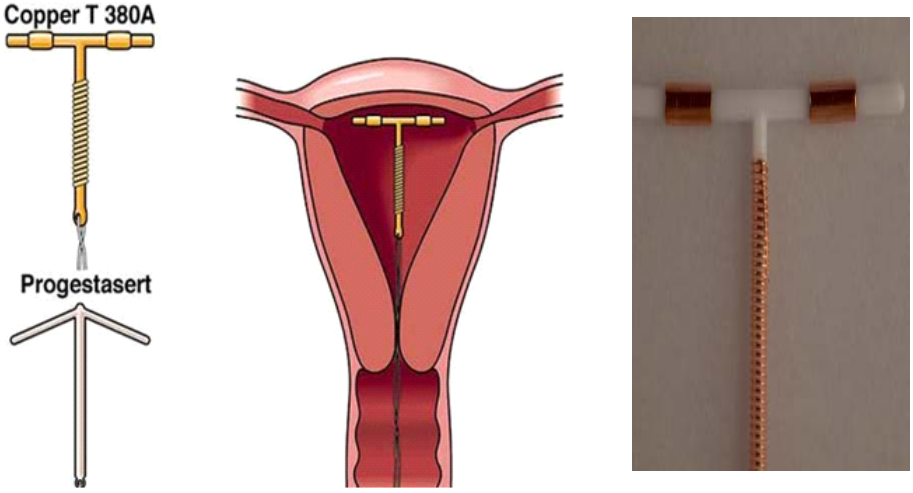

Fig. 2.10: Placement of Copper T

Interval IUCD can be inserted any time within 7 days after the menstrual period is over. Under the programme emphasis is on post partum/MTP IUCD insertion. Post partum/Post MTP IUCD insertion can be performed anytime within 48 hours of delivery before the women is discharged from hospital after delivery/MTP.

An ideal candidate for IUD insertion is a women who has born atleast one child, has no history of pelvic disease, has normal menstrual cycle, is willing to check the thread of the Cu T periodically, come for follow up and is into a monogamous relationship.

The advantages of these IUDs is that they have low expulsion rates and are effective for longer periods once in place.Since these are virtually free from any systemic metabolic side effects, these are well tolerated by most of the women and thus have been identified as an excellent method of spacing. However few women might experience slight discomfort and increased menstrual blood loss after insertion of Cu containing devices.This is managed in most cases by counselling and iron supplementation unless associated with an infection.

Common Side Effects of IUD insertion include Pain and Infection that can be managed with painkillers and antibiotics. Severe and non responding conditions may require removal. If a women gets pregnant with the CuT in the uterus, which is a rare possibility, she may be offered an MTP. However if she desires to continue pregnancy, there is no need to remove CuT. In case the women is unable to feel the thread and the health worker suspects a perforation, that might rarely occur in post abortive/partum insertions, the client should be referred to First Referral Unit (FRU) for management.

However it should not be used in women with suspected pregnancy, any Pelvic Disease, uterine abnormalities, history of ectopic pregnancy.

2.7 PERMANENT METHODS

The methods of family planning that are irreversible and involve surgical intervention. These are vasectomy for men and tubectomy (tubal ligation) for women.

2.7.1 Vasectomy

Vasectomy is a method wherein the ‘vas deferens’(a duct that carries the sperms from testes to the seminal vesicle) is surgically cut and the two ends are tied to prevent the entry of sperms into the seminal vesicle and thereby the semen has no sperms. Fig. 2.11)

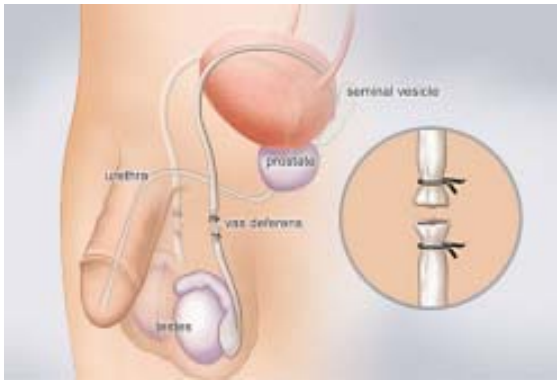

Fig. 2.11: Vasectomy

Currently, two methods are being practiced: Conventional and No Scalpel Vasectomy (NSV). NSV is a minimum intervention procedure where the ‘vas

deferns' is reached through a small puncture in the scrotum that does not need stitching. Inclusion of NSV in the national family welfare programme and its availability up to the peripheral level is to increase male participation by motivating them to adopt this method. It requires low infrastructure setup and can be done by trained MBBS doctors in peripheral units with minimum logistics. NSV is a safe and simple procedure and there are no major after complications reported. The client can immediately be discharged after the procedure and can continue with routine work. Since the procedure does not affect the hormones, the enjoyment or drive for sex in the acceptors of this method are not affected.

In cases of vasectomy, all cases should be visited by the health worker within 48 hours. Since this procedure doesn't render the client sterile immediately and it takes atleast 20 ejaculations or 3 months, whichever is earlier, before the person stops ejaculating sperms in the semen. Thus the client should be advised to use an alternative method like condom before his semen analysis confirms absence of sperms, which should be done after three months of the procedure. The client must also be counselled on where to report for complications. Minor complications like pain, infection, fever and local swelling can be managed by analgesics, anti-inflammatory and antibiotics. For un-resolving complications, the client should be referred to the Medical Officer/FRU.

2.7.2 Tubal Ligation

It is a procedure done on women, who have completed their family, by cutting, sealing or blocking the fallopian tubes which carry an egg from the ovary to the uterus (womb). However there are other methods like rings, clips and coils that can be used to obliterate the fallopian tubes and thus preventing the fertilisation. As a policy, the emphasis has been laid on Minilap over Laproscopic sterilisation as it can be provided by trained MBBS doctors under local anaesthesia with simple, inexpensive and easily manageable surgical equipments that addresses the shortage of manpower and equipments also.

Interval tubectomy can be performed any time within 7 days after the menstrual period is over. Under the programme emphasis is on post partum/MTP sterilisation services. Post partum sterilisation can be performed within 48 hours upto 7 days of delivery whereas post MTP sterilisation can be performed concurrently along with MTP. (Fig. 2.12)

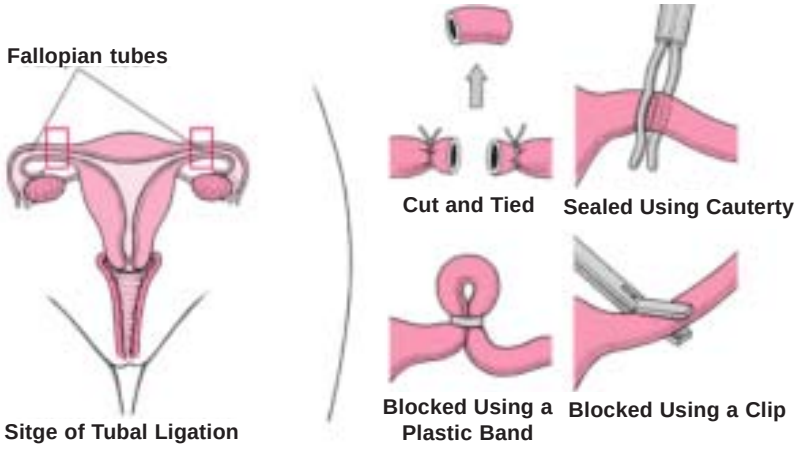

Fig.2.12: Tubal Ligation

All married women, living with their partner, preferably less than 45 years of age and above 22 years of age, having atleast one child more than one year of age, mentally sound with partner not using any method of contraception are eligible

for tubectomy. There are no conditions that are absolute contraindications for the procedure except a few like psychiatric illnesses (where the women cannot give informed consent) or physical conditions like moderate to severe anaemia.

2.8 POST PARTUM FAMILY PLANNING (PPFP) CHOICES

Return of fertility after delivery varies markedly from one woman to other and may return as early as within 4 weeks of delivery/MTP even before she resumes her menstrual cycles. Thus during this period there are high chances of unwanted pregnancies. (Fig. 2.13)

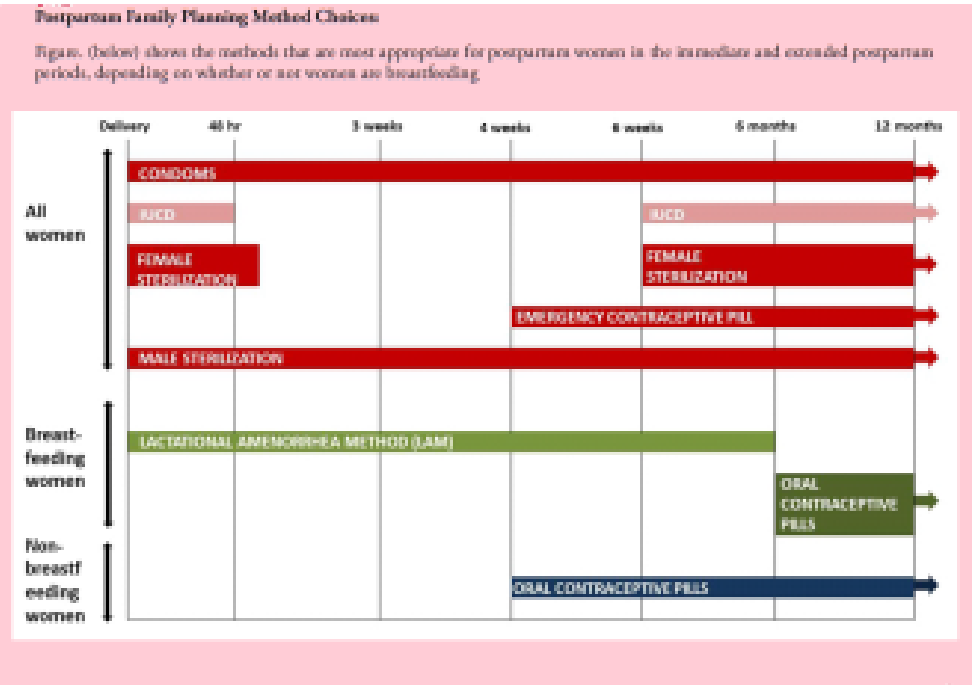

Fig.2.13: PPFP Choices

2.9 FAMILY PLANNING 2020

A national initiative/momentum for access to quality contraceptive services is called Family Planning 2020.This involves partnership of government with International agencies, civil social agencies and private sector for expanding access to voluntary family planning services. The strategy intends not only to strengthen the existing strategies but also emphasise on the indirect indicators of fertility like age of marriage, women literacy and other socio cultural barriers towards access to services. Follow the targets setup for sub centre spcifie input.

The current interventions include Post-partum family planning, Fixed facility strategy, increasing male participation, community based services through ASHAs like home delivery of contraceptives, rapid diagnostic pregnancy kits, spacing at birth, family planning counsellors, compensation scheme, Family Planning Indemnity Scheme and Public Private Partnership etc. To achieve these objectives, government is also harnessing the expertise of various partners in the field of advocacy, capacity building, IEC/BCC, Programme Management, quality assurance and provision of skilled human resource for successful implementation.

The **Area of Focus** under the RMNCH plus A is under following heads:

A) Community based promotion and delivery of services through ASHAs.

B) Promotion of Spacing Methods with emphasis on spacing methods like Interval IUCD including Post-partum IUCD (PPIUCD) with institutional deliveries. The counsellors have also been appointed at the facilities with high rate of institutional delivery. The demand for services are being increased through focused IEC/ BCC through posters, billboards and audio/videos along with better availability of contraceptives (OCPs, Condoms and Emergency Pills) at the doorstep by the ASHAs.

C) Sterilisation Services (Tubectomies and Vasectomies): Of the limiting methods, the focus is on Mini lap tubectomy and increased men participation through NSV. Accordingly training programmes have been designed to build institutional capacities with trained manpower. The Government has also made provision for compensation to the acceptors of family planning methods for the loss of wages for the day on which he/she attended the medical facility for undergoing sterilisation. In high focus States, a sum of Rs 1100 and 600 is given to all the men and women who accept the terminal method of family planning. Whereas in low focus states, all men who are acceptors of terminal method are given Rs 1100, whereas women from BPL/SC/ST are given Rs 600 for accepting the terminal method of Family Planning. The non SC/ ST/BPL category of women are also given a token sum of Rs 250 in low focus states for accepting the terminal method of family planning. Under National Family Planning Indemnity Scheme (NFPIS), claims are being given to the acceptors of sterilisation in the event of death/failures/complications/ Indemnity cover to doctors/health facilities. An amount of Rs 2 lakh is given in case of death during or within seven days following sterilisation and 50,000 in case of death from 8–30 days following procedure. The Government also pays a sum of Rs 30,000 in case of the failure of sterilisation and bears the cost of treatment on actual basis for any complication following sterilisation.

Quality Assurance Committees have been established at the State and District levels for accreditation of the private and non governmental Organisations (NGOs) to provide family planning services. Kindly refer to the GOI quality assurance guidlines.

Besides counselling the beneficiaries for various methods of contraceptives available under RMNCH plus A programme, the government is also emphasising on indirect methods like delaying the age of marriage of girls and birth of the first child along with use of terminal methods of family planning after second child through incentive based schemes like Prerna and Santushti.

Prerna (Responsible Parenthood Scheme): This strategy is for couples below poverty line (BPL) where the couples are awarded Rs 10,000/- at the time of birth of a Boy child or Rs 12,000/- if it is a Girl through Aadhar linked account under the given conditions:

1) Age of girl at the time of marriage should be 19 years.

2) The first child should be born to the couple after at least 2 years of marriage.

3) In case of spacing between the first and second child is atleast 3 years and either of the parents voluntarily accept permanent method of family planning within one year of the birth of the second child, the couple will get an additional award of Rs.5,000/- (Boy child) / Rs.7,000/- (Girl child).

Santushti is a scheme of Jansankhya Sthirta Kosh (JSK) for high populated states namely Bihar, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand,

Odisha, and Rajasthan wherein gynaecologists and vasectomy surgeons from private sector are accredited by government to conduct sterilisation in PPP mode.

D) Comprehensive Abortion Care

E) Prevention and Management of Reproductive tract and Sexually Transmitted infections.

Check Your Progress 1

1) Mention two conditions when IUD should not be inserted.

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2) What are Symptothermal methods of Family Planning?

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3) What is the focus of the Government in limiting methods of planning?

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2.10 COUNSELLING

Counselling is a two way process of exchange of ideas between health worker and a client with an aim to facilitate the decision by the client or helping him/her address concerns/problems. For a successful counselling, there should be mutual trust between the provider and the client. The rights of the clients should be taken into consideration. These are right to information, access to safe and continuous services, informed choice, right to dignity, comfort, opinion, privacy and confidentiality.

The client and health care provider should share relevant, accurate and complete information so that the client is able to make the right decision. The objectives of counselling are:

i) Helping Clients to assess their needs for a range of health services, information and emotional support.

ii) Providing information as per the problems and need of the client.

iii) Assisting/Enabling clients in making voluntary and informed choices.

Iv) Clearing myths, misconceptions and doubts regarding the available contraceptive methods.

An acronym CLEAR is used to briefly describe about the procedure of counselling- Communicate with clarity, Listen, Encourage/Emphathize, ask questions and respect the constraints and decision of the client.

For a counsellor to be effective, he/she should be:

i) accepting, respecting, non judgemental and objective while dealing with clients.

ii) able to and psychological factors with sensitivity that may influence the client's decision to adopt family planning methods.

iii) able to maintain client's privacy and confidentiality.

iv) thorough with knowledge on the technical aspects of the services and be able to judge when and where the person has to be referred.

v) able to use audio visual aids and provide technical information to the client in a simple language that he can understand.

vi) confidently and comfortably handle questions on sex and sexuality, reproductive and personal matters, rumours and myths.

For effective counselling, the health worker should use **GATHER** approach.

Greet the client and build rapport in a polite, friendly and respectful manner.

Ask about their problem in simple, open and brief questions. Express empathy and avoid opinions and judgements.

Tell the client about available methods and possible choices in a personalised manner that suits his/her current needs put in terms of his own life.

Help them to make decisions by choosing solutions that best fit their own personal circumstances.

Explain the method, possible side effects and their management,when and where to report back for follow up.

Return: Schedule a return or follow up visit.

2.10.1 Principles, Approaches and Techniques of Family Planning Counselling

The principles of family planning counselling are similar to that of general counselling with a few differences:

i) Besides privacy and confidentiality, the counsellor should be caring, non-judgmental and accepting to the client's social and personal constraints.

ii) Language should be simple and culturally appropriate with brief and specific key messages.

Iii) Good interpersonal communication skills should be used.

iv) Client should be encouraged to ask more questions and the counsellor should cross verify if the client has understood what the counsellor intends to explain.

v) Appropriate anatomic models, audiovisual aids and contraceptive samples should be used to explain it better to the client. Appropriate feedback should also be provided to the client after the session and repeat the key messages.

The Family Planning Counselling can be done for Individuals or for Groups.

Counselling for family planning can be of three types:

a) General Counselling: To orient the client to the benefits of methods available for family planning. In this, the reproductive goals and needs of the clients

are discussed, myths and misconceptions are cleared and decision making is facilitated.

b) Method Specific Counselling is done after the client has made decision on the choice of method. This involves more information on the method chosen, screening for the method, detailed information on the procedure, common problems and adverse effects anticipated and methods to deal with them. The clients are given handouts and printed matter to carry back home after clearing the myths and misconceptions of the client with the method.

c) Return/Follow up Counselling is done to illicit the satisfaction and response of the client with the method prescribed. The problems and queries of the clients are addressed and solved. They are motivated and encouraged to use the method unless any major problem exists. The satisfied clients can be encouraged to motivate other couples to use this method.

In group counselling, you can provide the following:

- Give basket of choices for type of contraceptive use.
- Check for nutritional deficiency
- Identify anaemia, investigate and manage as per protocol

Counsel the patient / beneficiary.

- Give method specific counselling
- Have a follow up programme

2.10.2 Counselling and Motivating Men

Since increasing male participation is an important mandate of the programme, men must be involved in the family planning counselling. The providers should counsel and motivate men to make them feel responsible for the health of their family. They should be encouraged to adopt a family planning method themselves (NSV or Condoms).Usually either men are poorly informed or have myths and misconceptions about their reproductive functions, systems and organs. These need to be clearly discussed out and explained to them to motivate them to use a family planning method.

Give technical reasons to the family on the benefits of use of permanent method by men and women

Men
- non invasive, simple procedure
- can go to work soon
- Family will not suffer

Women
- Need bed rest
- She may how bleeding
- Family tend to go neglected

The counsellor can also use models to demonstrate correct method of use of condoms, whenever possible.

2.10.3 Common Myths and Misconceptions

The clients usually have myths and misconceptions about the family planning methods that pose a challenge towards adopting them. A few have been discussed below to enable the health worker to clear these up while counselling the clients for adoption of one or more methods of family planning.

A) **Regarding Oral Contraceptives:**

1) I only need to take the Pill when I sleep with my husband.

Ans: A woman must take her pills every day in order not to become pregnant. Pills only protect against pregnancy if she takes them every day. If she misses one pill, she should take two as soon as she remembers.

2) I will face difficulty in getting pregnant again if I have been using it long enough.

Ans: A woman is only protected for as long as she actually takes the pill every day.

3) Pills make you weak and can cause cancer.

Ans: MALA N and MALA D have hormonal pills for 21 days followed by Iron containing tablets for subsequent seven days. Regular consumption of these pills tablets would rather improve the general well-being of the women by decreasing the menstrual blood loss and also building up iron reserve. The pill is also known to protect women from some forms of cancer, such as those of the ovary, endometrium, and cervix.

4) The Pill causes the birth of twins or triplets.

Ans: The Pill has no effect on the tendency toward multiple births rather this usually happens in families or with the use of drugs for treatment of infertility like clomiphene. In case there have been multiple births in either the man's or woman's family, then the chances of having twins are greater.

B) **Regarding Condoms:**

1) If a condom slips off during sexual intercourse, it might get lost inside the woman's body.

Ans: A condom cannot get lost inside the woman's body because it cannot pass through the cervix. Usually the condom will not slip if put on properly i.e rolled down to the base of the erect penis. However, if it comes off accidentally, the client should pull it out carefully ensuring that the semen doesn't spill leading to an unwanted pregnancy.

2) There is too much danger of condoms breaking or tearing during intercourse.

Ans: Condoms are made of thin but very strong latex rubber and they undergo extensive laboratory tests for strength. Condoms are meant to be used only once. There is less chance that a condom will break or tear if it is stored away from heat and placed on the erect penis leaving enough space at the tip for the ejaculate. A condom is more likely to break if the vagina is very dry, or if the condom is old (past the expiration date).

C) **IUDs**

1) The thread of the IUD can trap/irritate the penis during intercourse.

Ans: The cut thread of the IUD (Cu T) is short enough to be able to be grasped by a forceps, soft and flexible, clings to the walls of the vagina and are rarely felt during intercourse. Since the IUD is located within the uterine cavity and the penis is positioned in vagina during intercourse, it cannot trap the penis.

2) A woman who has an IUD cannot do heavy work.

Ans: Use of an IUD should not stop a woman from carrying out her regular activities in any way.

3) IUD might travel inside a woman's body to her heart or her brain.

Ans: The IUD is placed in uterus and by no means cross the vault of the uterus to migrate to epigastrium or any other organ of the body. Even if the IUD is accidentally expelled, it comes out of the vagina, which is the only passage to the uterus.

4) The IUD causes ectopic pregnancy.

Ans: There is no risk of an ectopic pregnancy with use of IUD.

5) Placement of IUCD in uterus lets to the rottening of Uterus.

Ans: The IUD is made up of materials that cannot deteriorate or "rot". Hence there is no question of rottening of uterus due to IUCD.

D) **Vasectomy**

1) Vasectomy is the same as castration. A man who undergoes vasectomy has his manhood taken away and he will no longer enjoy sex.

Ans: Castration is removal of testes whereas in vasectomy, the vas deferens are cut and tied so that sperms are not ejaculated in the semen ejaculated during sexual intercourse. Vasectomy does not alter the hormone status of an individual thus the man continues to produce hormones and stays "masculine" and heterosexual. Many men enjoy sex more after a vasectomy because they no longer need to worry about getting a woman pregnant.

2) Sperm that is not ejaculated during intercourse will collect in the scrotum and cause the scrotum to burst or will cause other problems in the body.

Ans: Sperm that is not ejaculated is absorbed by the body. It cannot collect in the scrotum or cause harm to a man's body in any way.

E) **Tubectomy**

1) A woman who has undergone sterilisation loses all desire for sex (becomes frigid).

Ans: Tubal ligation has no effect on the hormones produced by the ovaries of the woman,but only prevents the egg from meeting the sperm thereby preventing fertilisation. The ovaries continue to release eggs and produce hormones, the woman will still continues to menstruate, but she no longer gets pregnant.

2) A woman who has undergone sterilisation becomes sickly and unable to do any work.

Ans: A woman who has been ligated can resume regular activities as soon as she is free from post-surgical discomfort. It does not affect her ability to work or make her weak or "sick".

3) A woman who undergoes sterilisation has to be hospitalised.

Ans: There is no need for hospitalisation with a female sterilisation ligation. The procedure takes approximately 15 minutes. After the operation, the woman should rest for a few hours and then be allowed to go home in the company of a family member.

Check Your Progress 2

1) State True/False:

   a) Use of Oral Contraceptive Pills (OCPs) may cause weakness in the users……..

   b) Use of Condoms have an additional advantage over contraception……..

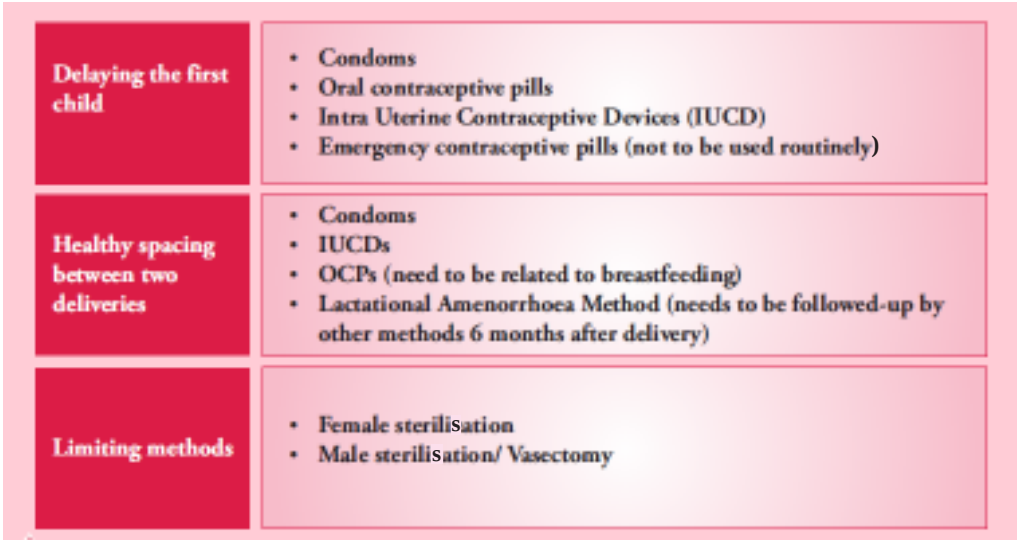
2) Fill in the blanks:

   a) The aim of the family planning programme is to ……male participation.

   b) E-pills……be used as a regular contraceptive method.

2.11 LET US SUM UP

Under Family Planning component of RMNCHA programme, various spacing and limiting methods of family planning methods are available. These include natural methods, barrier methods (condoms, spermicidal creams, jellies etc), Hormonal (pills and injections) and non hormonal (pills) methods, Intrauterine devices (IUDs), Tubectomy and Vasectomy. The e-pills are available as a post coital pill for prevention of unwanted pregnancy.



Each method has its merits and demerits and the clients have a right to make informed choice depending on their need. It is the responsibility of the health worker to counsel the client to make the right decision about whichever method suits her/his need the best. The health worker must also ensure that the client is referred to the right facility for seeking the service he/she chooses and is then adequately followed up for continuation. The role of health worker is to provide a constant support to the client by clearing myths and misconception and handholding in case of initial period of acceptance after the choice of method has been made.

2.12 KEY WORDS

Total Fertility Rate (TFR) : The number of children who would be born per woman (or per 1,000 women) if she/they were to pass through the childbearing years bearing children according to a current schedule of age-specific fertility rates.

Unmet need of Family Planning : This includes the currently married women, who wish to stop child bearing or wait for next two or more years for the next child birth, but not using any contraceptive method.

PPP : Public Private Partnership

NFHS : National Family Health Survey

SRS : Sample Registration Survey

DLHS : District Level Household Survey

IEC : Information, Education, Communication

BCC : Behaviour Change Communication

2.13 MODEL ANSWERS

Check Your Progress 1

1) Pregnancy and Pelvic Inflammatory Disease
2) BBT,Cervical Mucous and Calender Method are together known as Sympto thermal methods.
3) NSV for men and Mini Lap for women

Check Your Progress 2

1) a) False b) True
2) a) Increase b) Should never

UNIT 3 MEDICAL ABORTION AND MTP ACT

Structure

3.0 INTRODUCTION

Unsafe abortions significantly contribute to maternal morbidity and mortality in India. According to Sample Registration System (SRS) 2001-03, unsafe abortions account for nearly eight per cent of all maternal deaths in India. Numerous barriers limit access to safe abortion services including shortage of trained providers; lack of infrastructure at the facilities; and lack of information about legality and availability of services among women and the community. Medical Methods of Abortion (MMA) is one of the safest technologies of abortion care that helps to improve access to abortion care services particularly in early pregnancy. However, it is not to be considered or used as a method of family planning. With this background the present unit discusses all the important concepts of MMA and MMA under the purview of Medical Termination of Pregnancy (MTP) Act, 1971.

3.1 OBJECTIVES

After completing this unit, learner will be able to:

- define abortion and enumerate methods of abortion;

- enumerate indications and contraindications of Medical Methods of Abortion (MMA);
- discuss the process of MMA and tell the drugs used in MMA;
- counsel a women who has come for termination of pregnancy; and
- enlist 3 key conditions of MTP using medical methods, under MTP Act.

3.2 ABORTION

Abortion is defined as termination of pregnancy before the foetus becomes viable (capable of living independently i.e. before 28 weeks or when the foetus weighs less than 1000 g).

Abortions are categorised as spontaneous and induced. Spontaneous abortions are the type of abortions that occur spontaneously due to some medical or unknown reasons. It is considered as "Nature's method of birth control". Induced abortions are those that are deliberately induced. They may be legal or illegal. Legal abortion is the one which is done by a qualified doctor, in a recognised hospital, under specific indications. Illegal abortion is the one which is performed by an unqualified person under hazardous conditions. They are usually the last resort of women to end their pregnancies at the risk of their own lives.

Illegal or unsafe abortions contribute to 8 per cent of maternal deaths. In absolute numbers, close to 10 women die due to unsafe abortions each day. The official report from India indicates that only two legal abortions per 1,000 women were performed in 2008.

3.2.1 Methods of Inducing Abortion

It can be of two types: medical and surgical. Medical abortion refers use of pharmacological drugs to terminate pregnancy. Use of trans-cervical procedures for terminating pregnancy, including vacuum aspiration, and dilatation and evacuation (D&E) is called as surgical abortion.

Check Your Progress 1

1) Define abortion.

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2) Enumerate the methods of surgical abortion.

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3.3 OVERVIEW OF MEDICAL METHODS OF ABORTION (MMA)

MMA is a non-surgical, non-invasive method for termination of pregnancy by using a drug or a combination of drugs. It can be offered at all levels of health care, including primary levels. It can also be provided on an outpatient basis and simplifies the requirements of place and equipment required for vacuum aspiration procedures.

3.3.1 Indications and Contraindications of MMA

The MMA can be offered to all women coming to health facility seeking termination of pregnancy up to 7 weeks of gestation (49 days from the first day of the last menstrual period in women with regular cycles of approximately 28 days). However, MMA are contraindicated in women with:

- Anaemia (haemoglobin < 8 gm%)
- Confirmed or suspected ectopic pregnancy/undiagnosed adnexal mass
- Uncontrolled hypertension or Blood Pressure >160/90
- Known cases of heart problem such as angina, valvular disease, arrhythmia, which can lead to sudden cardio-vascular collapse; renal, liver or respiratory disorder (except asthma); current long term corticosteroid therapy; uncontrolled seizure; chronic adrenal failure; inherited porphyrias and hypersensitivity to Mifepristone/Misoprostol or other prostaglandins.

Besides absolute contraindications for MMA, there are conditions where caution has to be exercised. Such conditions are:

- Women who are not sure about their last menstrual period or with lactational amenorrhoea
- Pregnancy with IUCD in situ: IUCD to be removed before giving MMA drugs
- Pregnancy with uterine scar: Although safe, exercise caution with history of Lower Segment Caesarean Section (LSCS), hysterotomy or myomectomy
- Pregnancy with fibroid: Large fibroid encroaching on endometrial cavity can cause heavy bleeding and can interfere with uterine contractility
- Women on anti-tubercular drugs: Rifampicin is a liver enzymes inducing drug, which can lead to increased metabolism and hence decreased efficacy of MMA drugs
- Breastfeeding: Women have to withhold feeding for four hours after Misoprostol administration

3.3.2 Drugs used in MMA

Recommended drugs for MMA are Mifepristone and Misoprostol. They are schedule H drugs and are to be sold on the prescription of registered medical practitioner only.

Mifepristone is an anti-progestin that blocks the progesterone receptors in the endometrium, causing necrosis of uterine lining and detachment of implanted embryo. It also causes cervical softening and an increased production of prostaglandins, causing uterine contractions.

Misoprostol is a synthetic prostaglandin E1 analogue. It binds to the myometrial cells, causing strong uterine contractions, cervical softening and dilatation. This leads to the expulsion of Products of Conception (POC) from the uterus. Misoprostol can be given through different routes of administration (oral, buccal, vaginal and sublingual). Sublingual route is the most recommended route of administration for misoprostol as it has fastest onset of action and prolonged duration of action.

Mifepristone and Misoprostol are safe drugs for terminating pregnancy as long as the woman does not have any contraindications for their use. A combination of Mifepristone and Misoprostol has an effectiveness of 95–99% for termination of early pregnancy up to seven weeks.

Check Your Progress 2

1) Enlist 1 indication and 2 contraindications of MMA.

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2) Name the drugs used in MMA.

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3) Effectiveness of MMA is: a. 95–99% b. 80% c. 83%

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3.4 MEDICAL METHODS OF ABORTION PROTOCOL AND PROCESS

MMA process typically requires three visits (Day 1, 3 and 15) when the MMA drugs are used by the woman and to confirm the completion of the abortion process.

Visit	Day	Drugs Used
1st	1	200 mg mifepristone oral; Anti D 50 mcg if Rh negative
2nd	3	400 mcg misoprostol (two tablets of 200 mcg each) sublingual/oral/vaginal/buccal; Analgesics (Ibuprofen); Antiemetics; Offer contraception
3rd	15	Confirm and ensure completion of abortion; Offer contraception, if already not done so.

3.4.1 First Visit/DAY 1/ Day of Mifepristone Administration

First visit usually starts with assessment of suitability of women for MMA. Suitability is judged by conducting a clinical examination, necessary investigations

and excluding the contraindications. First visit may sometimes not be the day of Mifepristone administration. It is the day of Mifepristone administration which is taken as Day 1.

History Taking:

A detailed history about the demographic information of the women (that includes age, religion and complete address); menstrual history: length and duration of the cycle, flow, and last menstrual period; obstetric history: gravida, parity, live births, mode of delivery of previous child births, previous abortions; history of pre-existing medical or surgical conditions including drug allergies, history of tubal/ectopic pregnancies or abdominal surgery; history of treatment of tuberculosis, infertility or pelvic inflammatory disease; history of any intervention (medical or surgery) undertaken to terminate the present pregnancy; contraceptive history; history of sexual assault or domestic violence; status of tetanus immunisation; and psycho-social assessment.

Counselling:

Counselling is more than information provision and refers to a focused, interactive process through which the woman voluntarily receives support, information and non-directive guidance from a trained person.

While preparing to counsel the patient, ensure that a clean unit is prepared for examination of the patient. Maintain privacy and ensure extra care regarding the dignity of the women. Give assurance to the patient and explain the confidentiality of her information will be maintained. Maintain aseptic techniques while examine the patient. Keep in mind the physical, psychological and social stigma, she may face after an abortion. Provide quality care to prevent complications and do a regular follow up to know the current status of the patient.

At the time of counselling for about termination of pregnancy or abortion methods, the provider should follow the GATHER approach for counselling. Ensuring confidentiality and privacy is crucial for all counselling sessions.

G Greet	–	Greet the client. Build a rapport with client by greeting the client and making her feel comfortable.
A Ask	–	Ask questions effectively in a friendly manner using words that client understands and listen patiently, without being judgmental. Identify client needs by asking relevant questions about personal, social, family, medical and reproductive health including reproductive tract infections, sexually-transmitted diseases, family planning goals and past/ current use of family planning methods. Also ask about her existing knowledge and beliefs about abortion options.
T Tell	–	Tell the relevant information to help her reach a decision and make an informed choice regarding method of abortions.
H Help	–	Help the client to reach a decision and give other related information like side effects of drugs etc.
E Explain	–	Explain about the method in detail including information about the need for follow-up. Also discuss infection prevention aspects

		like local hygiene, hand washing and use of clean sanitary napkins, etc.
R Return	–	Return for ongoing abortion process is advised and need for follow-up is emphasised.

Method specific counselling: If the women chooses MMA, then she should be provided the following information:

a) MMA is a non-invasive and non-surgical method. The process is similar to a natural miscarriage.

b) She needs to make a minimum of three visits to the facility (day 1, 3, & 15). Home administration of Misoprostol is allowed on provider's discretion. In such cases, the number of facility visits will reduce to two.

c) She has to follow a definite drug protocol. She can be explained about different routes of administration.

d) She should be counselled to be ready for Vacuum Aspiration (VA) procedure in case of failure of the method or excessive bleeding (soaking two or more thick pads per hour for two consecutive hours).

e) She has to stay within the accessible limits of the appropriate health care facility. She should not be left unattended at home. In case of women with no support at home, she should be admitted in hospital for MMA procedure.

f) She should be told that following symptoms could be experienced by her during the MMA process:

- Bleeding per vaginum is an essential part of the MMA process since it is similar to miscarriage. Bleeding is usually heavier than what is experienced during a menstrual period. Bleeding often lasts for 8 to 13 days. Soaking of two thick pads within one to two hours after taking Misoprostol, but decreasing over time is considered normal.
- Abdominal pain is experienced as a part of the MMA process. It is similar to severe menstrual cramps. Sometimes the pain begins following ingestion of tablet Mifepristone, but most often it starts one to three hours after Misoprostol administration and is heaviest during the actual abortion process, often lasting up to four hours. If the pain is persistent, the possibility of ectopic pregnancy should always be ruled out.
- Nausea, vomiting, diarrhoea, etc. are normal side effects of drugs.

g) There could be teratogenic (harmful) effect on the foetus, if pregnancy continues.

h) A small percentage of women (3%) may expel products with Mifepristone alone, but total drug schedule with Misoprostol must be completed.

i) During the abortion process, it is ideal to avoid intercourse to prevent infection, or use barrier methods.

Activity: Counsel a 25 year old women who has come to health facility for termination of pregnancy. Her period of gestation is 6 weeks. (This can be done in the form of role play)

Check Your Progress 3

1) Define Counselling. What is GATHER Approach in counselling?

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2) Government of India's standard MMA drug protocol (for gestation upto 49 days) is: a) 600 mg Misoprostol followed 2 days later by 400 mcg Mifepristone vaginal/sublingual

b) 200 mg Mifepristone orally followed 2 days later by 400 mcg Misoprostol sublingual/ buccal/vaginal/oral

c) 600 mg Mifepristone orally followed 2 days later by 400 mcg Misoprostol oral/vaginal d) 200 mg Misoprostol orally followed 2 days later by 800 mcg Mifepristone vaginal/buccal

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3) After giving Misoprostol, the woman should be called for follow-up on which day:

a) 5th b) 15th c) 7th d) 10th

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Physical Examination and Investigations:

After the history and method specific counselling, a detailed general physical, systemic, abdominal and pelvic examination needs to be done. Few investigations such as pregnancy test, haemoglobin, routine urine examination and blood group ABO Rh especially in case of primi-gravida, are recommended. It is not mandatory to perform ultrasonography for all women undergoing termination of pregnancy with medical methods. However, it can be performed when women are unsure of her last menstrual period or when there is discrepancy between history and clinical findings and when there is strong suspicion about ectopic pregnancy.

Before prescribing her the MMA drugs, take informed consent from the women/ guardian in requisite format. 180 tablets of Iron and Folic Acid (to be taken for next six months) should be given to all women undergoing MMA procedure. Two packets of sanitary napkins could be provided to all women undergoing MMA. Routine use of prophylactic antibiotics is not indicated except in cases of nulliparous women. Antibiotics should also be given to women with vaginal infections. Women may be instructed to return after 2 days for Misoprostol administration. She should be advised to avoid intercourse during this period or to use barrier method while doing so. She should be explained that she should report to the health facility in case she experiences severe abdominal pain or excessive bleeding.

3.4.2 Second Visit/DAY 3/ Day of Misoprostol Administration

As the women arrives on Day 3, assess her general condition and note if there are any side effects of mifepristone like excessive bleeding or pain. After that, ask

the women to empty the bladder and give /insert two tablets of 200 mcg Misoprostol (total 400 mcg) by sublingual/buccal/vaginal/oral route. Ask her to lie in bed for half an hour after vaginal insertion. If she vomits tablet misoprostol within half an hour of its intake, the same dosage (400 mcg misoprostol) should be repeated.

She should be observed for four hours after Misoprostol administration in the clinic/hospital and monitored for blood pressure and pulse, time of start of bleeding and expulsion of POC and any side effects of drug.

Usually the pain starts within one to three hours of taking Misoprostol, so analgesic can be taken well in time before pain becomes intolerable. Tablet Ibuprofen 400 mg is recommended. Perform pelvic examination before the woman leaves the clinic and if cervical os is open and products are partially expelled, remove them digitally.

In case the women does not abort at the health facility/clinic or takes misoprostol at home, she should be advised to return back in case of excessive bleeding or severe abdominal pain or if there is no bleeding even after 24 hours after taking the drug. She should be advised to use clean sanitary napkins and avoid douches and tampons. She should also report back in case she experiences side effects such as nausea, vomiting, diarrhoea (usually mild), headache, fever, dizziness.

If everything goes fine, she should return for follow up on Day 15 for the third visit.

3.4.3 Third Visit/ DAY 15/ Follow up Visit

When the women arrives for follow up visit on Day 15, note down relevant history and ensure that abortion process is complete by carrying out pelvic examination. Advise USG in case complete expulsion of POC is not confirmed, continuation of pregnancy is suspected or bleeding continues. Provide Post MMA contraception advice and ask women to report back in case the menstrual periods do not return within six weeks.

Post MMA Contraception:

Hormonal methods, whether combined (estrogen and progestogen) or progestin-only, can be started on the day of the Misoprostol administration (day 3) or day 15 of the MMA regimen. Injectable hormonal methods like Depot Medroxy Progesterone Acetate (DMPA) can also be started on day 3 or 15 of the MMA regime. IUCD can be inserted after confirmed complete abortion, provided the presence of infection is ruled out, on day 15. Condoms can be used as soon as she resumes sexual activity after abortion. Tubal ligation can be done after the first menstrual cycle. However, if desirous of concurrent tubal ligation, vacuum aspiration is preferred. Vasectomy, however, can be done independent of the procedure.

3.5 MTP ACT AND MEDICAL METHOD ABORTION

Illegal abortion was one of the causes of increased maternal morbidity and mortality before 1970. In order to reduce the hazards of population explosion and to reduce maternal mortality rate, termination of pregnancy was legalised by

passing an Act by the Indian Parliament, called Medical Termination of Pregnancy (MTP) in 1971. It came into force from April 1, 1972 (except in Jammu and Kashmir where it came into effect from 1st Nov, 1976).

The MTP Act, 1971 lays down:

1) The conditions under which the pregnancy can be terminated.
2) The person or persons who can perform such terminations.
3) The place where such terminations can be performed.

3.5.1 The Conditions under which Pregnancy can be Terminated

There are 4 conditions that have been identified in the Act:

a) Medical: where continuation of the pregnancy might endanger the mother's life, or cause grave injury to her physical and mental health.

b) Eugenic: where there is substantial risk of the child being born with serious handicaps due to physical or mental abnormalities.

c) Humanitarian: where pregnancy is the result of rape.

d) Failure of contraceptive devices: This is a unique feature of the India law and virtually allows abortion on request in view of difficulty of proving that pregnancy was not caused by failure of contraception.

3.5.2 The Person or Persons who can Perform Abortions

MTP can be legally provided by only a 'registered medical practitioner' (RMP) who has one or more of the following experience or training in gynaecology and obstetrics:

a) Has completed six months as house surgeon in gynaecology and obstetrics;

or

b) Has experience in any hospital for a period of not less than one year in the practice of obstetrics and gynaecology;

or

c) Holds a post-graduate degree or diploma in gynaecology and obstetrics;

or

d) Has assisted an RMP in the performance of 25 cases of MTP of which at least five have been performed independently, in a hospital established or maintained by the Government, or a training institute approved for this purpose by the Government.

3.5.3 Place where Pregnancy can be Terminated

Hospital established or maintained by the Government or a place approved by the Government or the District Level Committee (DLC) headed by the Chief Medical Officer (CMO) or District Health Officer (DHO). In government facilities, pregnancy may be terminated up to:

- 8 weeks of gestation at Primary Health Centre (PHC)

- 12 weeks of gestation at Community Health Centre (CHC)
- 20 weeks of gestation at District Hospital and above facilities

DLC may approve private place to conduct terminations up to 12 weeks and 20 weeks.

3.5.4 Documentation

It is mandatory to fill and record information for all abortion cases in the following forms:

- Form C-Consent Form- Consent of only the woman is required if she is of and above the age of 18 years. Only in case of a minor and/or a mentally ill woman of any age, her guardian's consent is required.
- Form I-Opinion form- It must be duly filled with reason for termination of pregnancy and signature with date within three hours of termination of pregnancy. The opinion of second RMP must also be recorded in case of second trimester abortions.
- Form II-Reporting formats- A monthly statement of all MTPs done (both surgical and medical) must be sent to CMO on this format.
- Form III-Admission register- All MTPs conducted at the facility must be recorded in the (confidential) admission register maintained at the facility for each calendar year.

Note:Incomplete abortion, inevitable abortion, missed abortion, blighted ovum are obstetric complications and do not come under the purview of the MTP Act and thus need not be recorded as per the MTP Act.

3.5.5 MTP Act, 1971 (Amendment 2003)

Amendment to MTP Act in 2003 includes decentralisation of power for approval of places as MTP centres from State to district level with aim of enlarging the network of safe MTP centres and MTP providers. The strategy at community level includes: Spreading awareness regarding safe MTP and availability of services; enhancing access to confidential counselling to safe MTP; train health/ link workers like ANM, ASHAs, AWWs; and promote post abortion care. At the facility level strategy is: to provide MVA at all CHCs and 50 per cent PHCs that are being strengthened for 24 hour deliveries; provide comprehensive and high quality MTP services at all First Referral Units (FRUs); and encourage participation by private sector.

3.5.6 MMA under MTP Act

Following are the key conditions/requirements of MTP using medical methods, under MTP Act:

- It can be performed only by certified abortion providers
- It can be performed for gestation age up to seven weeks, from approved sites as well as clinic of a RMP with referral linkages, provided a certificate of access to an approved site is displayed
- All documentation formats, filled for vacuum aspiration, are to be filled for MMA also.

Check Your Progress 4

1) Enumerate the conditions under which pregnancy can be terminated under MTP Act.

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2) Enumerate the conditions of MTP using MMA under MTP Act.

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3.6 LET US SUM UP

Medical Method of abortion (MMA) is safe technology of abortion in which POCs are expelled with help of drugs Mifepristone and Misoprostol. It can be used up to 7 weeks of gestation and is 95–99% effective. It require minimum of three visits that includes administration of drugs and follow-up. Drugs are to be provided only by trained health provider. It requires only few hours of hospital stay in each visit. There is no risk of injury to cervix or uterus as no instrumentation is involved. Documentation of MMA is just as any other abortion under MTP Act.

3.7 MODEL ANSWERS

Check Your Progress 1

1) Abortion is defined as termination of pregnancy before the foetus becomes viable (capable of living independently i.e. before 28 weeks or when the fetus weighs less than 1000 g).

2) Methods of surgical abortion are: Vacuum Aspiration and Dilatation and Evacuation.

Check Your Progress 2

1) Indication: MMA can be used in all women coming for termination of pregnancy with seven weeks of period of gestation.

   Contraindications: Anaemia, ectopic pregnancy/adnexal mass, hypertension or known cardiovascular, respiratory or any medical problem.

2) Mifepristone and Misoprostol

3) A 95–99%

Check Your Progress 3

1) Counselling is more than information provision and refers to a focused, interactive process through which the woman voluntarily receives support, information and non-directive guidance from a trained person.

   GATHER approach refers to Greet Ask Tell Help Explain Return

2) B

3) B

Check Your Progress 4

1) Medical, eugenic, humanitarian, and failure of contraceptive

2) It can be performed only by certified abortion providers

   - It can be performed for gestation age up to seven weeks, from approved sites as well as clinic of a RMP with referral linkages, provided a certificate of access to an approved site is displayed
   - All documentation formats, filled for vacuum aspiration, are to be filled for MMA also.

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UNIT 4 COUNSELLING IN REPRODUCTIVE AND SEXUAL HEALTH INCLUDING PROBLEMS OF ADOLESCENTS

Structure

4.0 INTRODUCTION

In this unit you will be learning about the definition of counselling, need for counselling, principles, purpose and steps of counselling, Techniques for effective communication with the adolescents and how to counsel the adolescent on sexual and reproductive health matters.

4.1 OBJECTIVES

After completing this unit, you should be able to:

- define the terms: Counselling, sexual Health and Reproductive Health;
- discuss the need for counselling in adolescence;
- list the principles and purposes of counselling;
- describe the steps of counselling;
- explain the techniques of effective communication with adolescents; and
- discuss how to counsel the adolescents on sexual and reproductive health matters.

4.2 DEFINITION OF TERMS:

Let us now discuss about definitions as given below:

Counselling

It is face to face communication between two or more people in which one person helps the other to make a decision and then act upon it. It is two way communication in which the counsellor listens patiently to the client's thoughts / fears / misconceptions / problems without being judgmental.

Sexual Health

The term sexual health is used to describe the absence of illness and injury associated with sexual behaviour and a sense of sexual well-being. Sexuality influences thoughts, feelings, interactions and actions among individuals, and motivates people to find love, warmth and intimacy. It can be expressed in many different ways and is closely linked to the environment in which people live.

Reproductive Health

Reproductive health is a state of complete physical, mental and social well-being. It is not merely the absence of disease or infirmity, in all matters relating to the reproductive system, its functions and processes, at all stages of human life (WHO).

4.3 NEED FOR COUNSELLING IN ADOLESCENCE

Adolescence (10–19 years) is a transition period between childhood and adulthood characterised by rapid physical, psychological, social and behavioural changes. As the adolescent come across these changes, they have many doubts and concerns about the changes which are happening in their bodies. However majority of adolescents hesitate to share their doubts and concerns and to seek answers from caring adults. During this period, they start extending their relationships beyond the family and give important place to peers. Adolescence is also a period for contracting many negative behaviours such as violence, consumption of alcohol, smoking, substance abuse and unprotected sex. The leading causes of adolescent mortality are accidents (death from unintentional injury), homicide and suicide. Additional morbidity is related to drug, tobacco, and alcohol use; risky sexual behaviours, poor nutrition and inadequate physical activity. One third of adolescents are engaged in atleast one of these high-risk behaviours. If these adolescents are not well informed or guided, they are likely to make decisions that could harm them. All these adolescents require counselling from the trained counsellors, although adolescents may be reluctant to initiate discussions about risky behaviour because of confidentiality concerns. The key is to provide relevant and useful preventive counselling. It is necessary to develop trust for discussing the specific issues that have a long lasting impact on this age group. It is the responsibility of health care professionals to help the adolescents by providing them with information, advice, counselling and clinical care to maintain safe behaviour and modify unsafe habits.

Counselling helps adolescents to identify the problem, make decisions and give

them confidence to put their decisions into practice.

4.4 PURPOSE OF COUNSELLING THE ADOLESCENT ON SEXUAL AND REPRODUCTIVE HEALTH ISSUES

- Exercise control over her/his life.
- Make decisions using a rational model for decision-making.
- Cope with her/his present situation.
- Achieving control over behaviour, understanding oneself, anticipating consequences of actions, and making long-term plan.

4.5 PRINCIPLES OF COUNSELLING

- Helps the client to identify the problem and make decisions for himself or herself.
- The client has the right to choose his or her own action.
- Accurate information is provided.
- Is strictly confidential.
- Takes into account psycho-social, financial and spiritual needs of the client.

4.6 GATHER APPROACH FOR COUNSELLING

- Greet the adolescents
  - Put them at ease, show respect and trust
  - Emphasise the confidential nature of the discussion
- Ask how can I help you?
  - Encourage them to bring out their anxieties, worries and needs, determine their access to support and help in their family and community
  - Encourage the person to express his/her feelings in own words
  - Show respect and tolerance to what they say and do not pass judgement
  - Actively listen and show that you are paying attention through your looking
  - Encourage them through helpful questions
  - Find out what steps they have already taken to deal with the situation

  Tell them any relevant information they need
  - Provide accurate and specific information in reply to their questions.
  - Give information on what they can do to remain healthy.
  - Provide information they need to know about the particular health issue.

  Help them to make decisions
  - Explore the various alternatives

- Raise issues they may not have thought of
- Be careful of letting your own views, values and prejudices influence the advice you give
- Ensure that it is their own decision and not one that you have imposed
- Help them make a plan of action

Explain any misunderstandings

- Ask questions to check understanding of important points
- Ask the person to repeat back in their own words and key points

Return for follow-up or Referral

- Make arrangements for a follow-up visit or referral to other agencies
- If a follow-up visit is not necessary, give the name of someone they can contact if they need help

4.7 COUNSELLING SESSION

Individual comes to the counsellor with concerns, problems, difficulties and confusion. During counselling all aspects of problem get discussed with due respect to the client. Counsellor assesses the strengths and weakness of the individual based on the discussion and provides multiple alternative solution and help client to take the right decision or solution.

Six Steps of Counselling

STEP 1 - Connect

- Initiate first contact
- Communicate appropriately
- Establish trust and confidentiality

STEP 2 - Reassure

- Be a calming influence
- Minimise feelings of insecurity
- Provide accurate information
- Refer to appropriate services

STEP 3 - Stabilise

- Help clients understand their own reactions
- Recognise the signs of severe distress
- Refer to specialists if necessary

STEP 4 - Address Needs and Concerns

- Gather accurate information
- Clarify the client’s concerns
- Formulate possible solutions to problems

- Provide practical assistance

STEP 5 - Provide Support

- Help rebuild social networks
- Encourage clients to seek external support
- Assist in overcoming 'support obstacles'

STEP 6 - Facilitate Coping

- Raise awareness of positive coping skills
- Enable clients to identify negative coping
- Help clients to manage anger

4.8 TECHNIQUES FOR EFFECTIVE COMMUNICATION WITH THE ADOLESCENTS

The following technique helps for effective communication with adolescents.

- Create a good, friendly first impression.
- Start the session on time. Don't make the client wait.
- Smile and warmly greet the adolescent client.
- Introduce yourself and what you do.
- Ask her/his name and what she/he likes to be called.
- Establish rapport during the first session.
- Face the adolescent, sitting in similar chairs.
- Use the adolescent's name during the session.
- Demonstrate a frank and honest willingness to understand and help.
- Begin the session by allowing the adolescent to talk freely before asking directive questions.
- Congratulate the adolescent for seeking help.
- Eliminate barriers to good communication.
- Avoid judgmental responses of body or spoken language.
- Respond with impartiality, respecting the adolescent's beliefs, opinions and diversity or expression regarding her/his sexuality.
- Use "active listening" with the client.
- Show your sincere interest and understanding and give your full attention to the client.
- Sit comfortably and avoid movements that might distract the adolescent.
- Put yourself in the place of the adolescent while she/he speaks.
- Assist the client to be more aware of the problem without being intrusive or taking away her/his control over the issue.
- Observe the tone of voice, words used and body language expressed and reflect verbally to underscore and confirm observed feelings.
- Give the adolescent some time to think, ask questions, and speak. Be silent

when necessary and follow the rhythm of the conversation.

- Periodically repeat what you've heard, confirming that both you and the adolescent have understood.
- Clarify terms that are not clear or need more interpretation.
- Summarise the most relevant information communicated by the adolescent, usually at the end of a topic.
- Provide information simply.
- Use an appropriate tone of voice.
- Speak in an understandable way, avoiding technical terms or difficult words.
- Understand and use where appropriate the terms/expressions adolescents use to talk about their bodies, dating, and sex.
- Use short sentences.
- Do not overload the adolescent with information.
- Provide information based on what the adolescent knows or has heard.
- Gently correct misconceptions.
- Use audiovisual materials to help the adolescent understand the information and to demonstrate information in more concrete terms.
- Ask appropriate and effective questions.
- Use a tone that shows interest, attention, and friendliness.
- Begin sessions with easy questions, gradually moving up to more difficult questions.
- Try not to take notes except in a structured interview that has an established order for special cases.
- Ask a single question and wait for the response.
- Ask open-ended questions that permit varied responses and require thought.
- Allow for explanations of feelings or concerns. Examples: "How can I help you?", "What's your family like?"
- Ask in-depth questions in response to a previous question and to solicit more information. Example: "Can you explain that better?"
- Ask the same question in different ways if you think the adolescent has not understood.

4.9 COUNSELLING AN ADOLESCENT ABOUT SEXUALITY

Sexuality includes the sum total of a person's personality, thinking and behaviour towards sex. It includes the identity, emotions, thoughts, actions, relationships, affection, feelings that a person has and displays. The negative aspects of sexuality include sexual coersion, eve teasing, sexual harassment, rape and prostitution. Communicating and counselling with adolescents about sexuality can be challenging because it is a sensitive topic about which adolescents often feel emotional, defensive, and insecure.

Counselling an adolescent about sexuality require the following:

- Consider an adolescent's age and sexual experience.
- Have patience and understanding of the difficulty adolescents have in talking about sex.
- Assure privacy and confidentiality.
- Respect the adolescent and her/his feelings, choices, and decisions.
- Ensuring a comfort level for the adolescent to ask questions.
- Respond to expressed needs for information in understandable and honest ways.
- Exploring feelings as well as facts.
- Encourage the adolescent to identify possible alternatives.
- Discuss consequences, advantages, and disadvantages of options.
- Assist the adolescent to make an informed decision.
- Help the adolescent plan how to implement her/his choice.

4.10 DECISIONS ON SEXUAL AND/OR REPRODUCTIVE HEALTH MATTERS

Adolescents must often make significant decisions on the following sexual and / or reproductive health matters:

- How to discourage and prevent unwanted sexual advances?
- Whether to engage in sexual relations or not. If yes, when?
- How to prevent pregnancy and STI/HIV?
- Whether to conceive a child or not? If yes, when?
- Whether to continue or terminate a pregnancy?
- What kind of antenatal care to seek and where to go?
- How to deal with sexual abuse and/or violence?

Most of these decisions can be worked through during counselling sessions.

4.11 COUNSELLING IN CASES OF SEXUAL ABUSE AND/OR VIOLENCE

Sexual abuse is any sexual activity carried out against a person's will. Often, sexual abuse is perpetrated by an adult, whether by deceit, black mail, or force, against a child or someone not mentally or physically mature enough to understand or prevent what is happening. Sexual abuse has a significant impact on an adolescent's health, mental state and life. It can cause serious future sexual and reproductive health problems. If violence is associated with the abuse, even more severe physical and emotional problems can result. The victim needs to be referred to the health facility.

The objectives of counselling session addressing sexual abuse are:

- Provide psychological and emotional support. Be understanding but not pitying.

- Help the adolescent to not feel guilty.
- Explore feelings of guilt.
- Tell the adolescent she/he is not responsible for what happened.
- Help the adolescent recover her/his sense of self-esteem.
- To regain self-confidence.
- To trust others.
- Counteract anxiety or depression.
- Refer the adolescent to the health facility.

4.12 CONDUCTION OF COUNSELLING SESSION WITH ADOLESCENT

I) Establishing Rapport with Adolescent for Counselling.

1) Some adolescents may come to the counsellor alone or with friends or relatives. Other adolescents may be brought by a parent or another adult. Based on the circumstances, the adolescent could be friendly or unfriendly with counsellor. Depending on the nature of the problem or concern, the adolescent could be anxious or afraid.

2) Adolescents may be reluctant to disclose information on sensitive matters if their parents or guardians or even spouses are present.

In such a situation, you as a counsellor should do the following:

1) Greet the adolescent in a cordial manner.

2) Explain to the adolescent that:

- You are there to help them, and that you will do your best to understand and respond to their needs and problems;
- You would like them to communicate with you freely and without hesitation;
- They should feel at ease and not be afraid because you will not say or do anything that negatively affects them;
- You want them to decide how much they would like to involve their parents or others;
- You will not share with their parents or anyone else any information that they have entrusted you with, unless they give you the permission to do so.

3) If the adolescent is accompanied by an adult, in their presence, explain to the accompanying adult that:

- You want to develop a good working relationship with the adolescent. At some stage you may need some time to speak to the adolescent alone.

II) Taking a history of the present problem or issue

As many adolescent health issues are sensitive in nature for e.g. sexual activity or substance use, adolescents may be reluctant to disclose information because of fears that they may be scolded. Hence as a counsellor,

1) ***Start with non-threatening issues*:** Start the session with issues that are the least sensitive and threatening. First to start with some introductory questions (e.g. about the adolescent's home situation) before proceeding to more sensitive topics such as sexual and reproductive health. Then ask questioning about sexual and reproductive health, it is best again to start with the most non-threatening questions before proceeding to the more sensitive ones.

2) ***Use the third person (indirect questions) where possible*:** Instead of asking directly the activities of adolescent, first ask their peers and friends activities. For example, rather than ask an adolescent directly, "Do you smoke cigarettes?" you could ask, "Do any of your friends smoke?" If the adolescent replies, "Yes", you could then ask, "Have you ever joined them?" This can lead to other questions such as, "How often do you smoke?" etc.

3) ***Reduce the stigma about the problem by normalising it*:** An adolescent who has an unwanted pregnancy or a sexually transmitted infection may feel embarrassed or even ashamed. You can reduce the stigma around the issue by saying to the adolescent that, "I have treated a number of young people with the same problem you have".

III. Going beyond the presenting problem or concern

1) When adolescents seek help, they tend to volunteer information about the health problem that seems most important to them (i.e. the presenting complaint). They may have other health problems and concerns but may not say anything about them unless directly asked to do so.

2) Adolescents may not volunteer information about a health problem or concern because they may be embarrassed or scared to do so, or because they may not be comfortable either with the counsellor or the situation they are in.

Using the following HEADS assessment one can

- detect health problems that the adolescent has not presented;
- detect whether the adolescent is engaged in behaviour that could put one at risk of negative health outcome (such as injecting drugs or having unprotected sex);
- detect important factors in their environment that increase the likelihood of engaging in such behaviour;
- handout provided if nesessary.

4.13 SEQUENCE OF CONVERSATION AMONG THE ADOLESCENTS (HEADS)

The HEADS assessment helps to start the discussion with the most non-threatening issues. It starts with examining the home, educational/employment setting, eating habits, activities and then it deals with more sensitive issues such as drugs, sexuality, safety and suicide/depression etc.

1) Home
   - Where do they live?
   - With whom do they live?
   - Whether there have been recent changes in their home situation?
   - How they perceive their home situation?

2) Education/ Employment
   - Whether they study/work?
   - How do they perceive their performance?
   - How do they perceive their relations with their teachers and fellow students / employers and colleagues?
   - Has there been any recent change in their situation?
   - What do they do during their breaks?

3) Eating patterns/habit
   - How many meals do they have on a normal day?
   - What do they eat at each meal?
   - What do they think and feel about their bodies?

4) Activity and Leisure time
   - Which activities are they involved in outside study/work?
   - What do they do in their free time-during week days and on holidays?
   - Whether they spend some time with family members and friends?

5) Drugs / substance abuses
   - Do they use tobacco, alcohol or other substances?
   - Whether they inject any substances?
   - If they use any substances, how much do they use: when, where and with whom do they use them?

6) Sexuality
   - What do they know about sexual and reproductive health?
   - What do they know about their menstrual periods?
   - Any questions and concerns that they have about their menstrual periods?
   - What are their thoughts and feelings about sexuality?
   - Are they sexually active; if so, the nature and context of their sexual activity?
   - Are they taking steps to avoid sexual and reproductive health problems?
   - Have they encountered any of the problems such as unwanted pregnancy, infection, sexual coercion?
   - If so, have they received any treatment for it? What is their sexual orientation?

7) Safety
   - Whether they feel safe at home, in community, in their place of study or work or on the road etc.
   - If they feel unsafe, what makes them feel so?

8) Suicide/Depression
   - Whether their sleep is adequate?

- Whether they feel unduly tired? Whether they eat well?
- How do they feel emotionally? Whether they have any mental health problems (especially depression)?
- If so, whether they have received any treatment for this?
- Whether they have had suicidal thoughts?
- Whether they have attempted suicide?

If the time is short to do a full HEADS assessment, you as counsellor need to prioritise which sections of the HEADS assessment to do. You may choose to prioritise the sections which are most related to presenting complaint. For e.g. If an adolescent presents with an injury after a fall while drinking alcohol, you may prioritise the "Drugs" section of the HEADS assessment.

4.14 LET US SUM UP

Adolescence (10–19 years) is a transition period between childhood and adulthood characterised by rapid physical, psychological, social and behavioural changes. It is also a period for contracting many negative behaviours such as violence, consumption of alcohol, smoking, substance abuse and unprotected sex. If these adolescents are not well informed or guided, they are likely to make decisions that could harm them. All these adolescents require counselling from the trained counsellors. It helps adolescents to identify problem, make decisions and give them confidence to put their decisions into practice. The common approach used in counselling is GATHER approach. In counselling, individual comes to the counsellor with concerns, problems, difficulties and confusion. During counselling all aspects of problem get discussed with due respect to the client. Counsellor assesses the strengths and weakness of the individual based on the discussion and provides multiple alternative solution and help client to take the right decision or solution. Communicating and counselling with adolescents about sexuality is challenging because it is a sensitive topic about which adolescents often feel emotional, defensive, and insecure. While Counselling an Adolescent about sexuality, the counsellor has to consider an adolescent's age, sexual experience and have patience and understanding of the difficulty adolescents have in talking about sex. Counsellor needs to assure privacy, confidentiality, respect the adolescent and her/his feelings, choices, decisions and respond to expressed needs for information in understandable and honest ways. He has to encourage the adolescent to identify possible alternatives, discuss consequences, advantages, and disadvantages of options and assist the adolescent to make an informed decision. He also needs to help the adolescent plan how to implement her/his choice.

4.15 MODEL ANSWERS

1) Definition of Counselling

It is face to face communication between two or more people in which one person helps the other to make a decision and then act upon it. It is two way communication in which the counsellor listens patiently to the clients' thoughts / fears / misconceptions / problems without being judgmental.

2) List the Principles of Counselling are:

- Helps the client to identify the problem and make decisions for himself or herself.
- The client has the right to choose his or her own action.
- Accurate information is provided.
- Is strictly confidential.
- Takes into account psycho-social, financial and spiritual needs of the client.

3) Six Steps of Counselling are:

STEP 1 - Connect

- Initiate first contact.
- Communicate appropriately.
- Establish trust and confidentiality.

STEP 2 - Reassure

- Be a calming influence.
- Minimise feelings of insecurity.
- Provide accurate information.
- Refer to appropriate services.

STEP 3 - Stabilise

- Help clients understand their own reactions.
- Recognise the signs of severe distress.
- Refer to specialists if necessary.

STEP 4 - Address Needs and Concerns

- Gather accurate information.
- Clarify the client's concerns.
- Formulate possible solutions to problems.
- Provide practical assistance.

STEP 5 - Provide Support

- Help rebuild social networks.
- Encourage clients to seek external support.
- Assist in overcoming 'support obstacles'.

STEP 6 - Facilitate Coping

- Raise awareness of positive coping skills.
- Enable clients to identify negative coping.
- Help clients to manage anger.

4) Points to be considered while counselling an Adolescent about Sexuality.

- Consider an adolescent's age and sexual experience.

- Have patience and understanding of the difficulty adolescents have in talking about sex.
- Assure privacy and confidentiality.
- Respect the adolescent and her/his feelings, choices, and decisions.
- Ensuring a comfort level for the adolescent to ask questions.
- Respond to expressed needs for information in understandable and honest ways.
- Exploring feelings as well as facts.
- Encourage the adolescent to identify possible alternatives.
- Discuss consequences, advantages, and disadvantages of options.
- Assist the adolescent to make an informed decision.
- Help the adolescent plan how to implement her/his choice.

5) Objectives of Counselling Session Addressing Sexual Abuse:

- Provide psychological and emotional support. Be understanding but not pitying.
- Help the adolescent to not feel guilty.
- Explore feelings of guilt.
- Tell the adolescent she/he is not responsible for what happened.
- Help the adolescent recover her/his sense of self-esteem.
- To regain self-confidence.
- To trust others.
- Counteract anxiety or depression.
- Refer the adolescent to the health facility.

4.16 REFERENCES

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UNIT 5 MANAGEMENT OF TEENAGE PREGNANCY

Structure

5.0 INTRODUCTION

In the previous unit you have learnt about counselling in reproductive and sexual health problems. We discussed the need for counselling in adolescence in details. It is very important to know various aspects of teenage pregnancy which are being described in the coming unit.

In this unit you will be learning about the definition of teenage pregnancy, its magnitude, risks of teenage pregnancy, causes and outcome of teenage pregnancy, complications associated with it, care of teenagers during antenatal, intranatal and postpartum period and the possible solutions to prevent teenage pregnancy.

5.1 OBJECTIVES

After completing this unit, you should be able to:

- define teenage pregnancy;
- describe the magnitude of teenage pregnancy;

- list the risks of teenage pregnancy;
- explain the outcome of teenage pregnancy;
- discuss the complications associated with teenage pregnancy;
- describe the care of teenager during antenatal, intranatal and postnatal period; and
- discuss the potential solutions of teenage pregnancy.

5.2 TEENAGE PREGNANCY

Let us learn teenage pregnancy in details:

Definition Teenage Pregnancy as defined as "any pregnancy from a girl who is 10–19 years of age", the age being defined as her age at the time the baby is born (WHO). Often the terms "Teenage pregnancy" and "Adolescent pregnancy" are used as synonyms.

5.2.1 Magnitude of the Problem of Teenage Pregnancy

Teenage pregnancy is an important public health problem in both developed and developing countries bearing serious social and medical implications relating to maternal and child health. As Per UNICEF report, worldwide every 5th child is born to teenage mother. It is estimated that globally 13 million births (11% of births) each year occur to girls younger than 19 years of age with varying incidence between different countries. Approximately 90% of the teenage births occur in developing countries. The 2014 World Health Statistics indicate that the average global birth rate among 15 to 19 year olds is 49 per 1000 girls. More than 30% of girls in low- and middle-income countries marry before they attain 18 years; around 14% before they are 15 years old. Teenage pregnancy in India is 62 per 1,000 women. Although the national policy of the Government of India advocates the minimum legal age of marriage for girls to be 18 years, 16% of teenage girls, in the age group 15–19 years, have already started childbearing (NFHS-III). Nearly 45% of young women in India marry and begin cohabiting with their husband before the age of 18. There is interstate variation in the age of marriage in India for e.g. only few women (12%) marry before the age of 18 in Goa and Himachal Pradesh, while nearly three-fifths (57–61%) do so in Rajasthan, Jharkhand and Bihar (28% in urban areas and 53% in rural areas). A substantial proportion of young married girls are malnourished. Nearly 47% of teenage girls have body mass index of less than 18.5. About 11.4% are stunted, and half of them have anaemia.

5.2.2 Risks of Teenage Pregnancy

Pregnancy is an unplanned and challenging life event for many teenager. In addition to the implications on education and financial stability, giving birth during teenage is considered risky because complications from pregnancy and childbirth is associated with various adverse maternal and foetal outcomes. Teenage pregnancy is the second leading cause of death in adolescent girls aging between 15 and 19 years in developing countries. It is estimated that every year, some 3 million girls aged 15 to 19 undergo unsafe abortions and about 70,000 female teenagers die each year because they are pregnant before they are physically mature enough for successful motherhood. As the expectant teens are less likely to receive prenatal care and engaged in unhealthy lifestyle choices including not

eating right or exercising during pregnancy, mother's risk for anaemia and postpartum depression is heightened, and the baby is more likely to be born prematurely and have a low birth weight.

Adverse maternal outcomes of teenage pregnancy includes after abortion, Anaemia, Hypertensive Disorders of Pregnancy (HDP), Urinary Tract Infection, abortion, Sexually Transmitted Diseases, HIV, Obstetric Fistulas, Puerperial sepsis, Mental illness and high rate of cesaerean sections for cephalopelvic disproportion, foetal distress and postpartum depression. Adverse foetal outcomes include Preterm births, Low Birth Weight infants, Still Births, birth asphyxia, Respiratory Distress Syndrome and birth trauma or injury. Babies born to adolescent mothers face a substantially higher risk of dying than those born to women aged 20 to 24.

5.2.3 Causes of Teenage Pregnancy

Teenage pregnancies may result for different reasons in developed countries as compared to developing countries. Factors that contribute to teenage pregnancies include:

- Cultural and societal pressures - Girls are often married early due to prevailing cultural norms around adolescent marriage and child bearing.
- Disruption of education - It influences childbearing as girls with little or no education are more likely to get married and become mothers early.
- Sexual coercion and rape - Sexual coercion and rape not only causes pregnancy but also serious physical and psychological consequences in young girls.
- Socio-economic factors - Young girls are often forced into sexual exploitation and prostitution due to poverty and pre-compounded by lack of access to contraceptive services. Due to the inability to negotiate condom use, the young girl may soon become pregnant.
- Lack of access to information - It has a significant bearing on early pregnancy and childbirth.
- Lack of Guidance: Teenage girls are more likely to get pregnant if they have limited or no guidance from their parents. Many parents have busy lives that prevent them from providing the guidance and support that their young teenagers need to make good decisions on issues such as sex. When a teenage girl does not feel that she can talk to her parents about sex either because they forbid sex talk or because they are not around, she tends to get misguidance from friends resulting in misinformation and possible teen pregnancy.
- Lack of access to services - It leads to risky pregnancy and unsafe abortion etc. Teenage pregnancies tend to be highest in areas with the lowest contraceptive prevalence. Contraceptive prevalence has increased mostly among older, married women but not among adolescents.
- Peer pressure to engage in sexual activity - Due to peer pressure, young girls tend to get involved in sexual activity and become pregnant. During adolescence, teenagers often feel pressure to make friends and fit in with their peers. Many times these teenagers let their friends influence their decision to have sex even when they do not fully understand the consequences associated with the act.

- Incorrect use of contraception - Lack of knowledge regarding correct use of contraceptive leads to pregnancy.
- Exposure to abuse, violence and family strife at home - It has a significant bearing on early pregnancy and childbirth.

5.2.4 Consequences of Teenage Pregnancy

Teenage pregnancy and childbirth is life changing. It can have detrimental socio economic and psychological outcomes for the teenage mother and her child. While most teenage pregnancies are unplanned, even a planned pregnancy has risks and potential problems.

a) A teenage mother is more likely to:

- drop out of school
- have no or low qualifications
- have stigma and social exclusion may not get partner of her choice which is a cause of concern to teenager
- be unemployed or low-paid
- have financial pressure
- have limited the social interactions
- live in poor housing conditions
- suffer from stress and depression which may result in suicide
- pressurise their parents to raise upbringing of the child
- have no parenting skills.
- Explain that she may undergo undue stress due to lack of finances leading to unwarranted actions/activities like getting into prostitution to earn extra income therefore should be counselled for managing the situation.

b) The child of a teen mother is more likely to:

- live in poverty
- grow up without a father
- become a victim of neglect or abuse
- do less well at school
- become involved in crime
- abuse drugs and alcohol
- eventually become a teenage parent and begin the cycle all over again.
- you need to explain mother the economical implication for upbringing the child need for extra income

Check Your Progress 1

1) Define teenage Pregnancy.

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2) Why do we consider teenage Pregnancy as "High risk" or "At Risk" Pregnancy?

.....

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3) What are factors that contribute to teenage pregnancies?

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5.3 COMPLICATIONS ASSOCIATED WITH TEENAGE PREGNANCY

Biologically, the teenager is still developing and not yet physically ready to take on an added strain. Her body has special nutritional needs and when pregnancy occurs, it is a strain on already depleted reserves. The young girl may not be mentally prepared for motherhood with all its added responsibilities and this could give rise to mental health problems like depression and postpartum psychosis.

5.3.1 Health Complications in the Antenatal Period

- Unsafe Abortion: Teenage pregnancy leads to Unsafe Abortions.
- Pregnancy-induced hypertension (PIH): The increased demand for blood flow during pregnancy can place strain on a teenage mother's undeveloped cardiovascular system, which can be unprepared to handle the extra circulatory load. High blood pressure, also called pregnancy induced hypertension (PIH), is more common in teenage pregnancy. Even with treatment, PIH can develop into a more serious condition called preeclampsia, which is a combination of high blood pressure, swelling of the hands, face and feet and protein in the urine. Preeclampsia and PIH can both result in reduced fetal birth weight and growth and place the mother at risk of cardiac complications during pregnancy.
- Anaemia: There is an increased risk of anaemia in adolescents because of nutritional deficiencies, especially of iron and folic acid, and by malaria and intestinal parasites.
- STIs/HIV: Sexually active adolescents are at an increased risk of contracting STIs, including HIV infection, owing to their biological and social vulnerability. There is also the increased risk of mother-to-child transmission of HIV in adolescents. The presence of other STIs (syphilis, gonorrhoea and chlamydia) with local inflammation may increase viral shedding, thereby increasing the risk of transmission during labour.

5.3.2 Health Complications during Labour and Delivery

- Pre-term birth is common in girls under twenty years of age because of immaturity of the reproductive organs. Social factors such as poverty also play an important role in pre-term birth.

- Obstructed labour occurs in young girls (below 15 years of age) due to the small size of the birth canal leading to cephalo-pelvic disproportion. Lack of access to medical and surgical care can result in complications like vesico-vaginal and recto-vaginal fistulae.

5.3.3 Health Complications in the Postpartum Period

- Anaemia: It is common and further is aggravated by blood loss during delivery and increases the risk of infection.
- Pre-eclampsia: Several studies report that pre-eclampsia occurs more often in young adolescents. The symptoms may worsen and sometimes can be recognised only during the first postpartum days.
- Postpartum depression: The occurrence of postpartum depression and mental health problems are frequent.
- Too frequent pregnancies: The frequency can increase especially in unmarried adolescents and can occur due to the difficulty in timely access of reliable contraception.

5.3.4 Problems Affecting the Baby

- Low birth weight: There is a higher incidence of low birth weight (weight < 2500 g) among infants of teenage mothers.
- Perinatal and neonatal mortality: There is increase in perinatal and neonatal mortality in infants of teenage mothers, compared to the infants of older mothers.
- Inadequate childcare and breastfeeding practices: Young mothers, especially those who are single and poor, may find it hard to provide their children with the adequate care. This is reflected in their poor child feeding and breastfeeding practices.

5.3.5 Social Complications of Teenage Pregnancy

- Teenage pregnancy often affects the education of young girl. Teen mothers are more likely to drop out of high school. Poverty, lack of family support and social exclusion are common. Teenage mothers rely on the family and community support, social services and child-care support to help them cope, and educate their child.
- Socio-culturally, pregnancy outside the marriage bears a terrible stigma and the situation worsens when the girl is not married. In such case she does not get the emotional support she needs as well as support in terms of nutrition, rest, antenatal check-ups, etc.

5.3.6 Other Complications

- Emotional Crisis: Teenager may suffer an emotional crisis if she becomes pregnant and does not want the baby. This crisis may lead to rash behaviour such as attempting to self-abort the baby or a suicide attempt.
- Worries about Future: Uncertainty about the future may arise when a teenager is pregnant. She may have fears about how having a baby will impact her own life and dreams for the future.

- Delayed Education: Education may be put on hold when a teenager becomes pregnant. Some pregnant teenager may decide to leave high school. Others who were planning to attend college in the future may put off that plan after becoming pregnant. They may decide to focus on the baby or getting married rather than pursuing further education.
- Exhaustion: Exhaustion may arise during a pregnancy. A pregnant teen should try to exercise during the pregnancy if exhaustion arises. It is important to know that this is often a normal part of pregnancy. Getting the standard 8 hours of sleep every night (or more) is important.
- Depression: Depression may arise when a teenager is pregnant. She may fall into a depression while trying to handle the emotions a pregnancy creates and all of the possibly negative feedback about the pregnancy from friends and family. The fluctuating hormones that a pregnancy causes may also prompt depression.
- Neglect of Baby: Once their baby is born, teenagers may not be willing or able to give the undivided attention to the baby. A teenager may not be an adequate mother because she is overwhelmed by the constant needs of the baby.
- Trouble with Finances: Financial difficulty may arise during a teenage pregnancy or after the baby is born. Teenagers who do not have full-time employment may struggle to cover the basic expenses of life upon having a baby.

5.4 CARE OF TEENAGERS DURING ANTENATAL, INTRANATAL AND POSTNATAL PERIOD

Teenage pregnancies and deliveries require much more care than adult pregnancies. All efforts must be made to reduce the occurrence of problems. This includes early diagnosis of pregnancy, effective care during antenatal, intranatal and postpartum period. Skilled health services in outpatient or clinical settings help to save the lives of pregnant mothers and their newborns. As teenage pregnancy is a 'high risk' pregnancy, pregnant teenagers must be educated to have more number of antenatal visits so that the signs and symptoms of various complications of teenage pregnancy could be recognised at the earliest. Knowledge about pregnancy complications and recognising the signs of complications should be widely disseminated to pregnant teenagers, their families and the community for ensuring that pregnant adolescents deliver with the assistance of a skilled health-care provider and have access to support and services for routine as well as emergency care throughout pregnancy, childbirth and during the postpartum period.

5.4.1 Antenatal Care

It is important to provide teenagers with an early start to antenatal care and to options for continuing or terminating pregnancy, particularly because they tend to delay seeking abortion, resort to the use of less skilled providers, use more dangerous methods, and delay seeking care for complications and ultimately suffer with serious complications and even death. Since teenagers are especially

susceptible to anaemia in pregnancy, it is important to diagnose and treat for anaemia. Adverse outcomes such as low birth weight can be reduced by improving the nutritional status of teenagers before pregnancy and preventing sexually transmitted infections before and during pregnancy. Pregnant teenagers especially first time mothers are particularly susceptible to malaria, hence priority should be given in treatment and management of malaria in pregnancy. To reduce health risks during pregnancy the following steps are recommended:

- Get early prenatal care: Early prenatal care by skilled health professionals is essential to prevent birth defects and other complications during pregnancy.
- Stay away from alcohol, drugs, and cigarettes: Alcohol, drugs and cigarettes harm the growing foetus more than the growing teenager. The pregnant teenager should avoid these during her antenatal period.
- Take adequate vitamin and iron rich food: Adequate vitamin and iron rich food is essential for meeting the physiological needs of growing teenager as well as for her foetus.
- Take Adequate Rest: Pregnant teenager requires adequate rest, 2 hours in the afternoon and 8 hours sleep in the night.
- Emotional support. Motherhood brings untold emotional and practical challenges especially for teenagers. They need emotional and practical support.

5.4.2 Intranatal Care

Teenage mother needs skilled care during labour and child birth to reduce and manage the occurrence of problems. Proper monitoring of the progress of labour is important to prevent prolonged labour.

5.4.3 Postpartum Care

This includes the prevention, early diagnosis and treatment of postnatal complications in the mother and her baby. It also includes information and counselling on breastfeeding, nutrition, contraception and care of the baby. The adolescent mother will require special support on how to care for herself and her baby.

- Contraception: To avoid too frequent and unplanned pregnancies due to lack of timely access to contraceptive services, it is essential during the postpartum period to take steps towards pregnancy prevention by encouraging condom use. It is important that teenage mothers be counselled and provided with postpartum family planning methods of their choice to avoid future adolescent pregnancy
- Nutrition for the adolescent mother: The lactating adolescent needs adequate nutrition to meet her own as well as the extra needs required for breast-milk production.
- Breastfeeding: Exclusive breastfeeding is recommended for 6 months. A young adolescent, especially one who is single – would require extra support in achieving breastfeeding successfully.

- Family counselling: Many adolescents need ongoing contact through home visits once they return with their babies, especially if they are unmarried. In the latter case, both the mother and her baby are at a higher risk of abuse and maltreatment. Family counselling is therefore vital and provides a lifeline to the adolescent and her baby.

Check Your Progress 2

1) Mention the Health complications associated with teenage pregnancy?

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.....

2) List the steps recommended for reducing health risks during pregnancy?

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5.5 POSSIBLE SOLUTIONS TO PREVENT TEENAGE PREGNANCY

Education: Majority of teenage pregnancy occurs as a result of lack of education about sex and pregnancy. Sex education to children is essential at schools by the teachers. However it should start from within the family. Sometimes parents might think talking about sex is inappropriate or that it is automatically encouraging their children to have sex, so they avoid talking about it entirely. As a result the children are misinformed by their peers, which often includes pressure to engage in sex acts to meet social standards. Parents should realise that in attempting to protect their children from the reality of human sexuality they are causing more harm than good. Open discussion about sex in a safe, non-judgmental environment is essential to help children make educated decisions about sex.

Screening and Counselling: Screening and counselling teenagers for sexual risk behaviours, HIV and sexually transmitted diseases (STDs), and dating violence is essential.

Sexual and Reproductive Health Care Services: Providing teen-friendly reproductive and sexual health care services facilitates teenagers to avail the services when required.

Abstinence/ Delaying Sex: Abstinence is the decision of the persons not to have sex until they are married. So they decide to delay having sex until they are older, more responsible, in a stable relationship with one partner, have a job, or have become independent of their parents.

Contraception: It's important to impart knowledge on sexual and reproductive health to the teenagers including contraception. Using contraception during sexual intercourse helps to prevent teenage pregnancy.

Communication: It is the responsibility of school teachers and parents to communicate the teenagers about the sexual and reproductive health and clarify their doubts. This conversation should ideally begin well before a child's teen years.

Engaging Teenagers in Extracurricular Activities: The last solution would be to implement extra-curricular tasks for teenagers in order to keep them occupied, and also to help develop their sense of independence and responsibility. Such extra-curricular activities may range from sports to simple community service.

Vocational Training: Adolescent mothers should be provided with life skills (including vocational training) and sexuality education to increase their autonomy, mobility, self-esteem, and decision-making abilities.

Parental Counselling: Parents need to provide proactive, positive and participatory support to their teenage children. Most parents do not have adequate skills to understand and guide diversified teenage related issues either due to the generation gap or differences in cultural and social norms. Many teenagers are hesitant to share their issues with their parents due to fear. They think parents may feel sad or would take it very seriously or things may get out of control. Closeness between parent and adolescent need to be deeper. Counsellors have to understand these barriers and provide skills to all parents to come out from these situations.

5.6 LET US SUM UP

Teenage pregnancy is one of the most important public health problems. It is estimated that globally 13 million births (11% of births) each year occur to girls younger than 19 years of age with varying incidence between different countries. Approximately 90% of the teenage births occur in developing countries. Teenage pregnancy in India is 62 per 1,000 women. Although the national policy of the Government of India advocates the minimum legal age of marriage for girls to be 18 years, 16% of teenage girls, in the age group 15–19 years, have already started childbearing (NFHS-III). Giving birth during teenage is considered risky because complications from pregnancy and childbirth is associated with various adverse maternal and foetal outcomes. Teenage pregnancy is the second leading cause of death in adolescent girls aging between 15 and 19 years in developing countries. Adverse maternal outcomes of teenage pregnancy includes Preterm labour, Anaemia, Hypertensive Disorders of Pregnancy (HDP), Obstetric Fistulas, Puerperial sepsis, mental illness and high rate of cesarean sections for cephalopelvic disproportion, foetal distress and postpartum depression. Adverse foetal outcomes include Preterm births, Low Birth Weight infants, Still Births, birth asphyxia, Respiratory Distress Syndrome and birth trauma or injury. Teenage pregnancies may result for different reasons in developed countries as compared to developing countries. Cultural and societal pressures, Sexual coercion and rape, Lack of access to information, Lack of guidance are few to mention. Teenage pregnancy and childbirth can have detrimental socio economic and psychological outcomes for the teenage mother and her child. While most teenage pregnancies are unplanned, even a planned pregnancy has risks and potential problems. Health complications associated with Teenage Pregnancy are Pregnancy-induced hypertension, Anaemia, STIs/HIV, malaria, preterm labour, low birth weight etc. In addition, the teenager undergoes social complications during pregnancy. Teenage pregnancies and deliveries require much more care than adult pregnancies. All efforts must be made to reduce the occurrence of problems. This includes early diagnosis of pregnancy, effective care during antenatal, intranatal and postpartum period. It is important to provide teenagers with an early start to antenatal care and to options for continuing or terminating pregnancy,

particularly because they tend to delay seeking abortion, resort to the use of less skilled providers, use more dangerous methods, and delay seeking care for complications and ultimately suffer with serious complications and even death.

Attention should be given to the use of various screening and diagnostic tests and to the interventions needed if any complication does occur during the course of pregnancy or labour. Proper monitoring of the progress of labour is important to prevent prolonged labour. There is a need to promote the use of Contraceptives amongst the married teenagers and ensuring the availability of contraceptives at a wider scale. Access to contraceptives prevents teenage pregnancies while access to abortion services is crucial for managing them. Good antenatal and intranatal services, good neonatal services, contraceptive services and abortion services, all together can minimise the various risks associated with teenage pregnancies to a large extent.

5.7 MODEL ANSWERS

Check your Progress 1

i) World Health Organisation defines Teenage Pregnancy as "any pregnancy from a girl who is 10–19 years of age", the age being defined as her age at the time the baby is born. Often the terms "Teenage pregnancy" and "Adolescent pregnancy" are used as synonyms.

ii) Teenage Pregnancy as "High risk" or "At Risk" Pregnancy

Giving birth during teenage is considered risky because complications from pregnancy and childbirth is associated with various adverse maternal and foetal outcomes. Teenage pregnancy is the second leading cause of death in adolescent girls aging between 15 and 19 years in developing countries. It is estimated that every year, some 3 million girls aged 15 to 19 undergo unsafe abortions and about 70,000 female teenagers die each year because they are pregnant before they are physically mature enough for successful motherhood. As the expectant teens are less likely to receive prenatal care and engaged in unhealthy lifestyle choices including not eating right or exercising during pregnancy, mother's risk for anaemia and postpartum depression is heightened, and the baby is more likely to be born prematurely and have a low birth weight.

iii) Factors that contribute to teenage pregnancies include:

- Cultural and societal pressures - Girls are often married early due to prevailing cultural norms around adolescent marriage and child bearing.
- Disruption of education - It influences childbearing as girls with little or no education are more likely to get married and become mothers early.
- Sexual coercion and rape - Sexual coercion and rape not only causes pregnancy but also serious physical and psychological consequences in young girls.
- Socio-economic factors - Young girls are often forced into sexual exploitation and prostitution due to poverty.
- Lack of access to information - It has a significant bearing on early pregnancy and childbirth.

- Lack of guidance: Teenage girls are more likely to get pregnant if they have limited or no guidance from their parents. Many parents have busy lives that prevent them from providing the guidance and support that their young teenagers need to make good decisions on issues such as sex.
- Lack of access to services - It leads to risky pregnancy and unsafe abortion etc. Teenage pregnancies tend to be highest in areas with the lowest contraceptive prevalence. Contraceptive prevalence has increased mostly among older, married women but not among adolescents.
- Peer pressure to engage in sexual activity - During adolescence, teenagers often feel pressure to make friends and fit in with their peers. Many times these teenagers let their friends influence their decision to have sex even when they do not fully understand the consequences associated with the act.
- Incorrect use of contraception - Lack of knowledge regarding correct use of contraceptive leads to pregnancy.
- Exposure to abuse, violence and family strife at home - It has a significant bearing on early pregnancy and childbirth.

Check Your Progress 2

i) Health complications associated with teenage pregnancy are?

- Unsafe Abortion: Teenage pregnancy leads to Unsafe Abortions.
- Pregnancy-induced hypertension (PIH): The increased demand for blood flow during pregnancy can place strain on a teenage mother's undeveloped cardiovascular system, which can be unprepared to handle the extra circulatory load. High blood pressure, also called pregnancy induced hypertension (PIH), can develop as a result.
- Anaemia: There is an increased risk of anaemia in adolescents because of nutritional deficiencies, especially of iron and folic acid, and by malaria and intestinal parasites.
- STIs/HIV: Sexually active adolescents are at an increased risk of contracting STIs, including HIV infection, owing to their biological and social vulnerability. There is also the increased risk of mother-to-child transmission of HIV in adolescents. The presence of other STIs (syphilis, gonorrhoea and chlamydia) with local inflammation may increase viral shedding, thereby increasing the risk of transmission during labour.
- Malaria is often seen in first time pregnant women and is a common cause of anaemia increasing the risk of intra-uterine death.
- Pre-term birth is common in girls under twenty years of age because of immaturity of the reproductive organs.
- Obstructed labour occurs in young girls (below 15 years of age) due to the small size of the birth canal leading to cephalo-pelvic disproportion. Lack of access to medical and surgical care can result in complications like vesico-vaginal and recto-vaginal fistulae.

ii) To reduce health risks during pregnancy the following steps are recommended.

- Get early prenatal care: Early prenatal care by skilled health professionals is essential to prevent birth defects and other complications during pregnancy.

- Stay away from alcohol, drugs, and cigarettes: Alcohol, drugs and cigarettes harm the growing foetus more than the growing teenager. The pregnant teenager should avoid these during her antenatal period.
- Take adequate vitamin and iron rich food: Adequate vitamin and iron rich food is essential for meeting the physiological needs of growing teenager as well as for her foetus.
- Take Adequate Rest: Pregnant teenager requires adequate rest, 2 hours in the afternoon and 8 hours sleep in the night.
- Emotional support: Motherhood brings untold emotional and practical challenges especially for teenagers. They need emotional and practical support.

5.8 REFERENCES

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LCertificate in Community Health for Nurses (BPCCHN)
Theory Course

BNS-042 Primary Health Care in Common Conditions

Block-1 : Management of Common Conditions and Emergencies including First Aid

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Unit 3 : Common Conditions – 3 Heart, Urinary System and Blood Disorders
Unit 4 : Common Conditions – 4 Eye, Ear, Nose and Throat
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Block – 3 : Reproductive Health and Adolescent Health

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Block – 4 : New Born and Child Health Care

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Unit 3 : Integrated Management of Neonatal and Childhood Illness
Unit 4 : Introduction to Rashtriya Bal Swasthiya Karyakaram
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Block-5 : Overview of Common Surgical Conditions

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Block – 6 : Essential Drugs

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