

P R O B L E M S O F W O M E N
(CLINICAL OBSTETRICS AND GYNAECOLOGY)
M O D U L E

1980

Rural Health Development Project
Ministry of Health and Social Welfare
Maseru, Lesotho

ACKNOWLEDGEMENTS

Nurse Clinician training materials are Lesotho adaptations based upon the MEDEX prototype curriculum for training mid-level health workers.

The prototype MEDEX materials were developed by the Health Manpower Development Staff of the John A. Burns School of Medicine, University of Hawaii. The original prototypes were based on training experience in over a dozen third-world countries. These were revised on the basis of HMDS experience in Micronesia, Thailand, Pakistan, and Guyana before being made available to Lesotho under a U.S.A.I.D. funded contract.

Major adaptation in Lesotho began at the National Nurse Clinician Training Programme Curriculum Adaptation Workshop held at Mazenod in January 1980. The nearly fifty participants represented all major health and health related activities in Lesotho, both Government and private. These participants and others working as individuals and then as review committees have adapted the Nurse Clinician training materials to meet the conditions and needs of Lesotho.

The Government of Lesotho and particularly the staff of the Nurse Clinician training Programme are grateful to HMDS for supplying the prototype materials and to all those individuals who have helped in the Lesotho adaptation process.

First Edition May 1980

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SCHEDULE

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5

STUDENT GUIDE

Physical Exam of Female Reproductive System

I. Entry Level Skills and Knowledge

Before starting this unit, you should be able to:

1. Explain the normal anatomy and physiology of the female reproductive organs.
2. Explain the anatomy and physiology of the breasts.

II. Objectives

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Identify on a diagram the correct location of each of the organs in the female reproductive system.
2. Describe the procedures for a pelvic exam, and demonstrate exam on model.
3. Perform a breast exam.

III. Evaluation:

Upon completion of the module, you will be assessed on:

1. Knowledge: Written test based upon contents of unit in module text. Acceptable performance, 80%.
2. Skills: Physical examination of the breast; pelvic examination.

IV. Activities you will be participating in to complete the unit objectives:

1. Read module text and answer review questions.
2. View slide presentation on the pelvic examination, physical examination of the breast, and anatomy and physiology of the female reproductive organs.
3. Participate in large group discussion of subject material.
4. Clinical observation and practice of female pelvic and breast exams.

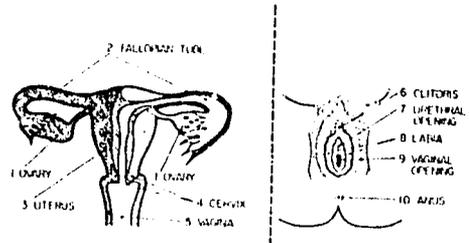
ANATOMY AND PHYSIOLOGY OF THE FEMALE REPRODUCTIVE SYSTEM

The reproductive system is the part of the body concerned with creating and supporting new life.

A. Anatomy of the Female Reproductive Organs

Some of the most important female organs are shown in the following diagram. (Figure PR 1)

Figure PR 1 - Female Reproductive System: On the left are the major internal anatomical structures of the female reproductive system. On the right are the external anatomical landmarks associated with the female reproductive system.



1. Ovaries

Two ovaries lie on either side of the uterus. They are normally small (4 cm long, 1.5 cm broad, and 1.25 cm thick). They are responsible for the production of the female hormones and are the source of the egg (ovum).

2. Fallopian tubes

Fallopian tubes are two canals which open near the ovaries and connect to the uterus. The canals are about 11 cm in length. The egg produced by the ovary passes along these tubes on the way to the uterus.

3. Adnexal

Adnexal is the term used for the pelvic areas on either side of the uterus. These adnexal areas contain the fallopian tubes, the ovaries as well as the nerves, blood vessels, and tissues necessary to support them.

4. Uterus

The uterus (womb) is a hollow muscular organ which lies midline in the pelvis behind the bladder and in front of the rectum. The inside lining of the uterus (endometrium) is composed of special cells and is richly supplied with blood. The fertilized egg embeds in this lining. If the egg does not embed, the lining is shed monthly (menstruation). During pregnancy, the uterus expands with the growing foetus.

5. Cervix

The cervix is the lowest part of the uterus. It is the uterine opening into the vagina. The male sperm enters the uterus through the cervix and the fetus leaves the uterus through the cervix. A non-pregnant cervix is very firm, smooth and pink in colour. A pregnant cervix is soft, smooth and bluish in colour.

6. Vagina

The vagina is a canal which extends from the perineum to the cervix. It lies behind the bladder and in front of the rectum. This canal is entered by the male penis during intercourse. This is the canal through which an infant passes at birth.

7. Labia

The labia are the lips that surround the external entrance to the genital urinary tract in a woman. There are two sets of labia. The inner set (labia minor) is more discrete and narrow and the outer set is broader and fuller (labia major).

B. Physiology of Female Reproductive Organs

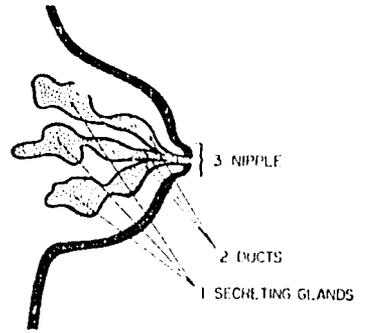
1. Menstrual Cycle

2. Normal Changes of Pregnancy (See Antenatal Care Module)

C. Anatomy of Female Breasts

Breasts are located in the subcutaneous layer of the chest wall. They are milk-secreting glands. The surface openings containing the milk carrying ducts is called a nipple. Breast glands are embedded in fat tissue. (Figure PR 2)

Figure PR 2 - Anatomy of Female Breasts: The major anatomical parts of the female breast are:
1) *Secreting Glands;*
2) *Ducts;* 3) *Nipple.*



D. Physiology of Female Breasts

During pregnancy, the breast undergoes certain changes which prepares it for milk secretion (lactation). At birth, hormone changes occur which begin milk secretion. The sucking of an infant improves milk production.

DIAGNOSTIC SKILL
PELVIC EXAMINATION

Supples

1. A good light source (flashlight or lamp)
2. A sterile speculum
3. A pair of surgical gloves
4. Lubricant jelly
5. An examining table or bed

Purpose of the Procedure

The purpose of the procedure is to examine a woman's reproductive organs.

Steps in Procedure

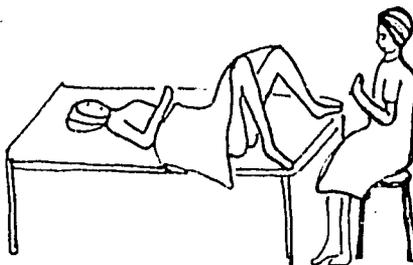
Preparation:

First, describe to the woman the examination you will perform and explain the reasons for the exam. Then, ask the woman to pass urine so that her bladder will be empty. Then have the woman remove her clothes from the lower part of her body. The woman should lie on an examining table with her legs apart and knees bent (lithotomy position). (Figure PR 3)

The nurse clinician washes her hands and puts on clean gloves.

As you do each step of the exam, tell the woman what you are going to do before you do it. Ask her to tell you if any part of the procedure is painful to her.

*Figure PR 3 - Lithotomy
Position: Here you see
the correct lithotomy
position.*



Part I - External Examination:

Using the left hand, spread the labia apart and observe the genitalia. Look for any abnormal signs, discharge, lacerations, or swellings.

Part II - Speculum Examination:

Keeping the labia separated with the left hand, take the speculum in the right hand and gently insert it into the vagina. Move it into a position which will allow it to be opened easily. Arrange the light so that you can see inside the vagina. If the cervix is not visible, adjust the speculum by closing it and changing its position until it becomes visible.

Observe the cervix. In a woman who has never had a child, the cervix will be $1\frac{1}{2}$ to $2\frac{1}{2}$ cm in diameter, pink, smooth and firm. In a woman who has had babies, the cervix and centre opening will be larger and possibly darker in colour. Look for any abnormalities on the cervix - discharge, colour, irregularities, bleeding, IUD strings, erosion.

Observe the vaginal walls. The vaginal walls should be pink and firm with ridges. They should have a moist appearance. Look for any abnormalities on the vaginal walls - colour, discharge, tears.

Remember all of the normal and abnormal findings and then gently close the speculum and remove.

Part III - Bimanual Examination:

The examiner puts the speculum aside and puts some lubricant jelly on the index and middle finger of the right hand. These fingers are gently inserted into the vagina until the cervix is located.

In the centre of the cervix, there is a dimple. If the cervix is closed, the examining finger will not enter this dimple. If it is open, the fingertip will go inside the cervix. The examiner should not allow the finger to actually enter the cervix. The two inserted fingers are placed under the cervix to keep it in place.

The left hand is placed on the lower abdomen and presses downward. This procedure locates the uterus between the two hands (bimanual). A normal uterus feels about the size of a lemon. After noting the size, gently and slowly wiggle the uterus. Normally, the uterus should move easily without causing pain. While keeping the left hand on the abdomen, move the inside fingers to either side of the cervix.

This allows you to feel the sides of the pelvis that contain the Fallopian tubes and ovaries (adnexal areas). The ovaries are difficult to palpate. They are normally almond-shaped and freely movable. Abnormalities that might be noted during the bimanual exam are tenderness on uterine movement, adnexal tenderness, enlargement of the uterus, a mass in the adnexal areas. After these findings are mentally recorded, remove your hands from the position. Ask the woman to re-dress.

Part IV - Recording

Remove your gloves and immediately record your findings. After recording your findings, explain them to the woman.

PELVIC EXAM CHECKLIST

- a. Record "N" if Normal
- b. Describe if abnormal

External Genitalia:

Clitoris and labia _____

Urethral opening _____

Perineum _____

Vagina _____

Discharge _____ Bleeding _____

Speculum:

Cervix - colour _____ discharge _____

open or closed _____ bleeding _____

irregularities _____

Vaginal walls - colour _____ tears _____

discharge _____

Bimanual:

Uterine size _____

Tenderness of Uterine Movement _____

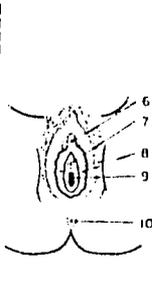
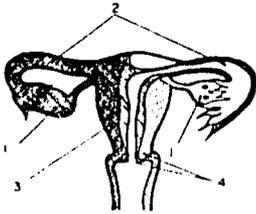
Adnexal masses _____

Adnexal tenderness _____

Pregnant Yes No

REVIEW QUESTIONS

1. How would you explain the pelvic exam to the woman?
2. Identify each of the female organ parts by placing the number from the drawing next to the correct name.



- ___ uterus
- ___ urethral opening
- ___ vagina
- ___ ovaries (2)
- ___ fallopian tubes (2)
- ___ cervix
- ___ labia
- ___ anus

3. Describe the function of the following reproductive organs.
 - a. uterus
 - b. fallopian tube
 - c. ovary
 - d. vagina
4. Name the three parts of the pelvic examination.
 - a.
 - b.
 - c.

STUDENT GUIDE
BREAST PROBLEMS

I. Entry Level Skills and Knowledge

Before starting this unit, you should be able to explain the anatomy and physiology of the breast.

Skill: Physical examination of the breast.

II. Objectives

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Identify and differentiate the physical signs associated with breast problems.
2. Demonstrate breast examination technique.
3. Use the diagnostic and management protocols as guides to identification and management of breast problems:
 - a. Inverted or flat nipples,
 - b. Nipple cracks,
 - c. Breast abscess,
 - d. Breast lump.
4. Recognize the physical exam discriminations listed for breast problems.
 - a. Flat and inverted nipples,
 - b. Nipple cracks,
 - c. Breast lumps,
 - d. Breast abscess.
5. Describe the management of the above-mentioned conditions.

III. Evaluation

Upon completion of the module, you will be assessed on:

1. Knowledge: Written test based upon contents of unit in module text. Acceptable performance, 80%.
2. Skills: Use of protocols.

IV. Activities you will be participating in to complete the unit objectives:

1. Read module text, Breast Problems, and answer review questions.

2. View slide presentation based on breast related problems specified in module text.
3. Participate in large group discussion of subject material presented in module text and slide presentation.
4. In small group setting, participate in case study analysis exercise, using protocols and module text as guides to diagnosis and management.
5. In large group setting, student from each group presents findings of the group.

DIAGNOSTIC SKILL

FEMALE BREAST EXAMINATION

Supplies

Folded towel or flat pillow
 Drape
 Well-lighted room

Purpose of the Procedure

The purpose of the breast examination is to detect structural abnormalities of the nipple, lumps, growth, or thickenings in the breast or underarm area.

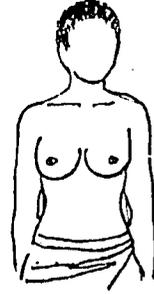


Figure PR 1 -

Steps in the Procedure

The purpose of the examination should be explained to the woman and her consent obtained. Then she should be asked to remove her clothing to the waist.

Part 1 - Seated

Initially with the patient seated, arms at her side, facing the examiner, the breasts are observed to see that they are equal in colour, size and shape (Figure 1). Also to be noted is if there is any puckering or dimpling of the skin or indentation of the nipples. This visual scan is repeated, with her hands on her hips (Figure 2) and with her arms raised over her head (Figure 3).

(If breasts pendulous, palpate breasts by placing one hand under the breast and the other on top - bi-manually -).

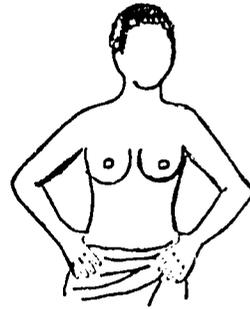


Figure PR 2 -

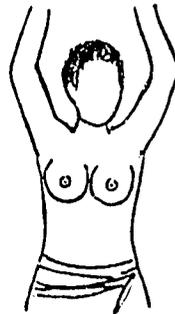


Figure PR 3

Part 2 - Reclining on a Flat Bed

First examine the nipples. Observe for size, fissures, inversion. Also examine for lactation or bleeding. Ask the woman for any history of bleeding and, if positive, request her to demonstrate by milking the nipple area.

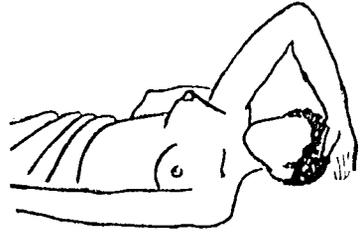


Figure PR 4

Next place the folded towel under the shoulder on the same side as the breast to be examined. Position the patient's arm on that side so as to permit it to rest comfortably over her head (Figure 4). By thinking of the breast as a clock, start at the top of the breast, or 12 o'clock with the flat of the fingers, moving from the outer portion of the breast toward the nipple, using light circular movements. Cover the entire breast in this manner.

Then, with the arm down at the patient's side, examine the tissues of the breast which extend into the armpit, or the axillary region ... also feel for lymph nodes in this area.

The examination is then repeated on the other side, moving the folded towel first under the other shoulder, with the arm raised over the head as before.

At completion of the examination, ask the woman to dress and tell her you will explain your findings.

Recording

Record your findings using a sketch and discuss them with the woman. Always remind the woman to come in for a check-up if she suspects any lump and other changes in her breasts.

Breast Examination Record:

- a. Record "N" if normal.
- b. Describe if abnormal; use diagram for locating abnormality.

Nipples R - _____
 L - _____
 Breasts R - _____
 L - _____
 Axillae R - _____
 L - _____

BREAST-RELATED PROBLEMS

INVERTED OR FLAT NIPPLES

General Considerations

This is a flattening or turning in of the nipple which makes it difficult or impossible for the infant to suckle.

Clinical Picture

The nipple is either flat or turned in and no symptoms are related to the woman. The infant has difficulty suckling. This should be diagnosed during pregnancy but may be found while investigating a feeding problem of the infant.

Management

1. If found during pregnancy, the nipple should be massaged and rolled outwards daily.
2. If it is found as a feeding problem, massage of the nipple before each feeding should be demonstrated and taught to the mother.

NIPPLE CRACKS

General Considerations

During breastfeeding, cracks in the nipple may occur.

Clinical Picture

The nipple is tender. Visible cracks and blood may be present. This is painful to the mother when breastfeeding. Cracks may allow bacteria to enter the milk ducts and cause a breast abscess.

Management

1. The infant should not be allowed to suckle for 24 hours. The milk should be manually expressed and fed with cup and spoon to the infant during this period.
2. The nipples should be exposed to sunlight for 20 minutes three times a day.

Complications

If an abscess occurs, follow the abscess protocol.

Prevention

Toughen the nipples during the last two months of pregnancy by massaging the nipples daily with cold water.

BREAST ABSCESS

General Considerations

This is an abscess that is located in the breast tissue. It is a painful condition for the woman but will not harm the suckling infant.

Abscesses may be preceded by nipple cracks which allow bacteria to enter the milk-secreting glands.

This condition occurs during breastfeeding but is uncommon.

Clinical Picture

The woman presents with pain and swelling in one breast. The swelling is usually warm, tender, firm and reddened. She may have fever and feel generally ill. If this condition progresses, the swelling may develop a soft centre surrounded by a firm red area. This soft centre may point and burst open releasing a large amount of pus. When this occurs, the pain and fever will disappear, but the breast will have a deep open sore with a purulent exudate.

Management

Initial:

1. Wet, hot packs should be applied to the swollen area for 15 minutes three times a day.
2. Breastfeeding should be continued so that the breast is emptied of milk regularly.
3. Ampicillin - 2 cap. (500 mg) four times a day for 5 days. Check for history of sensitivity to penicillin.
4. If the abscess has a soft centre, prepare the patient for an incision and drainage of the abscess. Manage as described in Patient Management Skills.
5. If the woman enters with a draining abscess, manage as you would an infected wound:
 - a. Soak the wound with sterile warm saline solution for 15 minutes three times a day.
 - b. Continue breastfeeding.
 - c. If hole very small, (insufficient drainage), enlarge the hole. Give Ampicillin as in 3.

BREAST LUMP

General Considerations

Lumps in the breast may occur at all ages. They often are benign but may be malignant.

Clinical Picture

A firm lump is found in one of the breasts by the woman herself or the nurse clinician. It is discrete and non-painful. If it is a malignant lump found in a later stage, it may be attached to the chest wall or the skin. If attached to the skin, it will cause a dimple. It may be associated with enlarged lymph nodes under the arms. It may also be associated with bleeding from the nipple.

Management

In all cases of non-painful breast lump, the patient should be referred to a physician.

Prevention

1. Early detection and treatment of breast lumps may decrease the high death rates associated with cancer of the breast.
2. Women should be encouraged to report any lumps regularly.

REVIEW QUESTIONS

1. Why are a mother's flat or inverted nipples a problem to the newborn infant?

2. Cracks in the nipple may occur during breastfeeding. What is a complication of this condition?

3. Describe the clinical findings of a breast abscess.

4. A mother with a 3-month old baby comes for treatment of a draining (for 3 days) breast abscess. Explain the management.

STUDENT GUIDE

ANAEMIA, TOXAEMIA, DIABETES AND HEART DISEASE
IN PREGNANCY

I. Entry Level Skills and Knowledge

Before starting this unit, you should be able to:

1. Describe the pathophysiology associated with anaemia.
2. Describe the clinical picture of the anaemic patient.
3. Describe the diet for the anaemic patient.
4. Describe the clinical picture and management of a diabetic patient.
5. Describe the clinical picture and management of a patient in congestive heart failure.

II. Objectives

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Describe the signs, symptoms and management of the patient with anaemia, toxoemia, diabetes or heart disease of pregnancy.
2. Identify and manage the patient with toxoemia, anaemia, diabetes or heart disease of pregnancy, using protocols as guidelines for diagnosis and management.
3. Describe the complications of anaemia, toxoemia, diabetes and heart disease of pregnancy.
4. Demonstrate the use of nutrition flip charts in patient education.

III. Evaluation

Upon completion of the module, you will be assessed on:

- a. Knowledge: Written test based upon contents of unit in module text. Acceptable performance, 80%.
- b. Skill: Patient education (flip charts; nutrition during pregnancy).

IV. Activities you will be participating in to complete the unit objectives.

1. Read module text on Anaemia, Toxaemia, Diabetes and Heart Disease and answer review questions.
2. Participate in large group discussion of text material.
3. Practice using protocols for diagnosis of anaemia, toxoemia, diabetes and heart disease of pregnancy.
4. Discuss case studies.

ANAEMIA IN PREGNANCY

General Considerations

Anaemia is a condition of reduced haemoglobin content in the blood. In pregnancy, anaemia may be caused by a lack of sufficient iron and folic acid in the food eaten by the woman. Because of the growing foetus, the amount of iron and folic acid needed is increased above normal. Frequent pregnancies and bleeding related to abortions and the delivery process lead to an even greater need for iron.

Anaemia in pregnancy is a very common condition. Some culturally related food taboos may lead the pregnant or lactating woman away from eating foods with high iron and folic acid content.

Clinical Picture

The anaemic pregnant woman usually presents with tiredness and weakness. She is often unable to do her regular work. If the condition progresses, she may become short of breath while doing physical labour. She looks pale. Her conjunctiva and buccal mucosa are pale. The palms of her hands are pale compared to your own.

If the condition progresses, she may begin to have the signs and symptoms of congestive heart failure.

Management:

If the woman is anaemic but does not have congestive heart failure:

Start iron and folic acid daily supplements and continue treatment for two months after the delivery.

Ferrous sulfate - 1 tab (300 mg) three times a day
or Ferrous fumarate 200 mg three times a day.

Folic acid - 1 tab (1 mg) daily

If the woman has signs of shortness of breath at rest, prominent neck veins and ankle oedema, refer to a physician.

If the woman cannot be referred, treat congestive heart failure as directed (in Module) and treat anaemia with iron and folic acid as above.

Prevention

1. All pregnant women should be seen in a prenatal clinic.
2. All pregnant women should receive supplemental iron and folic acid.
 Ferrous sulphate - 1 tab (300 mg) three times a day
 Folic acid - 1 tab (1 mg) daily
 OR Ferrous fumarate 200 mg
3. Women in the child-bearing years should be encouraged to eat green leafy vegetables daily.
4. Community education should include a recognition that a woman when pregnant requires more food for the proper development of the foetus.

REVIEW QUESTIONS

1. Anaemia is a common condition seen during pregnancy. Name the two nutrients which cause anaemia that are insufficient in the woman's diet.
 - a.
 - b.
2. Cultural food taboos may lead to increased anaemia. Give an example of such a taboo in your community.
3. Describe the usual clinical picture of an anaemic woman.
 - a. Usual complaints:
 - b. Appearance:
 - c. Possible complications:
4. What is the treatment and the prevention of anaemia of pregnancy? (Check one.)
 1. Rest
 2. Iron and folic acid supplements
 3. Treat heart failure
 4. Community education

TOXAEMIA OF PREGNANCY

General Considerations

Toxaemia of pregnancy is a serious disease that occurs in some women during pregnancy. Its cause is unknown. It is commonly seen during the last three months of pregnancy. It can be dangerous to the life of the foetus and the mother. It is seen mainly with first pregnancies.

Clinical Picture

Early signs of this condition include an increasing blood pressure or a blood pressure of 140/90 or above, and pre-tibial oedema. These signs may be found in an antenatal examination. As the disease progresses, symptoms of headache and spots in front of the eyes occur. Later, nausea and vomiting and convulsions may occur. When the convulsions occur, this condition is called eclampsia. Eclampsia may be fatal for the foetus and the mother.

Management

Initial:

1. If a pregnant woman has oedema and a blood pressure of 140/90 or above or a sudden rise in blood pressure, she should be referred to a physician.
2. Any additional symptoms or signs such as headaches, spots in front of the eyes, nausea and vomiting should be managed by Diazepam (Valium) 20 mg IM and immediate referral to hospital.

Complications - Eclampsia

If the patient is seen while convulsing, a physician should be called and emergency treatment begun. Arrange for immediate referral to hospital.

Emergency Management:

1. Turn on her side to prevent aspiration of vomited material.
2. Keep in a quiet room at bedrest.
3. Diazepam (Valium) 10 mg (2 ML) IV very slowly, followed if necessary in 10 minutes by Diazepam 10 mg IV very slowly. May be repeated in 10 minutes IF CONVULSIONS CONTINUE.
4. Encourage early delivery by rupture of the membranes. The delivery of the infant seems to end the disease process. Convulsions may occur after the delivery of the infant but the condition often gradually improves. Prepare to deliver a depressed infant.

Prevention

Good antenatal care will decrease deaths due to toxæmia. If a woman has a history of toxæmia or any of the signs and symptoms of toxæmia, she should be considered a high risk mother and be referred to a physician for examination and to a hospital for delivery.

REVIEW QUESTIONS

1. What is the cause of toxæmia of pregnancy?

2. Mark three (3) important signs and symptoms of toxæmia.
 - a. bleeding
 - b. blood pressure of 140/90 or above
 - c. fever
 - d. headache
 - e. swelling of the ankles

3. Eclampsia is the serious complication of toxæmia. What is eclampsia and how should it be managed?

HEART DISEASE AND PREGNANCY

General Considerations

Pregnancy causes an increased demand of work from the heart. The physical stress of labour, delivery and the physiological strain immediately after delivery demand extra work from the heart. The peak demand occurs at about 5 to 6 months and again during the delivery.

Clinical Picture

A woman with known rheumatic heart disease or congenital heart disease becomes pregnant and at 5-6 months of pregnancy shows mild signs congestive heart failure, shortness of breath, and oedema. (See Respiratory & Heart Module.) If the woman is anaemic, the heart failure signs are more marked.

Management

Any pregnant woman with suspected heart disease should be referred to a doctor for management. A hospital delivery is mandatory and a therapeutic abortion should be considered to protect the life of the mother.

Prevention

1. Early diagnosis during an antenatal exam and referral with prompt correct management can prevent maternal mortality.
2. Early and specific treatment of streptococcal pharyngitis will prevent rheumatic heart disease.
3. Prevention of anaemia with ferrous sulfate and folic acid will eliminate further worsening of symptoms seen with associated anaemia.

DIABETES AND PREGNANCY

General Considerations

Changes in the metabolics of carbohydrates and fats during pregnancy complicate the management of diabetes. Maternal and foetal mortality are significantly increased.

Clinical Picture

A woman with known diabetes becomes harder to manage. The blood sugar rises, low blood sugar (hypoglycaemia) occurs more easily and coma may occur. Associated diabetic changes in vision and the kidneys can become more marked.

Infections such as urinary tract infection, skin infections, and vaginitis are more common. Toxaemia is seen more commonly. Hydramnios may occur as well as prematurity. Foetal deaths are more common and babies born to diabetic women are more often larger than those born to non-diabetic women. Congenital abnormalities are more frequent.

Management

Any woman with known diabetes who becomes pregnant should be referred to a physician for management. Her delivery should be handled in a hospital and delivery should occur 2 to 4 weeks before term.

Prevention

Therapeutic abortions may be considered to prevent maternal deaths.

REVIEW QUESTIONS

Match the disease with the sign/symptom.

Identify the disease with the following signs/symptoms. If the sign/symptom is found in a pregnant woman with heart disease, place an a in front of the sign/symptom. If the sign/symptom is found in a pregnant woman with diabetes, place a b, if not found in either heart disease or diabetes, place a c. There are more than one answer for some of the signs and symptoms.

- a. Heart disease and Pregnancy
- b. Diabetes and Pregnancy
- c. Neither disease

- ___ 1. Increased maternal mortality
- ___ 2. Increased foetal mortality
- ___ 3. Should be delivered at home
- ___ 4. Should be delivered in a hospital
- ___ 5. Associated with hydramnios
- ___ 6. Associated with congestive heart failure
- ___ 7. Therapeutic abortion may be considered
- ___ 8. Traditional birth attendants handle well
- ___ 9. Nurse clinician handle well
- ___ 10. Urinary tract infections are more common
- ___ 11. Anaemia makes worse
- ___ 12. Seen with known rheumatic heart disease
- ___ 13. Seen only in multipara
- ___ 14. Seen only in primipara
- ___ 15. May have history of foetal death

STUDENT GUIDE

BLEEDING DURING PREGNANCY, ECTOPIC PREGNANCY,
SEPTIC ABORTION, PUERPERAL SEPSIS,
INTRA-UTERINE FOETAL DEATH

I. Entry Level Skills and Knowledge:

Before starting this unit, you should be able to:

1. Describe the signs, symptoms, and complications of bleeding.
2. Discuss the management of bleeding/shock.
3. Identify/describe signs, symptoms, and complications of sepsis.

Skills - Start IV; Pelvic exam.

II. Objectives:

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Demonstrate the use of diagnostic and management protocols as guides to identification and management of haemorrhage, ectopic pregnancy, septic abortion, and puerperal sepsis,
2. Recognize the physical exam discrimination of haemorrhage in pregnancy, ectopic pregnancy, blood loss related to shock, septic abortion and puerperal sepsis,
3. Differentiate between a closed versus an opened cervix, and a pregnant versus a non-pregnant cervix,
4. Identify intra-uterine death,
5. Describe the procedures for management of the above-mentioned conditions,
6. Differentiate between complete versus incomplete abortion, and tissue versus clots.

III. Evaluation

Upon completion of the module you will be assessed on:

Knowledge: Written test based upon contents of unit in module text. Acceptable performance, 80%.

IV. Activities you will be participating in to complete the unit objectives:

1. Read module text and answer review questions.
2. Participate in large group discussion of subject material.
3. In small group setting, analyze and solve case studies provided by instructor, using protocols as guides to identification and management.
4. In large group setting, present and discuss analyses and solutions to case study problems.

BLEEDING DURING EARLY PREGNANCY

General Considerations

Bleeding during early pregnancy (less than 20 weeks) is a serious threat to the life of the foetus and may be a serious threat to the mother's life.

Bleeding during pregnancy is a sign that something is wrong with the development of the foetus in the uterus. In early pregnancy, this may be due to an abnormality in the foetus or an abnormality in the uterine environment.

Clinical Picture

In the early part of the pregnancy, the woman may have slight bleeding without pain.

Pelvic examination shows a closed cervix with only slight bleeding. The uterus is enlarged and signs of pregnancy are present. (Threatened abortion.)

If this progresses, cramping lower abdominal and back pain may occur with opening of the cervix and expulsion of the foetus (spontaneous abortion).

If the foetus is incompletely expelled, bleeding may continue for a longer period of time and may become severe enough to cause blood loss related shock.

Pelvic examination reveals an open cervix, bleeding, clots and tissue. This is called an incomplete abortion.

Management

Initial:

1. At the first sign of bleeding, the patient should be kept at bedrest until the bleeding stops.
2. Mild sedation with phenobarbital 1 tab (30 mg) two times a day may be given.
3. Sexual intercourse should be avoided.
4. If history of syphilis, VDRL should be done if possible.

Complications

If bleeding profusely, clean the vaginal area. Scrub and put on sterile gloves. Gently insert your index finger into the opened cervix. Place your other hand on the abdomen supporting the uterus. Gently in a circular motion stroke the inside of the uterus. Reassure the woman and encourage her to breathe deeply and relax. The remaining contents will be expelled from the uterus as you remove your hand.

Give Ergometrine 0.5 mg IM, Ampicillin 500 mg 4 times a day X 5 days. Refer to a physician.

If the bleeding is prolonged and an incomplete abortion is diagnosed, the woman should be referred to a hospital for a curettage procedure. Give one dose Ergometrine 1 ampule (0.5 mg). IM before transfer.

If the bleeding causes shock, treat as an emergency and treat for blood loss shock.

In all cases of incomplete abortion, the nurse clinician must search for signs of fever or interference with the pregnancy. If found, this should be managed as a septic abortion.

REVIEW QUESTIONS

1. Explain the following:
 - a. threatened abortion:
 - b. spontaneous abortion:
 - c. incomplete abortion:
2. The management of bleeding during early pregnancy should include (mark three):
 - a. bedrest until bleeding stops
 - b. increase fats in food
 - c. sedation with phenobarbital
 - d. no sexual intercourse
 - e. increase physical exercise
3. Name three serious complications which may be associated with bleeding early in pregnancy.
 - a.
 - b.
 - c.

SEPTIC ABORTION

General Considerations

This is a life-threatening infection that requires emergency measures to save the woman's life.

It is caused by the insertion of unsterile material into the uterus. This is usually done to induce an abortion. Unsterile instruments, sticks, wires or IUD's may have been inserted into the pregnant uterus. Since these objects were unclean, bacteria were inserted into the uterus and a serious infection occurred. If poor technique is used in a clinic or hospital where induced abortions are performed, sepsis can occur but most commonly this occurs in non-clinical situations.

Clinical Picture

The woman usually enters with fever, chills, mild pain in the lower abdomen and some bleeding from the cervix. Abdominal exam may show mild lower abdominal tenderness.

Pelvic examinations often show a blood-tinged discharge from the cervix. The pregnant-appearing cervix, bluish and soft, is often open and will admit one fingertip. It may show signs of something having been forced through its opening. The uterus may be mildly tender and slightly enlarged as if pregnant.

The most serious complication is septic shock. The blood pressure is low, heart and respiration rates fast. If the woman comes in with the signs of septic shock, fast heart rate, fast respiration, chest pain, vomiting, abdominal distension and dehydration, they may be so severe that the slight bleeding is forgotten. It is important to consider septic abortions as a possibility and do a pelvic examination.

Management

1. During the pelvic exam, any foreign object remaining in the cervix should be removed
2. Refer to the hospital

3. If referral will be delayed, give antibiotics -
Streptomycin 1 gram IM daily for seven days
Procaine penicillin 1.2 million units IM daily
for seven days.
4. Keep the patient in a semi-seated position with the
pelvis the lowest part of the body so that the
uterus drains.

Complications

Septic Shock - Treat as a serious emergency. Follow
the management guidelines.

Blood loss and shock - Treat as a serious emergency.
Follow management guidelines in the Emergency Module.

REVIEW QUESTIONS

1. What occurs during an induced abortion which may
cause an infection?

2. Describe the findings of a pelvic examination for
septic abortion:
 - a. cervix

 - b. uterus

3. What antibiotics should be given in the management
of septic abortion?

ECTOPIC PREGNANCY

General Considerations

This is a life-threatening condition of pregnancy. It occurs when the fertilized egg implants and begins to grow outside the uterine cavity. Most of these ectopic pregnancies are located in the fallopian tubes. Since the fetus cannot grow fully there, it separates and often causes severe internal haemorrhage. Ectopic pregnancies occur about one out of every 200 pregnancies.

Clinical Picture

Menses or light bleeding for days or weeks. This is usually followed with heavier bleeding. Pelvic pain is usually present and may be sudden and severe. The lower abdomen may be tender and swollen to palpation. The woman often feels she is pregnant.

Pelvic examination should only include the speculum exam and not the bimanual.

Pelvic examination will reveal a pregnant-appearing cervix with some bleeding from the opening but the opening is usually closed. Caution is necessary because a rough pelvic exam may cause increased internal haemorrhage.

Low blood pressure and a shock-like picture may occur because of bleeding into the abdomen or pelvic areas. If the bleeding is slow, the shock-like picture will not be present, but if acute it may be an overwhelming picture of shock with low blood pressure, weak-fast heart rate, clammy skin and unconsciousness.

Management

Initial:

If an ectopic pregnancy is suspected, the patient should be immediately referred to a hospital.

Complications

If a shock-like picture occurs, the patient must be treated for shock while she is transferred to a hospital which can give blood transfusions and handle the problem.

1. Elevate the legs.
2. Keep the patient warm.
3. Start an IV with an 18 gauge needle and give 1,000 cc normal saline while transporting to the hospital.

BLEEDING DURING LATE PREGNANCY
(ANTEPARTUM HAEMORRHAGE)

General Considerations

Bleeding during late pregnancy is a serious threat to the life of the fetus and the life of the mother.

The bleeding is often due to the placenta being attached over the mouth of the uterus (placenta previa). As adjustments are made preparing the cervix for delivery, this blood-laden organ is separated from its attachment and bleeding occurs. Another cause of late antepartum bleeding is the early separation of the placenta from the uterus wall (abruptio placenta).

Clinical Picture

The woman is 28 to 40 weeks pregnant and bright red bleeding occurs with or without associated labour pains.

DO NOT DO A PELVIC EXAMINATION

DO NOT DO A RECTAL EXAMINATION

When a pelvic or rectal examination is done, the examining hand or speculum may poke a hole in the placenta and cause severe haemorrhage.

The uterus may become very hard, tense and tender. Severe haemorrhage may occur as a complication with shock due to blood loss. Early labour and the birth of premature infant may occur, and stillbirths are common.

Management

Patients should be instructed to report any vaginal bleeding at once. If bleeding occurs, the woman should be transferred to the hospital immediately. Pelvic or rectal examination should not be done.

Complications

If severe haemorrhage occurs with impending or actual shock, treat for blood loss shock and refer to a hospital quickly.

If early labour occurs, shock should be anticipated and referral expedited. However, the nurse clinician should be prepared for the delivery of a premature depressed infant.

REVIEW QUESTIONS

1. List two reasons for bleeding in late pregnancy.
 - 1)
 - 2)
2. Why must a pelvic or rectal examination never be done in bleeding seen late in pregnancy?
3. Outline the management for blood loss related shock.

PUERPERAL SEPSIS

General Complications

Puerperal sepsis is an infection of the reproductive tract that follow labour and delivery. It is seen often after premature rupture of membranes, prolonged delivery, or instrument or Vacuum Extraction delivery. It is caused by bacteria ascending through the vagina and into the uterine cavity.

Clinical Picture

Fever occurs a few days after a delivery. Chills may be present but abdominal pain is usually minimal. The discharge from the vagina is foul smelling.

Pelvic examination reveals that the uterus is tender to palpation and the blood-tinged discharge is foul smelling and may be purulent in appearance.

If untreated, this infection may spread out of the pelvis and cause a general abdominal infection or may spread into the blood stream. It may form an abscess in the pelvis.

Septic shock may occur. The signs of septic shock include fever or subnormal temperature with low blood pressure, a fast heart rate and shortness of breath and may progress to unconsciousness and death. This serious complication must be treated as a medical emergency.

Management

Initial:

1. The woman should be placed at bed rest in a semi-seated position so that the pelvis is the lowest part of the body and this allows drainage of the uterus.
2. Refer to a hospital if possible - if referral is not possible, or will be delayed,
3. Give antibiotics
 - a. Procaine penicillin 1,200,000 units IM every day for 7 days.
 - b. Streptomycin 1 gm IM every day for 7 days.
4. Fluids should be given by mouth until the patient is able to eat normally.

Complications

If a generalized abdominal infection occurs, treat as above, No.1 and No.2, but add intravenous fluids.

- a. 1,000 cc $\frac{1}{2}$ strength Darrows in Dextrose 5%
Given over a
24 hour period.
- b. 1,000 cc 5% Normal saline

If there is no improvement in 24 hours, or any signs of deterioration, refer to a physician.

Septic shock is a serious emergency. Follow Emergency Module management protocol.

REVIEW QUESTIONS

1. Puerperal sepsis is an infection of the genital tract that occurs following
 - a.
 - b.
2. Describe the position a woman should be in while being treated for puerperal sepsis and why.
3. List the two antibiotics that should be given and the dosage recommended.
 - a.
 - b.
4. Name one serious complication.

INTRA-UTERINE FOETAL DEATHS

General Consideration

In the later stages of pregnancy, the foetus may die and remain in the uterus. This may be caused by some general disease of the mother such as diabetes, syphilis or viral diseases. It may also be caused by some genetic abnormality of the foetus or by some combined abnormality between the mother and foetus such as a blood incompatibility. It may also occur as a result of an attempted abortion or accident.

Clinical Picture

The woman is usually beyond five months of pregnancy. She complains that the foetus has stopped moving or that she thinks that the foetus is not growing well. Abdominal examination will reveal absent foetal heart tones. The foetal heart tones should be thoroughly searched for before determining they are absent. The uterus may be small for foetal age (see Antenatal Module).

If the foetal death is caused by an attempted abortion, an intrauterine infection may occur with fever, chills, and signs of septic shock.

Management

If uterine foetal death is diagnosed, the patient should be referred to a hospital. If signs of sepsis are present or signs of septic shock, treat as in Emergency Module and refer quickly to a hospital.

REVIEW QUESTIONS

1. Mark three (3) signs and symptoms of intrauterine death:

- | | |
|--------------------------|-------------------------------|
| a. bleeding | d. high blood pressure |
| b. no foetal heart tones | e. no foetal movement |
| c. anaemia | f. small uterine size for age |

STUDENT GUIDE

PELVIC INFLAMMATORY DISEASE, VAGINITIS, CERVICITIS

I. Entry Level Skills and Knowledge

Before starting this unit, you should be able to explain the anatomy and physiology of the female reproductive organs.

Skills - Pelvic exam; history taking.

II. Objectives:

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Explain the pathophysiology associated with the following conditions: Vaginitis, cervicitis, pelvic inflammatory disease,
2. Describe the etiology, signs, symptoms, and complications of the above-mentioned diseases,
3. Demonstrate the use of diagnostic and management protocols as a guide to the identification and treatment of vaginitis, cervicitis, and pelvic inflammatory disease,
4. Describe the procedure for management of these conditions,
5. Recognize and describe physical exam discriminations of abdominal tenderness and rebound tenderness.

III. Evaluation:

Upon completion of the module you will be assessed on:

Knowledge: Written test based upon contents of unit in module text. Acceptable performance, 80%.

IV. Activities you will be participating in to complete the unit objective:

1. Read module text on PID, vaginitis, and cervicitis, and answer review questions.
2. Participate in large group discussion of text material.
3. In small group setting, students work on topic given to them by instructor. They do the following:
 - a. Develop a case study based on the disease condition identified by the instructor. Include history, presenting complaint, findings and management (including patient education).
 - b. In large group setting, each group presents their case study to the class.

PELVIC INFLAMMATORY DISEASE

General Considerations

This is often an infectious venereal disease that requires prompt treatment to avoid complications.

It is caused by a bacterial infection originating in the vagina and spreading into the cervical canal, uterine cavity, the fallopian tubes and into the abdominal cavity.

When the disease is caused by the gonococcus, it has been spread from one infected person to another at the time of intercourse and is called a venereal disease. This disease can also be caused by organisms normally found in the rectum.

Clinical Picture

The woman enters with marked generalized lower abdominal pain, fever, chills, and sometimes nausea and vomiting. The abdomen is tender to palpation and rebound tenderness is present.

Pelvic examination reveals marked tenderness when the cervix is moved and may reveal a tender mass in the adnexal area. Often pus is seen in the vaginal canal.

If this remains untreated, an abscess may form in the fallopian tubes or in the general pelvic region. Intestinal peristalsis may decrease or stop (ileus) and vomiting become more severe.

Pelvic Inflammatory Disease (PID) may become a chronic disease which is a painful condition which often is associated with sterility because of the scarring that occurs in the tubes.

Management

Initial:

After diagnosis, immediate treatment should begin.

- a. The patient should be placed at bed rest in a semi-seated position keeping the pelvis as the lowest part of the body.
- b. Procaine penicillin 4.8 million units IM should be given in multiple sites on the first visit plus one gram of probenecid by mouth. (Check for sensitivity.)

Then give Ampicillin 2 caps (500 mg) four times a day for 10 days.

Complications

If an abscess is suspected, the patient should be referred to a physician. If immediate referral is not possible, begin the treatment indicated above until referral is possible.

If nausea and vomiting (ileus) are severe, withhold fluids by mouth and provide 1,000 cc 5% Dextrose in water and 1,000 cc 5% normal saline daily until bowel sounds return. If the ileus lasts for more than 24 hours, refer to a physician.

Prevention

1. Intercourse with a man with known urethral discharge should be avoided.
2. Condoms used at the time of intercourse are helpful in preventing the spread of venereal disease.
3. All sexual contacts of the woman with pelvic inflammatory disease should be examined when possible and treated with penicillin.

Procaine penicillin 4.8 million units in multiple sites with Probenecid 2 tabs (1 gm) by mouth.

4. This disease may be associated with other venereal diseases such as syphilis. The patient and her contacts should be questioned about this and treated if a positive history is obtained.

REVIEW QUESTIONS

1. This condition may be caused by an organism called Gonococcus. If it is caused by this organism, it may be termed: (Mark 2):
 - a. a venereal disease
 - b. a malignant disease
 - c. an infectious disease

2. Explain the clinical picture of Pelvic Inflammatory Disease. Don't forget:
 - a. Immediate signs and symptoms --

 - b. Pelvic exam show -

 - c. Three complications:
 - 1)

 - 2)

 - 3)

3. The immediate management of uncomplicated Pelvic Inflammatory Disease includes two components. Select the two.
 - a. Give IV solutions
 - b. Procaine penicillin, probenecid and ampicillin
 - c. Refer to a physician
 - d. Bed rest with the pelvis low

VAGINAL AND CERVICAL INFECTIONS
(VAGINITIS AND CERVICITIS)

General Considerations

This is a very common disease of women which may cause them much discomfort and irritation. It is caused by organisms which infect the vaginal walls -

a) non-specific, b) trichomonas, c) yeast, d) gonococcus.

- a. The non-specific is the most common type.
- b. The trichomonal infection is spread back and forth between sexual partners although the male usually has no symptoms. The trichomonas is a one-celled parasite.
- c. The yeast infection may be more commonly seen in women with diabetes, in women on oral contraceptives, or pregnancy.
- d. Gonorrhoea is spread between sexual partners (See G.U. Module.

Clinical Picture

- a. In the non-specific, the discharge may be white or yellow and is often heavy and purulent. Perineal itching and burning on urination are often present.

Pelvic examination - external genitalia may show redness and discharge. The vaginal walls may be swollen and covered with pus-like discharge.

- b. In trichomoniasis, the vaginal discharge may be frothy and yellow greenish in colour. There is often a strong unpleasant odour. Perineal itching and burning urination is often present.

Pelvic examination - discharge may be seen on the external genitalia. The vaginal walls may be swollen and bleeding.

- c. Yeast infection - the vaginal discharge is white and thick. Perineal itching is often present and may be severe. Burning urination is common.

Pelvic examination - external genitalia are reddened and thick white discharge is present. The vaginal walls are often reddened with white patches.

The most common complication of vaginitis is an infection of the cervix called cervicitis. The cervix becomes involved in the same infection as the vagina. The symptoms are the same but pelvic examination will reveal this condition.

Pelvic examination - visualization of the cervix shows a swollen, reddened cervix covered with exudate. Reddened and bleeding areas (erosions) may be present.

The condition may become persistent despite treatment.

Management

Vaginal suppositories contain a medication in a medium which dissolves inside the vagina and provides a topical medication to the vaginal mucosa. These suppositories are placed inside the vagina by the woman with her finger. After insertion, the suppository liquifies. She should remain in a horizontal position for at least 30 minutes after insertion. When up and about, some of the medication will leak out and cause some staining of her underclothing.

a. Non-specific:

1. Insert triple sulfa vaginal suppositories in the morning and in the evening for three days; then daily at night for four days.

OR

2. Metronidazole (Flagyl) 200 mg (1 tab) three times a day for 10 days

b. Trichomanl infection:

1. Give metronidazole (Flagyl) 2 gm (8 tablets) all at once at bedtime.
2. Treat sexual partner(s) with the same dosage at the same time.
3. Advise use of condom during intercourse until both partners are free of the disease.

c. Yeast infection:

1. Give Nystatin vaginal suppositories. One in the morning and one in the evening for three days; then one daily at night for seven days.
2. If she is on oral contraceptives, consider changing her contraceptive.
3. If the woman has diabetes, give Nystatin and treat diabetes accordingly.
4. If she is pregnant, refer to physician.

Complications

Cervicitis with erosion - if an erosion is present, a repeat pelvic examination should be done two weeks after treatment. If the erosion is still present, the woman should be referred to a physician.

Chronic - If the discharge and symptoms continue after treatment is completed, the woman should be referred to a physician for a microscopic examination of the discharge.

REVIEW QUESTIONS

1. Name three types of vaginitis and give the treatment for each.

- a.

Treatment:

- b.

Treatment:

- c.

Treatment:

2. Explain the management of a cervical erosion associated with vaginitis.

In the use of vaginal suppositories, the following statements are true or false?

- ___ 3. Vaginal suppositories are taken orally.
- ___ 4. Vaginal suppositories dissolve in the vagina.
- ___ 5. Vaginal suppositories contain specific drugs.
- ___ 6. Vaginal suppositories may cause staining of underclothing.
- ___ 7. Vaginal suppositories should be inserted near lunch time.
- ___ 8. Vaginal suppositories are best inserted early in the morning and late at night so the woman can rest for 30 minutes before walking about.
- ___ 9. Vaginal suppositories are the treatment of choice for trichomonal vaginitis.

STUDENT GUIDE

"OTHER" PROBLEMS

(Cancer of Cervix and Uterus, Dysmenorrhoea
Menopausal Associated Problems, Fibroids, Ovarian Tumour)

I. Entry Level Skills and Knowledge:

Before starting this unit you should be able to:

1. Explain the normal anatomy and physiology of the female reproductive organs,
2. Discuss the clinical picture and management of the bleeding/shock patient.

Skill - pelvic exam.

II. Objectives:

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Use diagnostic and management protocols as a guide to the identification and treatment of "other problems".
2. Describe appropriate management.
3. Recognize the physical exam discriminations for "other problems".
4. Demonstrate the use of the protocol in discriminating among problems of reproduction and pregnancy in the clinic.
5. Perform the management skills in the clinic.

III. Evaluation:

Upon completion of the module, you will be assessed on:

Knowledge - Written test based upon contents of unit in module text. Acceptable performance, 80%.

IV. Activities you will be participating in to complete the unit objectives:

1. Read module text on "Other Problems" and answer review questions.
2. Participate in large group discussion of "Other Problems".
3. In small group setting, use diagnostic and case studies protocols to identify and manage specified conditions.
4. In large group setting, (in role-playing form) present the solution of the group (including patient teaching) to the rest of the class.

DYSMENORRHEA
(MENSTRUAL CRAMPS)

General Considerations

Pain with menses is a common complaint during adolescence but may occur at any age. It often has no known cause. However, rarely it may be caused by a foreign body in the uterus such as a polyp or IUD. It may also be due to an unusual condition in which the uterine lining (endometrium) spreads outside the uterus, (endometriosis).

Clinical Picture

A woman has abdominal or low back ache which begins a day or so before her menses. Headache, nausea and diarrhoea may also be present. Some women have swollen breasts and abdominal bloating. These symptoms may last for two to three days.

Pelvic examination is usually normal.

Complications are rare. Emotional disorders may be associated with the other symptoms. Often these symptoms decrease with age and after pregnancy.

Management

1. Reassurance of the woman is important.
2. Give aspirin two tablets (600 mg) every 4 hours for the pain. For the best effectiveness, the aspirin should be given early just at the onset of the pain.
3. She should be encouraged to continue her normal activities. If the symptoms are very severe, short periods of rest may be advised.

Complications

In severe cases of disability with emotional problems, the patient should be referred to a physician.

MENOPAUSAL ASSOCIATED PROBLEMS

General Considerations

Menopause is the term used for the cessation of the regular monthly menstrual cycles. This occurs at 40 to 55 years of age and is due to the discontinuing of hormones that cause ovulation and the normal shedding of the inside lining of the uterus (endometrium). This is a normal physiological process.

Clinical Picture

A woman, 40 to 55 years of age, begins to have scanty, irregular menstruation.

Pelvic examination is normal.

Complications may occur during the change.

Bleeding may become severe or constant. In sudden severe bleeding, shock may occur. However, more commonly, constant bleeding may result in anaemia.

Certain cultures may associate special symptoms to this period of life such as "hot flashes".

Bleeding may occur one year or later after menopause and can be a sign of cancer.

Management

In normal menopause, no treatment is required besides reassurance.

Constant or severe bleeding should be referred to a physician. If blood-loss shock occurs, refer to Emergency Module.

Bleeding after menopause should always be referred to a physician.

REVIEW QUESTIONS

1. When does menopause occur?

2. Bleeding that occurs after menopause can be a sign of _____.

CANCER OF THE UTERUS, CERVIX, OVARIES

General Considerations

Cancer is a life-threatening condition. Cancer of the cervix is a common form of cancer in women. Cancer originating in the inside uterine lining (endometrium) is also common. Cancer of the cervix is often found in young women but can be found in all ages. Cancer of the endometrium is usually found in older women but can be found in all ages.

Clinical Picture

Often, the patient has no symptoms and the first signs are found during a pelvic examination.

Pelvic examination may show a cervical ulcer (erosion) or an enlarged uterus.

If the patient has complaints of a blood-tinged discharge, post-menopausal bleeding, heaviness or mass in the pelvis, or irregular bleeding, cancer must always be considered.

Cancer, if not treated early, may progress to form a large irregular mass on the cervix or inside the uterus. This mass will grow until it invades the bladder or rectum and becomes fixed to the pelvic walls. Pain is usually a late symptom of the disease.

Death is always the result of cancer of the cervix and uterus if it is not treated.

Management

If cancer is suspected, the patient should always be referred to a hospital. At the hospital, a smear of the cervix can be taken and examined. The smear is examined under a microscope. If early abnormal cells are seen, special surgical procedures are performed which prevent the cancer from growing. This test is called a Pap Smear.

REVIEW QUESTIONS

1. Match and complete these sentences.

Cancer of the cervix is usually seen in _____.

Cancer of the endometrium is usually seen in _____.

a. older women

b. younger women

2. What is the purpose of doing a pap smear?

OVARIAN TUMOUR

General Considerations

When ovaries enlarge this is termed an ovarian tumour. The most serious cause of such enlargement is cancer, but it is fairly rare. Physiologic enlargement of the cyst (fluid) that surrounds the egg (ovum) can also cause ovarian enlargement.

Clinical Picture

Often the patient has no symptoms and the ovarian tumour is only found when a pelvic examination is done.

Pelvic examination reveals a mass in the adnexal area. It is small (size of an egg), it is often smooth and movable and usually not painful.

The patient may complain of heaviness in the pelvis or feeling something in her lower abdomen. Ovarian tumours can become very large and occupy most of the lower abdomen or even all the abdomen.

Management

All masses in the pelvis should be referred to a physician.

If an ovarian tumour is suspected, the patient should be referred to a hospital for probable operation.

REVIEW QUESTIONS

1. Give two reasons that ovaries may enlarge.
 - a.
 - b.
2. What is the common management and treatment for an ovarian tumour?

REVIEW QUESTIONS

1. A 26-year old woman, complaining of vaginal discharge, visits the clinic. Your interview with her reveals that she delivered a normal baby boy six months ago.

Physical examination findings include:

- a. Temperature of 38.5°
- b. Lower abdominal tenderness
- c. Discharge is foul smelling and pinkish
- d. Movement of the cervix causes pain

What is the most likely diagnosis of this woman?

2. You are called to the home as an emergency. Your patient is a 22-year old woman who is lying down and in obvious discomfort.

1. Her skin is cool and damp
2. She is not fully responsive
3. Her blood pressure is 90/50
4. She has severe abdominal pain

The family provides the following historical information. Perfectly healthy woman, married with a 2-year old child. Her abdominal pain started quite suddenly. She has missed 3 menstrual periods, but has been having some light bleeding for the last two weeks.

What is the most likely diagnosis for the woman based on the information?

3. A 19-year old woman visits the clinic complaining of vaginal bleeding. She has missed 3 periods. She is pregnant for the first time. She has no abdominal pain, no fever. Her vaginal bleeding is moderate to heavy.

What is the most likely diagnosis?

4. A 56-year old woman visits the clinic complaining of vaginal discharge that is pink and watery. She has no bleeding and no fever.

What is the most likely diagnosis?

MODULE PHASE

SKILL EVALUATION

Before you are advanced to the rotation phase of training, a staff member will evaluate your mastery of the physical examination procedures and discriminations which have been identified in the modules.

You will have the opportunity to be rated on your performance of these skills at any time during the module phase that you feel prepared.

To help you prepare, the module contains a list of the skills to be evaluated. You are advised to do the following:

1. Work at perfecting your techniques of examination by practicing with another student.
2. During the clinical practice time provided, each week, practice the skills applicable to the subject being taught.
3. Have a fellow student observe and evaluate your performance.
4. When you feel you are ready, ask a trainer to observe and rate your performance.
5. If your performance is unacceptable, the trainer will give you specific comments on how to improve.
6. Practice again until you are ready for evaluation, and arrange to be rated.
7. If after two attempts you are unable to perform a skill at an acceptable level, arrange for a meeting with members of the training staff, who will help you obtain the experiences necessary for improving your performance.