Ethiopian TVET-System

Health Extension Service

Level III

Based on Jan.2018G.C Occupational Standard

Module Title:	**Promoting and Educating on Ante-Natal Care**
TTLM Code:	**HLT HES3 TTLM 1019v1**

This module includes the following Learning Guides

LG36: Plan antenatal activities

LG37:Promote antenatal care

LG38:Conduct home visit and refer pregnant women

LG39: Take and record complete history of pregnant mother

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

- Definition of terms
- Planning antenatal care

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

- Gather information for planning antenatal care
- Identify Antenatal eligible's and calculate number of expected pregnant women
- Develop Action plan

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 4
3. Read the information written in the information "Sheet 1 in page 1 to 7
4. Accomplish the "Self-check 1, in page 8

Information Sheet-1	Planning antenatal Care

1.1. Definition of terms

Antenatal care: the professional healthcare a woman receives throughout her pregnancy

Planning : is forecasting and thinking about things that you want to happen in the future and then working out ways to get there

An action plan: describes the way your Health Post will meet its objectives through detailed action steps that describe how and when these steps will be taken.

1.2. Planning antenatal care

Antenatal care, the professional healthcare a woman receives throughout her pregnancy, is important in helping to ensure that women and newborn babies survive pregnancy and childbirth. In this information sheet, you will learn how to plan the antenatal care services that your community needs in order to improve and protect the health of mothers and newborns during pregnancy, childbirth and the postnatal period. You will learn what is meant by the antenatal profile of your community, and how to calculate the number of mothers who are pregnant every year in your catchment area.

1.2.1. Information gathering

Pregnant women may face many different health problems during pregnancy. Some of these are bleeding, high blood pressure, convulsions, high fever, blurred vision, abdominal pain, breathing difficulties, severe headache, anemia, diabetes and infections.

To ensure a full understanding of the problems that pregnant women may face during the antenatal period, and the possible solutions, a well planned antenatal care programme is necessary.

To plan effective maternal and newborn health services, you need to make an assessment of your community and identify the health needs of the population.

You can carry out this assessment through asking questions or through discussion with community representatives and elderly people who know the persistent patterns of habits, customs, attitudes and values in the community, which are transmitted from generation to generation

Then you need to identify the problems in relation to maternal and newborn health conditions, and assess the uptake of services. In promotion of maternal and child health services, you should clearly identify any attitudes and conditions which have an influence on the outcomes.

> ***For example***, in small villages, when a woman has a problem in labour it is very difficult for her to go to a health centre or hospital. Few or no villagers have cars, and even in urban areas most taxi drivers refuse to take a woman in labour to hospital. It is therefore very important for you to have an emergency care plan set up, and to make arrangements for transporting women who need urgent care to treat complications associated with pregnancy or childbirth.

Finding out what the concerns are in your community is an important first step in identifying and studying the problems in your catchment area, and your next step is to rank them in priority order

Ranking and prioritizing problems to tackle

You should rank the identified problems based on the following criteria:

- Magnitude or extent of the problem (how big is this problem?)
- Severity of the problem (how serious is it in terms of adverse outcomes?)
- Feasibility or practicability (how easy or difficult would it be to tackle this problem?)
- Community concern (is this problem an important concern for the community?)
- Government concern (is it an important concern for the government?).

For example, if there is low antenatal care (ANC) coverage and low latrine coverage in your catchment area, you might set the priority of these two problems, as shown in Table 1.1. The scoring system is from 1 to 5, where 1 is the lowest ranking and 5 is the highest. You decide on the score in each box in the table, based on your knowledge of your community and its needs.

Table 1.1 Example of a priority setting analysis of two identified problems

Identified problem	Magnitude	Severity	Feasibility	Community concern	Government concern	Total (out of 25)
Low ANC coverage	5	5	5	5	5	25
Low latrine coverage	5	4	4	4	4	21

As you can see in Table 1.1, the total score is 25 for low ANC coverage and 21 for low latrine coverage. So, in this example, you would set low ANC coverage as a higher priority problem.

When you have identified a high priority problem to tackle in your community, your next steps are listed in Box 1.1.

Box 1.1 Steps in tackling a problem

- Set the objectives (e.g. increase the number of women receiving antenatal care visits)
- Identify the strategies you will use to achieve this (e.g. by organizing a health education campaign to promote the benefits of antenatal care
- Locate the resources needed for implementation of your plan
- Set the time span for reaching your target
- Continuously monitor and evaluate your progress towards achieving your goals.

1.2.2. Identifying antenatal eligible

The first step in assessing the need for antenatal care in your community is to calculate the number of women who are likely to be pregnant in a normal year. These women are sometimes referred to as the antenatal eligible (because they are 'eligible' to receive antenatal care).

A community profile describes the size and characteristics of a community, and the main health factors that affect its population. Population statistics, including facts and

figures about maternal health and pregnancy in the community and information about how the community functions, are important information for planning and promoting effective antenatal care. But
remember that every community is different, so the examples we give in this section may not be the same as you will find in your community.

According to the population statistics for Ethiopia, the number of pregnant n women is calculated as 4% of the general population. This percentage will vary to some extent between communities, depending on the number of women of childbearing age in the population. The number of women who are eligible for antenatal care in one year in Ethiopia can be estimated with reasonable accuracy using the 4% figure.

Example : Calculating the antenatal eligible in a community Imagine that the total number of people in one community is exactly 5,000.

Calculate how many pregnant women are likely to be eligible for antenatal care services in this community in one year.

Answer

The total number of pregnant women is calculated as 4% of the 5,000 population. To calculate 4% of 5,000, you multiply 5,000 by 4 and divide the result by 100. A good way to write this down is as follows:

$$\text{Number of pregnant women} = \text{Total number of populatio}$$

$$= 5,000 \times \frac{4}{100}$$

$$= 200 \text{ pregnant women}$$

Therefore, this community is expected to have 200 pregnant women in one year, who are eligible for antenatal care, delivery and postnatal care. Women who are eligible for Antenatal care needs at list four antenatal care visits called **Focused Antenatal care (FANC).**

Look back at the answer to the above example, . In that community, how many antenatal visits would you make in one year if you achieved focused antenatal care for every pregnant woman?

- You would make 800 antenatal visits ((4 X 200 = 800) 4 visits to each of the 200 pregnant women).

This calculation illustrates how carefully you will need to plan your antenatal care service, if you are going to visit each pregnant woman four times! If you cannot achieve this total, you should visit every pregnant woman at least once, and record the visit.

Calculating the uptake of antenatal care services

Antenatal care coverage is defined as the proportion of pregnant women attended at least once during the current pregnancy by a health professional such as a Health Extension Practitioner, for reasons related to the pregnancy.

Calculating the antenatal care 'first visit' coverage provides information on the percentage of women who use antenatal care services.

The antenatal care coverage rate (or ANC coverage rate) is calculated as the total number of pregnant women attended at least once during their pregnancy by a health professional for reasons relating to the pregnancy, divided by the total number of expected pregnancies during a given time period (usually one year) in the catchment area. The result is expressed as a percentage by multiplying by 100.

$$\text{Antenatal care coverage rate} = \frac{\text{Number of first antenatal visits}}{\text{Total number of expected pregnancies}} \times 100$$

For example, if the total number of first antenatal visits = 100, and the total number of pregnancies = 200, then the antenatal care coverage in your community will be 50%, calculated as written below

$$\text{Antenatal care coverage rate} = \frac{100}{200} \times 100 = 50\%$$

Calculating the antenatal care coverage rate in your community is important because ,It enables you and your supervisor to see whether your efforts to promote the uptake of antenatal care services are successful.

For example, if the antenatal care coverage rate was 50% of pregnant women before you began a health promotion campaign to increase uptake of antenatal care services, you could claim your campaign was successful if the uptake rose to 60% or more.

1.2.3 Developing action plan

Once you have identified the Antenatal eligible women in your catchment area, you will be in a position to implement a set of planned activities, sometimes called an action plan, to achieve your advocacy objectives

An action plan describes the way your Health Post will meet its objectives through detailed action steps that describe how and when these steps will be taken.

Most of the health and development issues that community partnerships deal with are community-wide, and thus need a community-wide solution. You might consider stakeholders/influential people, different sectors, religious organizations, schools, youth organizations, social service organizations, and others while developing the action plan .

Why develop an action plan?

Developing an action plan is a critical first step toward ensuring project success. An action plan may lend credibility to your Health Post and its initiative, increase efficiency, and provide accountability. In addition, the action plan provides a tool for mobilizing the community or group and encouraging members to share responsibility for solving the problems and improving the situation you have decided to change

For each action step or change to be accomplished, list the following, with a due date for each:

- What actions or changes will occur-by when?
- Who will carry it out-by when (or for how long)?
- What resources are needed-by when?
- Communication (who should know what)-and when?

Example: You can use the following format for developing your Action plan.

Example: Action Plan for FANC Services

Objective : To provide FANC services for all ANC eligible women in the catchment area within the specified period

Action Steps	By Whom	By When	Resources and Support Available/Needed		Remark
What needs to be done? **(Activities)**	Who will take actions? **(Responsible body)**	By what date will the action be done? **(Time)**	Resources Available	Resources Needed (financial, human, political, and other)	

Your action plans can be posted on the wall of the Health Post so everyone knows what you hope to achieve

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Imagine that the total number of people in a catchment area is 8000, and the total number of first antenatal visits the Health Extension Practitioners (HEPs) made last year was 100.
    a. Calculate the number of pregnant women who were eligible for antenatal care services in this catchment area last year.
    b. What was the antenatal care coverage rate achieved by the HEPs last year?
2. Assume that the total population of a community is 6,000. How many antenatal visits would the HEPs make in one year if they achieved focused antenatal care for every pregnant woman?
3. Develop an action plan for providing FANC service for ANC eligible women in your catchment area within the specified period
4. List the criteria for prioritizing the problem

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Score = _____

Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG37. Promote antenatal care

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

- Health promotion, advocacy and community mobilization

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

- Identify and consult influential community representatives and health development armies
- Organize, promote and provide Antenatal care promotion and education in partnership with the community and relevant organizations
- Support Antenatal clients to take self-care and birth plan approach in line with individual needs
- compiled, document and report activities

Learning Instructions:

5. Read the specific objectives of this Learning Guide.
6. Follow the instructions described below 3 to 4.
7. Read the information written in the information "Sheet 1, **in page 1- to 13**
8. Accomplish the "Self-check 1, **in page 14**

Information Sheet-1	Health promotion, advocacy and community mobilization

1.1. Health Promotion Advocacy and community mobilization

Health promotion includes any actions of individuals, community, and organizations aimed at improving health and healthy life.

Community mobilization is about organizing the community and all the resources available in the community to move them towards achieving a certain health programme goal. Having this concept in mind, community mobilization is defined as a capacity building process, through which individuals, groups and families (such as model families), as well as organizations, plan, carry out and evaluate activities on a participatory and sustained basis to achieve an agreed goal

Advocacy is speaking up, and drawing policy makers and the community's attention to an important health issue

As a health extension practitioner, you have to use concepts of health promotion, advocacy and community mobilization in order to promote Antenatal care activity or services to your community. By doing so, you will

- Improves the health status of pregnant women.
- Enhances the quality of life for women and children.
- Reduces pregnancy and childbearing related problems.
- Reduces the costs (both financial and human) that individuals, families, and the nation would spend on medical treatment.

During the antenatal period, you can promote the health of the women in your care and the health of their babies before and after birth, by educating mothers about the benefits of good nutrition, adequate rest, good hygiene, family planning and exclusive breastfeeding, and immunization and other disease prevention measures. Your aim is to develop women's knowledge of these issues so they can make better informed decisions affecting their pregnancy outcome.

1.1.1. Nutrition during pregnancy

Maintaining good nutrition and a healthy diet during pregnancy is critical for the health of the mother and unborn child. Nutrition education and counseling is a widely used strategy to improve the nutritional status of women during pregnancy.

The strategy focuses primarily on:

- Promoting a healthy diet by increasing the diversity and amount of foods consumed
- Promoting adequate weight gain through sufficient and balanced protein and energy intake
- Promoting consistent and continued use of micronutrient supplements, food supplements or fortified foods.

Counseling about healthy eating and keeping physically active during pregnancy is recommended for pregnant women to stay healthy and to prevent excessive weight gain during pregnancy.

a. Eating well

To eat well means, to eat a variety and enough balanced food. This combination helps a pregnant woman and her baby stay healthy and strong because it:

- Helps a woman resist illness during her pregnancy and after the birth
- Keeps a woman's teeth and bones strong
- Gives a woman strength to work
- Helps the baby grow well in the mother's uterus
- Helps a mother recover her strength quickly after the birth
- Supports the production of plenty of good quality breast milk to nourish the baby.

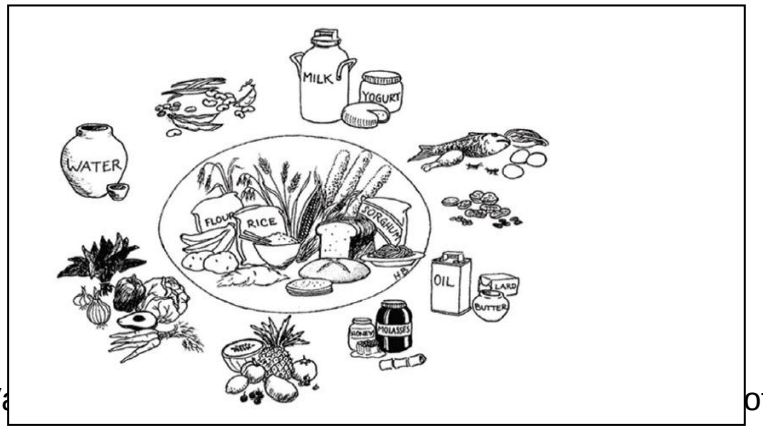

Figure 1.1.Va others

I. Eating a variety of foods

It is important for pregnant women (like everyone else) to eat different kinds of food , main foods (carbohydrates), grow foods (proteins), glow foods (vitamins and minerals), and go foods (fats, oils and sugar), along with plenty of fluids.

II. Eat more food

Pregnant women and women who are breastfeeding need to eat more than usual. The extra food gives them enough energy and strength, and helps their babies grow. They need to increase their usual food intake by at least 200 calories per day, or even more than this if they were underweight before they became pregnant.

Some pregnant women feel nauseated and do not want to eat. But pregnant women need to eat enough — even when they do not feel well. Simple foods like injera or rice can be easier for these women to eat. For women who suffer from nausea, encourage small and frequent meals

b. Talking to women about food

When you see pregnant women for antenatal care, or at village meetings and celebrations, in the market, try to find ways to enquire sensitively about the food they eat. The earlier pregnant women start eating healthier foods, the better chance they have to stay healthy, to have normal births and to have healthy babies.

To find out whether a woman is eating well, ask her what she usually eats, and how much. For example, ask her: 'What did you eat yesterday?' Be sure to tell her what is healthy about what she eats, reinforce the positive efforts she is making to eat well. Then, if it is appropriate, make a suggestion for how she could eat better.

Remember; that education about food is not enough on its own to change eating behavior. Even if a woman knows the best foods for health, she may not eat them. Many families cannot afford to buy enough food or a wide variety of foods. Some women may simply not like the taste of some healthy foods. To help a woman eat better, suggest healthy foods that she can afford and will choose to eat

c. Eating well with little money

The biggest cause of poor nutrition is poverty. A very poor family can eat better by spending money wisely and not wasting what little they have.

Here are some ideas that families can use to eat better with little money.

I. Beans, peas and lentils

Beans, peas and lentils belong to a family of vegetables called legumes. All legumes have a lot of protein and vitamins, and they usually do not cost much. They have even more vitamins if they are sprouted before being eaten.

II. Less expensive meats and animal products

Blood and organ meats like liver, heart and kidney have a lot of iron and may cost less than other meats. Fish and chicken are as healthy as other meats, and usually cost less — especially for a family that fishes or raises their own chickens. Eggs have a lot of protein, iron, and vitamin A. Eggs give more protein for less money than almost any other food.

III. Whole grains

Grains like teff, wheat, rice and corn are more nutritious when they have not been refined (processed to take out the color). Taking out the color takes out healthy things too. White bread and white rice have fewer vitamins, minerals and proteins than brown bread or brown rice. Dark teff and brown injera are more nutritious than the light-colored ones.

IV. Vegetables and fruits

When vegetables are boiled or steamed, some of the vitamins from the foods go into the cooking water. Use this water to make soups.

The outside leaves of plants are usually thrown away, but sometimes they can be eaten. The leaves of the cassava plant have more vitamins and protein than the root. Many wild fruits and berries are rich in vitamins and natural sugars that give energy.

1.1.2. Food groups and their nutrients

a. Main foods (carbohydrates)

In most parts of the world, people eat one main food at each meal. This main food may be injera, rice, maize, wheat, millet, cassava, plantain, kocho, bulla, godere, shenkora, gishta, breadfruit or another low-cost, starchy food which is rich in carbohydrates. These foods give the body energy. But to grow and stay healthy, the body needs other types of food too.

b. Grow foods (proteins)

Grow foods contain protein, which is needed for the growth of muscles, bones, and strong blood. Everyone needs protein to be healthy and to grow. Some grow foods that are high in proteins are:

- Legumes (beans, peas, soybeans, and lentils)
- Eggs, Cheese, milk and yogurt, Nuts and seeds
- Cereal, wheat, corn and rice, Meat, poultry and fish.

c. Go foods (sugars and fats)

Go foods contain sugars and fats, which give the body energy. Everyone needs these foods to be healthy. Some healthy go foods that are high in sugars are fruits and Honey. Some 'go foods' that are high in fats are:

- Some nuts (e.g. peanuts) and some seeds (e.g. sunflower),
- Avocados, Vegetable oils, butter and lard
- Fatty meat, Milk and cheese
- Eggs and Fish.

d. Glow foods (vitamins and minerals)

Glow foods contain vitamins and minerals, which help the body fight infection and keep the eyes, skin and bones healthy and strong. Vitamins and minerals are known as micronutrients because they are very small. Fruits and vegetables are high in vitamins and minerals. It is important for pregnant women to eat as many different fruits and vegetables as they can.

The most important vitamins and minerals that a pregnant and breastfeeding women need every day are

- **Iron, Folic acid, Iodine, Calcium, and Vitamin A**

A pregnant woman needs more of these vitamins and minerals, because the baby needs them to grow and be healthy and to prevent birth defects; and also she needs them to have enough energy to look after herself and her family, to fight infections and to keep her strong for completing the pregnancy, giving birth safely and breastfeeding the baby afterwards

Iron

Iron helps make blood healthy and prevents anemia. A pregnant woman needs a lot of iron to have enough energy, to prevent too much bleeding at the birth, and to make sure

that the growing baby can form healthy blood and store iron for the first few months after birth. It is also important in the production of good breast milk.

Some of the foods that contain a lot of iron includes

- Poultry (chicken), Fish
- Sunflower, pumpkin and squash seeds, . Beans, peas and lentils
- Dark leafy green vegetables
- Meat (especially liver, kidney and other organ meats), Egg yolk
- Whole grain products, Dried fruit, Nuts
- Iron-fortified bread

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Taking iron pills

It can be difficult for a pregnant woman to get enough iron, even if she eats iron-rich foods every day. She should also take iron pills (or liquid iron drops) to prevent anemia. These medicines may be called ferrous sulfate, ferrous gluconate, ferrous fumerate or other names (ferrous comes from the Latin word for iron).

Iron pills or drops can be obtained from pharmacies and health institutions, but throughout Ethiopia you will advice a women to take iron pills routinely to pregnant women as part of focused antenatal care

Folate (folic acid)

Lack of folate can cause anemia in the mother and severe birth defects in the baby. To prevent these problems, it is important if possible for a woman to get enough folic acid in her diet before she becomes pregnant and she should certainly do this in the first few months of pregnancy.

Foods rich in folate that pregnant and breastfeeding women should try to eat every day include:

- Dark green, leafy vegetables
- Whole grains (brown rice, whole wheat)
- Meat (especially liver, kidney and other organ meats) and Fish

As well as eating as many of these foods as she can, all pregnant women should also take 400 mcg (micrograms) of folic acid tablets orally every day during pregnancy. She should be able to get these tablets from the health post as part of Focused Antenatal Care.

Calcium

A growing baby needs a lot of calcium to make new bones, especially in the last few months of pregnancy. Women need calcium for strong bones and teeth. These foods contain a lot of calcium:

- Yellow vegetables (hard squash, yams)
- Milk, curd, yogurt and cheese
- Green, leafy vegetables and soybeans

Iodine

Iodine prevents goiter (swelling of the neck) and other problems in adults. Lack of iodine in a pregnant woman can cause her child to have cretinism, a disability that affects thinking and physical features. The easiest way to get enough iodine is to use iodized salt instead of regular salt . It is available in packet form labeled 'Iodized salt' in many market places.

Vitamin A

Vitamin A prevents poor vision at night or when light intensity is low and helps to fight infections. Lack of vitamin A also causes blindness in children.

A woman needs to eat plenty of vitamin A-rich food during pregnancy and while breastfeeding. Food items that contain lots of Vitamin A includes:

- Dark yellow and green leafy vegetables and yellow fruits (Carrots, mangoes, spinach, cabbage, etc).
- Liver, fish liver oil
- Milk, eggs and butter

Fluids

Along with eating healthy foods, women should drink plenty of clean water and other healthy fluids every day. Fruit juices, animal milks and many herbal teas are all healthy fluids to drink

1.1.3. Problems from poor nutrition

Poor nutrition can cause tiredness, weakness, difficulty in fighting infections and other serious health problems. Poor nutrition during pregnancy is especially dangerous. It can cause miscarriage or cause a baby to be born very small or with birth defects. It also increases the chances of a baby or a mother dying during or after the birth.

1.2. Hygiene During Pregnancy

During pregnancy, women should be especially careful about personal hygiene. Pregnant women sweat more and have more vaginal discharge than non-pregnant women (due to hormonal changes), and they may be more vulnerable to infection by germs in the environment. Keeping the body clean helps prevent infection.

Hand washing with soap is the most important hygiene action she can take, especially before
preparing food and after going to the toilet. If possible, a pregnant woman should wash her body every day with clean water especially her genital area.

Dental hygiene is especially important during pregnancy because increased oestrogen levels can cause swelling and increased sensitivity in gum tissues.
She should clean her teeth with a dental stick or a toothbrush with toothpaste, the pregnant woman should do so regularly.

1.2.1. Living a healthy lifestyle

As long as eating well and keeping clean is important for her, pregnant women need to get enough sleep and rest every day. This will help her to avoid developing high blood pressure , and edema (**Edema** is the swelling of the feet and ankles due to fluid collecting in the tissues).

Good rest also helps her to stay strong and gives the fetus a better chance of being born healthy. If families encourage a pregnant woman to rest, are helping her and the baby to be healthy.
Many women have to work throughout their pregnancy in the fields, factories or shops, as well as in their own homes. This can be especially hard for women during pregnancy, because they get more tired than usual; especially in the last few weeks. Explain to them and their families that the woman should try to rest for a few minutes every 1 to 2 hours. This will also help her to enjoy her pregnancy.

Make sure that women know that whatever they put into their body will pass across the placenta and into the baby.

Cigarette smoke, alcohol and illegal drugs such as opium, heroin, cocaine and barbiturates are dangerous for anyone, but especially harmful to the developing fetus. Even one or two alcoholic drinks a day during pregnancy can result in the baby being born too small, or with birth defects or disabilities that affect the brain

She should also be advised to avoid:

- Lifting heavy things
- People who are sick, especially if they have vomiting, diarrhea or rashes
- Strong chemicals or their fumes (e.g. chemicals used to kill pests in the fields)
- Non-essential medicines
- Medicines such as cough syrups, laxatives and pain relievers that have not been prescribed for her by a health worker

1.3. Benefits of early and exclusive breastfeeding

Educate and counsel for those who are pregnant for the first time and explain briefly the benefits of early and exclusive breastfeeding .

Explain to her that breast milk:

- Is ready made and natural food
- Provides the best nutrition for the newborn
- Is easily digested and efficiently used by the baby's body
- Protects against infection and other illnesses because it contains antibodies
- Is cost-effective and affordable
- Promotes mother-baby bonding
- Provides the mother as a contraceptive method (LAM) if she is exclusively and frequently breastfeeding until her first menstrual period returns

1.4. PMTCT

By prevention of mother to child transmission (PMTCT) of HIV we mean the set of interventions designed to reduce the transmission of HIV from Disinfected pregnant women to their babies. Although HIV testing and counseling before pregnancy is important, you should always bear in mind that antenatal care may provide the first opportunity for testing and counseling women in your community regarding HIV.

You should consider PMTCT as an essential component of focused antenatal care, It is an entry point for care and support not only for HIV infected pregnant women, but also for their partners and newborn babies.

It is Ethiopian national policy to aim to test all pregnant women who give their ***informed consent.***

Informed consent means consent given by a person who is being offered medical testing or treatment, and who understands the risks and benefits of the procedures being offered. you need to know about HIV testing, and what treatment will be provided for HIV-infected women.

This is so you can explain to them what will happen if they agree to be tested. We should emphasize that it is essential for pregnant women to give informed consent.

1.4.1. When does HIV transmission occur from mother to baby?

Although mother to child transmission (MTCT) of HIV can take place during pregnancy, the highest risk of transmission is during labour and delivery. Depending on breastfeeding practices and the duration of breastfeeding, there is also a substantial risk of MTCT of HIV during breastfeeding.

Without intervention, it is estimated that 40 out of every 100 babies (40%) born to HIV-infected mothers will be HIV-infected.. Sixty percent of babies of HIV-infected mothers will not acquire the virus at all. However, it is not possible to predict which HIV-infected mother will transmit the virus to her child, so you must provide PMTCT services to all HIV-positive pregnant women.

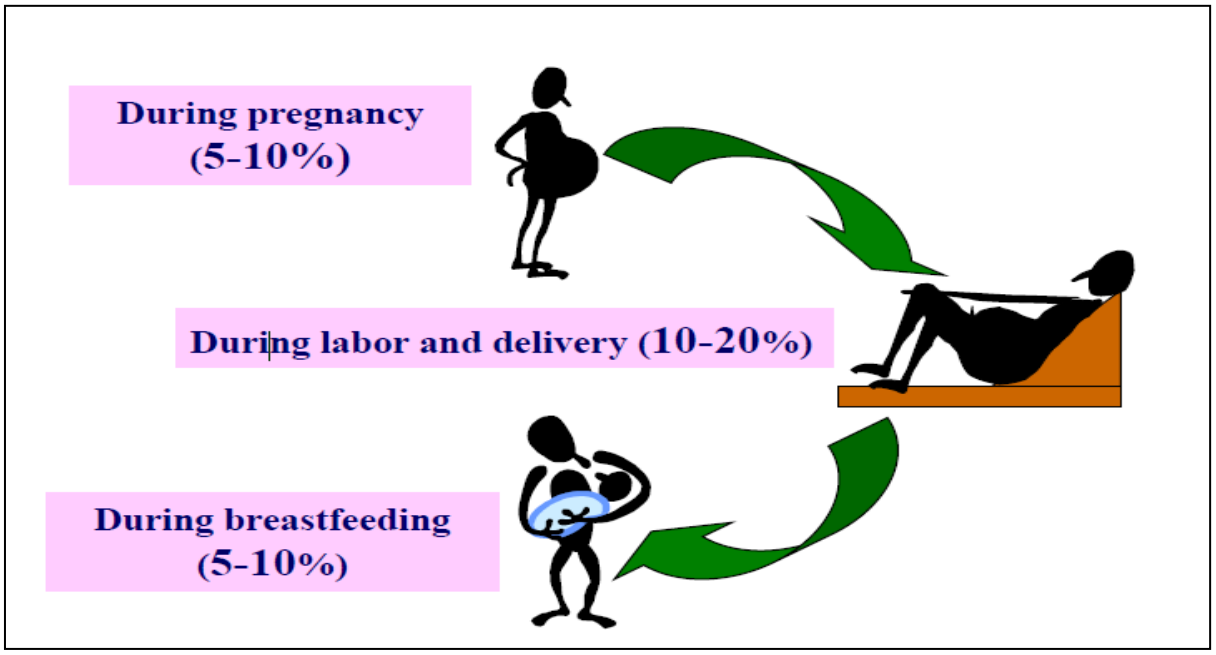

Figure 1.2: Outcomes of infants born to HIV-infected women without preventive measures (*BEmONC – LRP: Ethiopia Best Practices in Maternal and Newborn Care*), January 2017

1.5. Advocacy and community mobilization

Advocacy and community mobilization will help you to gain and sustain the involvement of a broad range of influential individuals, groups and sectors at different levels in the community, who will support the antenatal care program.

If you are successful in educating advocates to speak up for antenatal care and in mobilizing broad scale support for the service, the outcomes can include:

- Improving access to antenatal services for pregnant women, and its acceptance in the community
- Providing forums for discussion and coordination of the antenatal care service
- Mobilization of community resources, such as transportation, outreach and emergency funding for pregnant and laboring women with complications that require urgent medical attention.

1.5.1. Opinion leaders as advocates of antenatal care

Engaging the support of advocates who are *'**opinion leaders' or 'key persons'*** in your locality is an important task. Well-known and respected elders, traditional or religious leaders, and 'wise persons' whose advice and words are accepted in the community, can convince others of the benefits of the antenatal care service by exerting social pressure. The tendency of community members to agree with them is important in conveying your health messages and getting acceptance from others.

You can use these community-honored leaders to communicate positive messages about antenatal care if you give them the right information, and you are ready to use them as advocates. Advocacy by respected leaders can make sure people maintain the positive behavior changes you have brought about through health education.

Try to get the maximum number of people involved in the promotion of antenatal care, so that the community will really strengthen its support for pregnant women's health

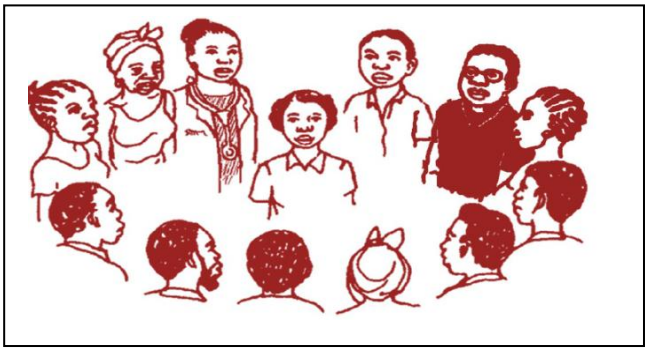

Fig 1.3. Community Mobilization as a whole

1.6. Compiling and Reporting activities

Each Health Extension Practitioner needs to keep records and notes, as it has a lot of relevance.

The information might be about the services you are providing, for example:

- Total number of FANC eligible
- Number of house visited by you in that specific period
- Number of women who came for 1st ANC services
- The number of women having major danger sign of pregnancy, or about other activities such as training volunteers and model families, or even organizing health education events.

In reporting your health-related activities, you need to collect information that will tell you how well you have done in terms of your targets, and compare this information with the things you planned to achieve.

Some of the sources of information available to you include:

- Examining records: for example health service records, financial and administrative records.
- Documentation: for example letters, reports, plans, attendance lists, forms, invoices, receipts, minutes of meetings and official reports.
- Continually observing work progress, staff performance and service achievements.
- Discussing progress and any problems with staff and with the community.

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe health promotion?
2. Explain why a mother has to keep her personal hygiene during pregnancy?
3. How can a poor family still maintain eating better food?
4. When does highest HIV transmission occur from mother to child?
    a. During pregnancy
    b. During delivery
    c. During breast feeding

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG38: Conduct Home visit and refer pregnant women

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

- Identifying and addressing/refer risk factors
- Home to home basic health education

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

- Give home to home basic health education on healthy living and maternal health care for pregnant mother and her family
- Take and record common vital signs recorded regularly
- Provide appropriate support , consultation and follow up of pregnant mother
- Identify and address Risk factors in consultation with her family and others
- Identified and urgently refer Pregnancy related danger signs to health centers
- Maintain Registers of women undergoing antenatal care according to organization policies and procedure
- Keep and use schedules of participation in antenatal care to organize continuing care for women.
- Organized and/or provide reminders and other assistance attend ANC care according to women's needs
- Maintain referral and communication networks with Medical staff, and midwives allied health staff, birthing facilities and female community elders
- Keep and use records on attendance for antenatal care and birthing outcomes to follow the mother

Learning Instructions:

9. Read the specific objectives of this Learning Guide.
10. Follow the instructions described below 3 to 4.
11. Read the information written in the information "Sheet 1, Sheet 2, **in page 1 to 7, and 9 to 12** respectively.
12. Accomplish the "Self-check 1, aand Self-check t 2, **in page 8, and 13** respectively

Information Sheet-1	Identifying and addressing /refer risk factors

1.1. Conduct Home visit

Safe motherhood begins before conception with proper nutrition and a healthy lifestyle. It continues with appropriate prenatal care, the prevention of complications when possible, and the early and effective treatment of complications. The ideal results are pregnancy at term, without unnecessary interventions, the delivery of a healthy infant, and a healthy postpartum period in a positive environment that supports the physical and emotional needs of the woman, infant, and family.

For the implementation to this, one of the approaches is visiting the client's (the pregnant mother's) home and talking to her and family. What function you will perform, before, during and on ending the visit need to be planned. In this aspect, before visiting the house, you need to review the client's pertinent data filled at the health post and elsewhere. Besides, you have to make sure that you obtain the permission of the clients to be visited. In this information sheet, you will learn in detail the importance of home visiting and how to go about it during the process and how to end it. It is a means to identify pregnant mothers and their problems (including the risk factors) and managing them at spot

Home visiting: is a face to face contact made by the public health professional to the client to offer care and support.

a. Principle of home visiting

1. It should have a purpose
2. It must be based on need
3. It should have a plan
4. It should use the available resources

I. Advantage

1. The family is seen in a familiar atmosphere which is were relaxed and makes communication easier than at hospital or clinic

2. All family members can be seen & assessed by one person at one visit
3. The health workers, who know the neighborhood, are aware of local problems, priorities, customs, difficulties, & resources.]
4. High risk families can be identified & visited as a priority
5. The health workers, can observe, assess, & act up on obvious and latent health problems. Health workers can follow these problems; Health workers can follow these problems at subsequent visit.'
6. Much can be assessed at one time. Example, personal hygiene, water supply, sanitation, waste disposed food storage etc.
7. More accurate assessment is done
8. Better understanding & good relationship is established with the family members.
9. Advice will be practical and suited to the family's needs.

II. Limitations

- Time consuming
- Limited equipment can only be carried to home
- Appointment might be not kept
- Destruction in the home makes construction difficult
- Certain homes may be geographical not reachable

b. Phases and activities of home visiting

Before doing home visiting the HEW should revive the client's pertinent data about the client.

The first thing is obtaining the client's permission to be visited, schedule for the visit, explains

the purpose and verifying the address.

Phase1. Initiation phase

- Clarify purpose of home visiting
- Share information to family member

Phase2. Pre-visit phase

- Initiate contact with family
- Determine family willingness
- Schedule home visiting
- Review records

Phase3. On home phase

- Introduction him/her self
- Warm greeting
- Social interaction (to develop trusting r/s
- Implement your objective.
- HEW must pay attention for safety of themselves and the client, if she has supervisor, deliver the plan.
- If she encounters problem inform her supervisor and return back and report

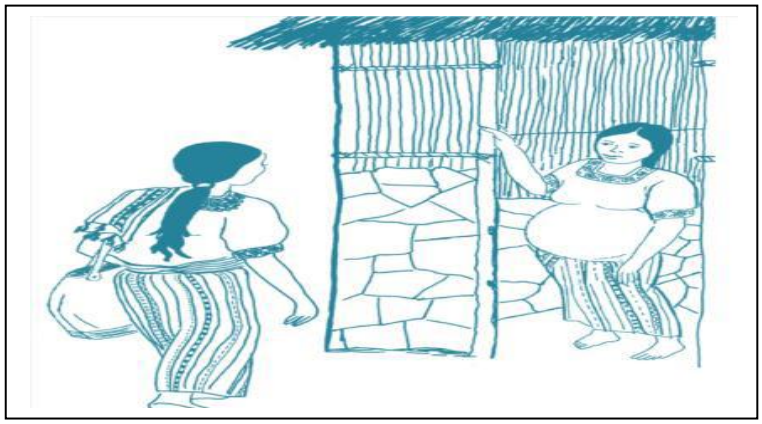

Fig 1.1 The HEW visiting the pregnant mother at her home

Phase4. Termination phase

- Review visit with family
- Plan for future visit

Phase5. Post visit phase

- Record visit what all you did and ANC service
- Plan for next visit

c. Detail of the Home Visit

I. Initial Home Visit

During the initial home visit, which is usually lasts less than an hour, the individual client is
evaluated and a plan of care is established to be followed or modified on subsequent visits.
The initial assessment includes evaluating the client, the home environment, the client's self-care abilities of family's ability to provide care, and the client's need for additional resources.
Identification of possible hazards, such as cluttered walk areas, potential fire risks, air or water pollution, or inadequate sanitation facilities, is also part of the initial assessment.

Documentation considerations for home visits follow fairly specific regulations. The client's
needs and the care provided must be documented. The medical diagnosis and specific detailed information on the functional limitations of the client are usually part of the documentation. The goals and the actions appropriate for attaining them must be identified. Expected outcomes of the nursing interventions must be started in terms of client's behaviors and may be realistic and measurable

II. Ending the Home Visit

As the visit comes to a close, it is important to summarize the main points of the visits for the
client and family and to identify expectations for future visits or client achievements. Here are
the following points to be considered at the end of each visit:

- What are the main points of the client or family should remember form the visit?
- What positive attributes have been noted about the client and the family that will give them a sense of accomplishment?
- What were the main points of the teaching plan or the interventions needed to ensure that the client and the family understand what they must do?
- Who should the client or family call if they need contact someone immediately?
- What signs of complications should be reported immediately?

- How frequent will the visit be made?
- When is the next visit?

1.2. Identifying and addressing/refer risk factors

Risk factors are those inherited, environmental and behavioral influences which are considered to increase the likelihood of physical or mental health problems in the future.

- The pregnant woman's age is below 18 years.
- A woman over 35 years of age is pregnant for the first time.
- The previous delivery was by operation.
- The height is below 150cm. and pregnant for the first time.
- Pregnancy (parity) over five.
- Less than 2 years spacing
- Alcohol consumption
- Tobacco use
- Mal-Nutrition
- Drugs that are not prescribed
- Environmental and housing issues affecting pregnancy, child care and family health
- Potential impact of compliance or non-compliance with antenatal care plan
- Presence or absence of family, financial and social support systems

1.3. Identify and refer potential pregnancy related danger sign

In addition to the above risk factors, there are major danger sign and symptoms, which are listed below that you have to identify and refer the mother immediately

- Persistent vomiting, weight loss
- Hyper emesis gravid arum (excessive nausea and vomiting during pregnancy)
- Vaginal bleeding, crampy lower abdominal pain.
- Headache, burning epigastric pain
- Blurred vision, generalized body swelling
- Leakage of watery fluid from the vagina
- Absent fetal kick for more than 6 hours
- Yellowish discoloration of the eyes

- Immobility or movement of the fetus has stopped.

As the occurrence of the common danger symptoms that can be felt or noticed by the pregnant woman may vary in their timing in relation to the gestational age:

- First, you have to know very well the timing of occurrence of common pregnancy related or other medical problems, taking the gestational age as the milestones;
- Secondly, you have to be selective not to overwhelm the pregnant mother with too much information at a time
- Thirdly, remember that counseling is not a one-time business . you should be prepared to repeat the messages about danger symptoms at every visit and check that the woman has understood correctly

Table 1.1. The major symptoms during pregnancy are outlined in the table below in relation to the gestational age

Gestational age	Sign and symptoms	Diagnosis/problem
Conception to 20 weeks of pregnancy	• Persistent vomiting, weight loss	Hyper emesis gravid arum
	• Vaginal bleeding (fresh), may include passage of clots and fleshy material, with crampy lower abdominal pain. On and off lower abdominal pain is very common in early pregnancy and not considered as danger sign.	Abortion
	• Pregnancy symptoms disappear, abdomen is not growing or is even decreasing in size, there may be minimal dark vaginal bleeding	Missed abortion
	• Vaginal bleeding (menstrual-like),lower abdominal pain, missed or irregular period	Ectopic pregnancy or pregnancy outside the uterus
	• Vaginal bleeding (fresh), passage of tissues which look like an ice spoiled with blood	Molar pregnancy

	(grape-like tissues), fast abdominal growth	
20 weeks to full term	• Headache, burning epigastric pain, blurred vision, generalized body swelling (involving the back, abdominal wall, hands and face), decreased urine output	Hypertensive disorder of pregnancy
	• Vaginal bleeding in late pregnancy, even minimal amount	Ante partum hemorrhage or late vaginal bleeding
	• Leakage of watery fluid from the vagina that wets her underwear significantly and may be extensive	PROM or premature/before labor/ rupture of membrane
	• Progressively increasing pushing down pain in the lower abdomen before 9 months of gestation	Preterm labor
	• No change in abdominal growth, fetal kick felt less than 10 times in 12 hours	Fetal growth retardation- IUGR
	• Absent fetal kick for more than 6 hours	Intra uterine fetal death (IUFD)
At any time during pregnancy	• Fever, headache, chills, rigor, sweating, feels thirsty, generalized aching pain, lost appetite	Malaria, Typhoid fever or other febrile illness diseases
	• Urination becomes painful, frequent, urgent and may be bloody or look like pus	UTI
	• Yellowish discoloration of the eyes, loss of appetite, hate spicy food smell, feels exhausted, nausea and vomiting	Liver disease
	• Thirsty, drinks excessive amounts of water, urinates a lot, feels hungry, weight loss	Diabetes militias
	• Persistent cough for more than two weeks	TB or Other disease

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe health promotion?
2. How many visits does house visiting have?
3. Discuss what you do during the initial and termination phase during house visit?
4. List at list five risk factors which may danger the pregnancy ?
5. What are the common pregnancy related danger signs and symptoms ?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

2.1. Basic Health Education

After tracing and identifying the pregnant mothers you had registered on the registration form

according to their gestational ages and their problems, you should provide appropriate interventions

1. Counseling about risk identifications
2. Advice on complication readiness and risk preparedness
3. Advice on the DO'S and DON'TS
4. Link or refer the mother if needed
5. Appoint your next visit

a. Pregnancy DO'S

- See your doctor regularly. Prenatal care can help keep you and your baby healthy and spot problems if they occur
- Continue taking folic acid throughout your pregnancy. All women capable of pregnancy should get 400 to 800 micrograms (400 to 800 mcg or 0.4 to 0.8 mg) of folic acid every day. Getting enough folic acid lowers the risk of some birth defects. Taking a vitamin with folic acid will help you to be sure you are getting enough.
- Eat a variety of healthy foods. Include fruits, vegetables, whole grains, calcium-rich foods, lean meats, and a variety of cooked seafood.
- Get all essential nutrients, including iron, every day. Getting enough iron prevents anemia, which is linked to preterm birth and low-birth weight babies. Ask your doctor about taking a daily prenatal vitamin or iron supplement.
- Drink extra fluids, especially water
- Get moving. Unless your doctor tells you otherwise, physical activity is good for you and your baby.
- Gain a healthy amount of weight. Gaining more than the recommended amount during pregnancy increases a woman's risk for pregnancy complications. It also makes it harder to lose the extra pounds after childbirth.

- Wash hands, especially after handling raw meat or using the bathroom.
- Get enough sleep. Aim for 7 to 9 hours every night. Resting on your left side helps blood flow to you and your baby and prevents swelling. Using pillows between your legs and under your belly will help you get comfortable.
- Set limits. If you can, control the stress in your life and set limits. Don't be afraid to say "no" to requests for your time and energy. Ask for help from others.
- Make sure health problems are treated and kept under control. If you have diabetes, control your blood sugar levels. If you have high blood pressure, monitor it closely.
- Ask your health care providers before stopping any medicines you take or taking any new medicines. Prescription, over-the-counter, and herbal medicine all can harm your baby.

b. Pregnancy DONT'S

- Don't smoke tobacco. Smoking during pregnancy passes nicotine and cancer-causing drugs to your baby. Smoking also keeps your baby from getting needed nourishment and raises the risk of miscarriage, preterm birth, and infant death.
- Avoid exposure to toxic substances and chemicals, such as cleaning solvents, lead and mercury, some insecticides, and paint. Pregnant women should avoid exposure to paint fumes.
- Protect yourself and your baby from food-borne illness, which can cause serious health problems and even death. Handle, clean, cook, eat, and store food properly.
- Don't drink alcohol. There is no known safe amount of alcohol a woman can drink while pregnant. Both drinking every day and drinking a lot of alcohol once during pregnancy can harm the baby.
- Don't use illegal drugs.
- Don't clean or change a cat's litter box. This could put you at risk for toxoplasmosis, an infection that can be very harmful to the fetus.
- Avoid contact with rodents and with their urine, droppings, or nesting material. Rodents can carry a virus that can be harmful or even deadly to your unborn baby.

- Don’t take very hot baths or use hot tubs or saunas (steam bath). High temperatures can be harmful to the fetus, or cause you to faint.
- Don’t use scented/perfumed feminine hygiene products. Pregnant women should avoid scented sprays, sanitary napkins, and bubble bath. These products might irritate your vaginal area, and increase your risk of a urinary tract infection or yeast infection
- Don’t douche. Douching can irritate the vagina, force air into the birth canal and increase the risk of infection.
- Avoid x-rays. If you must have dental work or diagnostic tests, tell your dentist or physician that you are pregnant so that extra care can be taken

2.2. Areas (points) to be assessed during Home visiting:

1. General cleanliness
2. Solid waste disposal
3. Latrine
4. Personal hygiene
5. Vaccination of <1yr infants
6. Vaccination of women
7. ANC
8. Feeding of children <2 yrs
9. FP
10. Presence of insects / rodents in the house
11. Presence of sick person in the house and action taken.

The health extension worker should hold a bag containing appropriate supplies to treat at the site.

2.3. Follow up of pregnant mother

A pregnancy follow-up is an appointment with a pregnant women to check on her and her growing fetus general condition. This occurs and is usually provided by you after a patient’s pregnancy is confirmed, and is performed on a schedule basis. The procedure involves, counseling/health education, physical examination of the pregnant patient and monitoring of the fetus’ growth. These visits play an important role in ensuring that the

mother and her baby are safe from risks and complications all throughout the pregnancy.

A pregnancy follow-up is highly recommended for all pregnant women once their pregnancy is confirmed. Once you identify a pregnant women at home , you have to schedule your follow-up as the FANC schedule principles, but you can modify the schedule depending on the condition of the mothers . so as a health extension worker, it is your part of work to provide health education regarding pregnancy follow up.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What are the Areas /points to be assessed during Home visiting?
2. List the basic health education that are given to pregnant women during home visits?
3. What is the purpose of follow up of pregnant women ?

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG39: Take and record complete History

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

- Focused ANC
- History taking and physical examination
- Record antenatal services

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

- Take general information (name, parity, etc) from the antenatal client using standard format and document of FMOH.
- Take Complaints of the current pregnancy from the antenatal client according to the procedure of FMOH.
- Collect problems related to previous pregnancy from client and documents based on the standard assessment technique

Learning Instructions:

13. Read the specific objectives of this Learning Guide.
14. Follow the instructions described below 3 to 6.
15. Read the information written in the information “Sheet 1, Sheet 2, and Sheet 3 **in page 1, 10 and 47** respectively.
16. Accomplish the “Self-check 1, Self-check t 2, and Self-check 3 **in page 9, 46 and 48** respectively
17. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1, ” **in page 49**
18. Do the “LAP test” **in page –51**

Information Sheet-1	Focused ANC

1.1. Definition of Terms:

Care: - look after someone or something; giving attention

Concepts: - a thought or idea, or something which someone might be able to imagine

Principles: - a rule or theory, standard of ethical behavior

Visit: - a short stay with someone, especially to comfort him/her or for business

Antenatal Care: the care that a woman receives during pregnancy; it helps to ensure healthy outcomes for women and newborns

1.2. Focused Antenatal Care - Concepts and Principles:

Historically, the traditional antenatal care service model was developed in the early 1900s. This model assumes frequent visits and classifying pregnant women into low and high risk through predicting the complications ahead of time. Although the approach is announced to be the best way to promote ANC, it was unable to identify accurately women who are „at risk" of developing any of the life-threatening conditions. Rather, it categorize some pregnancy as „low risk" when it is liable that the women may subsequently develop danger symptoms that need urgent professional attention. Hence, it is currently replaced by focused antenatal care (FANC) which is a goal-oriented antenatal care approach, recommended by researchers in 2001 and adopted by WHO in 2002. In line with this, Ethiopia has also accepted FANC"s approach as its ANC policy.

The advantage of FANC over the traditional ANC approach is that the former is an ANC strategy which uses evaluation, intervention and promotion to implement ANC without classifying pregnant women as high and low risk case, and in addition:

- Takes into consideration that every pregnancy ends with the delivery of a healthy baby without also impairing the health of the mother.

- Assures that pregnant women and their families need to be advised on how to prepare for birth and subsequent potential complications.
- Helps pregnant women to receive special care and attention from the family, community and the health care system
- Promotes the benefit of skilled attendance during pregnancy and at birth including encouragement for postpartum care for themselves and their newborns
- Supports counseling women on the benefits of family planning and provision of the options of contraceptives
- Helps to assure the continuum of the link with higher levels of care as needed
- Helps to identify and treat maternal conditions appropriately, cost-effectively and as individualized case.

1.3. Rights of the Pregnant Woman:

The followings are rights of women that service providers should be aware of and respects when providing maternity care.

- Every woman receiving care has a right to information about her health
- Every woman has the right to discuss her concerns, thoughts, and worries without fear
- A woman should know in advance the type of procedure that is going to be done for her
- Procedures should be conducted in an environment in which the woman‟s right to privacy is respected.
- A woman should be made to feel as comfortable as possible when receiving services.
- The woman has the right to express her views about the service she receives.

1.4. Objectives of Focused ANC:

The new approach to ANC emphasizes the quality of care rather than the quantity.

For normal pregnancies WHO recommends only four antenatal visits. Thus, the major objective of FANC is to help women maintain normal pregnancies through:

I. Health promotion and disease prevention
II. Early detection and treatment of complications and existing diseases
III. Birth preparedness and complication readiness planning.

I . Health Promotion and Disease Prevention:

Counseling about important issues affecting a woman's health and the health of the newborn is a critical component of focused ANC. That is, counseling the woman and providing the services required is the main concern.

The services include:

- Immunization against tetanus
- Iron and foliate supplementation.
- Recognition of danger signs, what to do, and where to get help
- Voluntary counseling and testing for HIV
- The benefit of skilled attendance at birth
- Breastfeeding (excluding and complementary)
- Establishing access to family planning
- Protection against malaria with insecticide-treated bed nets
- Good nutrition and the importance of rest
- Protection against iodine deficiency
- Risks of using tobacco, alcohol, local stimulants and traditional bad practices
- Hygiene and infection prevention activities

II. Early Detection and Treatment of Complications and Existing Diseases:

In FANC, as part of the initial assessment, the provider talks with the woman and examines her for pre-existing health conditions that may affect the outcome of pregnancy, require immediate treatment or a more intensive level of monitoring and follow-up during gestation.

III. Birth Preparedness and Complication Readiness:

Birth preparedness and complication redness is the process of planning for normal birth and expecting the action needed in case of emergency, so every woman and her family should have a plan for the following

Approximately 15% of women will develop a life-threatening complication. So, every woman and her family should have plan for the following for which some of them may need saving money.

- A skilled attendant at birth
- The place of birth and how to get there including how to access emergency transportation if needed
- Items required for the birth
- Support during and after the birth (e.g., family, friends)
- Potential blood donors in case of emergency

1.5. Implementation of Focused ANC:

This Focused ANC protocol is designed as a job aid for ANC providers. It includes

- Revised forms and checklists needed to identify those women that can follow basic care and
- those women with special health conditions and/or are at risk of developing complications that needs a special care.

Keep in mind to:

- Make all pregnant women feel welcome at your clinic.
- Opening hours for your ANC clinic should be as convenient as possible for mothers to come to the clinic.
- Make every effort to reduce client waiting time.
- However, women who come without an appointment should not be turned away even when there is no emergency.
- As far as possible, any required interventions (for treatment) or tests should be done at the women's convenience, for example, on the same day of the woman's visit.

1.5.1. The Basic Component of FANC:

The FANC approach categorizes pregnant women into **two groups**.

a) Those eligible to receive routine ANC (called the basic component); and

b) Those who need specialized care based on their specific health conditions or risk factors

Sets of criteria are used to determine the eligibility of women for the basic component. At first Antenatal visit, the provider should use the FANC checklist to classify the pregnant women. If a woman has none of the conditions listed on the classifying form (no single yes marked on the form), she is eligible to follow the basic component. But, if a woman has any one condition given in the checklist she should follow a specialized care.

If the specialized service is not available in the facility, she needs to be referred to the next level of care. A woman who was initially classified to follow the basic component of FANC may be reclassified to follow specialized care if she develops any of the conditions at any time during the ANC follow up. In the same way, a woman who was initially classified to follow a specialized care may be reclassified to follow the basic care if the condition or the risk factor initially identified no longer exists.

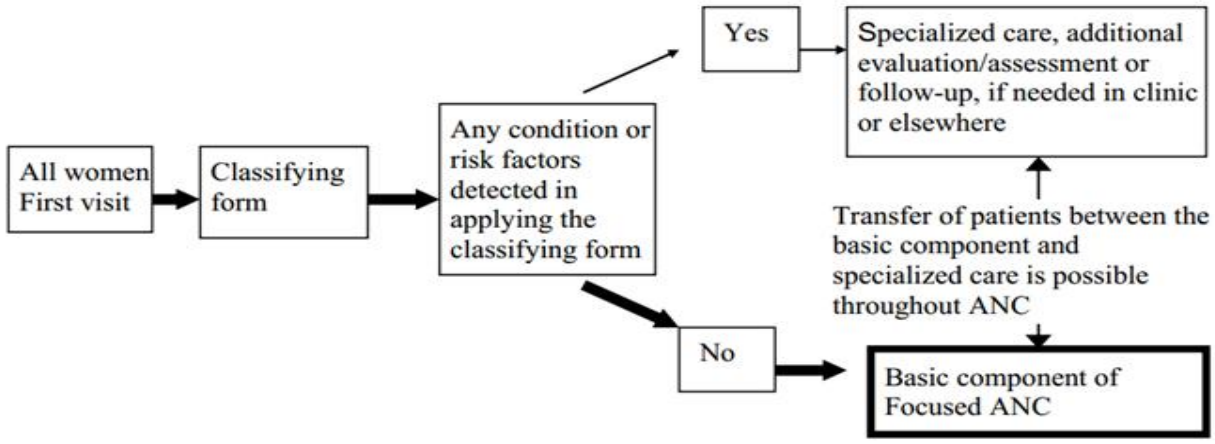

Fig 1.1. The FANC model

Does she has risk factor?

Federal Ministry of Health
Integrated Antenatal, Labor, Delivery, Newborn and Postnatal Care Card

Date: _____ ANC Reg.No: _____Medical Record Number (MRN):_____

Name of Client: _____Name of Facility _____

Woreda: _____Kebele:_____House No: _____

Age (Years) _____ LMP____/____/____ EDD ____/____/____

Gravida____ Para _____ Number of children alive_____ Marital Status_____

INSTRUCTIONS to Fill Classifying form: Answer all of the following questions by placing a cross mark in the corresponding box.

OBSTETRIC HISTORY	No	Yes
1. Previous stillbirth or neonatal loss?		
2. History of 3 or more consecutive spontaneous abortions?		
3. Birth weight of last baby < 2500g		
4. Birth weight of last baby > 4000g		
5. Last pregnancy: hospital admission for hypertension or pre-eclampsia/eclampsia?		
6. Previous surgery on reproductive tract?(Myomectomy, removal of septum, fistula repair, cone biopsy, CS, repaired rapture, cervical circlage)		
CURRENT PREGNANCY	**No**	**Yes**
7. Diagnosed or suspected multiple pregnancy?		
8. Age less than 16 years?		
9. Age more than 40 years?		
10. Isoimmunization Rh (-) in current or in previous pregnancy		
11. Vaginal bleeding		
12. Pelvic mass		
13. Diastolic blood pressure 90mm Hg or more at booking?		
GENERAL MEDICAL	**No**	**Yes**
14. Diabetes mellitus		
15. Renal disease		
16. Cardiac disease		
17. Chronic Hypertension		
18. Known 'substance' abuse (including heavy alcohol drinking, Smoking)		
19. Any other severe medical disease or condition TB, HIV, Ca, DVT..		

A "Yes" to any ONE of the above questions (i.e. ONE shaded box marked with a cross) means that the woman is not eligible for the basic component of the new antenatal care mode and require more close follow up or referral to specialty care.If she needs more frequest ANC visits use and attach additional recoridng sheets

a

Annex 1: Integrated client card

II. Initial Evaluation plus Promotive and Preventive Care

General Exam		Gyn Exam		Counseling /Testing, HIV+ Care and follow up			
General_____		Vulvar Ulcer	Y N	Danger signs In pregnancy & delivery advised	Y N	HIV test result received with post test counseling	Y N
Pallor	Y N	Vaginal discharge	Y N	Birth Preparedness advised	Y N	Counseled on Infant feeding	Y N
Jaundice	Y N	Pelvic Mass	Y N	**MOTHER** HIV test accepted	Y N	Referred for care, treatment and support	Y N
Chest Abn.	Y N	Uterine size (Wks) ____		HIV test result	R NR I	**PARTNER** Partner HIV test result	R NR I
Heart abnormality	Y N	Cervical Lesion	Y N				

III.Present Pregnancy: Follow Up

	1ct visit (better before 16 wks)	2nd visit (better 24 - 28 wks)	3rd visit (better 30 -32 wks)	4th visit (better 36-40wks)
Date of visit				
Gestation age (LMP)				
BP				
Weight (Kg)				
Pallor				
Uterine height (Wks)				
Fetal heart beat				
Presentation				
Urine test for infection				
Urine test for protein				
Rapid syphilis test				
Hemoglobin				
Blood Group and Rh				
TT (dose)				
Iron/Folic Acid				
Mebendazole				
Use of ITN				
ARV Px (type)				
Remarks				

	First visit	*Second visit*	*Third Visit*	*Fourth Visit*
Danger signs identified and Investigation:				
Action, Advice, counseling				
Appointment for next follow-up				
Name and Sign of Health care Provider				

b

Figure 1.2. Both (a and b) shows focused ANC classifying form

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. State the difference between FANC and the traditional ANC approaches
2. What are the rights of pregnant women?
3. If the pregnant women develop any condition of risk factors detected in applying the focus ANC model form, she should have four FANC visit.
    a. True
    b. False
4. What is the objective of FANC?

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet-2	History taking and physical examination

I. The First Visit:

In Focused Antenatal Care (**FANC**), the first ANC visit should occur in the first trimester, preferably before 16 weeks of gestation.

2.1. Objectives of first visit (before 16th weeks of pregnancy):

- To determine the woman‟ medical and obstetric history with a view to collect evidence of the eligibility to follow the basic component or the specialized care and/or referral to a specialized hospital (using the classifying form).
- To refer for pregnancy test for those women who came early
- To determine gestational age
- To provide routine iron supplementation
- Provide advice on signs of pregnancy-related emergencies and how to deal with them including where she should go for assistance
- To provide Prevention of Mother To Child Transmission (PMTCT) care for HIV counseling and testing to link with a recommended facility or service

Remember:

Ideally, the first visit should occur before 16 th weeks of pregnancy. However, some Women may come at a later gestational age in which case the provider has to

enroll the woman as first visit and give her all the services required for the first visit and as well appropriate for her gestational age.

- The first visit can be expected to take 30 – 40 minutes.
- It is necessary that the steps recorded on the pregnant women registration card be followed part by part.

1. History

1.1. Personal history (Socio-demographic characteristics)-

- Ask her, name, Woreda, Kebele, house number, age, marital status, whether her pregnancy is planned or unplanned pregnancy
- Do a "quick check" for danger signs and conditions needing emergency treatment.
- About daily habits and lifestyle (e.g., social support, workload, dietary intake, use of alcohol/drugs, smoking), and whether she has experienced threats, violence, or injury.
- about tetanus toxoid immunization.
- whether she is using insecticide-treated bed nets at all times.

1.2. Nutritional status

- Ask symptoms that suggest **poor nutrition or lack of iodine in her diet**.
    - This is very important, because poor maternal nutrition is associated with poor pregnancy outcomes like a small baby, and the child may be short in stature.
    - Ask the following warning symptoms

Warning symptoms

- Not wanting to eat
- Not gaining weight
- Weakness and general ill-health
- Sores, rashes, or other skin problems
- Sore or bleeding gums
- Stomach problems or diarrhea
- Burning or numbness of the feet.

The effects of iodine deficiency are:

- Goitre (swelling in the front of the neck caused by iodine deficiency;
- Short children
- Children with deafness
- Children with cretinism, a disability that affects thinking.
    - If you suspect that a pregnant woman's health is poor due to inadequate nutrition, or lack of iodine in her diet, advise her about good nutrition and iodine supplementation

1.3. Check her weight and height

Healthy weight gain

- A woman in good health steadily gains between 9 to 12 kilograms during pregnancy. This is the same as 1 to 2 kilograms each month. However, routine weight measurement is not necessary for antenatal care because it is not a reliable indicator of pregnancy outcome.

Warning sign

- If a woman gains weight suddenly near the end of her pregnancy, it may be a sign of twins, or pre-eclampsia (high blood pressure and protein in the urine appearing for the first time during pregnancy).

1.4. Last Normal Menstrual Period (LNMP)

- Ask her Last Normal Menstrual Period (LNMP)
- Determination of the expected date of delivery (EDD) based on LNMP and all other relevant information.
- To calculate EDD, first sure that whether the month of pagume is crossed or not crossed.
    - If the month of , pagume is crossed; add 5 days on the first day of her LNMP and 9 months on the month of her LNM P
        - For example, if the mother's LNMP was on 12/6/2011, her EDD will be on 17/03/2012
    - If the month of pagume is not crossed add 10 days on the first day of her LNMP and 9 months on the month of her LNMP
        - For example, if the mother's LNMP was on 05/03/2011, her EDD will be on 15/12/2011

- To determine the gestational age of the fetus, i.e. the number of weeks or months of pregnancy (gestation), use the following formula

$$\frac{\text{VD (Visiting Day of the mother)} - \text{Her LNMP}}{7}$$

1.5. Medical history

- Ask specific diseases and conditions:
  - diabetes mellitus, renal, cardiac diseases, chronic hypertension, tuberculosis, HIV status , varicose veins, deep venous thrombosis, other specific conditions depending on what the service area perform (for example, hepatitis, malaria), other diseases (past or chronic) and allergies)
- Operations other than caesarean section
- Current use of medicines (specify them)

1.6. Obstetric history- Ask

- Previous stillbirth or neonatal loss
- History of three or more consecutive spontaneous abortion
- Birth weight of last baby < 2500 gm or > 4000gm
- Last pregnancy: hospital admission for hypertension or pre-eclampsia (eclampsia)
- Any unexpected event (pain, vaginal bleeding, others (specify them).
- About if she has felt fetal movements within the last day.
- Gravidity, parity, number of children alive and number of abortions
  - **Gravidity**: The total number of pregnancies (normal or abnormal) or it is the number of times a women has been pregnant
  - **Parity:** The number of times a women has delivered potentially viable children, or it is a description of having given birth to an infant, alive or died, with a birth of 1000gm or more, it excludes abortion
  - **Multigravida:** A woman who has been pregnant several times or a woman who had been pregnant at least once before the current pregnancy
  - **Multipara:** A woman who has given birth on two or more occasions

- **Primipara:** A woman who has given birth to one or more infants as a result of one pregnancy

2. Physical Examination

Assess the general appearance (look for signs of physical abuse)

2.1. Vital signs: Blood Pressure (BP), Pulse Rate (PR), Temperature (To), Respiratory Rate (RR)

2.1.1. Blood pressure :

Blood pressure (BP) refers to how hard the blood is 'pushing' on the walls of the major blood vessels as it is pumped around the body by the heart. The pressure is measured in millimeters (mm) of mercury (a liquid silver metal, which has the chemical symbol Hg), so blood pressure measurements are expressed as a number followed by mmHg

A blood pressure measurement is two numbers written one above the other. The top number tells you the woman's blood pressure at the moment when her heart 'beats' and pushes blood out into her body. The bottom number tells you her blood pressure when her heart relaxes between each beat, so it can refill with blood

Healthy blood pressure

Normal blood pressure stays between 90/60 mmHg (you say this aloud as 'ninety over sixty millimeters of mercury',) and below 140/90 mmHg ('one hundred and forty over ninety millimeters of mercury'). It does not go up much during pregnancy.

Warning signs

High blood pressure is known medically as hypertension and is a warning sign. The woman has high blood pressure if either of these is true:

- The top number is 140 or above.
- The bottom number is 90 or above.

Very low blood pressure (less than 90/50 mmHg) is also a warning sign, which is usually caused only by heavy bleeding or shock (a dangerous reduction in blood flow throughout the body). This is a very dangerous situation.

Blood pressure numbers

Show how hard the blood has to press. Note that blood pressure is not the same as pulse. You can have a slow pulse with a high blood pressure.

When a woman has high blood pressure during pregnancy, it is harder for her blood to bring food and oxygen to the baby via the placenta. The baby then grows too slowly. Very high blood pressure can also cause the woman to have kidney problems, bleeding in the uterus before birth, or bleeding in the brain (stroke).

How to check blood pressure

There are several types of blood pressure equipment (Figure 2.1).

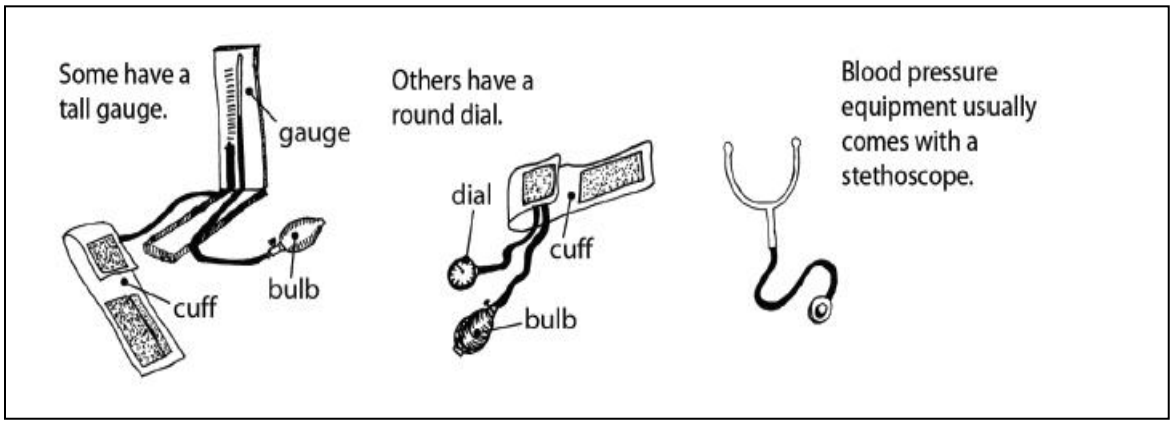

Figure 2.1: Blood pressure equipment may have a tall gauge (left) or a round one (middle). You will also need a stethoscope (right).

When you take the woman's blood pressure, first tell her what you are going to do, and why. Make sure she is sitting or lying comfortably and feels relaxed. Figure 2.2 shows the process step by step

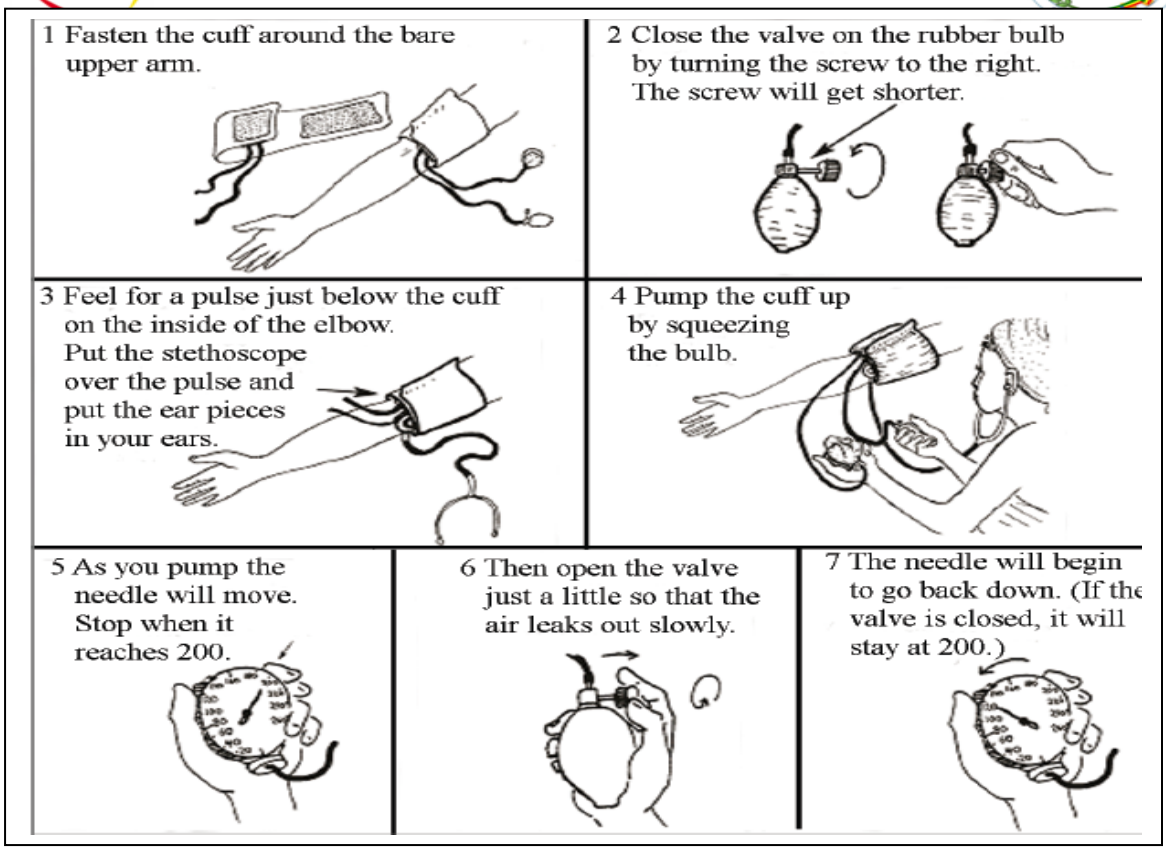

Figure 2.2. Diagrams 1 to 7 show you how to measure blood pressure

As the air leaks out, you will start to hear the woman's pulse through your stethoscope. Notice where the needle is (see Figure 2.3 below), or where the column of mercury stops if you have a tall gauge (as on the left of Figure 2.1)

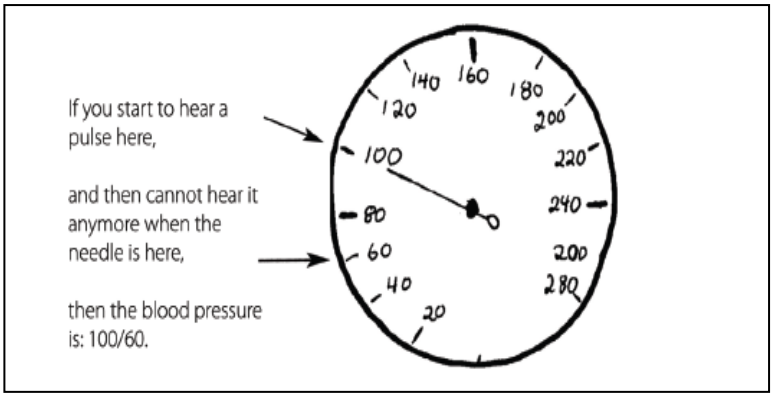

Figure 2.3: This gauge is round, and the pressure is indicated by a needle.

The other type of blood pressure equipment has a tall gauge with a vertical column of silver mercury and numbers at the side (left image of Figure 2.1); the top of the silver column indicates the blood pressure

You can record the woman's blood pressure:

- When you start to hear the pulse (this will be the top number), and
- When the pulse disappears or gets very soft (this will be the bottom number). Check the woman's blood pressure at each visit.
- Write the blood pressure down on her antenatal record card so you can check for changes over time (see the example in Figure 2.4). If her blood pressure is going up, ask her to come back every week until you are sure that it is not still rising.

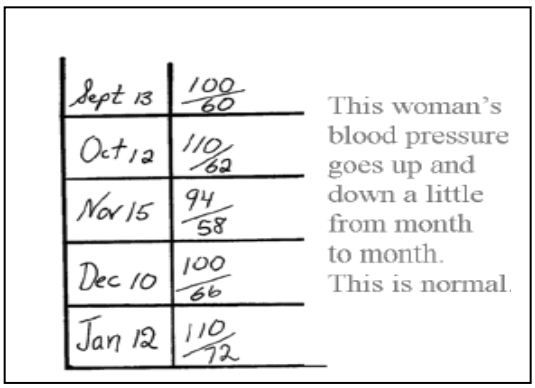

Figure 2.4 Record the woman's blood pressure as shown in this example

2.1.2. Checking her temperature

Body temperature is a measurement of how hot or cold the internal tissues of the body are. Although it varies a little bit in hot or cold weather, or if the person is wearing too many or too few clothes, or doing heavy physical work, it generally stays close to a value known as 'normal' temperature, unless the person is ill.

Body temperature is measured using an instrument called a thermometer (Figure 2.5a), which has a 'bulb' at one end, usually filled with a silver liquid metal called mercury. (Some glass thermometers contain a red dye instead, and some use digital technology — see Figure 2.5b.) In a glass thermometer, when the bulb of mercury is warmed by a person's body, the mercury expands and rises up the thin glass tube, which is marked with numbers showing the person's body temperature

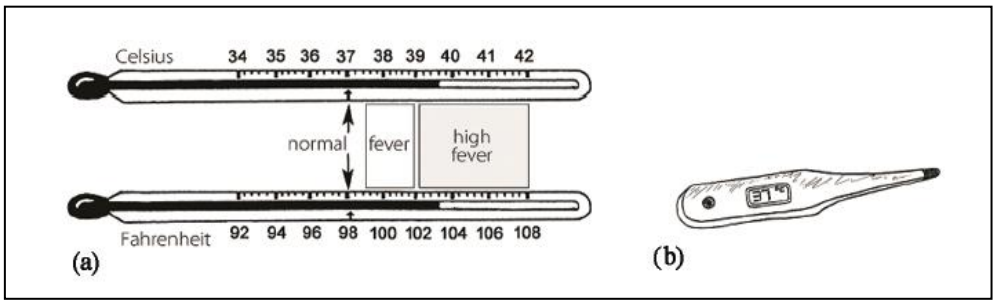

Figure 2.5. (a) Glass thermometers may measure temperature in degrees Celsius (top) or Fahrenheit (below). (b) A digital thermometer shows the temperature as a number in a window

Healthy temperature

Normal temperature is close to 37°C, or just under 98°F. The woman does not feel hot to touch.

Warning sign

The woman has a fever — a temperature of above 37.5°C (or 100°F) or above. She feels hot to touch.

How to check her temperature

If you don't have a thermometer, put the back of one hand on the woman's forehead, and the other on your own, or that of another healthy person (Figure 2.6). If the woman has a fever, you should be able to feel that her skin is hotter than that of a healthy person.

If you have a glass thermometer, clean it well with soap and clean water, or alcohol. Hold the thermometer with the 'bulb' containing the silver mercury pointing away from your hand. Shake it with a snap of the wrist (Figure 2.7), until the top of the thin column of silver mercury falls well below 'normal' body temperature, i.e. less than 36°C (or 96°F).

Put the bulb end of the thermometer under the woman's tongue or in her armpit, and leave it there for three minutes. The woman should keep her mouth closed, or her arm close to her body.

Take the thermometer out and turn it until you see the silver line. The point where the silver stops marks the temperature. There is usually a little arrow at the 'normal' point.

Figure 2.6. You can easily feel if she is hotter than you

Figure 2.7.Shake the mercury to below 36°C.

Always clean the thermometer with soap and cool water, or with alcohol, after you use it. Do not use hot water — it can break the thermometer! Mercury is a very poisonous metal. Be careful with glass thermometers, and if they break, do not pick up the mercury with your bare hands. Sweep the mercury into a jar and bury it. Do not let children play with thermometers or mercury. Get a digital thermometer if you can (Figure 2.5b).

Remember, a high fever (greater than 37.5^{o}C) may be due to sickness due to malaria or other body infection and needs to be lowered right away. To lower a fever:

- Have her drink one cup of fluid every hour
- Wash her body with a cloth dipped in cool water
- If available give 500 to 1,000 mg (milligrams) paracetamol by mouth every four to six hours and refer her

2.1.3. Checking her pulse

The pulse tells you how fast the heart is beating. Every time the heart beats (contracts) it pushes blood out into the arteries. You can feel each 'pulse' by pressing gently on an artery with your fingers. Everyone's pulse is different. That is normal. You can find the pulse in the throat or wrist, as shown in Figure 2.8.

Healthy pulse

The normal pulse rate is about 60 to 80 beats a minute when the woman is resting.

Warning sign

The pulse rate is 100 or more beats a minute when the woman is resting.

How to measure her pulse rate

Wait until the woman is resting and relaxed. Put the pads of two fingers on the pulse (Figure 2.9). Do not use your thumbs, because there is a little pulse in your own thumbs which could confuse you.

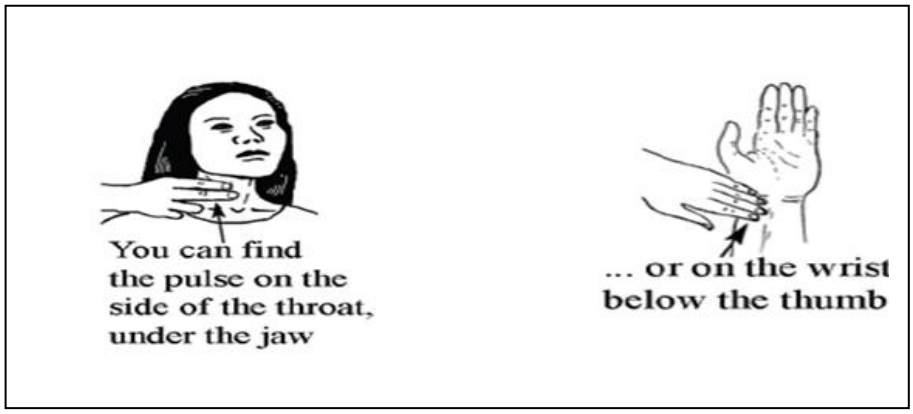

Figure 2.8 Use two or three fingers (never your thumb) to feel the pulse in the neck or inside of the wrist.

Figure 2.9. Make sure the woman is sitting in a relaxed position when you measure her pulse rate.

If you have a watch with a second hand, or there is a clock with a second hand, count the number of beats in the mother's pulse for one minute. Write the number down.

At first, have someone look at the watch or clock for you, and tell you when one minute has passed.

If you do not have a watch with a second hand, check the pulse anyway. You can learn to tell if it is slow, normal, or fast compared to your own pulse, and to other women's.

What to do if the woman has a fast pulse

If her pulse rate is 100 beats or more a minute, she may have one or more of the following problems:

- Stress, fear, worry, or depression
- Anemia
- An infection like malaria
- Bladder infection, or infection in her uterus
- Heavy bleeding
- Thyroid trouble
- Heart trouble.

If you do not know what is causing the fast pulse rate (above 100 beats per minute), refer the woman to the nearest health centre.

2.1.4. Checking for shortness of breath

Healthy respiration

Some shortness of breath, especially late in pregnancy, is normal. Many women get a little short of breath when they are 8 or 9 months pregnant. The cause of this is as the baby gets bigger, it squeezes the lungs so there is less room to breathe. Breathing may get easier when the baby drops lower in the belly shortly before labour begins.

Warning symptom

If shortness of breath is making a pregnant woman uncomfortable, this is a warning symptom, espe igure2.10).

Figure 2.10 Shortness of breath can be a warning symptom

Shortness of breath can also be caused by:

- Anaemia
- Heart problems
- Tuberculosis
- Asthma
- Lung infection
- A blood clot in the lung
- Allergies.

If a pregnant woman has trouble breathing all of the time, or severe trouble even once, or if you think she may have any of the illnesses listed, refer her to a health centre.

2.2. Head, Ear, Eye Nose Throat/mouth (HEENT),

- Look for the cleanliness of her hair/ head, observe any sign of trauma, wound etc
- Check for any discharge, sign of trauma, swelling/lesion or wound in her ear and nose
- Check for oral hygiene and dental carries
- Check for anemia and sign of jaundice

2.2.1. Checking for signs of anaemia

When someone has anaemia, it usually means the person has not been able to eat enough foods with iron. Iron helps the red blood cells carry oxygen from the air we breathe to all parts of the body. Some kinds of anaemia are caused by illness, not lack of iron. And some kinds of anaemia are inherited (genetic) and cannot be cured by eating iron-rich foods or taking iron pills.

Healthy signs and symptoms

General good health and plenty of energy. The woman does not have pallor see below).

Warning signs and symptoms

- Pallor — paleness inside the eyelids, pale fingernails and gums (Figure 2.11)
- Dizziness or fainting
- Weakness or tiredness
- Fast pulse (over 100 beats a minute)
- Difficulty breathing (shortness of breath).

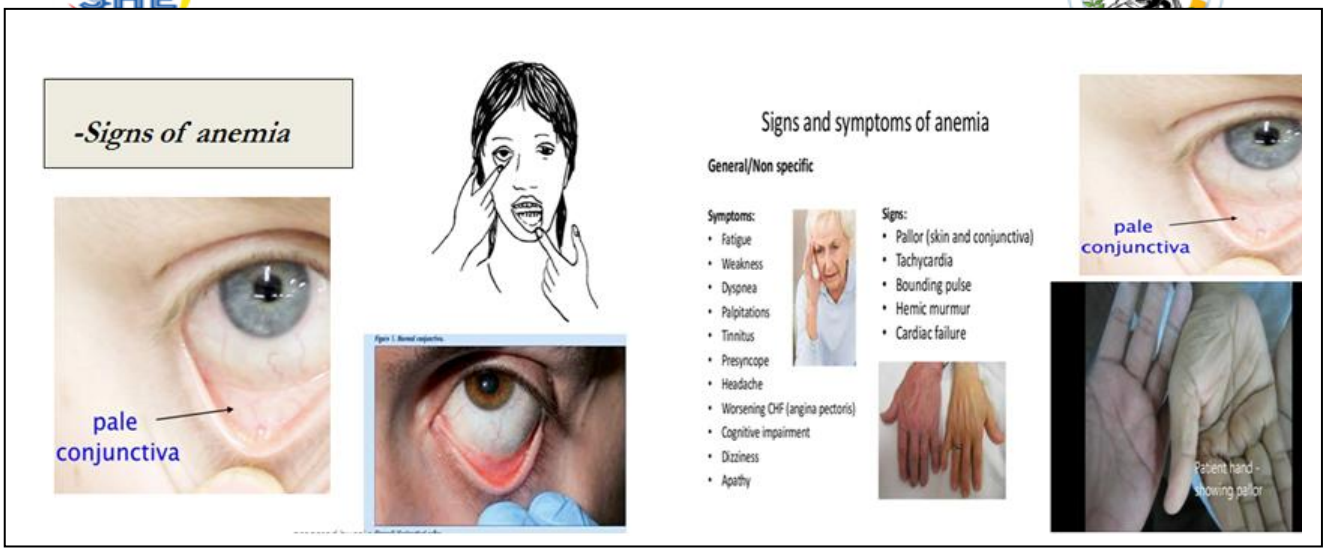

Fig 2.11. Illustrate sign and symptoms of Anemia

2.3. Perform breast examination and teach the mother breast self check

- Ask the woman to empty her bladder, and take her to the examination bed
- Secure privacy
- **Inspect**: color, size, symmetry, shape, direction of nipples , mass, swelling, discharge, or lesions
    - If the nipples appears inverted test for protractility by placing the thumb and the index fingers on either side of areola and gently squeezing- if the nipple goes in, it is inverted
- **Palpate**: use one of the following techniques for palpating the breast (use your 2nd, 3rd, and 4th fingers, keeping the fingers slightly flexed)
        - **The quadrant method**
        - **The circular method**
    - Palpate the axial area for mass, lymph nodes and swellings.

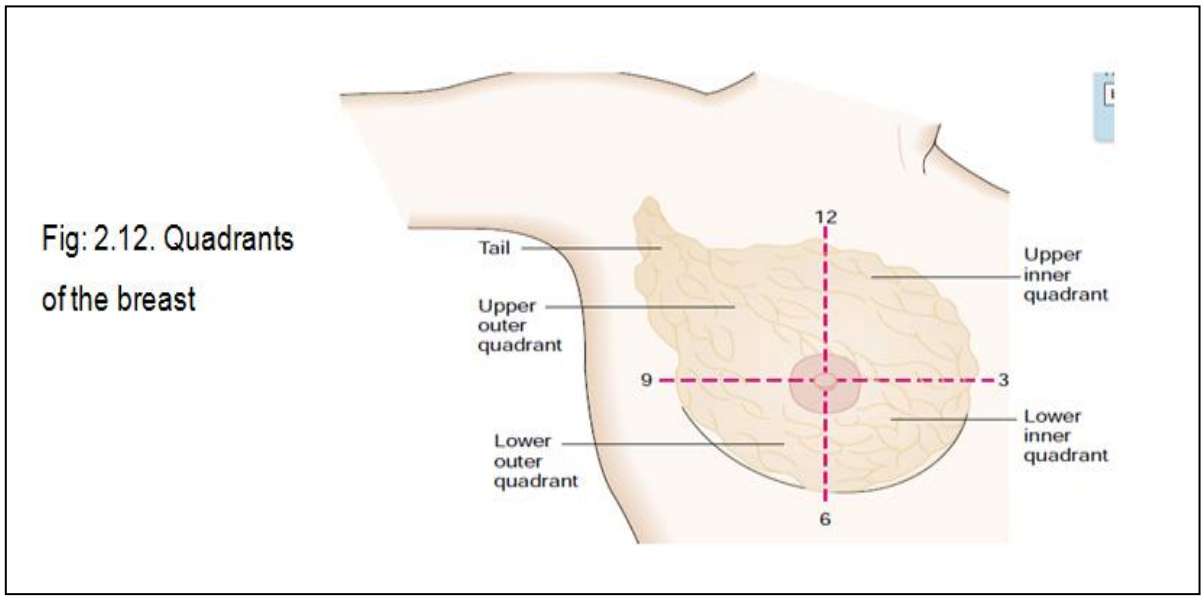

Fig: 2.12. Quadrants of the breast

2.4. Perform Abdominal examination and measure uterine height

Abdominal Examination (Every visit)

2.4.1. Inspection the abdomen:

- While examining the abdomen, cover the chest of the mother with the towel.
- Ask the mother to bent her knee slightly
- Use the three techniques inspection, palpation and auscultation of physical examination
- Warm your hands by rubbing each other and stand at the woman's side, facing her head

While inspecting the abdomen look for:

- **Shape**: Normally it is oval in primi and round in multi gravida mother
- **Size:** Look if the abdomen is distended or not, If it is bigger than the expected gestational age, consider big baby or other abnormalities and if it is less than the expected gestational age consider a small baby or other abnormalities
- **Scar**: Scar of any abdominal surgery
- **Skin**: Color , lesion, mass
- **Striae**/ Stretch marks

- **Striae or stretch marks** are caused by separation of the underlying collagen tissue and appear as irregular scars

Fig 2.13. Showing common finding on abdominal inspection

2.4.2. Palpation of the abdomen (LEOPOLD MANEUVERS)

There are **four maneuvers** that you apply while examining a pregnant women

a. First Maneuver: Fundal palpation:

- Fundus is the domed area at the top of the uterus, between the junctions with the two fallopian tubes.
- Place both hands on the side of the funds, and apply gentle pressure to assess consistency and mobility of the fetal part, normally, at 24 weeks, fetal parts are palpable
- Feel what part of the baby is in the upper uterus

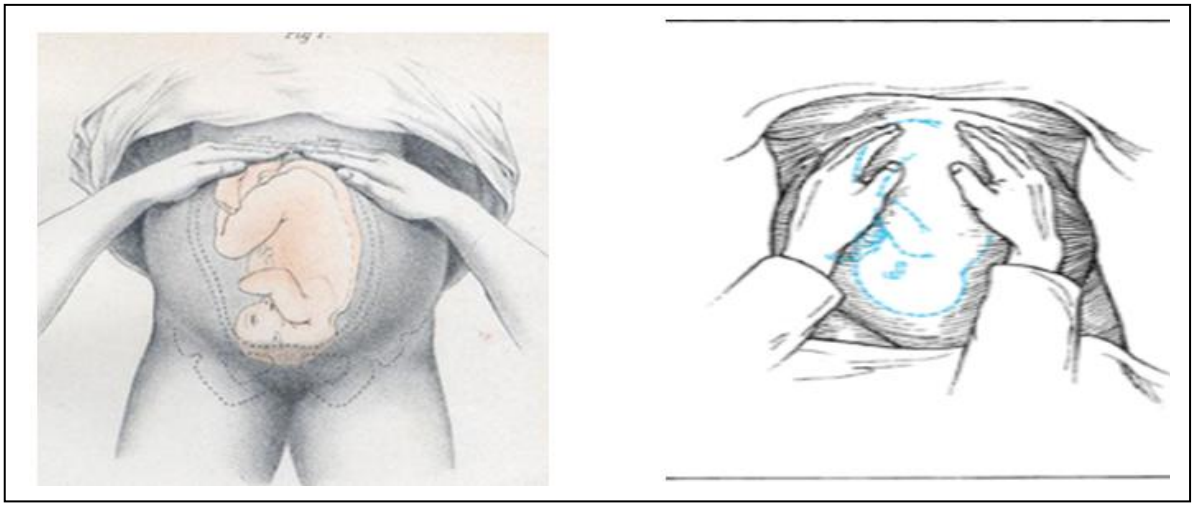

Fig 2.14. Both shows how to apply the first maneuver called fundal palpation

This first maneuver is used for:

- Identification of the fetal presentation (what the fundus /pole of the uterus occupies , is it head or buttock?)
    - If the palpable part at the pole of the uterus is more irregular, soft, and cannot moved independently of the body mass **<u>it is buttock</u>** and if the palpable part at the pole of the uterus is hard, round, and mobile **<u>it is head</u>**

Measuring the gestational age

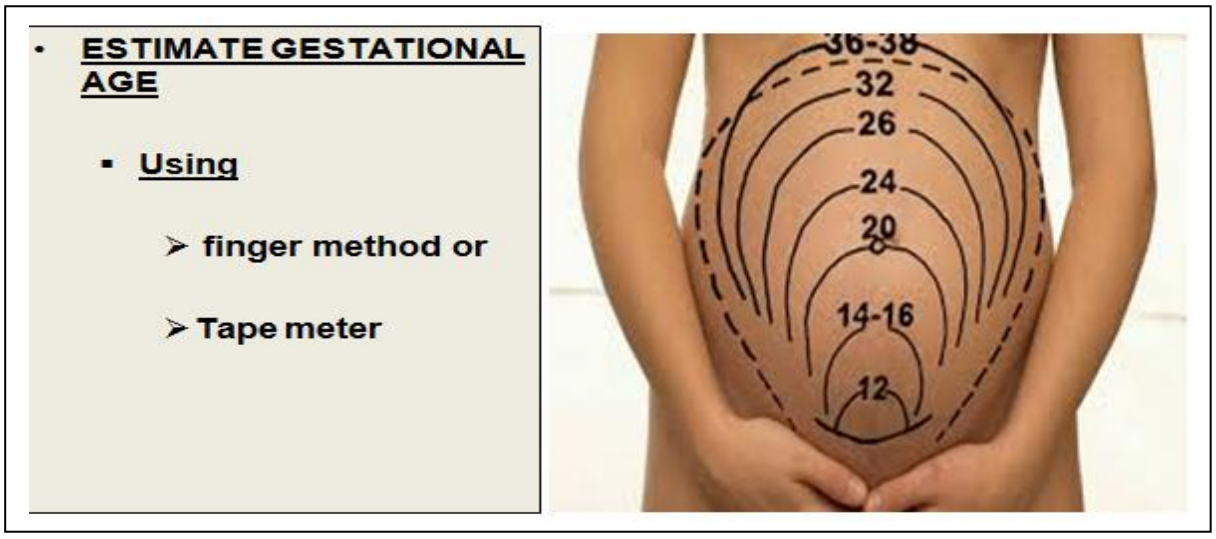

Fig 2.15. Shows how to estimate the GA according to fundal height

Fundal height is measured usually after 20 weeks of gestation. Measurement should be made with a cent meter (cm) tape from the pubic symphysis (the label 0 cm of the tape measure should start from symphysis pubis) to the top of the uterine mass over the curviness abdominal surface; or you can use your fingers.

- *Remember, tell the mother to empty her bladder prior to abdominal examination*

Normally, the uterus is palpable just at the pubic symphysis at 8 weeks. At 12 weeks it becomes an abdominal organ and at 16 weeks it usually at the midpoint between the pubic symphysis and the umbilicus. At 20 weeks it is palpable at the umbilicus

The height of the uterus matches the gestational age of the fetus. The top of the uterus rises in the mothers abdomen by about TWO fingers width or 4cm every month (in other words, the uterus should grow about 1cm every week or 4cm every month)

Fig 2.16. Shows how to measure the fundal height using tape centimeter

How to measure fundal height using the fingers method

If the top of the uterus is *below* the bellybutton, measure how many fingers *below* the bellybutton it is. If the top of the uterus is *above* the bellybutton, measure how many fingers *above* the bellybutton it is.

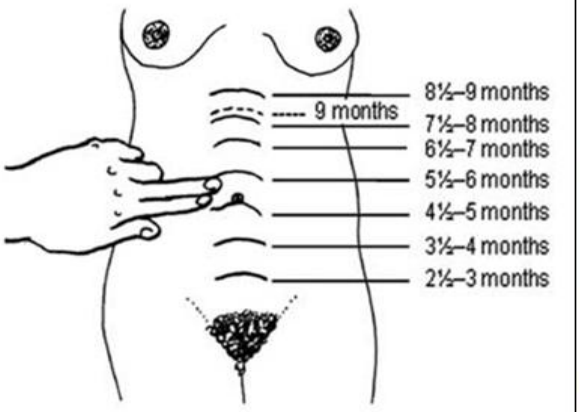

Fig 2.18: the fundus is about four finger above the umbilicus.

Figure 2.17. Measuring fundal height using the finger method. The woman is lying on her back. Each line represents the width of two fingers.

For example, How many fingers above the bellybutton should the top of the uterus be at 7 months' gestation?

Figure 2.19. Fundal height at 7 months' gestation.

In general, when you measure fundal height using finger method, and if the top of the uterus is above the umbilicus, one finger is 2 weeks and if it is below the umbilicus one finger is one week. However, the limitation of this method is the big variation in the thickness of our fingers, there could be up to three weeks difference between the fundal height measurement of the same woman made by two different people. (This is known as 'inter-observer variation', i.e. variation between different observers.)

b. Second Maneuver: lateral palpation

After the upper abdomen has been palpated and the form that is found is identified, the individual performing the maneuver attempts to determine the location of the fetal back

While doing lateral palpation, use the palm of your hand and placed on either side of the maternal abdomen and gently but deep pressure. If you feel a hard resistance structure on one of the sides, ***then this is the back***; and if you fell numerous small, irregular mobile parts on the other side, these are **the fetal extremities**.

This maneuver helps to determine the fetal **Lie and Heart beat**

- **Lie**
    - **Fetal lie:** relation of the long axis of the fetus to the mother. It could be longitudinal, transverse or oblique.
    - The longitudinal lie is the commonest lie, which occurs in 99% of cases
    - The back feels firm and smooth in contrast to the small parts, which will feel knobby and easily moveable
    - Once you identify the back of the fetus listen for the FHB
- **Fetal heart beat (FHB)**
    - listen and count to the fetal heart beat for a full minute, by using an instrument called Fetscope .
    - Normally, the FHB ranges from 110-180 beats/ min).

To listen the fetal heart beat, place the fetal stethoscope (fetscope) on the abdomen at right angle to it (on the same side that you palpated the fetal back). Remove hands from fetscope and listen and count to the fetal heart beat for a full minute. Feel the woman's pulse at wrist, simultaneously to ensure that fetal heart tones, and not maternal pulse (which is slower than the fetus), are being measured

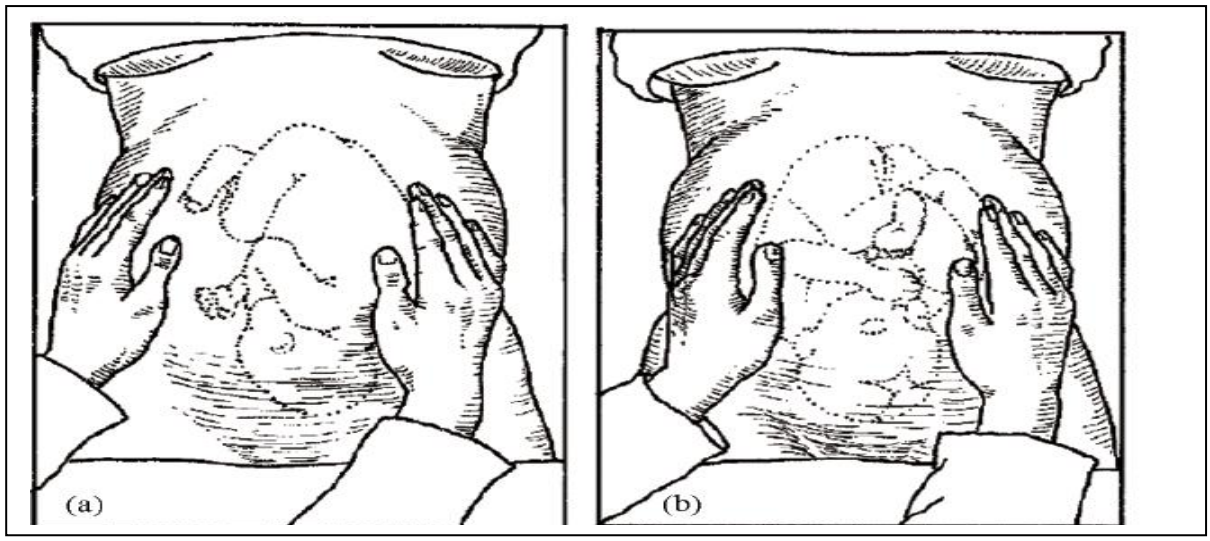

Fig 2. 20: Lateral palpation–the second manoeuvre. (a) The back of the fetus is towards the front of the mother's abdomen; (b) The back of the fetus is towards the mother's back

Fig 2.21. Pinard Horn Fetoscope-Aluminum

Fig 2.22. shows HEW auscultate fetal heartbea using pinard Fetoscope

c. Third Maneuver: Deep pelvic palpation

For the third maneuver, Face the mother's feet and with the tips of the first three fingers of each hand, exerts deep pressure in the direction of the axis of the pelvic inlet.

In many instances, when the head has descended in to the pelvis, the anterior shoulder may be the differentiated by this maneuver

The third maneuver helps to determine the fetal position, attitude and engagement.

- **Fetal position:** refers to the relationship of an arbitrarily (subjectively) chosen portion of the fetal presenting part to the right and left side of the maternal birth canal. Accordingly, with each presentation there may be two positions- RIGHT or LEFT
- **Fetal attitude:** refers to the relationship of fetal head and limbs to the trunk. It is the mode of growth of fetus and its accommodation to the uterine cavity- it is a characteristic of posture

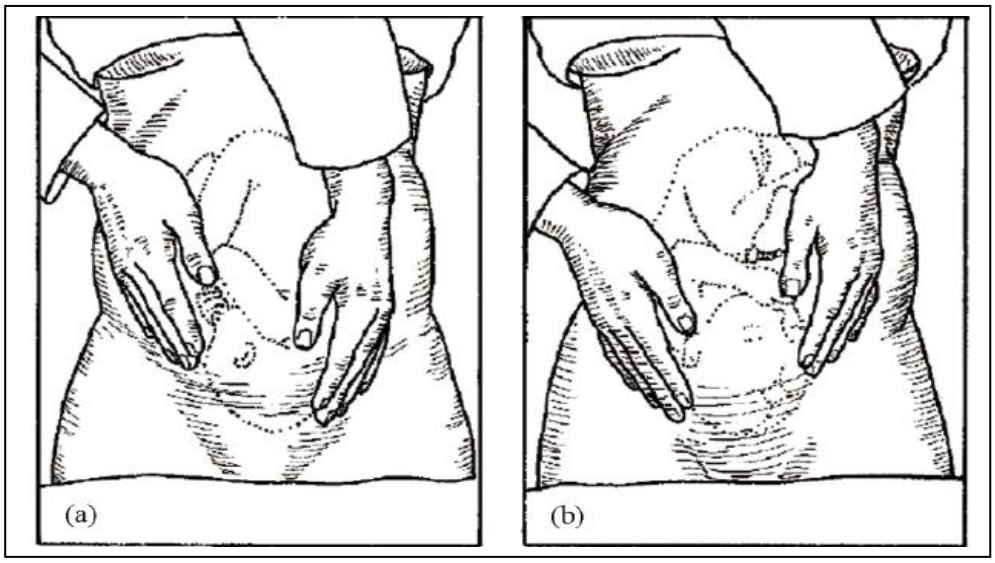

Fig 2. 23: Deep pelvic palpation–the third maneuver

This maneuver helps to determine the presenting part. Both these babies are in cephalic presentation, but (a) is in the occipito-anterior position, whereas (b) is occipito-posterior

d. Fourth Maneuver: Pawlick's Grip

Using the thumb and fingers of one hand, the lower portion of the maternal abdomen is grasped just above the symphysis pubis.

If the presenting part is not engaged, a movable mass will be felt, and it is usually the head. Remember, the differentiation between head and breech is made as in the 1st maneuver

This maneuver is used to detriment **engagement, decent**, and **presenting part**.

- **Engagement:** The mechanism by which the bi parietal diameter, the greatest transverse diameter of the fetal head in occiput presentation passes through the pelvic inlet (when the fetal head enters into the pelvic inlet)
- **Fetal presentation**: It is the portion of the fetal body that is either foremost within the birth canal or in closest proximity to it

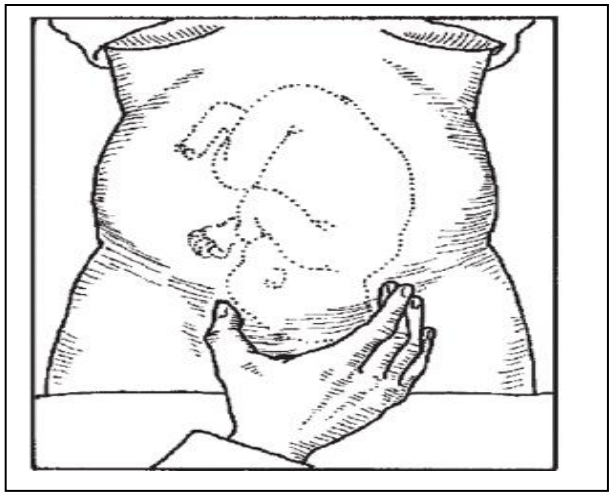

Fig 2. 24 : Pawlick's grip — the fourth manoeuvre helps to determine whether the presenting part has engaged.

Contraindication for the fourth manoeuvre - if the women has:

- Active vaginal bleeding
- PROM (premature rupture of membrane)

2.5. Check the extremities

Check legs for varicose veins, pain, swelling, redness, and edema related to anemia. (Visits 1 and 4 and as needed.)

3. Laboratory tests

- Urine pregnancy test for HCG (Refer the mother for Pregnancy test)
- Counsel her on PMTCT (Refer the mother for HIV test)

4. Implement the following interventions:

- Supplementation of iron and folate to all pregnant women
- One tablet of 60-mg elemental iron and 400 micrograms folate per day. Note that, In case of anemia increase the dose of iron and folate.
- To enhance the absorption of iron, instruct mothers to take iron when eating meat or vitamin-rich foods (fruits and vegetables).
- Avoid tea, coffee, and milk at the same time when taking iron; it interferes with the body's absorption of iron. Iron can also be taken between meals.
- Educate/council the mother on the side effect of iron, such as
    - Constipation
    - Nausea
    - Black stool (reassure her, this is not harmful)

Figure 2.25. A pregnant women taking Iron /folate tablets

- In malaria endemic areas provide ITN.
- Counsel her on PMTCT
- Refer clients that need specialized care based on diagnosis

4.1. Advice, questions and answers, and schedule the next appointment

Provide advice on signs of pregnancy-related emergencies and how to deal with them including where she should go for assistance. This should be confirmed in writing in the antenatal card. Provide simple written instructions in the local language general information about pregnancy and delivery. When necessary, materials

appropriate for an illiterate audience should be available, such as simple pictures and diagrams describing the advice given at each visit.

- Give advice on birth plan, including transportation options to health institution.
- Offer sufficient time for free communication and discussion with the mother.
- Advise the woman to bring her partner (or a family member or friend) to later ANC visits so that they can be involved in the discussion and can learn how to support the woman through her pregnancy.
- Discuss on benefit of HIV testing, PMTCT, risk reduction support services including advice on safe sex.
- Provide HIV-posttest counseling according to Guideline for PMTCT of HIV in Ethiopia
- Advise women to stop the use of alcohol, tobacco smoking and chewing chat (if applies)
- Discuss on breast feeding options and advise on exclusive breast-feeding.
- Schedule appointment for the second visit at 24 – 26 weeks of gestation and state date/hour if possible. This should be written in the woman's appointment card and tell her to take note.

5. Maintain complete records

- Complete integrated client card
- Complete appointment card
- Enter information on registration book

Note that in each visit, Vaccination against tetanus toxoid should be given during pregnancy.

Consider also if the mother had taken other doses in her past life. It is proved that, this toxoid vaccine have only minimum interval for buster; there is no maximum interval limit. The protection is for both maternal and fetal benefit. As a service provider you should seriously check for her vaccination status till she reaches the maximum level of protection (TT5).

Table 2.1. Tetanus toxoid Immunization Schedule

Tetanus toxoid Immunization Schedule		
Dose	Schedule	Years of protection
TT_1	At first contact, as early as possible during pregnancy	0
TT_2	Four week after TT_1	3 years
TT_3	Six weeks after TT_2	5 years
TT_4	One year after TT_3	10 years
TT_5	One year after TT_4	Life long

Figure 2.26. Tetanus toxoid: give first injection 0.5 ml intramuscular on left shoulder

II. The Second Visit

The second visit should be scheduled at 24-28 weeks of gestation. It is expected to take 20 minutes.

The Objectives of the Second Visit is to:

- Address complaints and concerns
- Assess fetal well being
- Design individualized plan
- Advice on existing social support
- Update the risk assessment and based on that, decide on the need for referral

a) History

- Personal history: note any changes since first visit.

I. Medical history

- Review relevant issues of medical history as recorded at first visit.
- Take note of diseases, injuries, or other conditions and additional histories for HIV positive women since first visit.
- Ensure intake of medicines, other than iron-foliate and other prescribed drugs.
- Check compliance for intake of iron
- Note other medical consultations, hospitalization or sick-leave in present pregnancy.

II. Obstetric history

- Ask the woman her feeding practice
- Review relevant issues of obstetric history as recorded during the first visit.
- Record symptoms and events since first visit: Ask about:
    - Vaginal bleeding and vaginal discharge
    - Dysuria, frequency, urgency during micturition
    - Severe/persistent headache or blurred vision
    - Difficulty breathing
    - Fever
    - Severe abdominal pain
    - Fetal movement (note time of first recognition in medical record).
    - Signs and symptoms of severe anemia.
    - Other specific symptoms or events such as opportunistic infections in HIV positive women.
    - Abnormal changes in body features or physical capacity (e.g. peripheral swelling,
    - Shortness of breath), observed by the woman herself, by her partner or other family members.
- Check sustained habits regarding alcohol, smoking and others.

b) Physical Examination:

- Note general appearance; look for signs of physical abuse.
- Measure vital signs and record (BP, PR, RR, Temperature, weight)

- A woman in good health steadily gains between 9 to 12 kilograms during pregnancy. This is the same as 1 to 2 kilograms each month

- Measure uterine height in centimeters
- Auscultate for fetal heart beat and record
- Check for other signs of disease; shortness of breath, cough, generalized edema and the like.

c) Advice, Questions and Answers, and Scheduling the Next Appointment:

- Repeat all the advice given at the first visit.
- Questions and answers: give time for free communication.
- Give advice on whom to call or where to go in case of bleeding, abdominal pain or any other emergency, or when in need of other advice.
    - These information should be confirmed in writing (on the antenatal card), at the first visit.
- Schedule appointment of third visit (at 30-32 weeks).

d) Maintain Complete Records

- Complete clients" card on the Integrated Client Card.
- Complete appointment card
- Enter information on registration logbook

III. The Third Visit:

The third visit should take place around 30 – 32 weeks and is expected to take 20 minutes.

Objectives of the Third Visit are to:

- Address complaints and concerns
- Assess for multiple pregnancy, assess fetal well being
- Review individualized birth plan and complication readiness including advice to access skilled attendance in case of onset of labor, special care and treatment for HIV positive women based on the National Guideline for PMTCT of HIV in Ethiopia
- Advice on family planning and breastfeeding
- Decide on the need for referral based on updated risk assessment

a) History

- Personal history: (Note any changes or events since second visit).

I. Medical history

- Review relevant issues of medical history as recorded at first and second visits.
- Ensure existence of diseases, injuries or other conditions and additional histories for HIV positive women since the first and the second visit.
- Note intake of medicines other than iron and foliate.
- Compliance with iron intake
- Note other medical consultations and hospitalization

II. Obstetric history

- (Review relevant issues of obstetric history as recorded during the first visit and checked during the second one)
- Record symptoms and events since second visit; Ask about:
    - Vaginal bleeding and vaginal discharge
    - Dysuria, frequency and urgency during micturition
    - Severe/persistent headache or blurred vision
    - Difficulty breathing
    - Fever
    - Severe abdominal pain
    - Fetal movement; note time of first recognition in medical record.
    - Other specific symptoms or events such as opportunistic infections in HIV positive women.
    - Changes in body features or physical capacity, observed by the woman herself, her partner or other family members
    - Habits regarding alcohol, smoking and others.

b) Physical examination

- Measure and record vital signs (BP, PR, RR, weight gain or loss and temperature).
- Measure uterine height record on graph
- Palpate abdomen for detect multiple fetuses.
- Auscultate fetal heart beat (using fetusscope)

- Check for generalized edema.
- Check for other alarming signs of disease such as shortness of breath and cough etc.
- Check for bleeding or spotting {(Never do vaginal examination)
- Do breast examination for abnormality.

c) Implement the following interventions:

- Ensure compliance of iron and foliate and refill as needed
- Provide tetanus toxoid injection as needed.

d) Advice, questions and answers, and scheduling the next appointment

- Repeat advice given at first and second visits.
- Give advice on steps to be taken in case labor starts.
- Questions and answers: give sufficient time for free communication and discussion.
- Reconfirm written information on whom to call and where to go in case of emergency or any other problem.
- Ensure availability of transport in case of emergency like onset of labor
- Provide advice on breastfeeding, contraception and importance of the postpartum visit.
- Schedule appointment for the fourth visit at 36-38 weeks.

IV. The Fourth Visit:

The fourth should be the final visit of the basic component and should take place between weeks 36 and 38.

Objectives of the Fourth Visit are to:

Review individualized birth plan, prepare women and their families for childbirth such as selecting a birth location, identifying a skilled attendant, ensuring social support, planning for costs of transportation and supplies for her care and the care of her newborn.

Complication readiness:

- Develop an emergency plan which includes transportation, money, blood donors, and designation of person to make decision on the woman's behalf and person to care for the family while she is away.
- Re-inform women and their families of the benefits of breastfeeding and contraception as well as the availability of various methods at the postpartum clinics.
- Perform relevant examination
- Review special care and treatment for HIV positive women according to the Guidelines for PMTCT of HIV in Ethiopia.

a) History

- Personal information (Note any changes or events since the third visit)

I. Medical history

- Review relevant issues of medical history as recorded at the three previous visits.
- Note inter-current diseases, injuries or other conditions since the third visit.
- Note intake of medicines other than iron and foliate.
- Ensure compliance with iron intake
- Note other medical consultations, hospitalization or sick-leave since the third visit.

II. Obstetric history:

(Final review of obstetric history relevant to any previous delivery complications)

Record symptoms and events since third visit. Ask about:

- Vaginal discharge and/or bleeding
- Dysuria, frequency, urgency during micturition
- Severe (persistent) headache or blurred vision
- Difficulty breathing
- Fever
- Severe abdominal pain
- Fetal movement; note time of first recognition in medical record.
- Other specific symptoms or events such as opportunistic infections in HIV positive women.

- Changes in body features or physical capacity, observed by the woman herself, her partner, or other family members.

b) Physical examination

- Measure and record vital signs (BP, PR, weight, temperature or RR)
- Measure uterine height and record on graph.
- Check for multiple fetuses.
- Confirm fetal lie and presentation (head, breech, transverse).
- Check for fetal heart sound(s) and record.
- Check for generalized edema.
- Check for other signs of diseases like shortness of breath, cough, etc.
- If there is bleeding or spotting, never do vaginal examination

c) Implement the following interventions:

- (Continue with iron)

d) Advice, questions and answers on post-term management

- Repeat the advice given at previous visits.
- Give advice on measures to be taken in case of the initiation of labor or leakage of amniotic fluid.
- Give advice on breast-feeding.
- Give time for free communication and answer and questions
- Reconfirm written information on what to do and where to go (place of delivery) in case of labor or any other need.
- Schedule appointment, if the woman does not deliver by the end of week 41 (state date and write it in the ANC card).
- Schedule appointment for postpartum visit.
- Provide recommendations on lactation and contraception

e). Delivery Supplies the Mother Should Prepare:

The lists of birthing supplies that a pregnant woman and her family should be advised to prepare before the delivery are:

- Clean clothes to put under the mother and for drying and covering the newborn
- New razor blade to cut the cord

- Very clean and new string to tie the cord
- Soap, a scrubbing brush (if possible) and medical alcohol for disinfection
- Clean water for drinking and for washing the mother and your hands
- Three large buckets or bowls
- Supplies for making rehydration drinks, „Atmit" or tea
- Flashlight in case of interruption of electricity in the area.

f). Complication Readiness and Emergency Planning:

As noted earlier, complication readiness is the process of anticipating the actions needed in case of an emergency and making an emergency plan.

Pregnancy-related disorders such as high blood pressure and bleeding or other illnesses can occur any time between the antenatal check- up visits and delivery. If such conditions happen at any stage, you should refer the woman immediately to the next higher health facility. In addition, you need to counsel her repeatedly to report to you or to seek other medical care quickly in case she observes any of the danger symptoms.

g). Medical Equipment and formats needed for performing history taking and physical examination for FANC clients

The followings are list of some equipments that you need during FANC physical examination

- Towel (for covering the mother chest during examination)
- ANC card
- Appointment card
- TT card
- Referral (for internal and external referral) paper
- Teaching material (first visit) for family planning, breast feeding, HIV/AIDS such as flip chart, models, brushers, and other teaching aids.
- **Medications**
  - Iron or Ferious sulphate
  - TT with icepack
- **Solutions**
  - Alcohol swab
  - Needle and syringe (for TT)

- Trolley
- Receiver
- Clean glove
- Rubber sheet
- Safety box (for disposing the lancet and needles)
- Screen
- Pen/pencil
- ITN
- Watch
- **V/S equipment**
  - Thermometer
  - BP apparatus
  - Stethoscope
  - Fetscope
- **Anthropometric**
  - Tape measure
  - Weight scale
  - Height scale

Table 2.2. Focused antenatal care (FANC): The four visit ANC model outlined in WHO clinical guidelines

First Visit- Before 16 weeks	Second visit 24-28 weeks	Third Visit 30-32 weeks	Fourth Visit 36-38weeks
• Confirm pregnancy and EDD • Classify women for basic ANC (four visit) or more specializes care • Screen, treat and give preventive measures • Develop a birth and emergency plan • Advice and counsel	• Assess maternal and fetal well-being • Exclude PIH and anemia • Give preventive measures • Review and modify birth and emergency plan • Advice and counsel	• Assess maternal and fetal well-being • Exclude PIH, anemia, multiple pregnancy • Give preventive measures • Review and modify birth and emergency plan • Advice and counsel	• Assess maternal and fetal well-being • Exclude PIH, anemia, multiple pregnancy, Mal-presentation • Give preventive measures • Review and modify birth and emergency plan • Advice and counsel •

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. How many visits are recommended for ANC In FANC, and list the main objectives of each visit?
2. How many times do you need to give TT Vaccination for a pregnant mother to reach the maximum level of protection?
3. Describe the four maneuver in abdominal examination, and mention the function of each maneuver?
4. On palpation of Abdominal examination, if you find the fundas three finger width above the umbilicus, the estimated gestational age is_____?
5. List the sign and symptoms of anemia ?
6. At Antenatal visit to see W/ro Zufan and record the following measurements
   - Temperature ;37.2 ^{o}C
   - pulse rate 96 beats per min
   - Blood pressure 142/100mmHg

   Should you refer W/ro Zufan to a health center, explain why or why not ?

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet-3	Record antenatal services

3.1. Record Antenatal services

The health records are essential for monitoring and evaluation of activities and routine data collection at Health Post level, and is the basic source of information. Therefore, accurate and complete record-keeping is essential for providing the service information

Poorly written records can lead to doubts about the quality of your' work

Every pregnant woman coming for ANC services in public health institutions is issued with an ANC card now integrated into the maternity case record. This standardized national document is the principal record of pregnancy. It must be completed at each antenatal visit and retained by the mother until delivery, after which it will be kept for final referral.

The maternity case record serves to provide the woman a record of pregnancy, give health providers guidelines on history taken, examination, identifying problems during pregnancy and recording of action taken , enable you to manage follow ups and facilitate record-keeping.

Therefore, whenever providing FANC service to the women, you have to :

- **Maintain complete records**
  - Complete the FANC part of the integrated client card
  - Complete the registration log book
  - Give the appointment card to the client and advise her to carry with her to the hospital or to any appointments site for the necessary health services
  - Keep client records complete with all relevant information.
  - Document findings and management at each visit.

Self-Check -3	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is the purpose of health records ?
2. What important records are maintained during provision of FANC?

Note: **Satisfactory rating - 1 points** **Unsatisfactory - below 1 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Operation Sheet 1	Techniques of Providing Focused Antenatal Care

1.1. The techniques for providing Focused Antenatal Care are:

1.1.1. GETTING READY

- **Steps 1.** Prepare the necessary equipment.
- **Step 2-** Greet the woman respectfully and with kindness and introduce yourself, and then offer her a seat.
- **Step 3-** Tell the woman what is going to be done, encourage her to ask questions, and respond supportively
- **Step 4-** Provide reassurance and emotional support as needed

1.1.2. QUICK CHECK

- **Step 5**. Do a "quick check" for danger signs and conditions needing emergency treatment.
- **Step 6**. Ask the woman how she is feeling and respond immediately to any urgent problem(s).

1.1.3. GATHER INFORMATION: HISTORY

- **Step 7**. Gather information on Socio-demographic characteristics, personal (daily habits and lifestyle, immunization status, ITN utilization..), medical, and obstetric history
- **Step 8**. Calculate the estimated date of delivery (EDD) and gestational age.
- **Step 9**. Record all relevant details of the woman's history on her client record/antenatal card.

1.1.4. GATHER INFORMATION: PHYSICAL EXAMINATION

- **Step 10.** Explain each step of the physical examination to the woman
- **Step 11**. Wash hands thoroughly with soap and water and dry them
- **Step 12**. Perform Physical Examination (Head to toe)
- **Step 13**. Wash hands thoroughly with soap and water and dry.
- **Step 14**. Administer the necessary drugs and vaccine
- **Step 15**. Provide Counseling on birth preparedness, complication redness and on health life style
- **Step 16.** Evaluate what you did for her at the previous visit. Decide what else you may need to do for her.

- **Step 17**. Ask the woman if she has any further questions or concerns.
- **Step 18**. Write referral paper for laboratory tests (Blood group, RH, HCG, Hg..)
- **Step 19**. Thank the woman for coming and tell her when she should come for her next antenatal visit.
- **Step 20.** Record all relevant details of the woman's physical examination on her client record/antenatal card.

LAP Test	**Practical Demonstration**

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 2 hours.

Task 1: W/ro Sosina is a pregnant woman come to your health post for ANC on 26/04/2012. Her LNMP was on 23/10/2011 E.C.

The main task

- ❖ Provide FANC
- ❖ Calculate her EDD and GA
- ❖ Provide counseling according to her gestational age

List of Reference Materials

1. FMOH, Management protocol on selected obstetrics topics, January, 2010 Addis Ababa, Ethiopia
2. FMOH, Antenatal Care, Part 1, Blended Learning Module for the Health Extension Programme, Adds Ababa, Ethiopia 2007
3. FMOH, Health Education, Part 2, Blended Learning Module for the Health Extension Programme, Adds Ababa, Ethiopia 2007