

LECTURE NOTES

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Family Health

For Health Extension Workers



Abebe Gebremariam

Jimma University

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UNIT ONE

Family Health

Learning Objectives

By the end of this session the learner will be able to:

- Tell what the word family and health means
- List justification for knowing family health
- Recall the objectives and strategies of family health

1. Definitions Of Family

Family is defined as “ a basic structure of society centred about replacement.”

Family: According to Winch, (Robert F. Winch, 1963) **family** is defined at three levels, nuclear, extended and general.

1. **Nuclear family** is defined as “ a family consisting of a married couples and their children; the children can be born or adopted”.
2. **Extended family** is defined as “ a nuclear family plus collateral kinship.” – Lineal is vertical extension i.e. father, grand father, mother collateral indicates relationships such as uncles, aunts, nieces, nephews etc.
3. **Joint family:** a family consisting of two or more married couples staying together with children.

Family health is a part and component of community health. For practical reasons, it may be sound to distinguish:

- ◆ The childbearing unit, nuclear or one parent family, where the genetic factors are prominent.
- ◆ The child rearing unit, from nuclear to extended, with predominance of the social and environmental factors.

“Family health is more than the sum of the personal health of individuals (including father) who form the family since it also takes in to consideration-interaction in terms of health (physical and psychological) between members of the family-relationships between the family and its social environment-at all stages of family life in its different structural types”. Family should be distinguished as: A unit of health and unit for care.

What is health

Health is defined in different ways by different authors. It could be defined as: A quality of life, which involves social, mental and biological fitness on the part of the individual, which results from adaptations to the environment.

World Health Organization (WHO) defines health as:

A state of complete,

- ◆ Physical,

- ◆ Mental and social well-being and not merely the absence of disease or infirmity.

Others consider health as being more holistic, including spiritual and emotional components. The summary of different views conceptualises health to be multidimensional and inclusive of many components and many different aspects of one's life.

We can consider health as a quality of life that is a function of at least social, mental, emotional, spiritual and physical health.

Justification

Knowledge acquired in the past few decades has clarified the biological and social bases underlying the health and health care of families. This knowledge has strengthened the scientific justification for family health care.

- ◆ The basic principle underlying family health is that there are specific biological and psycho-social needs inherent in the process of human growth and development which must be met in order to ensure:
 - The survival and healthy development of the children in the family and future adult.

Family Health

- ◆ Child spacing is a means of bettering the health of mothers and children. The positive impact of child spacing will be reflected. In national socio-economic development.
- ◆ If preventive action is taken in pregnancy and early childhood, its effectiveness and impact on general health is great.
- ◆ Healthy development of children is an investment in social development and productivity.
- ◆ Mothers and children form the majority of the population.
- ◆ Family can also be seen as a unit of health: if one of the members of a family is ill, the whole family suffers or is exposed to a health risk such as contagious diseases or parasitic infestation which are so easily transmitted from one member of the family to another because of the closeness of home life.
- ◆ Healthy and happy parents, whose children have been desired and fostered in their development from their earliest years: children who have been protected from health risks while bearing progressively their own responsibilities in this area. This represents the image of a healthy family – the only real basis for the self-realization of all its members.

- ◆ Family as a unit of care: if the family is viewed as a unit for care, it offers the possibility of global approach that can render care for the individual more accessible, more acceptable, and more effective. This approach also takes account of the patterns of intra-family relationships in regard to disease prevention, health education and health care.

Objectives

The major objectives are:

- ◆ To reduce maternal, infant and child morbidity and mortality;
- ◆ To reduce total fertility (TFR);
- ◆ To increase contraceptive prevalence rates (CPR)
- ◆ To increase EPI services

Hence, the overall objectives of integrated family health services (HSDP, 2003) is to strengthen and to gradually expand family planning, health and nutritional services for mothers, children and youth at all levels of the health system, including community level.

Strategies

- Increasing utilization of information and knowledge about RH and safe sexual practices.
- Integrating family health with other health services.

- Strengthening logistic support
- Strengthening and expanding EPI services at all sites through effective support and a well-functioning cold chain system.
- Developing and expanding emergency obstetric surgical interventions, post-abortion care, and blood bank services to strengthen maternal emergency services.
- Strengthening prenatal and postnatal counselling.
- Creating an enabling environment for all stakeholders involved in EPI and RH activities to operate in an integrated approach.
- Initiation and creation of youth-friendly health services
- Initiating sugar and flour fortification with Vitamin A
- Promoting the use of iodised salt at household levels and supplementing Vitamin A to pregnant mothers and children less than five years.
- Conducting advocacy at all levels.
- Promoting exclusive breastfeeding for the first four to six months, appropriate child feeding practices, growth monitoring and de-worming.
- Develop training manuals and implementation guideline
- Conduct planned workshops, seminars, discussion forums;
- Strengthen intra and inter-sectoral collaboration among health and other sectors.
- Conduct training of trainers.

Family Health

- Introduce a basic package of nutrition to health services
- Provide technical support to the Regional Health Bureaus.

Target

- Increase contraceptive coverage rate
- Increase ANC coverage
- Increase the proportion of deliveries assisted by trained health workers
- Reduce measles morbidity and related mortality
- Increase post-natal service coverage
- Reduce the maternal mortality
- Increase EPI coverage
- Achieve polio elimination and certification
- Increase EPI coverage of TT₂ to pregnant and non pregnant women
- Reduce iodine deficiency
- Reduce the prevalence of micronutrient deficiencies
- Expand IMCI strategy in the health facilities.
- Increase utilization of integrated reproductive health services by youths.
- Reduce vitamin A deficiency disorders among children under five years

Assessment And Group Discussion

1. What do you understand when we say family health?
2. Is family health care necessary for Ethiopia? Why? And why not?
3. What are the objectives, strategies and targets of family health in Ethiopia?



UNIT TWO

Maternal Health Care

Learning Objectives

By the end of this session the learner will be able to:

- ◆ Recognize the extent of maternal health problems
- ◆ Identify the major health problems of women
- ◆ List the factors that cause maternal morbidity & mortality
- ◆ List and describe the components of family health

Maternal Morbidity and Mortality

Today an estimated 500,000 maternal deaths occur each year in the world and ninety nine percent happening in developing countries (WHO, 2000): **In Ethiopia the estimated current maternal mortality rate is 550,000 /100,000 LB (MOH).**

The cause and factors to maternal morbidity and mortality could be:

Medical Factors

- ◆ Anaemia of pregnancy
- ◆ Obstructed labour
- ◆ Infections
- ◆ Hypertension

Health delivery system factors

- ◆ Inadequate action taken by health personnel
- ◆ Lack of essential supply and trained staff.
- ◆ Lack of access to health services
- ◆ Low coverage of immunisation and
- ◆ Inadequate health care facility

Reproductive factors

- ◆ Pregnancy in age under 19 and greater than 35 years
- ◆ Four or more pregnancies
- ◆ Practice of early marriage
- ◆ High fertility
- ◆ HIV/AIDS/STI's
- ◆ Unwanted pregnancy e.g. unsafe or induced abortion

Socio-economic factors

- ◆ Poverty,
- ◆ Malnutrition,
- ◆ Low level of female education
- ◆ Law status of women
- ◆ Practices of early marriage
- ◆ Poor environmental sanitation and personal hygiene,

Harmful traditional practices

- ◆ Practices of early marriage
- ◆ Inappropriate timing of pregnancy
- ◆ Short pregnancy interval (less than two years)
- ◆ Female Genital Mutilation

Assessment and Group Discussion

- A) Recall the extent of maternal health problems
- B) Recall the major health problems of women in Ethiopia
- C) List the factors to the cause of morbidity & mortality

Maternal health services

Components of maternal health services

- ◆ Preconception care
- ◆ Prenatal care (Antenatal care)
- ◆ Delivery care
- ◆ Care for the newborn
- ◆ Postnatal care

Preconception Care

Definition: Preconception care is a comprehensive care that women need to be healthy getting pregnant.

To plan for a healthy pregnancy, preconception care includes:

- A visit to a health care facility (health post) to identify and correct any health problems
- Updating immunizations status
- Good nutrition education for mother
- Vitamin A supplementation including folic acid
- Counselling on regular physical activity
- Educating on unhealthy substances: alcohol use, cigarette smoking, using drugs
- Counselling and testing for HIV/AIDS/STI if at risk

Antenatal Care/Prenatal Care

What is pregnancy?

We say a woman is pregnant when a male's sperm reaches in the uterus of a woman, meets and fertilizes the woman's ovum. Pregnancy lasts from 37 to 42 weeks, (40 weeks on the average). The fertilized ovum gradually grows and develops in the uterus of the woman and transforms itself into a foetus.

Antenatal care...

Definitions:

What is antenatal service?

Antenatal service is the provision of counselling and health service to a pregnant woman by a health professional from the time of conception to delivery. It would be good if the following check ups are made for a pregnant woman.

- Urine test for albumin and sugar.
- Haemoglobin (in Health Center)
- Blood pressure (in the Health Post)
- Foetal auscultation (Foetal scope) (in the Health Post)
- Foetal palpation (in the Health Post)

Educating mothers the need to have regular check ups during pregnancy.

The medical check up made during pregnancy helps mothers to get advices during pregnancy and post delivery periods. This will help to prevent and reduce morbidity and mortality among mothers and children to be born. This is information that needs to be also shared with women of childbearing age.

The following are the activities that would be undertaken during first antenatal visit:

Registration of age, height, weight, last day of menstruation. From these information, the expected date of delivery will be calculated. Other information that would be collected from the mother are, number of children born, where they were born, previous health problems, information whether she ever taken vaccination or not.

After these and other information are collected, and when there are some indications for risks during pregnancy and delivery, the mother should be educated about the need for her to go to the next higher

level of health facility. She must also be educated not to keep her pregnancy as a secret.

Risks during pregnancy

Pregnant women can face some illnesses during their pregnancy period. Unless these illnesses are known on time and the necessary care is taken, the illnesses can lead to life threatening risks. The signs of such illness are the following: -

- Puffiness/ oedema of the face especially around the eye.
- Oedema of fingers.
- Consistent nausea and intense vomiting.
- Severe headache, abdominal pain, blurred vision.
- Bleeding from the uterus.
- Blood-like vaginal discharge.
- Fever.
- Voluminous yellowish or white vaginal discharge.

When the following signs are observed, the woman should be immediately referred to a health facility since this will lead her to dangerous situations. There is a need to make close follow up and know the outcome.

Conditions requiring close follow up

- If the pregnant woman's age is below 18 years.
- If a woman over 35 years of age is pregnant for the first time.

- If the previous delivery was by cesarian section.
- If the height is below 150cm. and pregnant for the first time.
- Pregnancy (parity) over five.
- Less than 2 years spacing.
- Absence of foetal movement after 20 weeks of gestation

Community support during pregnancy

- Share the workload so that heavy physical effort could be reduced
- Encourage woman to eat balanced diet and rest more than usual
- Establish transport readiness for emergency referral
- Risk mothers should be encouraged and supported to stay near a health centre or hospital

Care during pregnancy

Balanced diet

Balanced diet is one of the major essentials for a woman during her pregnancy. The food she takes must meet the nutritional requirements of herself and her baby. She needs to regularly and attentively feed herself with cereals, vegetables, fruits, milk, meat, pulses, butter, and cereals with fat contents. If she cannot get these food items, she should be educated on the use of other food items that replace those ones. She must be also educated on attending follow-up visits and about the role of the balanced diet she takes

during pregnancy in the child's physical and mental growth and development before and after birth.

Regular antenatal follow up

It is proposed that there should be:

- ◆ Nine visits for the healthy nulliparous
- ◆ Seven visits for the healthy parous

Actual visit is – Once per month up to 28 weeks (that is four times)

- Twice per week up to 32 weeks (four times)
- Then once per week till delivery. Such visits can help women to monitor their pregnancies and seek advice along the way. Health care providers can also help to detect and manage any warning signs that might occur during pregnancy.

Personal hygiene

A pregnant woman must keep her personal hygiene more than ever since the body easily gets dirty at this period than at other times; because much waste is disposed as sweat through the body skin. When this waste is accumulated on her body, it gives discomfort to the woman. Hence, the woman must regularly wash her body and keep her personal hygiene.

Dressing

In order to make complete the personal hygiene status of the pregnant woman, her clothing and dressings have to be clean. It does not mean that she has to have new clothes all the time. The old clothes can be regularly washed and kept clean.

Rest and Relaxation

Rest is very important for the health of the pregnant woman. She has to get eight hours sleep every night. This does not mean that she should not engage herself in any activity. She can perform routine domestic functions. Nevertheless, she should not lift heavy material, should not travel long distance by foot and perform heavy duties. For example, she should not pound, carry full jars, and do such type of heavy works. Nevertheless, she can undertake simple and useful activities slowly and with care. She has to be advised to regularly walk short distances and perform simple activities at home.

Vaccination against tetanus

Tetanus vaccination, given to the pregnant women, will help to prevent the new born from acquiring tetanus. The importance of this vaccine has to be explained to pregnant women and to all women of childbearing age. It is important to ensure whether she has started taking anti tetanus vaccine or not. If she has not completed the vaccination, there could be a need to vaccinate her. But if she has never been vaccinated, there is a need to immediately vaccinate her.

Harmful practices to avoid during pregnancy

- ◆ Massaging the abdomen
- ◆ Repeatedly taking local anti taeniasis (Kosso)
- ◆ Alcohol
- ◆ Unprescribed use of drugs
- ◆ Cigarette smoking and other tobacco use

Preparations when delivery date approaches

- ◆ Clean clothes and dresses for the newborn.
- ◆ Make ready a sleeping place and washing basin for the baby.
- ◆ Correction of retracted nipple.
- ◆ Prepare foods for the mother, which she would take them during her maternity period.
- Securing a transport and money

Nutrition during pregnancy

Balanced diet: It is one of the major essentials for a woman during her pregnancy. This helps prevent anaemia, and difficult labor. The food she takes must meet the nutritional requirements of herself and her baby. Pregnant women should eat foods rich in protein (eggs, milk and milk products, Soya bean, beans and lean meats), Calcium (dairy products, green leafy vegetables, fish), iron and folic acid (lean meat, legumes, green leafy vegetables, egg yolk).

Work during pregnancy

There is little evidence that continuing to work adversely affects the outcome of the normal pregnancy. However, women with certain medical conditions, high-risk pregnancies, or other complications may need to decrease working hours or discontinue working altogether.

As long as the job is safe, and does not cause any stress and exhaustion, low-risk pregnant women can continue to work. Job requirements may be modified to allow for less physical workload, frequent breaks, elevation of legs, and frequent position changes.

Reduced hours may be allowed in the third trimester as the demands of pregnancy increase. Working pregnant women should learn about their organizations maternity benefits and leave plans, as well as related local and national laws.

Travel during pregnancy

Pregnant women can safely travel until close to their due date. Exceptions include women with medical conditions or high-risk pregnancies. Some guidelines to follow include:

- ◆ Select the fastest mode of travel, if possible.
- ◆ Wear comfortable clothing.
- ◆ Stretch legs or walk every hour and a half.

- ◆ Take antenatal care records along.
- ◆ Do not take any medication for motion sickness without advice

Sex during pregnancy

A healthy woman can have sex throughout her pregnancy, without harm to the foetus. Intercourse will not induce pre-term labor. However, labor may follow intercourse at or near term. Women at risk for miscarriage or premature labor should abstain from intercourse and breast stimulation. In addition, pregnant women should continue to use condoms with partners that have Sexually Transmitted Infections.

Delivery Services

Delivery care: Is a care given during delivery process

Labor: Labor is a natural force by which the foetus and placenta are expelled from a mother's uterus.

Types of labor

- **False labor:** False labor is labor that is not true especially felt by women with first pregnancy.

With false labor, there is no feeling of pushing, no wetting (discharge) and opening of the cervix, In order to know the opening of the cervix, there is a need to do vaginal examination.

- **True labor:** Back pain, feeling of pushing, wetting (mucus discharge) and opening of the cervix are associated with true labor.

During true labor, contraction and relaxation of the uterus starts and a force of pushing down is felt by the mother. This feeling is felt at the end of nine months of pregnancy. The feeling of pushing down gets stronger as the date for delivery approaches. Pushing down (contraction of the uterus) comes and goes frequently and later stays longer. The volume of discharge increases, placental fluid starts to flow out and small haemorrhage starts.

The health extension worker must know the two types of labor and must be able to provide the necessary delivery assistance when she knows it is true labor.

Stages of labor

- **First stage labor**

This is labor which lasts from the beginning of a strong contraction of the uterus until the baby drops into the birth canal. First stage labor lasts 10 - 20 hours for women with first birth, 7 - 10 hours for mothers with more than one births.

- **Second stage labor**

Second stage labor is labor that lasts from dropping of the baby into the birth canal until it is born. This stage lasts one hour on the average.

- **Third stage labor**

Third stage labor is a process that lasts from the birth of the baby until the expulsion of the placenta. Therefore, the health extension worker should take into account these stages of labor and if the labor at each stage is more than the expected time, she should take her to the next health facility with supervision and assistance.

Preparations of the woman for delivery

- To keep personal hygiene of pregnant women: water, soap and clean cloth should be prepared for washing the legs, the pelvic and genital areas.
- The delivery room should be prepared to have adequate ventilation and light.
- Do every thing possible to make the room clean.
- Prepare the sleeping place and make it comfortable to the woman.
- Prepare water and soap for hand washing.
- Boil the razor blade for cutting and the thread for tying the umbilical cord.
- Prepare clean clothes for the new born.
- Prepare clean gloves.

- Advise the woman that comes for delivery to pass urine and stool before any delivery process.
- The health extension worker should wash her hands with water and soap.
- Advise the woman to walk slowly in the house and to sleep on her left side when she wants.

Care during intense labor

- Since labor entails tiredness, the woman on labor should be made to get simple food on occasional basis.
- Something that could be drunk is also necessary. She should occasionally be given clean water and light tea.
- Her husband, and if possible, her parents should be made to stay around her.

Remember: The following steps or conditions should be followed to conduct every safe deliveries:

WHO'S "SIX CLEANS" FOR LABOR AND CHILD CARE

- ◆ Clean hands
- ◆ Clean perineum
- ◆ Nothing unclean introduced into vagina
- ◆ Clean delivery surface
- ◆ Clean cord-cutting instrument
- ◆ Clean cord care (clean cord ties and cutting surface)

When the baby is born

- The baby's head will be seen first and later the face is seen. When labor becomes intense, the body of the baby slips down to the pelvic area.
- When the face is seen, the mouth and nose should be cleaned.
- When the head is out and the neck is seen, the health extension worker should see if the umbilical cord is twisted around the neck.
- If the cord is twisted around the neck of the baby, attempt should be made to untie the cord from the neck by turning the head or trying to send the cord back to shoulder. The mother should be told not to push down at this moment. If the umbilical cord is tightly knotted around the neck of the baby, the cord can be knotted and quickly cut at two places as it is on the baby's neck.
- After the baby's neck is seen and shoulder starts to come out, the head should be held down with two hands (one hand below and the other above) until one of the shoulders comes out. After one of the shoulders comes out, it should be raised up to allow for the body also to come out.
- Tie the cord at two places and cut it between the two tied places. The cord on the side of the baby should be tied again at another place.
- There is no need to paint the cut cord with anything. As traditionally done, painting it with cow dung, mud, butter or

another thing is dangerous to the baby. It can lead to tetanus infection.

- The newborn should immediately be made to sleep on one of body sides and then back should be gradually massaged until the baby starts to cry.
- The body should be checked for any physical disability and if there is any, the mother should be sent to a health facility where assistance can be given. The health extension workers should make follow up and a feedback should be received from the health facility.
- The baby should be made to have physical contact with the mother for warming and should breast feed after cleaning.

Expulsion of the placenta

- The mother will feel some labor after she has delivered. Most of the time this is a normal uterine contraction to expel the placenta.
- The placenta will expel itself within a few minutes of the birth of the baby.
- It is necessary to see that the placenta has been expelled without being cut into pieces. This is known by seeing that there is no cut in its soft side and that there is no cut on its sheath. This is done by spreading and seeing it well.
- The baby shall be rolled with warm clothes and care should be taken not to expose the baby to cold

Care for the mother after delivery.

- Ensure that the uterus has completely contracted.
- Ensure that there is no much bleeding.
- If there is much bleeding, first aid and ergometrine should be given to her and shall be urgently referred to the next health facility.
- Check if there is or no genital tear. If there is tear, put cotton pad or clean cloth and advice for urgent referral to the next health facility.
- If there is no genital tear, clean with lukewarm water and advice the mother to hold clean cotton/cloth in same area.
- Give the necessary information to provide the mother with hot tea, atmit (local fluid food) and milk.
- Clean all equipment used for delivery. Now bury the placenta at the backyard.
- Continue Iron/folic acid for the mother if she was previously on this drugs
- Give Vitamin A to the mother

Care for the New born

- Register the new born/date of birth, time, sex, weight etc.
- Dress the baby with clean cloth
- Give BCG and Polio vaccination and give next appointment for immunization.

- Breastfeed the baby immediately
- Give polio and BCG Vaccination
- Educate mother to wash the baby with lukewarm water and dress with clean clothes.

Postpartum Care

Definition: postpartum care is the period from completion of third stage of labor to the return to the normal non-pregnant, or pre-pregnant state, usually six weeks later. Lactation may continue after this period, menstruation may not recommence yet, or sexual activity is resumed. Overall it is a care given within the first 24 hours of delivery up to six weeks to:

- ◆ Prevent complications
- ◆ Restore to normal health
- ◆ Check to adequacy of breast-feeding
- ◆ Provide Family Planning service
- ◆ Give basic health information

Complications during Postnatal period

- ◆ Puerperal sepsis/general infection
- ◆ Thrombo-phlebitis
- ◆ Secondary Haemorrhage
- ◆ Breast problems – engorgement, infection
- ◆ Incontinence – stool or urine

Care to the mother during postnatal period.

- ◆ Establish breast-feeding: Give time for the mother and the baby to make acquaintances and begin bonding. You should encourage this immediately after birth, within 30 minutes of delivery.
- ◆ Teach the mother the advantages of breast-feeding.
- The mother should be educated about family planning and get contraceptive before next pregnancy occurs. (Progesterone only pills can be given during this period)
- Tell the mother that breast milk is sufficient to the baby until six months and undertake home visit to ensure that she is breast-feeding.
- Tell her to begin supplementary feeding after six months and continue breastfeeding until 2 years or more.
- Tell the mother that giving butter or oil to the baby is harmful.
- The mother should be advised not to breastfeed, if she is confirmed positive for HIV.
- Encourage the mother not to sleep in a dark room. The room should have fresh air and light.
- Encourage on adequate rest, balanced food, and light exercise.

Breastfeeding

Breast milk is: a perfect nutrient, easily digested, can be efficiently used and protects against infection.

Breastfeeding: - helps mother child bonding, helps delay a new pregnancy for some months and protects mother's and baby's health.

- ◆ Start breastfeeding within 30 to one hour of birth
- ◆ Breastfeed exclusively from 0 – 6 months of age
- ◆ Complementary foods can begin between 4 – 6 months
- ◆ Start full complementary food to all children from 6 month of age
- ◆ Continue breastfeeding up to 2 years of age or over

Breast-feeding

- ◆ After delivery, or as soon as the baby is alert and interested
- ◆ Make sure the area around the nipple (the areola), as well as the nipple itself, is in the baby's mouth
- ◆ If the baby started breast-feeding from the right breast last time, start with the left breast the next time (and vice versa)
- ◆ Breast-feed the baby " ON DEMAND " - whenever the baby seems hungry

Advantages of breastfeeding

If all babies are to be healthy and grow well they must be fed breast milk. Breast milk is food produced by the mother's body especially for the baby. It contains all the nourishment a baby needs.

Breast milk:

- ◆ Contain the right amount and type of nourishment for babies
- ◆ Is SAFE, and avoids potentially contaminated bottles,
- ◆ Has immunological properties and protect infants from infection

- ◆ No cost incurs to the family
- ◆ Mothers usually have longer periods of infertility
- ◆ Breast fed infants are less likely get colic, allergy, diarrhoea
- ◆ Immediately after delivery encourages uterine contraction
- ◆ It is always available at right temperatures.
- ◆ Breastfeeding makes mother and baby close & loving

Care during breastfeeding (demonstration).

- Wash hands before breastfeeding.
- Clean and dry with clean cloth the washed breast.
- Sit in a comfortable position while breastfeeding.
- Breastfeed for 15-20 minutes at each breastfeeding on demand.
- Hold up the baby after breastfeeding with cloth or breast holder.
- Following the breastfeeding, up hold the baby in an up right position. Repeatedly and smoothly tap the back of the baby until it belches.
- If one of the breast nipples cracks or gets infected, breast-feeding should be continued with the other healthy breast.

Disadvantages of Bottle Feeding

- Formula milk is expensive
- Formula needs to be accurately mixed for adequate nutrition
- Takes time for preparation
- Baby more susceptible to diseases and infection

- Fuel is needed for heating water to mix the formula
- More than one bottle is needed

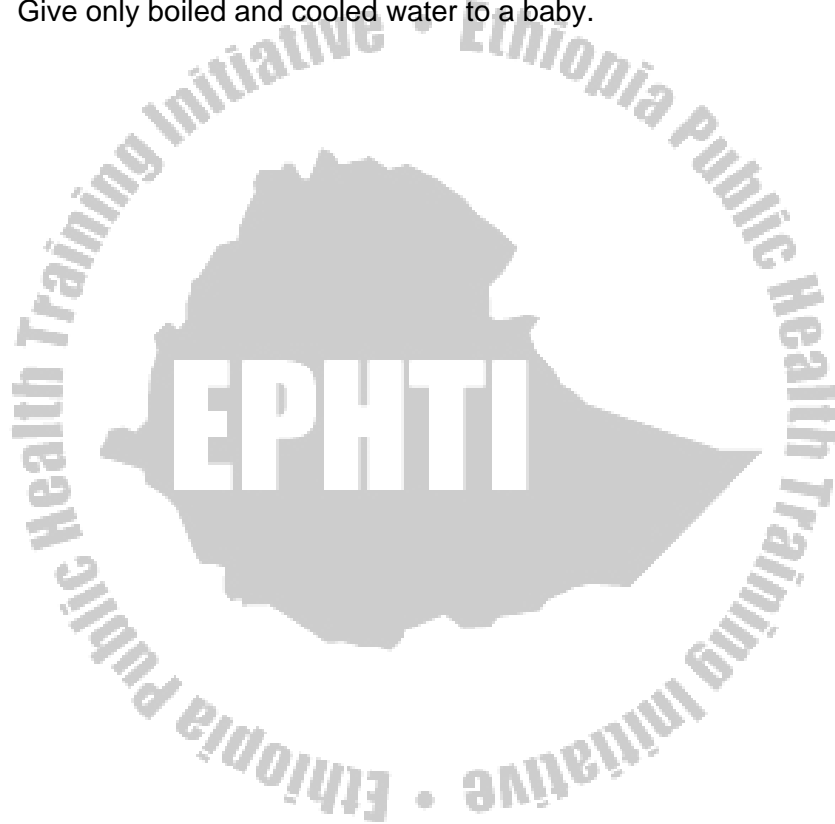
Demonstration on getting sunlight for the baby.

- Educate the family about the prevalence of bone deforming diseases (rickets) and the need to expose the baby to sunlight on a daily basis to prevent rickets.
- Start Warming on the second week of birth.
- Warm the baby outside the house for 10 - 20 minutes in the morning.
- The hands, legs and other body parts should be exposed to sunlight.
- Follow up should be made by the health extension worker on this practice.

Supplementary Feeding

- Wash hands before the preparation of child's food
- Start supplementary feeding when the baby reaches 6 months of age.
- Supplementary foods should be given with a cup and spoon without interrupting breast milk.
- Baby can be fed with boiled and mashed potatoes, boiled eggs and thin porridge. As the baby grows older feed thin and non-spiced pulses sauce mixed with injera (shiro).

- Avoid pepper and spices and too much fat.
- Limit the amount of food to be prepared for one time to serve hot.
- Avoid foods that have been prepared a day or night earlier that could lack hygiene, which can endanger the health of the baby.
- Give only boiled and cooled water to a baby.



UNIT TWO

Family Planning Services

Learning Objectives

By the end of this session the learner would be able to:

- ◆ Understand what Family planning means
- ◆ List the major objectives of Family Planning
- ◆ Tell the importance of Family Planning
- ◆ List the methods, advantage and disadvantages of FP

Definition: Deciding the number of children you want, when you want them. It is a means of promoting the health of the women and families and part of a strategy to reduce the high maternal, infant and child morbidity and mortality.

Objectives:

General: Is to reduce morbidity and mortality of mothers and children by spacing child bearing, preventing unplanned and unwanted pregnancy.

Specific:

- To increase awareness, knowledge and skills of the community to utilize family planning services,
- To increase utilisation of family planning services by households,
- To prevent mothers from having too many pregnancies and children
- To avert population growth rate,

- Prevent unwanted pregnancies and high risk abortions,
- Promote active participation of males in family planning activities.

Benefits Of Family Planning Services

General Benefits

For the family

Food is available for the whole family; all can get enough food based on their income

Anaemia: the need for iron is supplied with some FP methods

Maternal Mortality: decreased

Infertility: couples can have infertility service

Low birth weight: because of 2-3 years spacing between births birth weight improves

Young children and infants competition for food and cloths minimized

Happier sexual relationships: no fear of unwanted and untimed pregnancy

Educational opportunity for all children in the family

Abortion: problem of induced or illegal abortion decreased

Lactation continues: there are methods that do not interfere with lactation

Teenage pregnancy decreases, for they can use the methods

Health screening test: pap smear done to screen malignancy

b) For the health of the mother

- Mother's body needs at least 2 years or more to get back to full strength after the birth of a baby.
- By reducing undesired family size the need for health care and education of a family is achieved

c) For the health of the children

- ◆ Increase birth weight,
- ◆ Children will get adequate care and affection,
- ◆ Children can be breast feed longer and receive proper amount of nutrients, vitamins and minerals,
- ◆ Helps children to receive educational opportunities.

d) Benefits for national welfare

- ◆ Better rearing of children by devoting more time to each child
- ◆ Prevents excessive population growth,
- ◆ Promotes and speeds up national development, and helps women to participate in development.

Traditional family planning methods

Breast-feeding method:

When a mother breast-feeds her baby, the message concerning the feeding goes from the nipple to the vagus nerve and proceeds to the front-part of the pituitary gland in the brain. Then the pituitary gland

initiates the production of prolactin hormone to activate the milk producing glands in the breasts. The prolactin hormone again reduces the secretion of luteinizing hormone which initiates the normal menstrual cycle. Thus the process interrupts ovulation and prevents pregnancy.

Weaknesses

- Its effectiveness is low compared to all other natural methods of contraceptives;
- It does not prevent HIV/AIDS and other sexually transmitted diseases; and
- The effectiveness of this method decreases over time starting from sixth months after delivery.

The calendar method:

If a woman has a regular cycle of 27 days, it is possible to know by subtracting from 27-18 and 27-11 the first and last days of ovulation respectively. Based on this calculation, the woman should avoid sexual intercourse between day 9 and day 19 of the menstrual cycle in order to prevent pregnancy. By the same token, women who have regular menstrual cycles of 28 days, to 30 days should avoid sexual intercourse between 10-17 days and 12-19 days respectively; this time they are safe to do sexual intercourse during the remaining

respective days. This method is only appropriate to the affluent people.

Weaknesses

- This method of preventing pregnancy does not prevent HIV/AIDS/ST.Is

Abstinence method:

This refers to stopping temporarily or permanently sexual intercourse. Using this natural / traditional method requires a strong discipline, trust and good understanding between husband and wife or sexual partners. The effects of this method in the prevention of pregnancy is 100%. It incurs no expenses. There are no side effects on the body. It prevents early-age pregnancy and sexually transmitted diseases including HIV/AIDS.

Withdrawal Method:

This method uses the withdrawal or the pulling out of the male genital (penis) from the vagina, interrupting sexual intercourse just before ejaculation so that sperm does not enter the vagina. The ejaculation must be far away from the genital areas to make sure that no sperm enter the vagina. The effect of this method is weak and unreliable because of the following reasons.

Weaknesses

- Many males may not be able to control ejaculation time to pull out the penis on time; and
- Semen containing sperm may be leaking out into the vagina even before ejaculation.

Modern Contraceptive Methods

Combined oral contraceptive pills:

Combined oral contraceptive is prepared from two hormones, estrogen and progestin. This is the most commonly used method in Ethiopia.

Mechanisms of action

- Prevents ovulation;
- Thicken cervical mucus making it difficult for the sperm to pass through;
- Makes the lining of the uterus too thin for the fertilized egg to implant itself making it difficult for further development.

Presentation

- It comes in a packet of 28 pills and organized in four rows of seven pills. In the first three rows are the combined oral

contraceptive pills, while the seven pills in the last row are body supportive pills made of minerals.

Effectiveness

- It is highly effective;
- Avoids the fear of unwanted pregnancy during sexual intercourse;
- Can be taken by any female that has reached puberty-age;
- Pregnancy resumes immediately after interrupting the pills;
- Prevents extra-uterine pregnancy;
- Prevents unwanted pregnancy resulting from casual or unexpected sexual intercourse.
- No backup method necessary.

Adverse effects

- Nausea (the first three months);
- Irregular menstruation or missed menses,
- Headache;
- Tenderness of the breast;
- Weight increase; and
- It is not the choice for breast-feeding mothers.

Weaknesses:

- Pills are taken every day, hence, inconsistent or incorrect use raises a risk; and

- Lack of protection from HIV/AIDS and other sexually transmitted diseases.

Emergency contraception:

Emergency contraception is a combined oral contraceptive pills method that women can use to prevent pregnancy expected from unprotected sexual intercourse /violence, rape/. However, it should be underlined that the use of such method is only limited to unprotected sexual intercourse, but is never for regular usage.

Mechanism of action

Emergency contraceptive pills inhibit or delay to prevent fertilization.

When is emergency contraception used?

- When a woman is forced for sexual intercourse,
- Improper use or tearing of condom;
- When a loop inserted in a uterus has suddenly slipped out

Usage of emergency contraception:

- Take combined oral contraceptive two pills of 50 mcg ethingestradiol and 250 mcg. of levonrgestral in one dose immediately after sexual intercourse or during the first 72 hours and repeat taking another two pills after 12 hours;

- If the above types of pills are not available, take low combined oral contraceptive four pills of 30 mcg estrogen and 150 mcg progestin as one dose and repeat the same after 12 hours; and
- Continue to take the contraceptive pills with or without sexual intercourse.

Weaknesses

- If previous pregnancy occurs,
- Heart diseases,
- High blood pressure,
- Breast-feeding mother; and
- Women who smoke and who are over 35 years old.

Progestin only pill

The content of progestin in the contraceptive pills is less than what is contained in the combined oral contraceptive pills. This oral contraceptive has 35 pills in one package/box. The strength of progestin in each pill is the same.

Mechanism of action

- Highly effective in the body two hours after it has been taken.
- Make changes in the content of the cervical mucus and stays effective for about four hours.

- The change in the cervical mucus is effective to prevent pregnancy for a period of 4-20 hours. The pill has to be taken regularly every 24 hours.
- In general Suppresses ovulation,
- Thickens cervical mucus to prevent sperm entry into upper genital tract,

Advantages

- Reduces bleeding during menstrual period;
- Does not affect breast – feeding in any way;
- Can be used by women with reasons to avoid COCs,
- Prevents infection of the uterus,
- Can be used by women who smoke and over 35 years of age.
- Easier to explain take every single day, no days off at all,
- Less nausea or vomiting.

Weaknesses

- Requires taking one pill every day without interruption and always at exactly the same time of the day and so is hard to always remember;
- Less effective to prevent pregnancy compared to the combined oral contraceptive pills; and
- Has problems such as irregularity of menstrual cycles,

Who uses single oral contraceptive pills?

- Users of oral contraceptives and breast-feeding mothers;
- Women with high blood pressure;
- Women who have problems with combined oral contraceptive pills;
- Heavy smoking women and those above 35 years old; and
- Women who can take the pills regularly at the some interval and exact time.

Single OC pills should not be given to women who:

- Have breast cancer or suspected for the disease;
- Who cannot regularly take the pills at the specified time period; and
- Is breast-feeding a child less than six months old.

Procedures in the provision of single oral contraceptive pills:

- Introduce yourself and greet politely the family planning service client;
- Assess the client's knowledge about family planning services and ask about her health conditions;
- Ask if the client is on menstruation;
- Register the client;
- Show and demonstrate to the client the single oral contraceptive pills in the package;

- Carefully explain to the client to take one of the following steps;
 - To start taking the single contraceptive pills 24 hours after her menstruation started; or
 - Start on the 5th day of menstrual period;
- Carefully explain to the client to take every evening at the same time before sleep or sexual intercourse one pill from the package with water and without chewing;
- The client should take regularly contraceptive pill every evening at the same time with or without sexual intercourse;
- If the client forgets to take her pill, she must be told to take the missed pill and also continue on her normal schedule;
- Even if the client forgets to take two successive pills, she must be told to take pills and continue on her normal schedule. In addition she must be advised to use condom;
- A woman must be told to go to the health extension worker to seek advice when she faces health problems while on the single oral contraceptive pills; and
- Carefully inform a woman who has received one-month supply of single oral contraceptive pills, to take the pills according to instructions and to come back on the exact date of next appointment.

Male Condom:

- A plastic material that men wear over the erect penis just before sexual intercourse in order to hold the sperm and prevent it from spilling in the vagina. Condom is made from a thin plastic called latex.
- Condom prevents pregnancy as well as sexually transmitted infections including HIV/AIDS.
- Condoms are produced in different colours and size.

Effectiveness

- Condom is effective to prevent pregnancy and sexually transmitted diseases including HIV/AIDS unless it is broken, misused and exposed to the sun or other type of heat. Condom is very effective when used combined with other contraceptives.

Mechanism of action

- Condom holds the sperm and prevents it from spilling in the vagina and the cervix.

Weaknesses

- Most people are reluctant to use condoms;
- Can be broken due to inappropriate use during sexual intercourse;

- Disposal of condoms need precaution
- Creates itching feeling on the genitals of some males.

Injectable contraceptives

- A contraceptive which, are injected deep into muscle as a single. The injectable contraceptive contains progestin.
- The injection is given every three months; and
- Noristerat contraceptive is injected once in two months, however, in Ethiopia the commonly used contraceptive is the one injected every three months.

Mechanism of action

- Prevent ovulation;
- Makes cervical mucus too thick and difficult for the sperm to pass through to the uterus; and
- Makes the lining of the uterus too thin for the fertilized egg to implant itself.

Advantages

- Highly effective as compared to other contraceptives; Some brands serve for two and for three months;
- For the injection is invisible, can maintain client's secret if opposition from a partner;
- An option for those women who don't want to use other methods;

- Unlike OCs there is no risk of users forgetting to take;
- Reversible when women stop taking it

Weakness:

- Cannot prevent HIV/AIDS and sexually transmitted infections,
- Difficult to discontinue or remove from the body if complications arise
- Can some times initiates prolonged heavy vaginal bleeding;
- Delays return to fertility for about 6 - 12 months even after stopping;
- Increases weight; and
- A long time use decreases the normal quantity of menstrual bleeding.

Who can use the injectables

- Clients who want to delay pregnancy for a specified time period;
- Clients who cannot take contraceptive estrogen containing contraceptive;
- Those who want to space birth;
- Comfortable and better quality contraceptive for many clients;

Contraindications:

- Pregnancy or suspected for pregnancy;
- Vaginal bleeding that have not been medically checked and confirmed for any type of cause;

- Breast cancer or suspected for breast cancer;
- If menstrual cycle has already stopped not because of pregnancy or breast feeding;
- Liver diseases or gall bladder diseases;
- Heart diseases;
- High blood pressure; and
- Post-natal and breastfeeding mothers should not use at least for six months.

Implantable contraceptives:

- Noreplant is long acting contraceptives that contain progesterone hormone.
- The progesterone hormone is covered with plastic pill.
- Its size is comparable to a matchstick.
- It contains 34 mg of levonorgestral.
- Six of the implantable contraceptives are inserted under the skin of the inside left upper arm by trained health worker for this purpose.

Effectiveness

- Once it is inserted it prevents pregnancy for five years.
- The levonoregstral slowly releases to the woman's body.

Mechanism of action

- Prevents the release of egg from the ovaries; and

- Thickens the cervical mucus and difficult for the sperm to pass through to the uterus;

Advantages

- Highly effective in preventing pregnancy;
- Serves for a long period and avoids concern about frequent appointments and its daily administration;
- Prevents excess menstrual bleeding;
- The user can ask for the removal of the implants at any time when she decides to have a child or other reason.

Weaknesses

- Cannot help to prevent STI/HIV/AIDS
- Its removal require experienced and professional;
- In few inplant users there may be increased menstrual bleeding which decrease or stops within three months; and
- Headaches, weight increase or decrease are noted in some users.

Who should use the implant contraceptives?

- Those women who decide to stay long without being pregnant;
- Breast feeding mothers;
- Women who cannot use combined oral contraceptives;
- Clients with High blood pressure;

- Those women aged 35 and above years; and
- Those who weigh less than 70 kgm.

Contraindication:

- Women suspected for pregnancy;
- Those having cancer of the uterus, heart diseases and, liver diseases;
- Those who have uterine bleeding for unknown causes; and
- Are epileptic and are on anti-epileptic drug regularly.

Role of health extension workers

- Cannot insert the implant and refer interested clients to the nearby Health Facility
- Disseminate information or educate potential users
- clients to nearby health facility
- Undertake home visits to follow up

Female voluntary surgical contraception:

- This is a procedure that requires surgical intervention.
- Is performed twice as frequently as vasectomy among couples in many countries.
- It usually involves entering the abdominal cavity to ligate, cauterize, clip, or otherwise interrupt the fallopian tubes, and it often requires local anaesthesia.

Mechanism of action

- Stop the egg traveling through the fallopian tubes for fertilization
- Hinder the sperm not to reach the uterus through fallopian tube

Advantages:

- Highly effective than all the other contraceptives in preventing pregnancy;
- It can be administered in a few minutes.
- Sterilization is very effective and usually permanent.

Weaknesses:

- As with any surgical procedure, there are always risks, including:
 - Haemorrhage
 - Infection
 - Anaesthetic complications
 - Visceral injury
- Sterilization may fail from spontaneous re-canalization of a fallopian tube and may result in an ectopic pregnancy, blocked ducts, or fistula formation, but voluntary reversibility cannot be assumed.
- Procedure require adequately trained health workers;
- Health extension workers cannot do the procedure;
- Takes long time to counsel clients;

Male voluntary surgical contraception (VSC):

- This is a surgical and permanent contraception that is performed on agreement.
- The operation is done by cutting of the vas deferens (tubes).

Mechanism of action

Sperm cells cannot be ejaculated with the semen during intercourse.

Advantages

- Highly effective than all the other contraceptives;
- Administered within few minutes
- Prevention of pregnancy is ever lasting or permanent; and

Disadvantage

- Service requires adequate number of trained health workers;
- Cannot be provided by health extension workers;
- Cannot be reversed, once it is done;
- Takes longer time counselling clients; and
- There could exist minor problems related to the procedure.

INTRAUTERINE DIVICES (IUDS)

- IUDS are plastic and copper made devices that are placed in the uterus.

- The plastic materials from which IUDS are made do not change its shape, or rust. It contains progesterone hormone.
- The IUDS are called loop.

Mechanism of action

Prevent pregnancy by blocking uterine tubes from sperms

Effectiveness

- The copper IUD is a thin copper thread coil/progesterone hormone that is more effective than the one prepared from plastic.

Advantages

- IUD device is prepared in different shapes and size.
- Trained and experienced health worker inserts it into the uterus with special instrument.
- The best loop or intrauterine contraceptive device is the copper T380 that is covered with thin copper coil.
- It serves for a long period of about 5 – 10 years.

Weakness

- Health extension workers cannot insert IUD
- Not inserted if there is uterine infection
- If there is Irregular uterine bleeding in some women

Who can use loops (IUDS) devices?

- Women who are free from uterine infection or lacerations;
- Couples restricted to one sexual partner;
- Women who cannot use other contraceptives;
- Women who have at least one child; and
- Women who select contraceptives that don't require frequent regular visit, less or no health problems and unforgettable;

Contraindications

- Women who are pregnant or suspected for pregnancy;
- Have infected uterus;
- Women having uterine bleeding for unknown reasons;
- Cancer of the uterus;
- Women who have had extra-uterine pregnancies;
- Women who had wounds/ lacerations after delivery.

Health extension workers role in relation to IUD.

- Can provide information dissemination or education to potential users.
- Advice/refer interested users to a nearby health facility.
- Register and keep record of the clients using loops,
- Undertake home visits for follow up the users.

Criteria for a good contraceptive should include:

- ◆ Efficacy,
- ◆ Safety,
- ◆ Accessibility
- ◆ and reversibility.



Table: Effectiveness of contraceptive methods

No method	80 - 90
Rhythm (mucus) method	10 - 30
Withdrawal method	20 - 35
Lactation (LAM)	
during amenorrhea, first 6 months	2 - 6
when menstruating	30 - 60
Barrier	
Condom	3 - 15
Diaphragm	4 - 15
Spermicides	10 - 25
Hormonal	
Combined pill	1 - 8
Injectables and implants	< 1
IUCD	1 - 5
Surgical contraception	< 1

(Failure rates per 100 users each year)

The efficacy of contraceptive methods is often expressed in terms of failure rates. Reported failure rates per 100 users per year for different contraceptive methods vary greatly around the world, as can be seen from the above table.

Periodic abstinence (or natural family planning) is associated with 10-30 pregnancies per 1000 users, while those relying on the diaphragm

experience 4-25 pregnancies per 100 and those using Spermicides experience 10-25 pregnancies 100.

Hormonal and intrauterine devices are generally associated with higher efficacy. Women who use combined oral contraceptives experience 1 - 8 pregnancies per 100 users per year, while failure rates among those who rely on injectables and implants average less than 1 pregnancy per 100 annually. Women who use the IUCD experience 1 - 5 pregnancies per 1000, while couples that rely on surgical contraception experience less than 1 accidental pregnancy per 100 each year.

Practical Session Family Planning Methods

Male condoms may be right for you

There are a number of factors you should consider before deciding whether male condoms are the right contraceptive method for you. As with any method of contraception, you should first talk to your health care provider or a counsellor at your local clinic or hospital before using condoms as a contraceptive method.

Male condoms may be an appropriate

If any of the following is true:

- ◆ You are at risk for exposure to or transmission of an STIs, including HIV infection. Aside from abstinence, male and condoms offer the best protection against these infections.
- ◆ You prefer to use a method that you can discontinue at any time.
- ◆ You and your partner are looking for a back-up method (for example, in case your partner forgets to take her oral contraceptive).
- ◆ Your partner has a medical condition that poses a health risk with the use of other contraceptive methods.
- ◆ You have sexual intercourse only occasionally and do not need or want ongoing contraception.
- ◆ You are concerned about the side effects of other methods
- ◆ You and your partner want to share responsibility for family planning and the prevention of sexually transmitted infections.
- ◆ Your partner has just delivered a baby (You may begin using condoms as soon as you resume sexual intercourse.)
- ◆ Your partner has just had an abortion. (You may begin using condoms as soon as you resume sexual intercourse.)

Male condoms may not be appropriate

If any of the following is true:

- ◆ You are unable to obtain regular supplies of condoms.
- ◆ You are allergic to latex (or your partner is).
- ◆ You cannot maintain an erection when using a condom.

- ◆ You or your partner is unwilling to interrupt lovemaking in order to use a condom.

Lam lactation amenorrhoea method

There are a number of factors you should consider before deciding whether LAM is the right contraceptive method for you. As with any method of contraception, you should first talk to your health care provider or a counsellor at your local health post or hospital before using LAM as a contraceptive method.

Lam may not be an appropriate method

If all of the following are true:

- ◆ Your baby is less than six months old.
- ◆ Your menstrual periods have not yet returned.
- ◆ You are fully or nearly fully breastfeeding your baby.

Lam may not be an appropriate method

If either of the following is true:

- ◆ You are at risk for exposure to, or transmission of, STI, including HIV infection. LAM does not provide protection against these infections. Aside from abstinence, male condoms offer the best protection against these infections.
- ◆ You are HIV positive or suspect that you may be.

Lam is not an appropriate method

If any of the following is true:

- ◆ Your baby is six months old or older.
- ◆ Your menstrual periods have returned.
- ◆ Your breastfeeding's are regularly more than six hours apart.
- ◆ You regularly give your baby food or liquids as substitutes for breast milk.

Spermicides may not be appropriate method

If any of the following is true:

- ◆ You are at risk of exposure to or transmission of STI including HIV infection. Aside from abstinence, male and female condoms offer the best protection against these infections. Recent studies indicate that vaginal spermicides are not effective in preventing certain STIs such as gonorrhea, chlamydia, and HIV infection
- ◆ You plan to use spermicides frequently or in large amounts. Under these conditions, spermicides may cause vaginal irritation. Frequent use of spermicides cause irritation and breaks in the mucus layer or skin of the genital tract, creating a point of entry for the virus and increasing the risk of HIV transmission.
- ◆ You cannot always insert the spermicide before sexual intercourse.

Spermicides are not appropriate method

If any of the following is true:

- ◆ You cannot obtain a regular supply of spermicides.
- ◆ You dislike touching your genitals.
- ◆ You are allergic to spermicidal or have a partner who is allergic. (Signs of allergy include redness, itching, and pain of the vagina or penis during intercourse. The signs disappear after use of the spermicide is stopped.)

Is withdrawal the right method

There are a number of factors you should consider before deciding whether withdrawal is the right contraceptive method for you. As with any method of contraception, you should first talk to your health care provider or a counsellor at your local clinic or hospital before using withdrawal as a contraceptive method.

Withdrawal may be an appropriate method

If any of the following is true:

- ◆ You find other contraceptive methods unacceptable for religious or other reasons.
- ◆ You prefer a method you can discontinue yourself.
- ◆ You are concerned about the side effects of other methods.
- ◆ You have sexual intercourse only occasionally and do not need or want ongoing contraception.

- ◆ You feel that the man should share responsibility for family planning.
- ◆ You or your partner have medical conditions that pose health risks for the use of other contraceptive methods.
- ◆ You and your partner have just had a baby. You may start using withdrawal as soon as you resume sexual intercourse after delivery.
- ◆ Your partner has just had an abortion. You and your partner may start using withdrawal as soon as you resume sexual intercourse after the abortion.

Withdrawal may not be appropriate method

If any of the following is true:

- ◆ You are at risk of exposure to, or transmission of, STI, including HIV infection. Withdrawal does not provide protection against these infections. Aside from abstinence, male condom offer the best protection against these infections.
- ◆ Either you or your partner are not willing to cooperate in using this method.

Are fertility awareness right method

Fertility awareness methods include the calendar/rhythm method, the basal body temperature method, the cervical mucus method, and the standard days method. There are a number of factors you should

consider before deciding whether fertility awareness methods are right for you. As with any method of contraception, you should first talk to your health care provider or a counsellor at your HP or hospital before using fertility awareness methods.

Fertility awareness methods may be appropriate methods

If any of the following is true:

- ◆ You find other contraceptive methods unacceptable for religious or other reasons.
- ◆ You prefer a method you can discontinue yourself.
- ◆ You wish to use a barrier method only during the fertile phase of your menstrual cycle.
- ◆ You have a condition considered to pose a health risk for the use of other contraceptive methods.
- ◆ You are concerned about the side effects of other methods.
- ◆ You wish to share responsibility for family planning with your partner.

Fertility awareness methods may not be appropriate methods

If any of the following is true:

- ◆ You are at risk for exposure to or transmission of STI infection including HIV. Fertility awareness methods do not provide protection against these infections. Aside from abstinence, male condom offer the best protection against these infections.

- ◆ You intend to use only the calendar (rhythm) method and have menstrual periods at irregular intervals.
- ◆ You intend to use only the basal body temperature (BBT) method and cannot obtain or correctly use a basal body thermometer.
- ◆ You intend to use only the cervical mucus method and cannot correctly interpret cervical mucus signs.
- ◆ You intend to use only the cervical mucus method and have abnormal vaginal discharge.

You have just delivered a baby or had an abortion.

Fertility awareness methods are not appropriate methods If any of the following is true:

- ◆ You have a partner who is unwilling to avoid unprotected sexual intercourse during the fertile period of each cycle.
- ◆ You cannot keep track of your fertile period.
- ◆ You cannot abstain or use another method during your fertile period.

How to increase FP method acceptability?

- ◆ Commitment of political leaders are required for effective program implementation
- ◆ Raising FP as a public policy issues

- ◆ Change of attitude of the health care providers to see more client oriented strategies as treating with respect and dignity; giving sufficient information to make an informed choice.
Respect cultural mores & build upon
- ◆ Improve the quality and acceptability of FP through involving the communities in planning, implementation and evaluating activities.

Maintaining Sustainability Of FP Program

- ◆ Make regular home visits
- ◆ Make frequent inter personal communication
- ◆ Ease re-supply of the FP methods
- ◆ Conduct regular surveys. In your survey do appropriate consultation of services such as:
- ◆ Decrease waiting time
- ◆ Take adequate time with the client
- ◆ Set conducive clinic hours and days
- ◆ Consider staff age and gender

Family planning facilities

- ◆ Make waiting rooms adequate
- ◆ Adequate, ventilated well lighted examination rooms
- ◆ Use teaching aids/posters, charts, flip charts etc.
- ◆ Make available adequate water and toilet.

Information, education and communication for family planning services

Family planning through the administration of contraceptives is an old program. Even though it is an old program, easy access to FP services is yet not successful.

The aims of FP program are to access all persons at the age of puberty and married couples to make them know about the correct information of FP method and raise their awareness on the types and utilization of different contraceptives so that they benefit from the available services depending on their choices.

Counselling services should use the GATHER (the six important points in counselling) method to counsel their clients.

- G** Greet your client by name
- A** Ask what her problem is and how she believes you can help her.
Listen carefully and encourage her to ask questions
- T** Tell available methods: teach her the different ways to care herself and her family
- H** help her select what is best for her and her family
- E** Explain in detail about the treatment, the family planning method
- R** Refer a client that is ill, is beyond your capacity, needing medical help

While conducting counselling sessions use teaching AIDS to assist in clarifying trouble points and you should have a sound knowledge of the needs of the client.

Main targets for IEC

- ◆ Women 10 - 49 years
- ◆ Men
- ◆ Community Health Workers
- ◆ Religious leaders
- ◆ Other influential people in the community

IEC must be included in all health activities at all levels. It is an area where inter-sectoral collaboration with social workers, teachers, religious groups, agricultural workers etc is very appropriate.

Counselling, Informed Choice, Consent, and the Rights

What is counselling?

Counselling is the process of helping clients confirm or make informed and voluntary decisions about their individual care. It is a two-way exchange of information that involves listening to clients and informing them of their options. Counselling is always responsive to each client's individual needs and values.

What is informed choice?

Informed choice is a voluntary, well-considered decision that an individual makes on the basis of options, information, and understanding. The decision making process should result in a free and informed decision by the individual about whether or not he or

she desires to obtain health services and, if so, what method or procedure he or she will choose and consent to receive.

What is informed consent?

Informed consent is the communication between a client and a health extension worker that confirms the client has made an informed and voluntary choice to use or receive a medical method or procedure. Informed consent can only be obtained after the client has been given information about the nature of the medical procedure, associated risks and benefits, and other alternatives. Voluntary consent cannot be obtained by means of special inducement, force, fraud (criminal deception), deceit (dishonest trick), duress (compulsion), bias, or other forms of coercion or misrepresentation.

Health care providers are often required by law or institutional policies to obtain informed consent before administering certain medical procedures, including experimental methods or procedures. Although informed consent is often equated with a signed written form used to document an individual's decision, written consent is neither inherently necessary nor sufficient. Regardless of the presence or absence of written documentation, informed consent requires providers to ensure that a client receiving a method or treatment has knowingly and voluntarily agreed to be treated. Whether informed consent is written or verbal, however, it cannot replace the informed

choice process, which is dependent on counselling and the information exchange between providers and clients.

The rights of the clients

Clients have the right to:

- ◆ Information
- ◆ Access to services
- ◆ Informed choice
- ◆ Safe services
- ◆ Privacy and confidentiality
- ◆ Dignity, comfort, and expression of opinion
- ◆ Continuity of care

Assessment and group discussion

1. Can you recall what Family planning means?
2. List the importance and major objectives of Family Planning
3. List the methods of pregnancy prevention, advantage, disadvantages and efficacy of each?
4. Recall the available family Planning service outlets in Ethiopia and tell the activities at each level?
5. Identify the barriers to the family planning service provisions?
6. List at least three side effects and problems associated with each of the following contraceptive methods:

- a. IUCD
 - b. Injectables
 - c. Oral contraceptives
7. Tell 5 danger signs that a patient using an IUCD should know
 8. What risks or problems are associated with pills?



UNIT THREE

Child Health Care

Learning Objectives

At the end of this session the learner will be able to:

- ◆ Record important child health problems in Ethiopia
- ◆ List the aims and purposes of child health service
- ◆ Repeat the elements of child health service
- ◆ Report how to establish targets for immunisation in childhood
- ◆ Examine the benefits of growth monitoring and interventions

Objectives

- ◆ To reduce child morbidity and mortality.
- ◆ To ensure children's full physical and mental development.
- ◆ Raise the genuine participation of the family and community.

Child Health Problems

Under this heading we follow the integrated management of childhood illness approaches (IMCI).

The IMCI strategy is applied in countries where infant mortality rates, are above 40 per 1000. Since Ethiopia has an IMR of 97 per 1000, it has contributed the outcomes of its many studies to the development

of this strategy. Because of this, Ethiopia has also become one of the few countries that implemented the strategy.

Signs of dangerous (fatal) illnesses

- If the child cannot drink or breast feed.
- If the child vomits as he breast feeds or vomits immediately after food.
- If he had shivering related to the current illness or he is currently shivering.
- If the child is weak or unconscious. It means he has dangerous/fatal health problem. Therefore, the child should be urgently referred to the next higher health facility after undertaking some physical examinations. Before sending the child to the next health facility, a reference should be made to the drug administration manual on how we administer, any type of drug.

Cough/breathing problem

In our country pneumonia can be caused by viruses or bacteria. The common causes of pneumonia are bacteria. Pneumonia it is usually caused by the streptococcus pneumonia bacteria and hemophils influenza virus.

Children can die due to shortage of oxygen or due to the spread of the bacteria to all part of the body when they are caught with bacteria pneumonia.

Many children are brought to health facilities with simple health problems such as cough or breathing problem. Most children can be assisted by simple care, given at the household level. But, since few seriously sick children require medicine (antibiotics), the health extension workers can identify such patients using two indicative signs. The signs are fast breathing and lower chest in drawing, which both are signs of severe pneumonia.

Examination of a child with cough or breathing problem

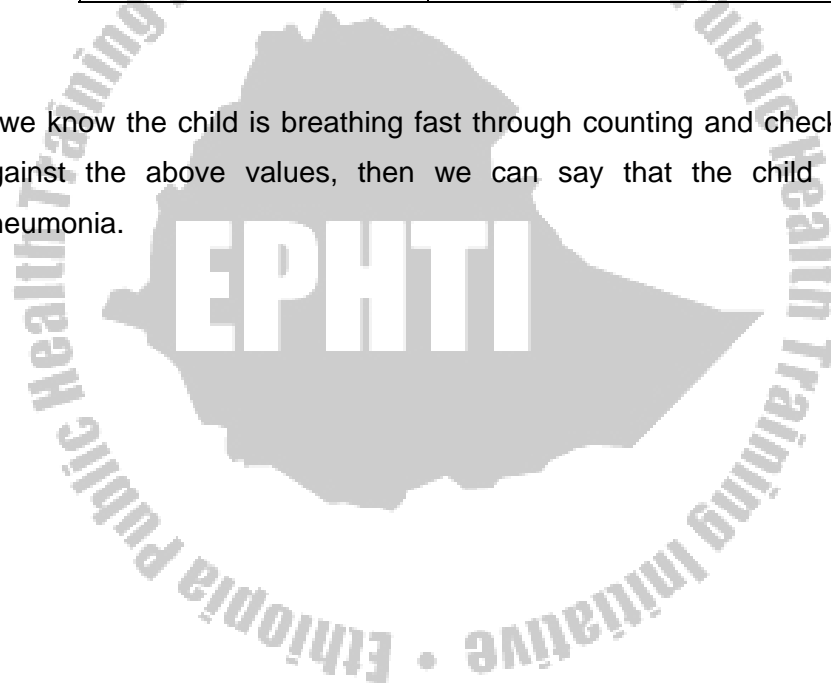
- Asking the mother for how long the child has cough or breathing problem.
- See that the child has fast breathing.
- See that the child has lower chest in drawing.
- Confirm that the child has wheezing.

A child who has cough or breathing problem for more than 30 days could be suggestive for asthma, whooping cough or another problem and therefore shall be referred to the next health facility for further examination.

The number of breathing per minute can be cross-checked with the following age/ breathing values.

Age	Fast breathing
2-12 months	50 or more breathings/ minute
12 months- 5 years	40 or more breathings/ minute

If we know the child is breathing fast through counting and checking against the above values, then we can say that the child has pneumonia.



Classification of cough or breathing problem

Sign	Classification	Action to be taken
-If he has any sign of a dangerous disease. - If he has lower chest inwaring. - If wheezing is observed on a child that is silent.	Severe pneumonia or other very serious disease.	- Urgently refer to next health facility.
Fast breathing	Pneumonia	Urgently refer to next health facility.
If no sign of pneumonia or serious diseases	No pneumonia, simple coughs or can be common cold.	- Refer child to next health facility if cough has been for more than 30 days. - Advice the family to bring the child, if there are suggestive signs that the illness is getting worse -See again the child if no improvement in 5 days

Actions to be taken

- Refer the child to the next health facility if he/she has severe pneumonia or any other serious illness.
- Advice mother/parent to take the child to a health facility if child has pneumonia.
- If conditions worsen as he/she takes the prescribed drug i.e
 - o If he/she has breathing problem
 - o If he/she has high fever
 - o If he/she fails to drink or suck breast
 - o Gets weak or is unconscious

The mother or guardian should be strongly advised to urgently take the child back to the health facility.

- If the problem of the child is common cold or simple cough, the mother or the guardian should be advised to give the child fluids such as tea, gruel etc and breast milk. If the child sucks breast, he/she should be breast feed more than the other times.

Since the condition of a child with simple cough or common cold can worsen, strong advice can be given to take the child to a health facility when the following signs are observed

- high fever
- failing to drink or breast feed
- dizziness or unconscious
- fast breathing

Diarrhoea

Diarrhea is defined as a passage of three or more loose or watery stools in a 24 hours period. Mothers usually know when their children have diarrhea. Diarrhea is the major cause of morbidity and mortality for children under five years in Ethiopia.

Aetiology

Diarrhea can be caused by bacteria, viruses, or parasites and other causes. It is common in babies from 6 months to 2 years of age.

Types of Diarrhea

- Diarrhea that is watery, acute and lasts less than 14 days is called acute diarrhea.
- If diarrhea is acute and lasts longer duration, usually over 14 days, it is called persistent diarrhea.
- If blood or mucus comes with diarrhea or alone, it is called bloody diarrhea. Most of the bloody diarrheas come due to infections with bacteria called Shigella. Diarrhea can also be due to amoeba. But this is not common among children.

Examination of a child with diarrhea

- Ask the duration of the diarrhea
- Ask if the diarrhea is bloody (has blood in stool) or watery
- Check if there is body dehydration

Signs and degrees of dehydration

Signs of dehydration	Degree of dehydration	Actions to be taken
<p>If two out of the following signs are present, they indicate the degree of body dehydration.</p> <ul style="list-style-type: none"> - Dizziness - Sunken eye balls - Unable to drink or weak to drink. - Loose skin turgor 	Severe dehydration	<ul style="list-style-type: none"> - Urgently refer to next health facility - If he can, refer him with ORS.
<p>If two out of the following signs are present, they indicate the degree of dehydration.</p> <ul style="list-style-type: none"> -Restlessness and irritability -Sunken eye balls -Thirsty -Loose skin turgor 	Moderate dehydration	Urgently refer to next health facility with ORS
No moderate and high dehydration	No dehydration	<ul style="list-style-type: none"> -If the child takes breast milk only, one ORS and frequent P.T.O breast feeding. - If the child does not breast, milk for a child that can take supplementary food/give nutrient fluid that can be prepared at home (gruel, fruit juice etc). - When signs that show the worsening of the illness are seen, advice the parents to immediately bring back the child. - If no improvement after 5 days, see the child again

To know the situation of a child's skin turgor, clamp, raise and release the skin of the abdomen with thumb and index finger and see whether it immediately goes back

- If the skin remains wrinkled as we back off our fingers it is a sign of extremely poor skin turgor.
- If the skin remains wrinkled for some time as we back off our fingers it is a sign of extremely poor skin turgor

Care to a child at home

Force the child to take fluid more than usual

- The fluid that will be given to the child must be among those which are easily available at home. Some of these fluids are breast milk, boiled cows milk, gruel, soup, curd milk, whey, rice water, fruit juice and clean water.

How much ORS or other fluids should be given?

- It necessary give 50-100 ml (one coffee cup) of fluid to children below 2 years and 100-200 ml (two coffee cups) of fluids to children 2-10 years of age when they have diarrhea. But if the child wants to have more, he/she can be given. Children who are above those ages can take any amount of water. The purpose of giving extra fluid to the child is to replace the fluid that has been lost by the diarrhea and to prevent further dehydration.

- **Feed the child more than before**
- Some of the food items that can be given to a child (especially to a child below the age of 6 months) are milk and milk products, porridge, eggs, meat, mashed injera with pulses sauce (Alicha shiro), banana and orange. But, if families cannot get these food items, they can give any food that is available at home with a quantity more than before.
- If possible, feed the child as he wants. He/she must be fed at 3 or 4 hours intervals (minimum of 6 times a day).
- The child can have one additional feed for two weeks from the number of feeds he/she had before he was sick, after the diarrhea has stopped. The purpose of providing the child with an additional quantity of food is to replace the nutrients that have been lost due to the diarrhea and to prevent malnutrition.

Preparation of ORS

- Wash hands with water and soap.
- Measure and make ready one liter of pipe water, or boiled and cooled water.
- Add one sachet of oral rehydration salt to the measured water and shake the mixture well.
- Take some from the solution with a cup and give in small quantity with a spoon to the child. If he/she vomits, continue giving him after 5-10 minutes.

- Cap and keep the solution. It can be used until 24 hours.
- If it is not finished within 24 hours, it can be discarded and a new solution can be prepared.
 - If this child is with diarrhea
- could not get well
- vomiting continues
- bloody diarrhea is observed and
- has fever

He/she has to be immediately referred to the next health facility. Follow-up and reporting has to be undertaken.

Methods of preventing diarrheal diseases

Breast feeding

Children 4-6 months have to stay only on breast feeding. Breast feeding means:- the child has to be fed on his mothers breast milk without giving him other fluids like water, fruit juice or cows and powder milk.

A child on breast milk only has less chance of having diarrheal diseases than a child on a half breast feeding or bottle feeding. The reasons are;-

- By breast feeding it is possible to avoid contaminated bottles, bottle nipples and powder milks.
- Breast feeding helps to raise the antibody level of the child.

▪ **Actions that should be taken by mothers in order to breast feed**

- Start breast feeding immediately after the baby is born
- No additional fluids such as water, sugar solution or powder milk shall be given to the child especially for the first 4-6 months.
- Breast feed whenever the child wants
- If it is not possible to take the child to the workplace, breast feed the child before going to work, upon returning from work, at night and at any time when the child is with his mother.
- In order to prevent the swelling of the breasts due to accumulation of milk, press the breast and expel the milk and keep it in a clean container and give it to the child.

Supplementary foods

Supplementary foods are soft and mashed foods, such as peas and beans, milk products, eggs, meat, fish, fruits, green vegetables. For additional information, refer to attached chart.

Activities that should be undertaken by family members with regard to supplementary food:-

Family Health

- Washing hands with soap and water before starting the preparation of food and feeding of the child.
- Preparing the food in a clean place.
- Washing with clean water those foods that would be eaten raw.
- Cooking well the food during food preparation.
- Feeding soon the hot foods prepared.
- Keeping the foods in cold places, and if possible in refrigerators.
- Washing until boiling, foods that have been boiled/ cooked and kept closed for more than 2 hours.
- Feeding the child with clean spoon/ avoid bottle feeding.

Washing hands

Mothers should wash their hands:

- after cleaning the child that has passed stool and disposing the stool into an appropriate a toilet
- after using the toilet
- before cooking/ preparing food
- before eating food
- before feeding the child

If the child feeds himself/herself, his/her hands should be washed.

- Cutting the nails short.

Malaria

If the sick child has fever and is living in malariaous area or had been taken to a highly malaria endemic area in the last month, the stage of the disease can be categorized as follows and the child shall be given malaria treatment immediately.

High Malaria Risks areas

Sign	Types of Disease	Action
- If there is any sign of dangerous disease -Has meningismus (stiff neck)	Very severe febrile disease	Immediately refer to the next health facility
If he had fever, he is febrile now or has a temperature of 37.5 °c or above	Malaria	Treat with Artemeth Lumefantrine based on the child's age and weight

Low Malaria Risk Areas

Sign	Type of disease	Action
-If there is any sign of a dangerous disease or -Has meningismus (stiff neck)	Very severe disease	Urgently refer to the next health facility.
-No cough -No measles and other known cause of fever	Malaria	Treat for malaria
-Has fever -Has measles or known cause of fever	Fever/ the probability of the fever to be due to malaria is less	Treat the cause

Prevention Methods

- Sleeping always inside insecticide impregnated mosquito nets.
- Drying or clean malaria mosquito breeding places, water accumulations and springs.
- Taking malaria prophylactic drugs before going, when staying and after returning from a malarious area.

Measles

Definition and cause:-

Measles is a highly infectious disease caused by the measles virus.

Signs:-

Fever and generalized red rashes are suggestive of measles. The antibodies that children get from their mothers during pregnancy can protect them from measles infections until they are six months old.

Measles reduces the immune system of children and exposes them to other diseases. Because of this reason, 30% of the children with measles have the following signs.

- Diarrhea
- Pneumonia
- Wheezing
- Ulceration of the mouth
- Ear infection /otitis media
- Severe eye infection (conjunctivitis) that can lead to blindness

Diagnostic methods

A child can be said to have measles when he has a history of generalized blotchy rash lasting for 3 or more days, fever, cough, running nose and red eyes (conjunctivitis)

A child having measles now or had in the last 3 months can be identified on the basis of what are indicated in the table below.

Sign	Name of disease	Action to be taken
<ul style="list-style-type: none"> -If there is any sign of a dangerous disease -If there is white patches on the eyelid - Severe mucal ulceration 	Severe complicated measles	<ul style="list-style-type: none"> -Give vitamin A -Urgently refer to next health facility
<ul style="list-style-type: none"> - If pus is coming from the eyes - If there is mucal ulceration 	Measles with eye or mouth complications	<ul style="list-style-type: none"> -Give vitamin A -Give eye drops if he has eye disease -Wash child's eye with warm water -Paint mouth with gentian violet if there is mouth ulceration -Check him on the second day
If he has measles currently or in the past three months without complications.	Measles	Give vitamin A

If a patient is known to have measles currently or had in the last three months, it is essential to check him for any complications. The

complications are extensive ulceration of the mouth, and white patches on the eyelid. If there are other signs of any dangerous diseases, he should immediately be referred to the next health facility.

Administration of vitamin A

- If the child has measles, it is necessary to give him vitamin A three times as follows:-
 - the first vitamin A today
 - the second vitamin A tomorrow
 - the third vitamin A after a month
- If the child has severe malnutrition or severe measles or persistent diarrhea with dehydration, he should be immediately referred to the higher health facility.
- Any child must get vitamin A every month starting from his ninth month up to five years.

Table for Vitamin A Administration

Age	Vitamin A capsule		
	200,000 IU	100,000 IU	50,000 IU
Up to 6 month	-	50,000	1capsule
6-12 months	50,000	100,000	2 capsule
12 month to 5 years	1 capsule	2 capsule	4 capsules

Prevention Methods

- Measles can be prevented by vaccinating the child against the disease on time. The disease will not be serious on him provided he is vaccinated.
- A child should be taken to the nearest health facility, to get appropriate treatment and to avoid its complications.
- Since measles is a highly infectious disease, the child with the disease should be taken to a nearby health facility.
- Since measles is a highly infectious disease, a child in the neighborhood who is ill with measles shall not be visited by other children.

Care of a child with measles

- Children with measles usually lose appetite. Therefore, they should be encouraged to take balanced diet. Refer to annex on feeding a child with measles.
- If there is high fever, lower the fever with antipyretics (fever lowering drugs) and cold soothing.
- Vitamin A should be given 5 times on the basis of their age or weight i.e on same day, next day and after a month. With this it is possible to prevent the eye disease which occurs due to measles and other health problems.

Malnutrition and Anaemia

Definition:-

We say there is malnutrition when a child fails to get adequate and balanced diet commensurate to his age which is necessary for body building, energy source and disease prevention.

According to the 2000 Demographic Health Survey (DHS) more than 50% of Ethiopian children's height was below the standard height. In addition to this, malnutrition and other related diseases were found to be causes for the deaths of 60% of children under the age of 5 years. Therefore, any child, when visited by health extension worker, should be checked for signs of malnutrition and anemia.

Causes and signs of malnutrition

Malnutrition occurs when a child does not get the necessary energy giving and body building foods. A child that is repeatedly ill is prone to malnutrition. When a child has malnutrition.

- He/she can be physically stunted
- He/she can have general body edema
- cannot grow well or can be short (retarded growth)

If a child does not get adequate vitamins in his/her food, he/she can encounter vitamin deficiency. A child with vitamin A deficiency has a

high probability of dying due to measles and diarrhea. His/her chance of being blind is also high.

A child who does not take food with no adequate iron will have anemia. Anemia means low number of red blood cells or low iron content in the red blood cells.

A child can have anemia because of the following reasons

- Infections
- Intestinal parasites
- Malaria

Signs of malnutrition and anaemia

- Severe emaciation/ being thin/, wrinkling of the skin on hip and lap areas, and clearly seen rib bones
- Oedema of both feet
- White palm/pale palm
- Under weight

Whitish palm is a characteristic of anemia. Very white palm indicates severe anemia.

We can classify the degrees of malnutrition and anemia using the following signs.

Family Health

Signs	Classification of Disease	Actions to be taken
-Severe body emaciation (thinness) or very white palms -Oedema of the lower extremities	Severe malnutrition or severe anemia	Give vitamin A and urgently refer to the next health facility
Moderate white palm or very low body weight	Anemia or low body weight	-Ask how the child is feed and if there is a problem with feeding give the necessary advice. If feeding is done well encourage the mother. -If the child has anemia, check up after 2 weeks -If his weight is very low, do check up after a month -If he has anemia and the chance of having malaria is high, give anti malaria drug and iron folate.
If there are no signs of malnutrition and anemia and no low body weight	Anemia or no severe malnutrition, or low body weight	-If the age of the child is below 2 years, ask how the child is fed and check his weight. Give the necessary advice if there is a feeding problem. Encourage the mother and advice her to continue if she is feeding him well. -If he has feeding problem, do check up after 5 days

A child with severe malnutrition or anemia he/she should urgently be referred to a higher health facility for proper treatment and follow up.

Prevention methods

Malnutrition can be prevented by providing nutrition education to the parents of children on sufficient breast feeding, and starting supplementary feeding after 4-6 months of age.

Anaemia can be also prevented if the child is given adequate and balanced diet. If this is done, anaemia that occurs due to infections can be prevented. If children are given balanced diet, they can get the necessary nutrients from the diet. With this intervention, iron deficiency anaemia can also be prevented.

Similarly, anaemia that occurs as a result of malaria can be prevented in malaria areas by the effective use of impregnated mosquito nets.

Protein energy malnutrition

This is a word used to describe a spectrum of clinical pictures, ranging from kwashiorkor to severe marasmus.

Kwashiorkor

A sever form of Protein Energy Malnutrition (PEM) which is manifested usually due to gross deficiency of proteins and few deficiency of calories.

kwash is usually associated with infections and occurs in age between 1-3 years.

Causes

- Inadequate intake
- Inadequate utilization
- Early cessation of breast milk and exposure to high CHO diet.
- Diseases - diarrhoea, measles

Signs and symptoms

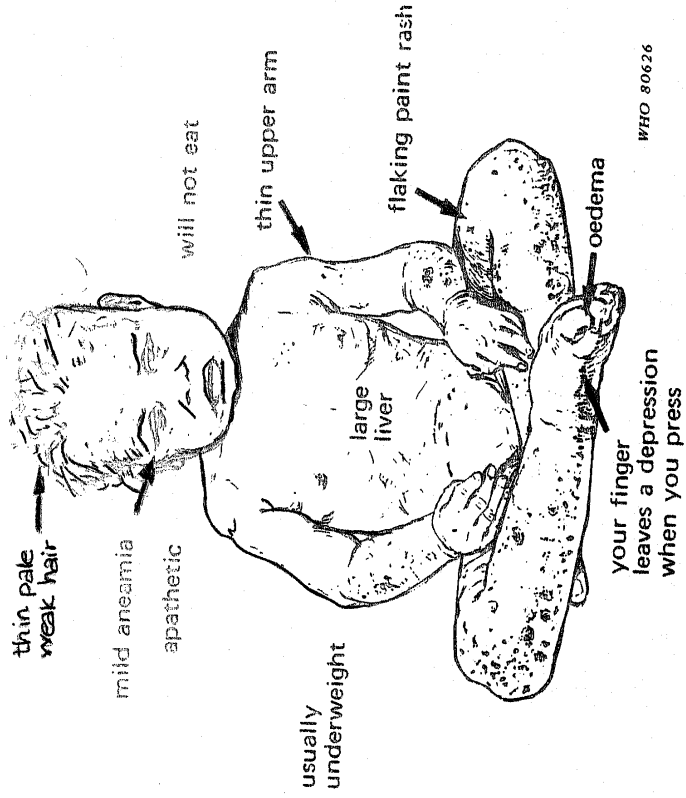
- Growth failure – weight and height decreases, child between 60-80% of the standard
- Wasting of muscles
 - Lack of proteins -> stored protein used therefore wasting of muscles occurs, but not evident due to the presence of oedema.
 - Oedema – pitting
 - Mental changes – apathetic, easily irritable
 - Hair changes – brown or reddish, easy plackable
 - Skin changes – dermatitis
 - Anaemia
 - Moon looking face
 - Usually followed by other deficiency.

Treatment:

- Diet – 150 cal/kg/day of dried skimmed milk
- Treat superimposed diseases as infections, anaemia, parasites etc.
- Nutrition Rehabilitation Centre (NRC) – health education, demonstration to mothers and follow – up child’s growth.

Management and prevention of nutritional deficiencies

www.who.int/nutrition



A child with kwashiorkor

Marasmus

Deficiency of food in general, particularly of energy

Can occur in all ages, usually in less than 4 years, more common in infants less than one year.

Causes:

- Poor feeding habits
- Infections eg. TBC, measles, diarrhoea
- Premature birth

Main signs and symptoms

- Failure to grow
- Face – old mans apprance
- Muscle wasting
- Diarrhoea
- Anaemia

Treatment

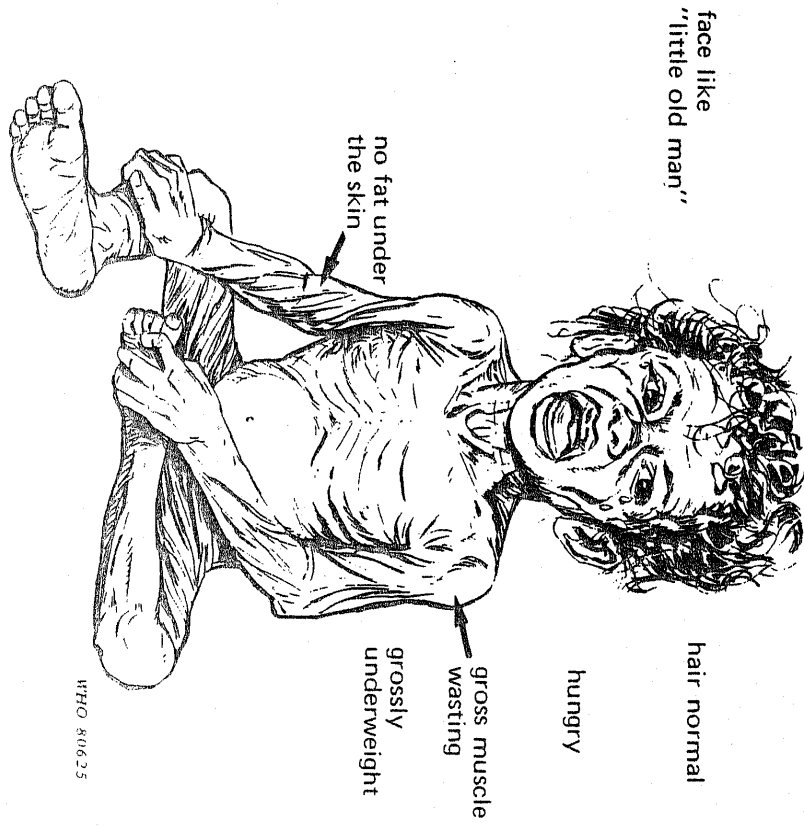
- Diet – 175 cal/kg/day
- Treat infection
- NRC

Assessment

Demonstrate special diet preparation for PEM children

Tell how to maintain hygiene

List health education topics to be given to mothers



A child with marasmus

Nutrition education to families and community

Food and nutrition education is a process by which people gain knowledge, attitude, confidence and skills necessary for developing dietary practices.

Planning Nutritional education programs

Here we can apply the steps of problem solving method

- Identify problem
- Decide on chief problem
- Suggest causes
- Decide on changes needed
- Discuss some solutions needed
- Decide on the solution
- Develop plan of action
- Carry out plan
- Evaluate

Additionally

- Specific groups to be reached
- Kind of information to be delivered
- Ways to give information must also be considered

Identify people to be reached

Background data: identify and describe people who are most affected by food and nutritional problems.

These are those we teach:-

- Discuss with people – to have need and want
- Understand how problem affects them and the kind of help they may need
- Intersect oral collaboration – community workers of other sectors.

II. Develop message

Develop a series of message, which will help people solve their food and nutrition problems. Eg. Grow and eat more leafy vegetables, breastfeed babies at least for 4 months.

When developing message **REMEMBER**

- Message is clear and easily understood
- Message fits people's life styles, tradition and culture
- Method used fits the characteristics and abilities of the group
- Message suggests changes, which the group can carry out and are not very different from what they already know and are doing
- Consistency: the message says the same thing said by other community workers.
- The group actively participates in both developing and responding to them (message)

III. Make sure a message is well suited to the group for which it is intended

- Methods
- Message
- Materials

IV. Communicating messages

Message may be delivered by:

- Spoken words – discussion, conversation, etc.
- Written words – books, pamphlets
- Visuals – diagrams, pictures, drawings
- Action – drama, demonstration...

These may be used either separately or together while choosing a method, make sure that:-

- It suits the people (targets)
- It fits their circumstances
- It is geared towards solving the problem identified.

V. Techniques for good communications

The aims of good communication is to make sure that individuals or groups can hear, see, and understand clearly the message that is being shared with them.

To communicate clearly:

- Know your audience

- Be sure that your message suits them
- Choose the right method
- Listen to them
- Be sure message communicated

Situation in which communication will be helpful:

Informal conversation – get views of many people

Home visits: - to watch families do things they have learned; to learn what they do or say; to teach them new things.

Plan for home visits:-

- Be friendly
- Be sure you and family understand/ agree on future plans
- Do what you promised to do
- Keep appointments
- Keep home visit records.

Talks

- Give to get across a particular idea or practice
- To be given a time when the audience most needs that specific information
- Tell audience what you want to say
- Encourage people to take part, observe peoples reaction

Demonstration

- To show people new skills, lively way to combine practical examples with facts.
- People can SEE, HEAR, TALK about and TAKE PART in a demonstration
 - Advantage: teaches new skills
- Use right time, familiar things to people and involve them

Feeding Recommendations

The following table shows the feeding recommendations for children under five years old in Ethiopia both during health and illness.

During illness, children may not to eat much. However, their should be the types of food recommended for their age, even though they may not take much at each feeding.

After illness, good feeding helps make up for weight loss and helps prevent malnutrition. When the child is well, good feeding helps prevent future illnesses.

A Sick child visit is good opportunity to counsel the mother on how to feed the child during illness and when the child is well.

Family Health

<u>Up to 4 months</u>	<u>4 – 6 months</u>	<u>6 – 12 months</u>	<u>12 months – 2 years</u>	<u>2 years and older</u>
Breast feed as often as the child wants, day and night, at least 8 times in 24 hours	Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours.	Breastfeed as often as the child wants.	Breastfeed as often as the child wants.	
Do not give other foods or fluids	Add complementary foods: mashed potatoes	Give adequate servings of: Shiro fitfit, merek fitfit, porridge made of cereal and legumes, mashed	Give adequate servings of: porridge made of cereal and legume mixes.	Give family foods at least 3 meals each day.
Expose the child to sunshine 20 –	softened with milk, cereal+		Shiro, kik, merek fitfit, mashed potatoes and carrot, gommen, undiluted milk and	Also, twice daily, give nutritious foods between meals such as: egg, milk, fruits, kitta, dabo.

Family Health

<p>30 minutes daily</p>	<p>legume mixes with milk.</p> <p>Give these foods with cup and spoon 1 or 2 times per day in addition to breastfeeding.</p> <p>Expose the child to sunshine for at least 20 – 30 minutes daily.</p>	<p>potatoes and carrot, mashed gommen, egg and fruits.</p> <p>Add extra butter or oil to child's food.</p> <p>- 3 times per day if breastfed</p> <p>- 5 times per day if not breastfed.</p> <p>Expose child to sunshine.</p>	<p>egg and fruits.</p> <p>Add extra butter or oil to child's food.</p> <p>Give these foods three times per day.</p>	
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Assessment

- Give nutrition education for infants using food charts
- List source of food items important to Ethiopians

Vitamin A

Vitamin A deficiency occurs when a child has malnutrition and measles. Vitamin A deficiency exposes to blindness and serious health problem. A child that gets adequate vitamin A has a higher defensive mechanism. By giving vitamin A to children, it is possible to reduce child mortality by 20%.

Therefore, a child from 9 month to 5 years has to be sent to the next health facility to get vitamin A every 6 months. Follow up on this is necessary.

Sore throat

- A child with sore throat will have fever.
- The glands around the neck can swell.
- When his throat has swollen, redness and pus are seen in the throat.
- He will have problem with taking food.

Care that will be given to a child with sore throat

- Giving much warm fluids
- Letting him to have adequate rest
- If there is pus in his throat, refer him to the next health facility.

Trachoma

Trachoma is a disease that occurs due to different microscopic organisms. The signs of trachoma are, redness of the eyes, burning pain, sometimes pus discharge, adhesion of the eye lashes and problem with opening the eyes, swelling of the eyelids.

Care that should be given to a child with trachoma

- washing his eyes with soap and water
- advising mothers to take the child to the next health facility

Preventive Methods

- Daily washing of the face with water and soap.
- Keeping personal and environmental hygiene.
- Appropriately disposing dry and fluid wastes

Meningitis

Meningitis, when it occurs in the form of epidemics, is caused by the meningococcus meningitis bacteria. When signs of meningitis are seen, the urgent referral of the child is required. Follow up is also required to know the outcome.

The meningitis that occurs frequently is caused by other varieties of bacteria (homophiles and streptococcus bacteria). Urgent diagnosis

and urgent referral to the next health facility will help to save the life of the child and to prevent the disability that results from the infection.

The signs of meningitis are:-

- fever
- headache
- vomiting
- lethargy
- swelling of the eye lids on children
- shivering (convulsions) fits
- anorexia (loss of appetite)
- menengismus (stiff neck)
- bulging of the eyes

Scabies

Definition and cause

It is a skin disease that occurs due to poor personal hygiene and transmitted through parasites.

Signs that are observed

Since scabies is a highly contagious skin disease, it mostly affects more than one family member. The signs are itching of the skin between the hand fingers, palm, elbow and other parts of the body except the face and head.

Actions to be taken

- Apply benzyl benzoate lotion on all parts of the body except the face for three consecutive days.
- Patients shall wash their body well and wash and boil their clothes before applying the medicine
- Since the disease is highly contagious, other members of the family shall be educated to keep their personal hygiene.
- If no improvement with the education they should be seen again.

Prevention methods.

- Keeping personal hygiene.
- Washing the body well and ironing or boiling all dressings.

Common Neonatal Problems

- The child is premature if born before 37 weeks.
- If weight below the standard (2,500gm).
- Has yellow colour.
- Does not suck the breast.
- Has fever
- Has problem of breathing
- Is gasping
- Does not pass urine and stool in 48 hours
- Has persistent vomiting (does not include belching)
- Has bleeding
- Has fits or convulsions

- His/her body is very much pale (severe pallor)
- Has open physical disability or problem

If the above listed health problem have occurred, advice should be given to the family to immediately take the child to the next health facility. Ensure that he/she is taken. Follow his/her health condition after he/she has been brought back home.

Vaccination

Definition:-

Vaccination is a method to prevent diseases by giving weakened live attenuated and killed micro organisms that cause diseases. Vaccination helps to accentuate the body to create its own natural defense mechanisms before a disease occurs.

The six childhood diseases that can be prevented by vaccination

The following diseases are the main causes of child morbidity, mortality and disability and that can be prevented by vaccination.

Types of diseases	Vaccination
1. Tuberculosis (TB)	B.C.G.
2. poliomyelitis	OPV
3. Pertusis	} ----- DPT
4. Diptheria	
5. Tetanus	
6. Measles	

Since vaccination very much helps to prevent child hood diseases or weaken their severity, children should be taken to health post to get their vaccination on time. Every child must complete his full vaccination before celebrating his first birth day. In view of this, we must check every child when we meet him in his home or at health facilities, whether he has taken vaccination against the above disease and if not shall be given on the same day, the vaccination that he has not taken.

- If a child is confirmed to have AIDS, vaccination will not be given. But if he/she is HIV carrier, he/she must be vaccinated.
- A child will not take the next DPT₂ or DPT₃ vaccination after 3 days of DPT vaccination if he develops shivering or goes to shock. But, if a child has common cold, diarrhea or fever, he should take the vaccination. He/She has to take his vaccination on the day he/she is scheduled to take.

Vaccination Schedules

Age of vaccination	Type of vaccination	Dose	Made of administration
At birth	BCG	0.1 ml	Upper arm of right intradermal
	OPV	2 drops	Oral
6 weeks	DPT1	0.5 ml	Front outer side of the thigh muscle
	OPV1	2 drops	Oral
10 weeks	DPT2	0.5 ml	Front side of the thigh muscle
	OPV2	2 drops	Oral
4 weeks	DPT3	0.5 ml	Front side of the thigh muscle
	OPV3	2 drops	Oral
9 months	MEASLES	0.5 ml	Upper arm of right hand subcutaneous

Harmful traditional practices applied on children

Tonsillectomy and extraction of the milk teeth

Most parents think and judge that their children have enlarged tonsil when they see that their children have fever and are not taking food as usual. But children will have fever whenever they have any illness. Fever and loss of appetite are signs of many childhood illnesses. They are not only signs of specific illnesses. There is fear from mothers that the tonsil can explode and lead to death. This is not a true judgment. The child can rather die from bleeding when the tonsil is cut. In addition to this, since the instrument used for cutting the tonsil is not clean, micro organisms can enter the body through the wound and make children victims of HIV and other diseases. Because of this, the child will be exposed to other illnesses and death.

Sore throat is an infection when the left and right tonsils are swollen and have pus discharges. When children are seen with this condition, they should be taken to a nearby health facility. It is unwise to take them to a traditional practitioner for removal of the tonsil (tonsillectomy).

Extraction of the milk teeth

The explanation that parents give to the cause of vomiting and diarrhoea is unremoved milk teeth. This is an explanation given due to lack of knowledge. Diarrhoea and vomiting usually occur due to

lack of hygiene. Since the growing teeth is extracted under the pretext of gum extraction, it is important for mother's to refrain from taking their children for such harmful traditional practice. The child should rather be taken to the nearest health facility whenever he has vomiting and diarrhoea.

Female circumcision

There is no need to circumcise female children. It will lead them to a big problem due to heavy bleeding. The scar that remains after circumcision will have also an effect during child birth. Therefore, an intensified public education should be given to control this harmful traditional practice.

Blistering of the skin

There will be no solution by blistering the skin when a child is sick. It is just burning the skin. It is creating an additional suffering to the child. Therefore, public education should be also given to control this harmful traditional practice.

Cutting the eye brows

Cutting the eyebrows do not also give any solution to a sick child. This practice will instead, expose the child to diseases such as HIV, tetanus and other communicable diseases through the use of unclean and unsafe instruments.

Preventing children from getting sunlight

Children will be exposed to rickets (problem with the chest and leg bones) if they are not exposed to sunlight at their early age.

Traditional medicines

There are many traditional medicines in Ethiopia. However, there is nothing known about these medicines. The number of children who died due to these medicines is not small. Therefore, it must be known that giving traditional medicines to children, which their efficiency is not yet known, is dangerous.

Swallowing of butter

Mothers say that swallowing butter will palliate (soften) the child's abdomen. This is thinking far away from the truth. Since the butter is heavy to the gastro intestinal system of the child, it causes diarrhoea and vomiting. It can also cause other diseases since it is not hygienic. If butter goes into the respiratory system of the child, he will be suffocated and will die. Therefore, this practice should be discouraged.

Mothers and families must be informed about the risks of the above described traditional practices. If they are not informed, their children will either become disabled or die at their early age.

Accidents that can occur to children

- Fire shall not be around places where children play. Children should not be let to enter rooms where there is fire. The room should be locked and stoves should be placed on an elevated place.
- Educate children to see either sides of the road (left and right) while crossing a road. Inform them not to play on the road.
- Keep out of reach of children, any type of medicine, gas, benzene, alcohol, etc.
- Children should not be left to sit or sleep on high places such as table, mud bed etc. If they are left on these places, they will suddenly fall and get fractured.
- If the child is somewhat big, he should be educated to show to his parents all the unique play materials he gets, and not to hide these materials. These actions can prevent the child from accidents such as land mine.
- Educate children not to play with sharp materials such as pins, needles, knives, blades. These materials should always be kept out of the reach of children.

Care should be taken to prevent children from all forms of accidents. But, they must be immediately taken to a place where urgent assistance can be given to them when they are faced with accidents.

Preparing balanced diet for families with local menu

What is balanced diet? Basic facts about food.

Every thing we eat and drink is called food. Things consumed as food, differ from one country to another and some times even within different regions of one country. The things people regard as food in different parts of the world have been selected by trial and error over years. The health worker must know what type of foods are consumed in his/her area, what items of food people like, and what foods people do not eat, even though they are cheap and available, you should know certain type of food that people do not consume

Functions of foods

Foods have three important functions for our body:

- To sustain growth – help body to grow in size
- Provide energy for our activities
- To give protection from diseases

Foods contain chemical substances known as nutrients. This can be divided into three categories according to their function:

- Energy giving nutrients
- Body building nutrients
- Protective nutrients.

Most foods contain a mixture of the three categories of nutrients, but usually in one type of food categories one is found in large amount than others.

Eg. Cereals as rice and wheat contain all the three categories of nutrients, but the energy-giving nutrients are the most abundant, it can also supply sufficient nutrients promoting growth. Commonly eaten foods can be broadly divided into three groups according to these functions.

Energy-giving foods:

Cereals such as rice, wheat, corn, Teff, fats and oils, butter
Starchy vegetables like potatoes, sweet potato, sugar, and honey

Growth promoting Foods:

Most foods of animal origin: meat, milk, eggs and fish.
Some foods of vegetables origin: peas, beans and nuts

Protective foods

Vegetables- green leafy types
Yellow and orange colour fruits and vegetables like carrots, papaya, mango, tomato, and orange.

Need for growth promoting foods

For infants growing rapidly e.g. babies double its weight in five months. Thus children need foods to promote the growth of soft tissues and bones.

Proteins are nutrients that promote the growth of soft tissues.

Minerals such as calcium promote the growth of bones. Foods for young children should contain both proteins and minerals.

Good foods necessary for infant growth

- Pulses such as lentils grams
- Peas and beans – Soya beans
- Nuts – peanuts
- Green leafy vegetables
- Milk and milk products
- Other foods of animal origin – meat, fish and eggs.

During pregnancy a woman's body grows rapidly. The growth material comes from what she eats. If she is on poor food during pregnancy, she and her baby will be affected. The weight of the baby will be less than 2500gm or will be a very low weight for date. Thus the mother and baby will be malnourished as well as exposed to infectious diseases. Dietary care is the starting point for good infant nutrition.

Breastfeeding mothers also need extra growth-promoting foods. Human milk is produced in the breasts of the mother from raw materials, which come from the diet. To produce enough milk of good quality, a mother must have a diet consisting of adequate amounts of cereals, beans, vegetables, oils as well as animal foods if possible.

- Infants and young children are very active and need a lot of energy
- They cannot chew properly

- They eat only a small amount of food at each feed. Therefore, give them – both growth promoting and energy-rich foods; foods of soft, semi-solid content and small but frequent feeds.

Some examples of weaning foods in Ethiopia

- Teff 60%, Field peas split 25%, Sugar 8%, And salt 3%
- Enset 80%, pea flour 17% and salt 3%
- Corn 67%, sour milk cheese 30%, and salt 3%
- Emmer wheat (mashilla) 67%, sour milk cheese 30% and salt 3%
- Corn 67%, sour milk cheese 30% and salt 3%

Promoting knowledge of use of local foods

- Teach and demonstrate about foods during ANC
- Teach in schools
- At women's associations
- Teach mothers and communities at large how to grow these.

Growth monitoring and promotion

Learning Objectives

By the end of this session the learner will be able to:

- Tell meaning of growth monitoring & promotion
- List the purposes of growth monitoring & promotion
- List components of growth monitoring & promotion
- Name 5 steps necessary for growth monitoring & promotion

- Repeat the process of weighing under 5 and plotting on Childs' card
- Restate reasons for doing growth monitoring in community instead of during immunization
- Report factors which contribute to effective growth
- Report factors which contribute to poor growth
- Examine reasons for referring children under 5
- List the steps involved in preparing for referral

Meaning of growth monitoring promotion

Growth monitoring and promotion of children under 5 is the proper weighing, clear and proper plotting of weight on a child health card, interpreting and counselling the mother or caretaker to understand what the weight means and take appropriate action. (Weighing should be done monthly for the first 2 years and every after 2-month's up to 5 years.)

Giving mother or care taker information on how to monitor baby's development and growth, care and diet given to baby will promote both physical and mental development.

The effectiveness of growth monitoring and promotion is measured by correct weighing of the child from birth up to 5 years at regular

intervals correct plotting on the child's growth curve interpretation of curves and relevant follow up action.

Purposes of growth monitoring

- Create awareness among parents/ guardians about importance of growth monitoring and promotion of under 5
- Encourage parents/guardians bring under 5 children for growth monitoring
- Give information to enable parents/guardians and community identify under 5 who need special attention
- Explain to parents the different steps that should be taken to ensure successful growth and promotion
- Educate parents on factors which contribute to effective growth, poor growth especially for the for the girl child

Components of growth monitoring

- Monthly weighing and plotting on growth chart
- Weighing all sick babies and plotting on chart
- Using the information on the child's health growth and feeding to decide what to do
- Counselling on the care and feeding of the child
- Deciding on follow-up to find out how the child is responding to the actions

- Sharing information with the community on the health of the children

Steps for successful growth monitoring and promotion

Step 1: Motivate care takers to bring their children and become involved in Whole process

Step 2: Measuring weight accurately and safely

Step 3: Recording/plotting the weight on the chart

Step 4: Interpreting growth curve

Step 5: counsel the mother according to growth curve and what you may have found out to be the cause of poor growth

Performance of Growth Monitoring

Every mother should be provided with a child health care card after delivery or at the first contact at the child health clinic. All relevant identification data shall be entered on one side of the card is fully devoted to growth monitoring. At each visit growth monitoring should be done as follows:

- ◆ Record the month of birth in the box for the month of the first year.
- ◆ Birth weight is recorded on the line to the right of the Kg numbers.
- ◆ The Kg numbers indicate the line on which they are printed.
- ◆ Indicate the month when the weight is plotted on the card.

Interpretation of growth monitoring chart

The first sign of different forms of protein energy malnutrition (PEM) is growth failure. Weighing a child regularly, plotting the weights on a growth chart and understanding the direction of the growth line are the most important steps in detection of early malnutrition. Eventually, the chart shall be interpreted as classified below for any child whose weight is plotted.

Nutrition Classification: Normal= > 80%; mild Malnutrition= 70-80%; Moderate malnutrition= 60-70%; Severe Malnutrition= < 60%. It is very important to follow subsequent measurements and plotting, to watch the direction of the line showing the child's growth.

Child's Condition good gaining weight: This means the child is growing well and as intervention we have to compliment the mother.

Danger signs: Stagnant- meaning not gaining weight. Here find out why. Poor nutrition? Infection? As an intervention process instruct the mother, for support.

Very dangerous: means losing weight: losing weight may be ill and needs care. As an intervention counselling. Return soon, admit or refer.

Growth Monitoring Interventions

Health and nutrition education shall be given on prominent childhood diseases in the area including diarrhoea, ARI, etc.

Importance of breast feeding, weaning food introduction

Practical demonstrations on the use of locally available foodstuffs.

Treat health problems of cases with mild to moderate cases of Protein Energy Malnutrition (PEM).

Refer all cases with signs of severe malnutrition (ie. Those with dangerous signs)

Educate the mother on Importance of breast feeding

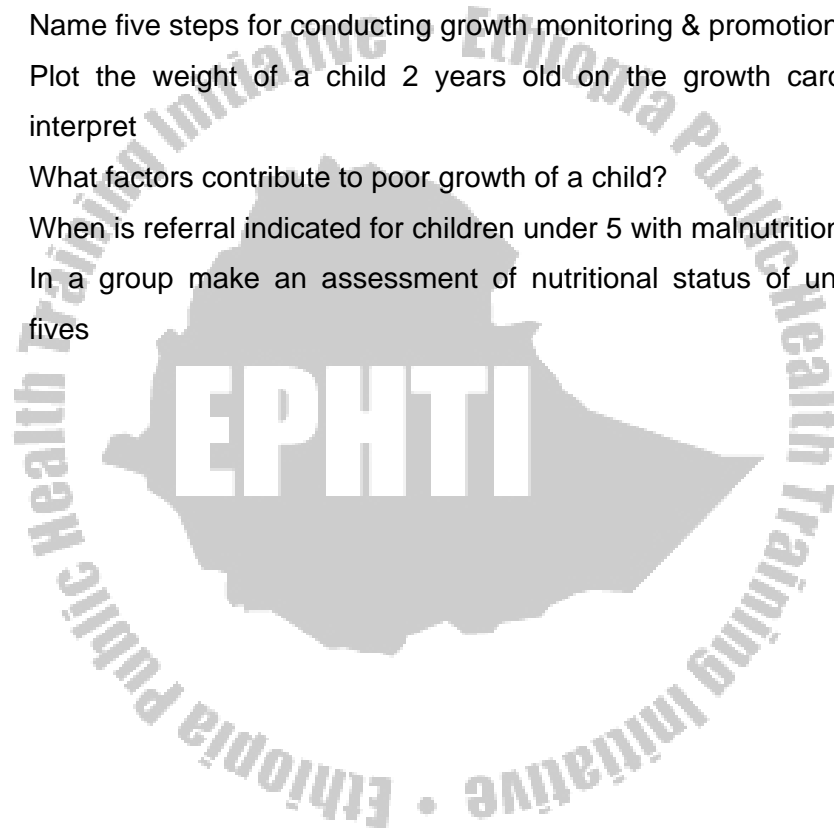
Nutrition supplementation depending on the need

Recommendations for well child visit and GM/Program

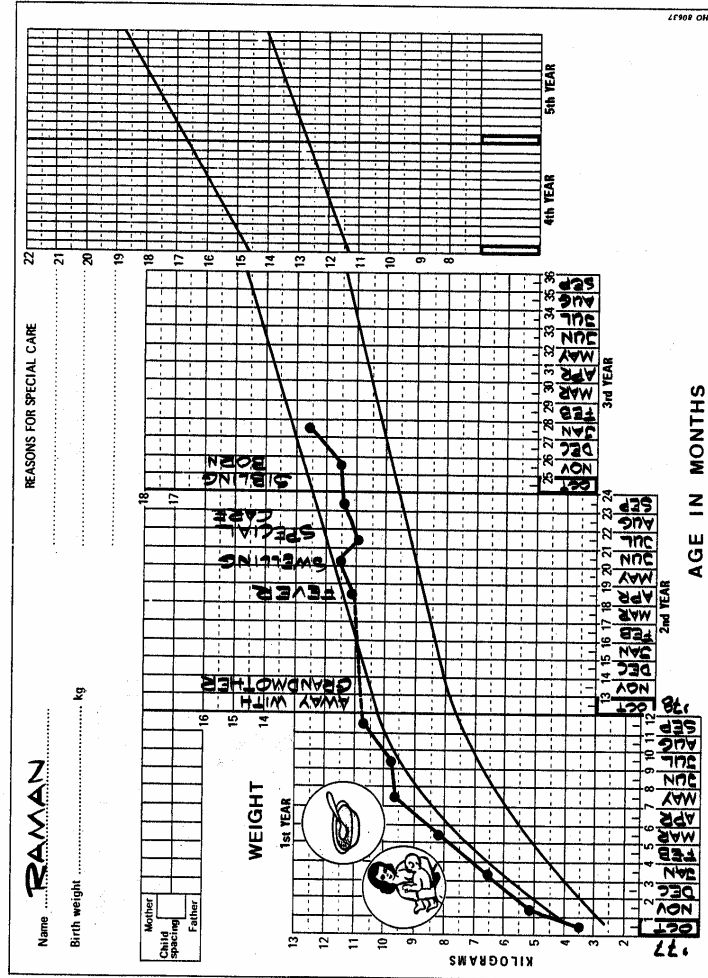
- ◆ Monitor infant/child's growth
- ◆ Assess and counsel on feeding (BE + CF)
- ◆ Assess and treat infant for anaemia
- ◆ Promote consumption of iodised salt
- ◆ Supplement vitamin A
- ◆ De-worm and check vaccination status

Assessment and discussion

1. What do we mean by growth monitoring & promotion?
2. List three purposes of growth monitoring & promotion
3. List five components of growth monitoring & promotion
4. Name five steps for conducting growth monitoring & promotion
5. Plot the weight of a child 2 years old on the growth card & interpret
6. What factors contribute to poor growth of a child?
7. When is referral indicated for children under 5 with malnutrition?
8. In a group make an assessment of nutritional status of under fives

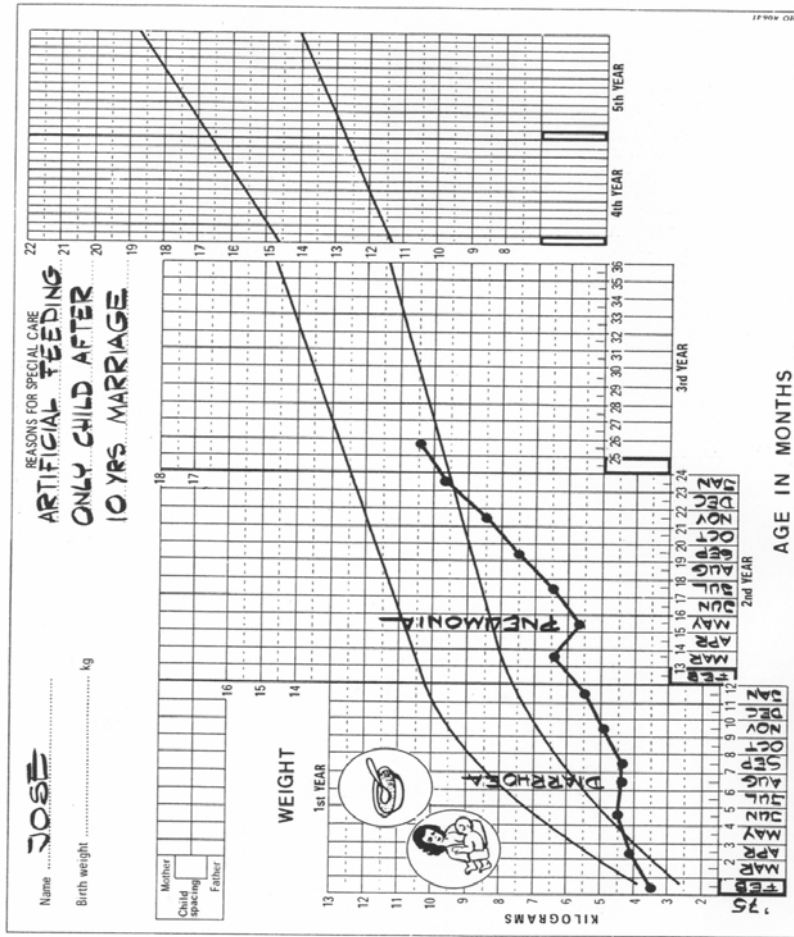


TRAINING COMMUNITY HEALTH WORKERS IN NUTRITION



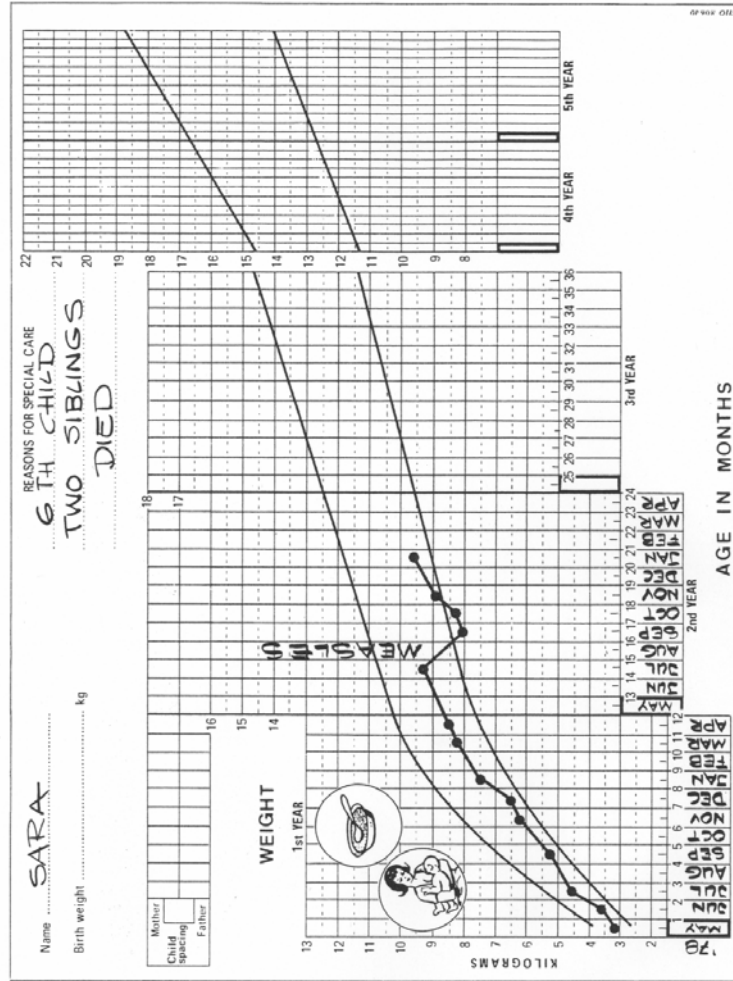
Growth chart of Raman

Measuring and Monitoring Growth and Nutrition



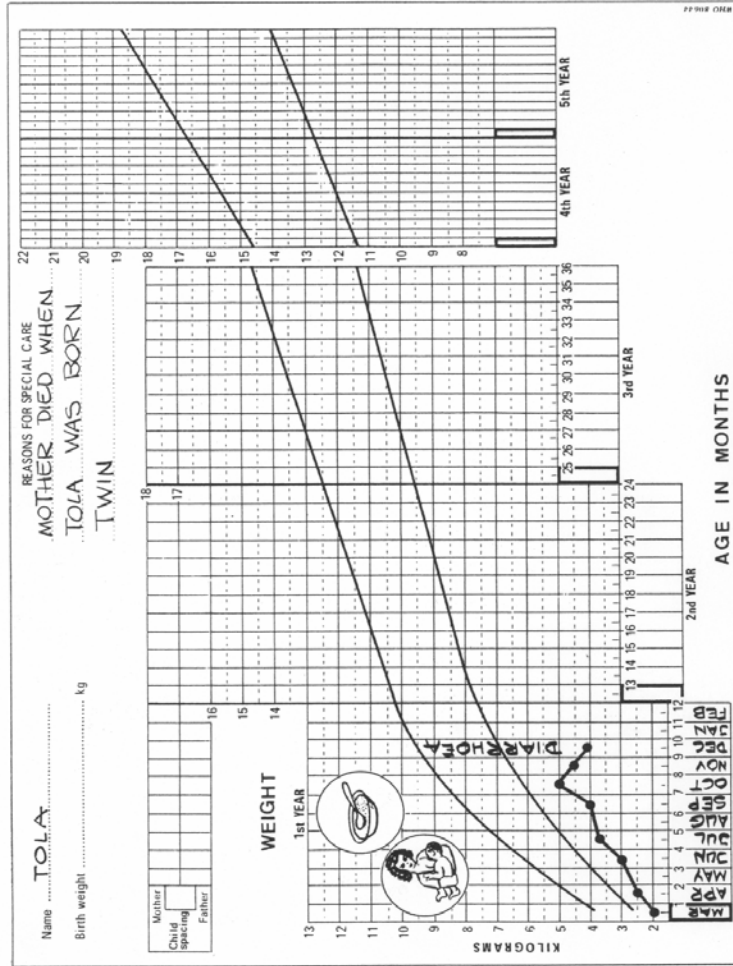
Growth chart of Jose

Training Community Health Workers in Nutrition



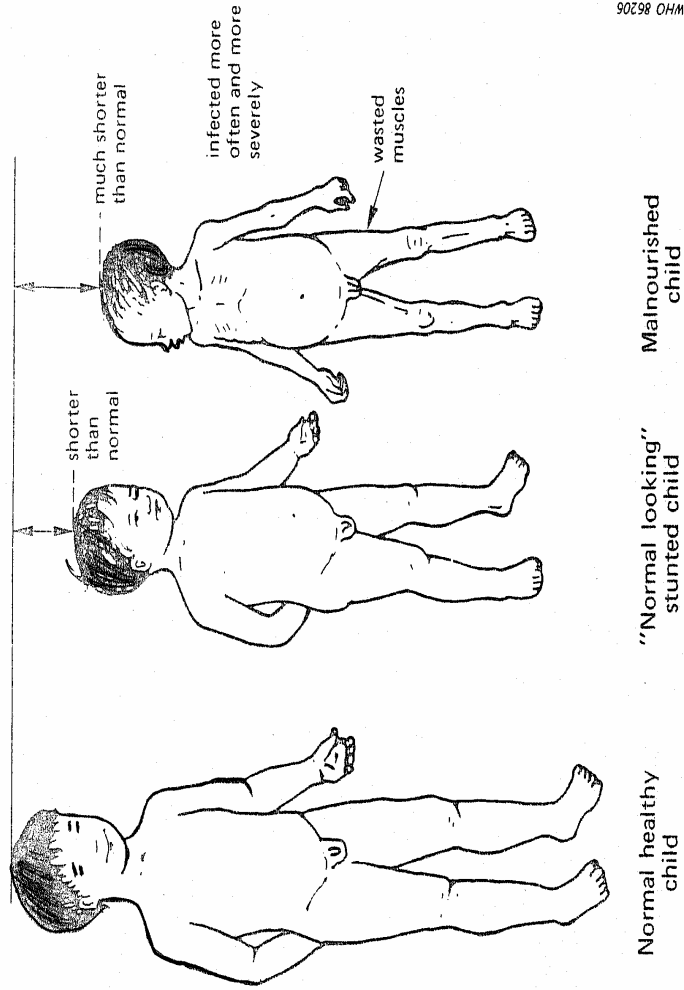
Growth chart of Sara

Measuring and Monitoring Growth and Nutrition



Growth chart of Tola

Management and Prevention of Nutritional Deficiencies



Characteristics of the underweight child

UNIT FOUR

Adolescent Reproductive Health Services

Learning Objectives:

At the end of this session the trainee will be able to:

- Be able to understand the basic concepts of ARH
 - Be able to describe major ARH problems
 - Be able to describe ARH services
 - Be able to understand how to live in harmony in the community
- ◆ Adolescence is a period of high developmental changes in physical, mental and social conditions.
- ◆ In this period the adolescent youth fails to control his emotions, listen to parents' advice and begins to indulge him/her in unhealthy behavioral activities.
- ◆ The youth is categorized in three age-groups 10 to 14 years old as teenage 15 to 19 year as early adolescent and 20 to 24 years as post-adolescent. In general, the age-group from 10 to 19 years is classified as adolescent.

- ◆ The problems of the adolescent arise from lack of understanding and proper response to the changes that occur during development, due to emotional behavior, peer pressure and the lack of experience of the prevailing social system and its interactions. In order to be prepared and respond to problems related to adolescence it is necessary to acquire a comprehensive knowledge concerning adolescence.
- ◆
- ◆ The adolescent reproductive health programme is one of the priority components of the Health Extension Package. The programme is designed to focus on the production of healthy adolescents that will effectively succeed the present generation.

Objective:

General objective:

Adolescent reproductive health program in general and the extension package in particular aims at producing healthy adolescent population that is physically, mentally and socially well-developed.

Specific objectives:

- provide adequate information and education to reduce and/or gradually eliminate traditional harmful practices that cause adolescent reproduction health related problems.
- Assist adolescents to protect themselves from HIV/AIDS and other sexually transmitted diseases.

- Protect adolescent young persons from unwanted pregnancy, high risk abortion, and other reproductive health related problems.
- Assist the adolescent young persons to protect themselves and their families from using addictive plants, narcotics and alcohol.
- Guide and alert/motivate adolescent to utilize available family planning and reproductive health services.

Strategies:

- ♦ Creating enabling conditions for the adolescents to receive health education and services on HIV/AIDS and other sexually transmitted diseases.
 - Providing adequate information to protect adolescents from casual sex, unwanted pregnancy, early childbearing age, and high-risk abortion.
 - Educating adolescents on traditional harmful practices and protect them from incidents of rape, early age marriage and female genital mutilation.
 - Creating an enabling environment for adolescents to receive adequate information and education, to develop skills and improve their living styles and eventually become responsible nationals.
 - Providing adequate information and education to adolescents to protect themselves from addictive plants, alcoholic drinks and narcotics.

- Establishing forums to discuss issues and problems related to adolescent reproductive health.
- Expanding adolescent reproductive health programmes in schools.
- Training of Trainers (TOT): Selecting and training volunteer housewives who have completed education and/or are dropouts from school. These volunteers are residents of the Kebele and should be able to coordinate the community members. The volunteer house wives will be aids to the health extension workers and will have the task of educating their neighbors.
- Youth Day Organizing and initiating the youth groups engaged in the activities of reproductive health to develop and present short dialogues, dramas and writings under the slogan youth to youth and present them for the Kebele residents. In addition, celebrity persons should be invited for discussions. The youth should provide sustained education on adolescent reproductive health and should commit itself to make the day a special occasion to strive to bring behavioral changes.

Changes developing in young females:

- The breast starts to develop and grow, feeling of breast pain; growth and sticking out of the nipples;
- Growth of hair in the armpit and pubic (around the genitals).
- The initiation of menstrual period;
- Broadening of the pelvic;
- Change in the amount and smell of body sweat;
- Increased eagerness to know more about sex; and
- Developing keen Interest and/or falling in love with opposite sex.

Changes developing in young males: -

- Change of voice;
- Building and broadening of shoulder and chest;
- Growing beard; starting to grow hair in the armpit, pubic and perhaps in the chest;
- Development of male genitals and testicles;
- Starting to release sperm;
- Change in the amount and smell of body sweat;
- Increased eagerness to know more about sex;
- Developing keen interest and/or falling in love with opposite sex; and
- Releasing sperm for the first time in bed during sleep.

Education on adolescent reproductive health related problems:

HIV/AIDS and other sexually transmitted infections:

The major sexually transmitted diseases are HIV/AIDS, syphilis, chancroid, gonorrhoea, etc. The prevention and control measures for both HIV/AIDS and other sexually transmitted diseases are the same. Therefore preventing and controlling sexually transmitted diseases means without doubt preventing and controlling HIV/AIDS.

HIV/AIDS prevention and control measures:-

- Abstain /refrain from sexual intercourse before and outside marriage;
- Sexual intercourse between two HIV/AIDS laboratory tested free sexual partners must be based on absolute trust and sustained one to one relationship.
- Use condom properly, if for any reason or reasons sexual intercourse before and outside marriage is needed.
- Don't ever share cutting and sharp instruments for use. At home separate items used by adults and children such as blades, needles, etc;
- Advise and follow up patients sick from sexually transmitted diseases other than HIV/AIDS to go to nearest health facility;
- Don't use the services of legally uncertified health facilities;

- Refrain from harmful traditional practices that expose to HIV/AIDS and other sexually transmitted diseases;
- Keep clean the areas around genitals;
- Advise and motivate suspected young individuals to go to health facilities and use HIV/AIDS counselling services.; and
- Provide support and care with affection to people living with HIV/AIDS and victims at family and community levels.

Female genital mutilation

Female genital mutilation is one of the harmful traditional practices that cause problems of adolescent reproduction health. It is widely practiced in 28 African countries including Ethiopia. Mutilation of female genitals causes immediate and delayed health problems in young females. The immediate health problems of the young females include bleeding, unconsciousness, septicemia, problem of urination and sometimes death. Among the problems that come late are infertility, scar, fistula, delay in labour, infant and maternal mortality and HIV/AIDS. In addition to the violation of human rights related to females, it seriously affects the happy and peaceful marriage of such victims. Furthermore, the number of deaths of mothers and infants is increased. It is essential to prevent and eventually eliminate the harmful traditional practices of mutilation of female genitals. The choice of intervention would be to provide sustained and adequate information on reproductive health. This could be realized through the coordination and support of the Kebele management, religious

leaders, schools, women and youth associations, other government organizations, NGOs and the communities at large.

High risk abortion

The youth engages in casual sex in the absence of adequate knowledge on sex and reproductive health and often without contraceptive methods. The consequences of such traditional practices is that the young females are exposed to illegal and high risk abortion resulting in illness, disability and death.

Main reasons for abortion:-

- Lack of appropriate information on sex and reproductive health;
- The non-existence of adequate services for abortion;
- The victims don't have access to adequate financial and other supports; and
- Communities don't effectively utilize available family planning services to prevent and control abortion.

Activities to prevent and control high risk abortion:-

- Increase awareness of the youth on sex abstinence and healthy behaviours that reduce reproductive health related problems.
- Because of casual sexual motive, young females are frequently subjected to rape and unwanted pregnancy. Therefore, they

should be educated and convinced strongly to commit themselves to utilize contraceptive methods to prevent unwanted pregnancy.

- Educate the youth to abstain /refrain from sex before marriage.
- Educate the youth to stick on one to one sex partnership as an important option.
- In case of unforeseen circumstances use condom.
- Conduct frank discussions on sex with friends and family.
- Provide continuous education to communities to give moral, and material support and care to HIV/AIDS patients and victims if possible the support should include to communities working on their farms,
- Provide adequate information and education on the complex consequences of abortion on the female youth, so that the communities will support the victims physically, mentally and socially.
- Motivate and mobilize the youth in the farmers association to establish health clubs that promote sex abstinence, healthy reproduction and healthy sex behavior among the youth, in addition, the health clubs should be supported in their efforts to disseminate information and create healthy environment.

Early-age marriage

Marriage in Ethiopia is often concluded according to established traditional practices and norms in different nations and nationalities. In the rural areas, however, it is common practice by families to marry their young girls at an early age. Early-age marriage is preferred by families for the following reasons. First, families prefer to get their daughters married while alive and or before they get old. Second, the marriage is accomplished with wealthy family in order to improve the living conditions of the bride's family. Third, to establish better relationship and tie between two families. Fourth, to prove that the bride is virgin, a litmus test that reassure that the bride is from a decent family. Fifth, to ensure that the bride is married at the right and socially accepted age limit.

Consequences of early age marriage on young females:-

Miss education opportunity and /or become out of school: young females miss the opportunity to go to school if she got married at an early age. The next episode is that the married girls often get pregnant. As the girls didn't get adequate education, their fate is indeed decided by others such as her parents, her husband and his parents and relatives etc.

- **Working/serving others:**

Girls work at home for their parents and brothers. Even though, girls are married at an early age and are too young, they continue to work for their husband and his family (the parents etc). At the same time their fate is decided by others. This state of affairs becomes an impediment to develop and acquire knowledge and skills to decide on their fate and related affairs.

High maternal and child morbidity and mortality

Some of the consequences of early age marriage are delayed labor, fistula and rupture of the bladder. These incidents occur because the pelvis of the young girls is still fully undeveloped and narrow. Fistula is a dirty injury that results in the loss of control of urine and stool which results in incontinence and body smell. The young female victims of such mishapening are segregated by communities. Furthermore, abnormal labor often ends in child death.

Adolescent RH related problems

The consequences of alcoholism

- Intoxicates brain and liver;
- Reduces appetite and causes protein and vitamin deficiencies;
- Reduces the capacity of understanding of prevailing situations and gradually drives individuals into fight;
- Initiates pain in the stomachs and spleen;
- Induces heart and kidneys illnesses.

Measures to prevent alcoholism:-

- Educate students in schools in the kebele on the consequences of alcoholic drinks on their health.
- Disseminate adequate information and education to raise the awareness of communities to enable them to participate in sustained efforts to prevent the youth from alcoholism and its adverse consequences on health and eventually to create alcohol free society.
- Provide adequate information and education to raise the awareness of communities on alcoholism to help them grow their children with care, to be responsible nationals.

- Young farmers often travel to nearby towns and village markets. They drink alcohol as refreshment in these areas. Then these young farmers get drunk and are triggered to fight between themselves or some of them indulge in sex that may result in the infection of HIV/AIDS and other sexually transmitted diseases. Therefore, the young farmers have to be made aware that such incidents can happen using pamphlets, health education in planned community meetings and other venues.

Addictive substances and drugs:-

Chat, hashish and cannabis are the major known addictive substances that cause the following health and related problems.

- Decayed tooth;
- Loss of appetite;
- Constipation;
- Reduced sex desire and /or feeling;
- Mental illness;
- Isolate oneself from family and community social values;
- Inability or loss of desire to participate in all development activities, schooling, farming etc,
- Participate in criminal acts; and
- Exposed to HIV/AIDS and other sexually transmitted diseases.

Measures to prevent addictive substances and drugs:-

- Provide planned health education to communities in kebeles and in nearby schools.
- In order to raise search and bring behavioral changes, provide adequate informative and education focused on the grave consequences of chat and other addictive substances to communities in general and the youth in particular. These activates should take place in youth forums in the form of dramas, discussions etc. by elderly and religious people.
- The health extension workers in collaboration with the agriculture extension workers should make continuous efforts to convince and influence the youth and adult farmers to acquire their income by harvesting other cash crops such as coffee, fruits, vegetables etc. Instead of the harmful chat and other addiction substances.
- Provide planned and continuous health education to the rural population to use drugs officially prescribed by health workers and by collecting them from clinics and rural drug vendors.

Provision of adolescent RH services:-

Establishment of adolescent reproductive health center:-

Activities on Youth Day:-

Family Health

- Drama:- initiate the youth to prepare and show drama that focuses on youth problems to communities.
- Play /dialogue:- Initiate the youth to stage exciting and educational but short play /dialogue to the youth at large.
- Short-writings:- initiate the youth to prepare short writings in conjunction with nearby schools to be presented on the Youth Day.
- Organize Youth peers to discuss on issues and problems related to adolescent reproductive health.

Establishment and organization of youth recreational facilities:- Establish youth recreational centers with rooms and other spaces for traditional sports activities and meetings. This will keep away the youth from harmful environment.

Provision of family planning and reproductive health services:

- Provide counselling service to the youth that wants to utilize family planning health services; and
- Promote and distribute condoms to prevent the youth from HIV/AIDS and other sexually transmitted infections;

Assessment and group discussion

1. List some factors for Adolescent Health promotion
2. In what possible ways do we improve Adolescent Health?
3. Name some contributing factors to adolescent sexual and reproductive health promotion



UNIT FIVE

Sexually Transmitted Infections

Learning Objectives

By the end of this session you will be:

- ◆ Aware of the type of sexually transmitted infections in Ethiopia
- ◆ Be knowledgeable about the mode of transmission and prevention of STD
- ◆ Knowledgeable about HIV/AIDS, transmission and prevention

STD is a group of disease, which are spread from person to person by sexual intercourse. Each disease is caused by a germ, bacteria or virus, which enters the body during intercourse with an infected person.

Venereal disease can be attached to any part of the body and produce serious complications. Most of them can be cured provided person seeks medical advice and help as soon as possible.

The most common STD in Ethiopia is the following:

- 5.1. **Gonorrhoea:-** is a sexually transmitted disease caused by the bacterium *Neisseria gonorrhoea*. A person carrying the bacteria when one mucus membrane comes into contact with another's

transmits it. It causes inflammation of the genital mucus membrane in both sexes.

5.1.1. Incubation Period

The average incubation period is 3–7 days after sexual contact although women may remain symptom – free for up to 3 months.

5.1.2. Signs and Symptoms

5.1.2.1. In women

- Vaginal discharge
- Frequency of urination
- Abdominal pain and backache
- Irregular and painful menses
- Pain with intercourse and post coital bleeding

5.1.2.2. In Men

- A thick yellow/green purulent urethra discharge
- Urethra irritation associated with dysuria and frequent urination

5.1.3. Complications of gonorrhoea

If the disease is not properly treated at once, it can lead to permanent damage of the reproductive organs in the women. This can result in a couple not being able to have children or infertile.

An infected pregnant woman can pass the germs to her baby during birth. About two days after the infected child is born, it will have a thick discharge (pus) from the eyes. If this is not properly treated the child may later become blind.

5.2. Syphilis:

Is a sexually transmitted disease caused by the microorganism (spirochete)- *Treponema pallidum*. The organism usually enter the body through invisible breaks in the skin or through intact mucus membranes lining the mouth, rectum, or genital tract

5.2.1. Incubation Period

It is usually from nine to ninety days (3 to 4 weeks on average)

5.2.2. It is transmitted mainly in the following way:

- ◆ Sexual intercourse
- ◆ Occasionally by kissing when one partner has moist syphilitic lesion of the mouth or throat
- ◆ Organism passing from the infected mother to fetus
- ◆ Blood transfused

5.2.3. Signs and Symptoms of Syphilis

Unlike gonorrhoea, a person who has syphilis has on pain while passing urine. However, the person will notice a painless hard ulcer

(sore or would) on the penis or vagina about 10 days after sexual intercourse with an infected person.

Another common sign is painful swollen glands in the groin. At this stage it is important to go for proper medical treatment because the disease can be cured at this time.

If not treated, the sore and the swollen glands will go away on their own but the germs remain in the blood.

5.2.3.1. Stage of Syphilis

5.2.3.1.1. Primary Syphilis

Three weeks after exposure chancre in an undulated penis, anus, edge of vagina, cervix or mouth. The signs will disappear within two to six weeks later even without treatment.

5.2.3.1.2. Secondary Syphilis

About six weeks after the healing of the primary infection rashes tend to be quickly passing and do not itch. These symptoms may disappear in 2 – 6 weeks even without treatment.

5.2.3.1.3. Tertiary Syphilis

10 – 20 years – Heart disease, brain damage, spinal cord damage, blindness. One in four persons not treated for secondary syphilis will eventually suffer incapacity or death from the disease.

Symptoms may be absent until tertiary damage occurs. Congenital syphilis - a serious infection in new born – occurs frequently if pregnant women with syphilis are not treated.

5.2.3.2. Complications of Syphilis

About two months later the infected person will develop a fever, headache and a skin rash. At this time it is still not too late to go for proper medical treatment to get cured.

Even if a person is not treated the signs will go away, but the germs still remain in the blood. Then the germs spread to various parts in the body, such as the heart and brain. Even if a person gets treatment at this stage, the damage is already done it cannot be cured.

5.3. Chancroid:

A sexually transmitted disease caused by the bacillus *Haemophilus ducreyi*.

It usually happens from 3 to 7 days. Occasionally it may be longer.

5.3.1. Signs and symptoms

- There will be a soft ulcer on the genital area (penis or vagina) within 3 – 4 days after sexual contact and frequently swollen glands in the groin accompany it. The glands often break through the skin, burst and start to discharge pus. The pus from the ulcer and glands is infectious. Chancroid is more common in males than females.

5.3.1.1. In males

It is found on the under surface of the prepuce and shaft of the penis.

5.3.1.2. In females

It is found on the labia minora and labia majora.

5.3.2. Complications

Ulcers (soft sore) will get infected with germs and healing will be slow causing scarring.

5.4. Chlamydia: A sexually transmitted disease caused by infection with the bacterium chlamydia trachomatis.

5.4.1. Signs and Symptoms

- Enlarged lymph gland in the groin areas which could be unilateral, lateral or bilateral
- It is very painful fluctuate and may rupture causing fistula.

5.4.2. Complications

- Narrowing of the tissue affected.
- Infertility, fistulas.

5.5. Herpes:

It is a sexually transmitted disease caused by another type of germ. It is spread from one person to another during sexual intercourse and through sharing contaminated materials such as towels.

5.5.1. Signs and Symptoms

- Painful sores on the penis and some pain during sexual intercourse.
- An infected woman will have itching and pain during intercourse.
- She may also have blisters that make her uncomfortable.
- The skin where herpes blisters are become weak, making it easier for other STD and HIV virus to get in to the body.

5.5.2. Complication

People who have herpes must go for proper medical treatment. This is because it is a very difficult disease to treat. Once it has been treated, it goes away, but may come again Herpes infection is linked to cancer of the cervix.

5.6. Infertility

This is one of the major complications of sexually transmitted infections. Around the world, infertility represents a major health and social problem. For women in many developing countries, the inability to have children can result in stigmatization and abandonment by their husbands. The highest rates of infertility in the world occur in sub-Saharan Africa--ranging from 10-21%. These high rates of infertility can partly be attributed to high rates of sexually transmitted infections (STIs) and complications of delivery or unsafe abortions.

Infertility is the inability to achieve and/or maintain pregnancy. About 35% of infertility is the result of male factors (including the absence of sperm or abnormal or too few sperm), and another 35% is the result of female factors (including problems in ovulation, blocked or scarred fallopian tubes, and endometriosis). In other cases, infertility results from a combination of both male and female factors, or it cannot be explained. Although it can take some couples longer than 12 months to achieve pregnancy, many people seek infertility treatment/counselling if they haven't achieved pregnancy after 12 months of unprotected and well-timed intercourse.

5.6.1. When Should One Seek Infertility Treatment or Support?

If you have had trouble trying to get pregnant, you may want to seek additional help and information about infertility treatment.

RESOLVE, a U.S. based national infertility support group, provides a wide range of information about treatment options and referrals to infertility specialists. They suggest seeking help if you have been trying to conceive for more than 12 months and:

- Are over 35 years of age
- Have irregular menstrual cycles or a history of pelvic infection
- Your partner had an undescended testicle at birth, hernia repair, or a history of urinary infections
- You've had two or more pregnancy losses

5.6.2. Risk Factors for Infertility

Throughout the world, 38% of infertility can be traced to a previous sexually transmitted infection (STI). When left untreated, many STIs can place women and men at risk for becoming infertile. Untreated gonorrhea and chlamydia in women can spread into the pelvic area and infect the uterus, fallopian tubes, and ovaries--leading to pelvic inflammatory disease (PID). In men, chlamydia can affect the testicles--also leading to problems with fertility.

Pelvic inflammatory disease (PID) is an infection of the internal female reproductive organs, usually affecting the uterus, one or both fallopian tubes, the ovaries, and surrounding pelvic tissues. These tissues become inflamed, irritated, and swollen. Untreated STIs, tuberculosis, and other types of bacteria and microorganisms cause PID.

PID can lead to infertility, because of the scar tissue that forms around the pelvic organs. This scar tissue can cause blockage and distortion of the fallopian tubes so that the egg cannot get through the tube and into the uterus. After one episode of PID, a woman has an estimated 15% chance of infertility. After two episodes, the risk rises to 35%. After three episodes, the risk for infertility is nearly 75%.

5.7. What is HIV(Human Immuno Virus)/ AIDS

Acquired Immuno Deficiency Syndrome

The causative organism is a virus, which is the most deadly of all the Sexually Transmitted agents. It is found in blood and body fluids.

5.7.1. Incubation Period

The period between infection and the onset of AIDS symptoms ranges from 6 months to 5 years and possibly longer.

It is also transmitted through blood transfusion, placenta to fetus, needle prick and using common blades for shaving and incisions. The white blood cells in the body damaged by the HIV virus cannot protect the body from infections. A person who lacks immunity becomes weak and eventually dies as a result of infections against which the body cannot protect itself.

HIV virus cannot survive in air, water, or on things people touch. You cannot get it from touching, hugging. Talking to or sharing a room with a person who is HIV infected or has AIDS. You cannot get HIV from being bitten by mosquitoes and other blood sucking insects, using the same toilet or sharing plates, glasses, or towels used by someone who has HIV or AIDS.

5.7.2. Signs and Symptoms

5.7.2.1. Frequently reported signs

- Persistent cough of over one month
- Skin infections
- Recurrent herpes zoster
- Oro – pharyngeal candidacies (ulcers)
- Chronic progressive and disseminated herpes simplex (sore on the lips and genitals)

- Generalized by lymphedeopathy (swelling of the lymph)

5.7.3. Consequences

- Death
- Economic problems
- Social problems

5.7.4. Prevention and Management of STD/HIV -

- One partner
- Use condoms
- People should not have injection except at the health institutions where equipment is sterilized and blood is checked.
- Appropriate hygiene and sterilization of needles and surgical instruments and care of lesions, rashes, body fluids and blood.
- Early detection and appropriate treatment including sexual partners in all STD's except HIV/AIDS patients.
- Continuous SRH education
- Infection prevention on STD, HIV/AIDS at all levels
- Avoiding to have unsafe sex with prostitutes
- Using known health institutions for injection

5.7.5. Assessment questions for discussion

- How can one know when a vaginal discharge is abnormal?

- Is it possible to get an STD and be infected with HIV at the same time?
 - What is Safer Sex?
1. Can syphilis be passed on to a baby just as AIDS can?



GLOSSARY

Age dependency ratio

The ratio of persons in the “dependent” ages (under 15 and older than 64 years) to those in the “economically productive” age (15-64 years) in a population.

Antenatal coverage

Coverage to a health institution made by a pregnant women to be sure that she has a safe pregnancy.

Average household size

The mean number of members per household

Child mortality

The probability of dying between exact ages one and the fifth birthday per 1000 children surviving to the first birthday

Child woman ratio

The number of children under ages five per 1,000 women of childbearing age in a given year. This measure is used as a rough fertility indicator, especially when detailed data on births are lacking.

Contraceptive prevalence rate

The proportion of eligible women (15-49 years old) who got contraceptive service.

Crude birth rate

The number of births in a population during a specified period divided by the number of person years lived by the population during the same period.

It is frequently expressed as births per 1,000 populations.

Crude death rate

The number of deaths in a population during a specified period divided by the number of person years lived by the population during the same period. It is frequently expressed as deaths per 1,000 population.

Delivery attended

The service given for pregnant women during labor; management of normal delivery and detection of complications, management of risk cases in labor and complicated cases.

Fully immunized

A child ages less than one who has taken all types of antigens completely.

General fertility rate

The number of births occurring in a given year per 1000 women in the reproductive ages (i.e. women age 15-49).

Infant mortality rate

The ratio of the number of deaths under one year of age occurring in a given year to the number of births in the same year. Also used in a more rigorous sense to mean the number of deaths that would occur under one year of age in a life table with a index of 1,000

Life Expectancy at Birth

The average number of years a newborn infant can expect to live under current mortality levels.

Live birth

The complete expulsion or extraction from its mother of conception, irrespective of the duration of pregnancy, which after such separation shows any evidence of life.

Maternal mortality rate

Maternal mortality is defined as the death of a woman during pregnancy or within 42 days of termination of the pregnancy. Maternal mortality ratio is the number of maternal deaths per 100,000 live births in a given period, usually a year. Maternal mortality rate refers to the number of maternal deaths per 100,000 women in the reproductive age group 15-49 per year (WHO, 2001).

Morbidity

The extent of illness, injury or disability in a population.

Sex ratio

The number of males in a population or specific sub population, divided by corresponding number of females, conventionally multiplied by 100.

Total fertility rate

The average number of children that would be born per woman of all women lived to end of their childbearing years and born children according to a given set of age specific fertility rates.

Under five mortality

The probability of dying between birth and age five per 1000 live births in given year.

Under 5 children

Under 5 year children visit to health institution for monitoring of growth and development, screening of risk cases, and for management of disease or mal development.

Culture

A complete set of attitude, a lifestyle, or a way of life. A system of beliefs, patterns of behaviour, norms traditions, interactions performed by a society.

Tradition

Part of a culture and are patterns of behaviour shared by members of a particular society having deep rooted history.

Taboo

Prohibition imposed by social customs,

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