



**Federal Democratic Republic of Ethiopia  
Ministry of Health**

**Maternal and Child Health Package**

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## **1. INTRODUCTION**

When the issue of growth and development of a country is raised, the indicators of maternal and child morbidity and mortality has a prominent place. As the EFY. 1994 Health and Health Indicator shows, an infant mortality rate (IMR) of 113/1000 live births. It also shows antenatal coverage of 34.1%, a delivery service coverage of 22.84% , and a postnatal service coverage of 7.12%. The number of mothers who suffer and die from abortion, pregnancy and delivery related causes is still high. For example, it is estimated that 871 mothers out 100,000 die due to pregnancy and delivery related problems. Poverty, backwardness, malnutrition, limited access to health services and unbalanced population growth are the structural causes for the high maternal and child morbidity and mortality rates in Ethiopia.

Moreover, mothers and children who are victims of these problems, are also affected by traditional practices that affect their health. Since these social groups constitute the majority of the population and are naturally exposed to diseases, priority should be accorded to them in the health delivery system.

Implementing the principles of safe motherhood is one of the strategies that enables to reduce the high maternal and child morbidity and mortality rates in Ethiopia. The safe motherhood principles have social and economic advantages. Some of the principles of reproductive health are strengthening women education and ensuring their choices, preventing early marriage and pregnancy, informing families that pregnancy can entail a problem and that appropriate care and monitoring should be made to ensure that a competent professional's assistance is required during delivery, improving the conditions for getting quality reproductive health services, preventing unwanted pregnancies and providing the necessary professional assistance when confronted by abortion, enabling

women of child-bearing age ( 15 -49 Years) to get tetanus toxoid vaccine before and after pregnancy and so on.

Since mothers are exposed to a number of risks during pregnancy, delivery and post delivery periods, special attention and care should be given to them. The health extension package programme that is under intense preparation, is expected to benefit all women of child bearing age and especially the rural women. Through this package, the necessary conditions will be met for mothers to receive full information and education about their health without going far away from their places. The health extension workers who can discuss their health and health related problems will be close to them.

Child health focuses on diseases that are causes of morbidity and mortality for the majority of children. The disease that are causes of child morbidity and mortality are acute respiratory infections, diarrheal diseases, malaria, measles, and malnutrition. In order to strengthen prevention activities related to these diseases, make the health service complete and integrated, and improve the quality of care, the implementation of the integrated management of childhood illnesses (IMCI) approach has been adopted as a key national strategy.

Since educating mothers means educating the family, mothers will be given information by a trained health extension package worker about where they can get health service, their role in the promotion of health within their family and community, will be informed about their share of responsibility in the prevention of diseases so that they their children and themselves will not be victims of many of the health problems.

## **2. OBJECTIVE**

### **2.1. General Objective**

To provide antenatal, delivery, postnatal and child health services as a package to prevent mothers and children that constitute a majority of our population, from illness, death and disability.

### **2.2. Specific Objectives**

To provide integrated family health service to prevent respiratory infections, diarrheal diseases, malnutrition, malaria, measles and harmful traditional practices which are major causes for child morbidity and mortality.

### **2.3. To provide full integrated antenatal, delivery and postnatal health services to mothers.**

- Provide full information to mothers about harmful traditional practices to prevent themselves and their families from such practices.
- Enable children and mothers to be beneficiaries of vaccination services.
- Strengthen the culture of breast feeding and supplementary feeding.
- Provide education to mothers to immediately take their children to health facilities when they are sick and to give the drugs that are prescribed ordure for their children with care and with compliance to treatment until they are finished.
- Provide full information and education to the family and the society at large on pregnancy and family planning so that they can provide the necessary care to mothers.
- Give continuing education to families to feed their children with balanced foods prepared from what is available in their houses

so that their children can have a balanced physical and mental development.

- Provide family level education about accidents that occur on children and the precautionary measures that families can take to prevent the accidents.

### **3. Implementation Strategies.**

The following will be the strategies for the implementation of the mother and child health extension package.

#### **3.1. Collect primary information**

Relevant information that will be used for starting the package will be collected and analyzed in advance by the health extension workers, the information that will be collected and analyzed include population by sex and age, major health problems etc. Although the type of information varies from region, to region they will nevertheless, be useful to identify the health problems that exist in specific communities and give health education on this problems. The information will be also useful to monitor the progress of the mother and child health extension package.

3.2. Based on the information collected and analyzed, prepare appropriate health education materials that focus on major health problems.

3.3. In order to provide maternal and child health education, prepare health education materials that can help the health extension package trainees in educating their communities.

3.4. Training of health extension package trainers.

Select and train from kebele community members, those who are willing to participate in the implementation of the package, have interrupted or completed their studies, have the necessary coordination (leadership) capacity and are able to change themselves and their communities.



- 3.5. Provide full information and education so that mother can get appropriate health service during antenatal, delivery and postnatal periods.
- 3.6. Eradicate harmful traditional practices that affect pregnant mothers and children through education and mobilization of communities.
- 3.7. Eradicate completely, harmful traditional practices on women which include abduction, rape, early marriage, circumssion.
- 3.8. By protecting women's reproductive health right, promote healthy motherhood.
- 3.9. Collaborate with other development sectors to ensure the success of the mother and child health service package.
- 3.10. Ensure full community participation in the planning and implementation of the mothers and child health service package.
- 3.11. Exchange experiences with woredas or regions that have successfully implemented the package and achieved good results.
- 3.12. Start and expand a community wide integrated child diseases treatment strategy to reduce major diseases that occur among children.
- 3.13. Sensitize communities through the use of discussions, dramas, scripts, leaflets and other IEC materials, to ensure the acceptance of World Women's Day and maternal and child health services.
- 3.14. Give incentives such as merit certificates and others to those mothers who have accepted and successfully implemented the health extension package and brought a change in the health status of their families.

#### **4. Activities that will be undertaken**

##### **4.1. House to house collection of information**

Population by sex and age, number of family members, women age 15 - 49 years, children under the age of 1, and 2 and 5 years, and 5-14 years, number of pregnant women, number of women who are

not pregnant, literate and illiterate women, women and children that have not taken vaccination, women and children who have completed their vaccination, and those women that started and dropped their vaccination, women who are beneficiaries of family planning and those who are not, women who attend antenatal services, mothers that received delivery assistance from a trained professional, trained and untrained traditional birth attendants, children sick due to diarrhea and vomiting, children suffering from acute respiratory infections, breast feeding practices, supplementary food preparations and feeding practices, birth and death registration etc.

**4.2. Analysis and consolidation of collected information.**

It is possible to know and identify the health problems of mothers and children by analysing and consolidating the information collected through house to house survey. If the problems are many, it is essential to identify the priority problems and through different strategies make an attempt to overcome the problems.

**4.3. Popularize the package among communities.**

In order to make this package effective and successful, it is very important to involve communities starting from the planning stage and during implementation, monitoring and evaluation of the package. Nevertheless, before going into implementation, there is a need to promote the programme and mobilize communities. Sensitization activities should be undertaken at public places, among farmer, women and youth associations, at religious places, market places, schools, civil society organizations such as Iders (local association for helping someone who has lost his loved) to raise their awareness about the package.

## **Section One**

### **Maternal Health**

#### **4.4. Provide antenatal services.**

##### **4.4.1. 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 fetus.

##### **Physical changes and signs of pregnancy.**

Basically, pregnancy is not a disease. It is a natural process for the reproduction of mankind. However, different changes and signs are seen on the body of the pregnant women. The following are a few of the changes and signs that can be observed from a pregnant woman.

- Ammenorhea (absent regular menstrual period)
- Nausia and vomiting.
- Increase in the size of the breasts.
- Growing or bulging of the abdomen.
- Movement of the fetus.
- Feeling the body of the fetus.
- Hearing the heart beats of the fetus etc.

##### **4.4.2. What is antenatal service?**

Antenatal service is the provision of advice and medical service to a pregnant women by a health professional from the time of conception to delivery.

It would be good if the following cheek ups are made for a pregnant woman.

- Urine test for albumin and sugar.
- Hemoglobin.
- Blood pressure.
- Fatal auscultation (Fetal scope)
- Fetal palpation

#### **4.4.3. 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 an information that need to be also shared with women of child bearing age. The following are the activities that would be undertaken during first antenatal visit. Registration, 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 must 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.

#### **4.4.4. Signs of health risks during pregnancy**

Pregnant women can face some illnesses during their pregnancy period. Unless these illness 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 they will lead to dangerous situations. There is a need to make close follow up and know the outcome.

- 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 ceasarian section.
- If the height is below 150cm. and pregnant for the first time.
- Pregnancy (parity) over five.
- Immobility or movement of the fetus has stopped.
- Less than 2 years spacing.

**4.4.5. Care during pregnancy.**

A pregnant woman must first keep herself healthy and give birth to a healthy child. In order to do this, she must adhere to the following precautions over her pregnancy period.

**4.4.5.1. 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.

#### 4.4.5.2. **Personal hygiene during pregnancy.**

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. Especially, if there is vaginal discharge during her pregnancy than other times, which does not allow the woman to keep her hygiene, she has to be advised and educated to go to a nearby health facility where she can make the necessary check up.

#### 4.4.5.3. **Dressing**

In order to make complete the personal hygiene status of the pregnant woman, her clothings 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. Her clothes have to be wide and comfortable as possible. She should not tighten her local cloth belt (makenet) during her pregnancy.

#### 4.4.5.4. **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.

#### **4.4.5.5. 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 child bearing 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.

#### **Steps for giving tetanus vaccine**

- Educate about the usefulness of the vaccine.
- Ensure that the vaccine is a tetanus vaccine by looking at the vial.
- Shake the vial.
- Suck the vaccine with 0.5 ml. syringe.
- Clean the left upper arm of the mother.
- Give the vaccine on the muscles of her left upper arm(deltoid) .
- Record on the card and inform the mother the next vaccination date.
- Burn and bury the used needle and syringe.

#### **4.4.5.6.Traditional practices that are harmful to the pregnant women.**

There are some traditional practices that can harm the pregnant woman. These are massaging the abdomen, repeatedly taking the local anti taenia drug (Kosso) and others. It is very dangerous to massage the abdomen during pregnancy. It can induce early labor that leads to abortion. Because of the massage, the uterus can be harmed, the woman can loose a lot of blood and the fetus can be endangered. Taking the local anti taenia drug, can also be dangerous. It can induce abortion. It is better that pregnant women do not eat raw meat. Especially, they should never take the local anti taenia drug (Kosso), during the first four months of pregnancy. It is should not be taken even after seven months, although it is said that it cleanses the gastric area and the fetus, and will help for labor. If there is a need to take anti taenia drug, the pregnant woman shall be adviced to go to the nearby health facility or a drug shop to get an advice from the health workers which type of simple drug she can buy and take. If cucumber seed or pine apple is available in the surrounding area, she should be adviced to take one of them. Because of local cultural beliefs, such as taking milk will lighten the texture of the skin of the fetus, eating cabbage and similar vegetables will make the fetus dirty etc, pregnant women do not want to take milk and eat vegetables. This belief is not right. Taking milk and vegetables has value for the pregnant woman and will make the fetus strong and fat. Generally, it is imperative to consistently



inform and educate communities to change their behavior on traditional practices that affect the health of pregnant women.

Detailed cultural taboos to be collected.

During pregnancy, especially during the first three months, no drug shall be taken.

#### **4.4.5.7.Preparations required when delivery date approaches.**

- ◆ Clean clothes and dresses for the new born.
- ◆ 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.

#### **4.4.5.8.Advantage of breast milk**

Educate mothers that breast milk is the only food for the baby until four months since it contains the highly nutritious food cholestrum. The following advantages should be told.

- ◆ Breast feeding will increase the love between the mother and child.
- ◆ Breast feeding does not incur additional cost.
- ◆ Breast milk is the most ideal food for the child.
- ◆ Breast milk is naturally clean.
- ◆ No time is required to prepare breast milk.
- ◆ It is possible to get breast milk at any time.
- ◆ Breast milk has an ideal temperature.
- ◆ Breast milk is a balanced food.
- ◆ Breast feeding serves as a contraceptive.
- ◆ Breast milk contains anti bodies that prevent the child from diseases.

#### **4.4. Providing delivery service.**

##### **4.5.1. Advantage of delivery service.**

In Ethiopia, the number of mothers suffering from birth related illnesses is high. As national statistical reports reveal, maternal mortality rate is 400/100,000. A few of the causes of maternal death during delivery are hemorrhage, intense labor and high blood pressure (eclampsia) that occurs during pregnancy. The child can also be asphyxiated and die due to delayed labor.

Therefore, it is possible to reduce and eventually avoid the high maternal and child mortality by providing safe delivery service. Every professional involved in the provision of delivery service must know and implement the following three clean things during the provision of delivery service.

1. Clean hand glove.
2. Clean delivery place.
3. Cutting the umbilical cord with clean, new or boiled razor blade.

##### **4.5.2. What is labor?**

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

##### **Types of labor**

###### **4.5.2.1. 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 gynecological examination.

#### **4.5.2.2. True labor.**

Back pain, a 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 hemorrhage starts. The health extension worker must know the two types of labor and must be able to provide the necessary delivery assistance when he/she knows it is true labor. Placental fluid can sometimes flow before labor starts and becomes intense during true labor. Since delayed labor, i.e. labor after flow of placental fluid, can be dangerous, the extension health worker must persuade the mother to go the next level of health facility.

#### **4.5.3. 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.

#### **4.5.4. Preparations for delivery service.**

- Since the personal hygiene of pregnant women has to be kept water, soap and clean cloth shall be prepared. Wash 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.
- Advice the woman that comes for delivery to pass urine and stool before any delivery process.
- The midwife shall wash her hands with water and soap.
- Advice the woman to walk slowly in the house and to sleep on her left side when she wants.

#### **4.5.5. Untouching**

- Since the traditional practice of massaging the abdomen of pregnant women with butter is dangerous, the practitioner should not do this.
- Unless extremely necessary, the woman's genital area should not be frequently touched and examination done.

#### **4.5.6. Care that would be undertaken before 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.
- Encouragement is necessary to reduce her psychological stress.
- Her husband, and if possible, her parents should be made to stay around her.

#### **4.5.7. When labor is intense**

- The pregnant women should sleep on her back.
- If it is comfortable to her, she should be on a sitting position.
- Pressing down or pushing down the abdomen of the woman on labor is dangerous.

#### **4.5.8. 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 midwife 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 his neck by turning his head or trying to send the cord back to his 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. Then the child should be delivered and assisted to breath.
- After the baby's neck is seen and his shoulder starts to come out, the head should be held down with two hands (one hand below and the other above) until one of his 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 new born should immediately be made to sleep on one of his body sides and then his back should be gradually massaged until he starts to cry.
- His 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. Follow up should

be made by the health extension workers and a feed back should be received from the health facility.

- The baby should be made to have physical contact with his mother for warming and should be breast after he is cleaned.

**Reminder:-**

If the new born baby is gasping or has a major problem of breathing, if he is shivering, his body is flacid, cannot breast feed or has fever, he should urgently be referred to the next higher health facility.

**4.5.9. Expulsion of the placenta**

- The mother will feel some labor after she has delivered. This is 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 cut in its soft side and that there is no cut on its sheath. This is done by spreading and seeing it well.
- After this, the baby shall be rolled with warm clothes and care should be taken not to expose him to cold

**Reminder:-**

- The cord that is on the side of the mother should not be pulled.
- To expel the placenta, the mother should not be raised from the ground and destabilized by holding her from her back.
- Again, abdomen should not be massaged for expelling the placenta.

- The umbilical cord will fall by itself and therefore, there is no need of touching it.

#### **4.5.10. Care that should be taken after delivery.**

##### **For the Mother**

- 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.
- She should be told the need of passing urine and to urinate. The value of this is to prevent much bleeding which occurs due to full bladder and continued contraction of the uterus.
- Light massaging of the abdomen will help to contract the uterus and stop bleeding.
- It is necessary to check if there is or no genital tear. If there is genital tear, she should be referred to the next health facility for suturing. Follow and know the result. If she has tear, there is a need to pad and press the bleeding site with clean cotton, plaster or cloth and advice her to clamp it with her laps so that there will not be bleeding. She should be referred to the next health facility with this first aid.
- If she is well with all the care she is provided, her genital area should be cleaned with lukewarm water. She should hold clean cloth or cotton in same area and advised to rest.
- Education shall be given on the necessity of providing the mother with gruel, hot tea and milk.
- Clean all equipment used for delivery. Bury the placenta.



### **For the New born**

- Register the new born/date, time, sex, weight etc.
- Vaccinate for TB and tetanus.
- Tonsillectomy, burrowing of the teeth root, and female circumcision are traditional practices that are harmful. Therefore, there is a need to educate the family to refrain from these practices.
- Educate the family to complete the rest of the vaccination on the appointed dates.
- Educate the family the necessity of washing the baby with lukewarm water and dressing him with clean clothes.

## **4.6. Provision of postnatal service**

### **What is postnatal service.**

- Postnatal period is the time that lasts from date of delivery until the sixth week of delivery.
- The advice and medical service given during this period to the mother and child is called postnatal service.

### **4.6.1. Advice that should be given to the mother during this period.**

Since the mother will have a flow of genital fluid until the 15<sup>th</sup> day, she should be advised to wash her body twice a day and pad the genital area with clean cloth and cotton. The fluid has different colours. Blood like fluid during the first three days and brown (millet water) until ten days. The fluid has no bad smell. If the volume of fluid increases and has bad smell, the mother should be advised to go to the next health facility for necessary treatment. Follow up and recording the result is important.

- In order to space the next pregnancy, the mother should be educated about family planning and get contraceptive drugs (refer to the detailed Family Planning Extension Package).
- Inform the mother that breast milk is sufficient to the baby until four months and undertake home visit to ensure that she is breast feeding. Since starting supplementary food is important after four months for the growth and development of the child, the mother should be educated to give supplementary food at four months.
- Inform the mother that giving butter or oil to the baby is harmful.
- The mother should be educated not to breastfeed, if she is confirmed positive for HIV. The family must be informed that mother to child transmission of HIV takes place during pregnancy and breast feeding.
- The postnatal mother should not be made to sleep in a dark room. Rather, she needs fresh air and sunlight more than ever for close follow up of the child. If the house has a window, fresh air should be allowed to enter.
- A postnatal mother needs adequate rest and a balanced food, and a light body exercise that would help her strengthen her body.

Balanced food means taking a mix of meat, eggs, milk, pulses vegetables, fruits and cereal on alternative basis. The balanced diet, apart from strengthening the body of the mother, helps to produce sufficient breast milk. If she is advised to feed with these food items on the basis of set time, she will have a strong and balanced body structure.

#### **4.6.2. Starting breast feeding**

Breast milk is a natural gift and a very necessary food for the baby. Breast milk is a liquid that contains all necessary nutrients the baby requires for his growth and development and the prevention of diseases. Many mothers, give lame excuses for not breast feeding. These excuses are breast is not full, should wait until it comes well, do not breast give to the baby the first flow of breast milk (colostrum). These are excuses that have to be fought. But, since colostrum is very useful to the baby, breast milk shall be given to the baby starting from the time the baby is born. If the baby does not suck well, breast milk should be pressed into a cup/glass and should be dropped into the baby's mouth thereby giving him the chance to taste it and the experience take it.

#### **4.6.3. Care that would be taken by the mother during breast feeding (demonstration).**

- Wash hands before breast feeding.
- Clean and dry with clean cloth the washed breast.
- Sit in a comfortable position while breast feeding.
- Breast feed for 15-20 minutes at each breast feeding time.
- Hold up the baby after breast feeding with cloth or breast holder.
- Hold up the baby in an up right position and repeatedly tap the back of the baby until he belches.
- If one of the breast nipples cracks or gets infected, it should be given. Breast feeding should be continued with the other healthy breast. Breast feeding with the infected breast can only be done after its full recovery.

#### **4.6.4. Demonstration on how the baby can get sunlight.**

Warming the baby with sunlight can be started on the second week of birth. Warm the baby outside the house for 10 - 20 minutes in the morning when the weather has warmed and in the afternoon when it has cooled. The hands and legs should be exposed to sunlight at this time. Education should be given to 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 this disease. Follow up should be made by the health extension worker on this practice.

#### **4.6.5. Demonstration on how to prepare supplementary foods.**

The baby, when he reaches 4 months of age, has to be given supplementary foods with a cup and spoon without interrupting breast milk. He can be fed with boiled and mashed potatoes, boiled eggs and thin porridge. As his age goes up, he should be fed with thin and non-spiced pulses sauce mixed with injera (shiro). The baby's food should not have pepper and spices and too much fat. There is no use of giving breast milk every time a baby cries, because he can have over eating. Nonetheless, the reason of his crying has to be explored.

A mother should very well wash her hands before going into the preparation her child's food. The utensils that would be used for the preparation of the food should also be well washed. It will be good if the utensils used for the preparation of the child's food are separate. It is necessary also to limit the amount of food to be prepared. It shall be for one time feeding. Food that has been prepared a day or

night earlier, could lack the necessary hygiene and endanger the health of the baby. The water that would be given to the baby should be boiled and cooled.

## METHODS OF CHILD FEEDING

Up to 4 Months	4 - 6 Months	6 - 12 Months	1 - 2 Years	> 2 Years
<ul style="list-style-type: none"> <li>☛ Breast feed the child any time (day &amp; night) he should be breast fed at least 8 times a day.</li> <li>☛ Never give any kind of other food or fluid.</li> <li>☛ Expose him every day to sunlight for 20 -30 minutes.</li> </ul>	<p>Breast feed the child any time (day &amp; night). He should be breast fed at least 8 times a day.</p> <ul style="list-style-type: none"> <li>☛ You should give, in addition to breast milk, other supplementary foods (e.g. boiled and mashed potatoes, a mix of cereal and porridge prepared with milk)</li> <li>☛ Give supplementary food once or twice a day.</li> <li>☛ Expose the baby to sunlight for 20 - 30 minutes a day.</li> </ul>	<ul style="list-style-type: none"> <li>☛ Give breast milk when he wants.</li> <li>☛ Give supplementary food in adequate quantity and whenever he wanted (e.g. shiro fitfit, mererek fitfit, mashed potatoes and carrot, mashed cabbage, eggs, fruits and others.</li> <li>☛ Do not put butter or oil in the supplementary foods under preparation.</li> <li>☛ Give supplementary foods.               <ul style="list-style-type: none"> <li>- 3 times if he is on breast milk.</li> <li>- 5 times if he has stopped breast milk</li> </ul> </li> <li>☛ Expose the baby to sunlight every day.</li> </ul>	<ul style="list-style-type: none"> <li>☛ Give breast milk when he wants.</li> <li>☛ Give supplementary food in adequate amount and whenever he wanted (e.g. injera with shiro or kik sauce, porridge prepared out of a mixture of cereals and grains ;porridge prepared out of a mixture of potato and carrot, undiluted milk, eggs, fruits and others.</li> <li>☛ Add butter or oil in the foods under preparation.</li> <li>☛ Feed him with the prepared foods 5 times a day.</li> </ul>	<ul style="list-style-type: none"> <li>☛ Give food which is prepared for the family 3 times a day.</li> <li>☛ Give him nutritious foods 2 times a day at snack times (10 AM and 4 PM). e.g. Eggs, milk, fruits, pan cake bread (Kita), and others.</li> </ul>

**4.6.6. Demonstration about keeping the cleanliness of children.**

The child should be washed with lukewarm water once a day. No soap shall be used while washing the face. Care should be taken not to let soap get into and irritate/ burn his eyes while washing his head. During washing the baby's body, parts of the joint which are the groin, armpit and neck shall also be washed well and gently. The nose, eyes and ears should be cleaned with cotton or clothes. The spaces between the fingers and toes of the hand and feet should be well cleaned by reaching the spaces. The child should be well cleaned and dried with soft towel or cloth and dressed well after he is washed. There is no need of covering and rolling him with too many clothes. Since he cannot get air, he will have a lot of sweating.

Take out regularly and expose to fresh air and sunlight the mattress, bed, and clothes of the baby. This will help to prevent the reproduction of pests. Cover the mattress of the baby by plastic sheets to prevent it from urine.

## **SECTION TWO**

### **CHILD HEALTH CARE**

#### **4.7. Integrated management of childhood illnesses**

##### **Introduction**

In the developing world, 12 million children under the age of 5 years die every year. More than 70% of the children die from pneumonia, diarrhea, malaria, measles, and malnutrition. It is possible to give focus and look solutions to these health problems, prevent and reduce the high child death. The health that is given to children cannot be in isolation but it has to be an integrated way. This should not be only to solve the problem that the child has but, it should be to solve the all round problems of the child by developing and implementing an integrated childhood illnesses management (IMCI).

An integrated childhood illness management strategy helps to easily identify step by step the problems that children have when we see them in their living areas and at the health posts. This includes segregating simple diseases from the severe ones, urgently referring those children with severe illnesses to the next health facility, deciding what can be done for the child with simple illness, what kind of care can be given at his home and what can be done to him if his illness gets severe. When we work following this strategy (algorithm) and using the indicative signs of severe diseases, we can identify and without delay refer the sick child to the next level of health facility and make him get the necessary assistance. In addition to this, the strategy will help to focus on major diseases of children, how to prevent these diseases and how the family and community can participate and be major activists in the process of bringing about behavioral changes. In view of the importance of this strategy as a tool for diseases prevention, family and community participation, and behavioral change, which are the principles of the strategy and are outlined in this document should be well known and understood.



#### **4.7.1. Objectives of integrated management of childhood diseases**

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

Even though a strong health institution and trained manpower that is to the standard is required, family and community participation has a major role in the promotion of children's health and reducing child mortality.

Therefore, it is necessary to give knowledge and skills for families and communities to bring about changes in their behavior. Based on this, issues where a behavioral change is necessitated and the key behaviors have to come out strongly. Communities must make relentless effort to implement these behaviors and reduce under five mortality, ensure the physical and mental development of children and produce a responsible and productive generation that is capable of leading the country.

This 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. All regions are now incorporating the strategy in their annual plans and implementing it after.

#### **4.7.2. Signs of dangerous (fatal) illnesses**

When any ill child is brought to a health facility, it is important to confirm that there are indicative signs that suggest the severity of the child's illness.

The signs of dangerous/ fatal illnesses are the following

- 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.

#### **4.7.3. Cough or breathing problem**

##### **Definition:-**

A child that has breathing problem can have pneumonia or another serious and fatal respiratory infection. Pneumonia means lung (pulmonary) infection.

##### **Etiology:-**

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.

**4.7.3.1. Examination of a child with cough or breathing problem**

- Asking the mother for how long the child has cough or breathing problem.
- See that he has fast breathing.
- See that he 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.

To know if a child has fast breathing, it is necessary to count the number of breathing per minute. In order to make correct counting, the child should be silent and in a stable condition. His breathing can be counted by removing the clothes on his front chest. The number of breathing per minute can be cross-checked with the following age/ breathing values.

<b>Age</b>	<b>Fast breathing</b>
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.

**Lower chest indrawing**

If the lower chest of the sick child indraws while breathing, then we say that the child has lower chest indrawing. The sign has to be clearly seen and must be seen all the time. We can see this sign only when the child is silent and in a

stable condition. If this sign is seen, then the child has pneumonia or another serious illness and shall be urgently referred to the next level health facility.

### **Classification of cough or breathing problem**

<b>Sign</b>	<b>Classification</b>	<b>Action to be taken</b>
-If he has any sign of a dangerous disease. - If he has lower chest inwarding. - 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

#### **4.7.3.2. Actions to be taken**

- Refer the child to the next health facility if he 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 takes the prescribed drug i.e

- If he has breathing problem
- If he has high fever
- If he fails to drink or suck breast
- Gets weak or is unconscious

The mother or guardian should be strongly advised to urgently take him 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 him fluids such as tea, gruel etc and breast milk. If he can suck breast, he should be breast fed 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 him to a health facility when the following signs are observed

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

**Reminder**:- It should be appreciated, if the training of the health extension worker on this matter is complemented by video films.

#### **4.7.4. Diarrhea**

##### **Definition**

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. According to the EFY 1989 National Health and Health Related Indicators, 46% of the children under five years die due to diarrheal diseases.

### **Etiology**

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.

#### **4.7.4.1. Examination of a child with diarrhea**

A child can have at the same time watery and bloody diarrhea. Therefore, the following have to be undertaken

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

### Signs and degrees of dehydration

Signs of dehydration	Degree of dehydration	Actions to be taken
If two out of the following signs are present, they indicate the degree of body dehydration. - Dizziness - Sunken eye balls - Unable to drink or weak to drink. - Loose skin turgor	Severe dehydration	- Urgently refer to next health facility - If he can, refer him with ORS.
If two out of the following signs are present, they indicate the degree of dehydration. -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	-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

#### **4.7.4.2. Actions to be taken**

When there is high or medium body dehydration and persistent diarrhea, the mother or guardian should be advised to take the child to the next health facility giving him ORS or clean water, gruel etc

If the age of the child is below 4 months and takes breast milk only, he should be given breast milk frequently and ORS. If there is no ORS, it is useful to give him clean water.

But, if he has no body dehydration, nutritional advice should be given and follow up should be made within 5 days so that the child does not develop malnutrition.

Since children lose their appetite when they develop diarrhea, it is important to encourage them to take food.

#### **4.7.4.3. Care that would be given at home to a child that has vomiting and diarrhea**

##### **Force the child to take fluid more than ever.**

- 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 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 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 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.
- Oral rehydration solution (ORS)

This medicine is prepared to fully replace the minerals that have been lost during diarrhea. If available at home, it shall be prepared and given to children.

### **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 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 with diarrhea
  - could not get well
  - vomiting continues
  - bloody diarrhea is observed and
  - has fever

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

**4.7.4.4. Bloody diarrhea**

A child with bloody diarrhea has to be urgently referred to the next level of health facility.

**4.7.4.5. Methods of preventing diarrheal diseases**

Diarrheal diseases can be prevented by applying the 1-6 strategies.

**4.7.5.5.1. 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 child 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.

#### **4.7.5.5.2. Starting food**

The child should be put on supplementary foods at the age of 4-6 months.

##### **What are 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 annex 6.

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

- 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.

#### **4.7.5.5.3. Use of much clean water**

Using much clean water at home can very much help the prevention of diarrheal diseases.

#### **4.7.5.5.4. Washing hands**

Washing hands well means washing all parts of our hands very well and carefully with adequate clean water and soap. Washing hands very well with clean water and soap can help to prevent diarrheal diseases.

When advice is given to a mother or guardian on the importance of hand washing, the methods and times of washing the hands must be told in details. She should wash her hands.

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

In addition to this, if the child feeds himself, his hands should be washed.

- Cutting the nails short.

#### **4.7.5.5.5. Using Toilet**

Using toilet is a key method for the prevention of diarrheal diseases. Each household should have a toilet. All family members are the ones who are able to use the toilet.

People with no toilet should pass their stools in places at least 10 meters away from water sources, child play grounds and passing roads. The stools of children should be disposed appropriately.

#### **Key points on disposing children's stool**

- Children's stools should be quickly cleaned and appropriately disposed.
- The stool should be cleaned and disposed in a pit latrine, or shall be covered with leaf or paper and be buried.

#### **4.7.5.5.6. Measles Vaccine**

Each child should get measles vaccine if possible on his 9 months age or immediately after his 9 month of age in order to protect him from measles associated diarrheal diseases. Refer to vaccination service extension package on the methods and quantity of vaccination.

#### **4.7.6. Fever**

**Definition:-** We say a child has fever when he is reported to have fever during his current illness, if his body is hot or his temperature is 37.5 degrees centigrade or above.

**Causes:-** A child can have fever because of malaria, measles or other reasons.

#### **4.7.6.1. Malaria**

Malaria is a disease caused by plasmodium parasites and transmitted by malaria mosquitoes. Since plasmodium falciparum is a dangerous parasite, focus will be made in this paper on this parasite.

Fever is a major symptom of malaria. The fever can be recurrent or persistent. Shivering, sweating and vomiting are also symptoms of malaria. If the disease stays for some time, it can mostly be followed by anemia. It can also lead to unconsciousness and death. The symptoms of malaria have similarity with the symptoms of other diseases. For example, cough or vomiting can occur as a result of malaria infection.

If a child with malaria is not urgently given treatment the disease can worsen and can be dangerous and severe. This means, it can transform into cerebral malaria or can result in severe anemia. This type of patient can die, if he is not urgently given proper treatment.

Therefore, when a child is brought with fever, we have to explore if he has come from a malarious area, or has been taken to a malarious in the last one month. There is a need to highly suspect that malaria is the

cause of the fever, and urgent action should be taken on the basis of the guideline.

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	Give fansidar on the basis of his age and weight.

### Administration of fansidar

Age or weight	Give immediately the Fansidar dose indicated here under
2-12 month or 4-10 kg	½ tablet
12 months to 5 years or 10-19 kg	1 tablet

### 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	Give fansidar
-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

#### **Remainder:-**

- If the disease is a severe febrile illness, the child should be referred to the next level of health facility.
- But if it is malaria, anti-malaria and anti-fever drugs should be given on the basis of his age or weight by referring to the administration manual annex 2.

#### **4.7.6.1.1. 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.

#### **4.7.6.2. 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

**4.7.6.2.1. 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.

<b>Sign</b>	<b>Name of disease</b>	<b>Action to be taken</b>
-If there is any sign of a dangerous disease -If there is white patches on the eyelid - Severe mucal ulceration	Severe complicated measles	-Give vitamin A -Urgently refer to next health facility
- If pus is coming from the eyes - If there is mucal ulceration	Measles with eye or mouth complications	-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	1 capsule
6-12 months	50,000	100,000	2 capsule
12 month to 5 years	1 capsule	2 capsule	4 capsules

#### **4.7.6.2.2. 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 diseases 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.

**4.7.6.2.3. Care to 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.

**4.7.7. Otitis Media ( Disease of the ears)**

Otitis media usually occurs due to infection of the ear. When there is ear infection (otitis media), pus will be accumulated behind the ear drum (inner ear), causing pain and fever. If timely treatment is not given; the ear drum will rupture and pus will come out. The pain subsides when the pus comes out from the ear.

If an otitis media is not immediately treated, the infection can spread to the surrounding bones and the brain and lead to a dangerous situation.

Otitis media causes deafness. This, poses a serious problem with the education of children. Therefore, it is imperative to educate children and parents for the child to immediately get appropriate treatment.

Conditions that have to be checked when a child with ear problem comes to the health extension worker.

- If he has currently pain in the ear.
- If there is pus discharge from his ear.
- If he has pus discharge, ask how long the pus has been present.
- If he has painful swelling behind the ear

The type of problem the child has can be distinguished on the basis of the signs indicated in the table below.

<b>Observed sign</b>	<b>Type of ear disease (stage)</b>	<b>Action to be taken</b>
- Painful swelling behind his ear.	Mastoditis (infection of the ear bone)	- Urgent referral to next health service
- Pus discharge from his ear and has been discharging for not less than 14 days -Ear pain (now)	Acute otitis media	- Urgent referral to higher health service
- Pus discharge from his ear and the discharge has been for 14 days or more	Chronic otitis media	- Clean and dry the pus - Check after 5 days
- No ear pain now or no pus discharge	No otitis media	- Only give advice

- If we confirm that the child has mastoditis or otitis media, the child shall be referred to the next health facility.
- Since the infection from a mastoditis child can spread to the brain and cause meningitis, he must be referred to a health facility where he can get proper treatment.

- A child with acute otitis media, if he does not immediately get treatment, can have hearing problem due to damage of his ear drum. A child that has hearing problem cannot learn well. And a child that is not educated cannot support himself well and therefore becomes a liability for his family and country. Therefore, a child with ear infection shall be immediately taken to the next health facility.
- If there is chronic ear infection (chronic otitis media) his ear shall be cleaned until it is dry with dry clean cloth or cotton.

### **How to clean the ear discharges**

Enter thinly rolled clothes or cotton into the ear canal. Sooth, clean and remove out, the cloth or cotton. Repeat the same at least 2-3 a day until the ear canal is dry.

A child who is under treatment for otitis media, should be checked on the fifth day. At this time, it is necessary to check if there is general improvement, reduction in the severity of the ear pain and fever. If the pus has dried up and there is general improvement, advice should be given to continue with the care that is given to him. But if the signs have not subsided and no general improvement, he should be referred to the next health facility.

### **4.7.8. Malnutrition and Anemia**

#### **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 can be physically stunted
- he can have general body edema
- cannot grow well or can be short (retarded growth)

If a child does not get adequate vitamins in his food, he can encounter vitamin deficiency. A child with vitamin A deficiency has a high probability of dying due to measles and diarrhea. His 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 anemia**

- 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

White 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.

<b>Signs</b>	<b>Classification of Disease</b>	<b>Actions to be taken</b>
-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

Since a child with severe malnutrition or anemia has a higher chance of dying from pneumonia, diarrhea, measles or other diseases, he should urgently be referred to a higher health facility for proper treatment and follow up.

It is possible to give nutrition education to the parents of children with no severe malnutrition and vitamin deficiency and nutrient treatments based on the attached treatment guideline (annex 5)

#### **4.7.8.1. 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.

Anemia can be also prevented if the child is given adequate and balanced diet. If this is done, anemia 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 anemia can also be prevented.

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

##### **4.7.8.1.1. Ask how the child is fed**

- If a child has anemia or is under weight or
- His age is below 2 years, the way he is fed shall be explored in the following way. The information that we get must be compared with the recommendations outlined in the chart and if there are problems with his feeding practices, attempts must be to correct the problems. However, if the feeding is undertaken correctly, the mother or guardian should be thanked and encouraged with what she is doing.

#### **Using good communication skills**

The following skills should be used when advice/ education is given to a mother or guardian.

### **Asking and listening**

We have in the past known the advantage of asking mothers on the feeding practice of her child. After asking, we must alternatively listen what the mother is doing with regard to feeding her child. If we listen attentively, we can know what the mother is doing and what correction can be made.

### **Thanking/ encouragement**

There is always some thing good that a mother does for her child. For example, she may breast feed her child. Breast feeding in itself is a very good practice for the child. Therefore, the mother should be thanked for the good things she is doing for her child. But she must be thanked for the correct things she has done.

### **Advising**

The advise that you give to the mother should only be appropriate. We must use a simple language that the mother can understand. If possible, we must use pictures or IEC materials that help the mother understand what she is being advised. For example, the amount of food that she is supposed to give must be demonstrated by cups or other utensils.

Advice should be given on combating or correcting harmful traditional feeding practices. When attempting to advice/educate a mother about correct harmful traditional practices, it must be done in an explicit way and simple language so that the mother can very easily understand the advice. But, care should be taken not to affect her feelings and regret for what she has done. She must be made to understand that the harmful traditional practice is something that has to be corrected.

### **Ensure that she has understood the advice**

There is a need to ask the mother or the guardian, before she goes back home, that she has understood all the advices and if there are some issues that need additional explanation. We must try to avoid questions that could be answered with simple yes



or no. For example, are you going to feed your child on the basis of the discussion that we undertook? The answer that she would give to this question would be yes. But we cannot know if she has correctly understood the discussion with this answer. Therefore, this is not a good question. If we ask her; tell me how you would feed your child hereafter. This question will give an opportunity to her to give a detailed answer. And for us to thank and send her back home if she has correctly answered.

It is advantageous to consult each other before a feeding problem occurs.

The following questions must be posed to mothers to know whether the feeding of their children is properly undertaken.

**Questions on feeding**

- Do you breast feed your child? \_\_\_\_\_
  - If yes, how many times in 24 hours? \_\_\_\_\_
  - Do you also breast feed at midnight? \_\_\_\_\_
- Does the child take other fluid or food? \_\_\_\_\_
  - What type of food or fluid? \_\_\_\_\_
  - How many times is it given? \_\_\_\_\_
  - With what do you give his food? \_\_\_\_\_
- If the weight of the child is below the standard:- ask how much food is given to the child \_\_\_\_\_
  - Is the food separately given to the child? \_\_\_\_\_
  - Who feeds the child? \_\_\_\_\_
  - How does he/she feeds? \_\_\_\_\_
- Is the feeding practice changed with the current illness of the child? If the answer is yes, ask how it is changed. Let them explain the change in details.  
\_\_\_\_\_

It is necessary to identify and list out the feeding problems, after gathering the information from the mothers on the basis of the above questions. The information gathered shall be compared with the recommendations outlined in the table. For example, it is imperative to know what a child at a specified age has to be fed and how many times a day he has to be. Once the feeding problems are known, the mother or guardian has to be advised and educated on how she should feed the child following the recommendations outlined in the chart. Refer to the standard recommendations. The advise that would be given to the mother will be based on what is available and affordable to her.

#### **4.7.8. 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.

#### **4.7.9. 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.

##### **4.7.9.1. 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.

#### **4.7.10.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.

##### **4.7.10.1. 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

##### **4.7.10.2. Preventive Methods**

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

#### **4.7.11. 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 (hemophilus 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

#### **4.7.12. Scabies**

##### **Definition and cause**

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

##### **4.7.12.1. 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.

##### **4.7.12.2. 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.

##### **4.7.12.3. Prevention methods.**

- keeping personal hygiene.
- washing the body well and ironing or boiling all dressings.

#### **4.7.13. Common Neonatal Problems**

- The child is premature if he is born before 37 weeks.
- His weight is very much below the standard weight.
- He is very yellow.
- He does not suck the breast.

- Has fever
- Has problem of breathing
- He has gasping
- Does not pass urine and stool in 48 hours
- Has persistent vomiting (does not include belching)
- Has bleeding
- Has fits or convulsions
- His 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 him to the next health facility. Ensure that he is taken. Follow his health condition after he has been brought back home.

#### **4.7.14. 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.

##### **4.7.14.1. 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	measles

Since vaccination very much helps to prevent child hood diseases or weaken their severity, children should be taken to health facilities 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.

**Reminder:-**

- If a child is confirmed to have AIDS, vaccination will not be given to him. But if he is HIV carrier, he must be vaccinated.
- A child will not take the next DPT<sub>2</sub> or DPT<sub>3</sub> 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 has to take his vaccination on the day he is scheduled to take.

**Vaccination Schedules**

<b>Age of vaccination</b>	<b>Type of vaccination</b>	<b>Dose</b>	<b>Made of administration</b>
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 month	MEASLES	0.5 ml	Upper arm of right hand subcutaneous

#### **4.7.15. Improving the health behavior of families and communities**

##### **Introduction**

It was decided in 1996, that integrated management of childhood illnesses is a major strategy to reduce the high child morbidity and mortality in Ethiopia. At the global level, the third round of integrated management of childhood illnesses was started recently. The main purpose of starting the implementation of the strategy was to raise the quality of service in health institutions. It was also to contribute to the reduction of child deaths and child sufferings. Taking note of this, families and communities should promote on the basis of this strategy health related behavioral changes to:-

- prevent major diseases that kill children
- raise the service provided to sick children at the household and community level
- raise the demand for family and community health

Since 20 key health related family behaviors play a major role in the reduction of child mortality and the development of their mental and physical growth, it has been found necessary to implement them at family and community level.

This strategy also helps to bring collaboration with concerned government, non-government and private organizations who have a stake in the health of children and communities.

Working in collaboration with development and health workers by integrating the strategy with existing structures and projects is highly advantageous. This system of work helps to economically and properly use the existing inputs and for mutual assistance. The activities that will be undertaken in communities shall be those that are acknowledged by communities as solving their priority problems and would be fully supported. In addition, the main aim of community supported initiatives is to eradicate harmful traditional practices and develop and support

those traditional practices that are useful to the promotion of child and community health.

These key family and community supported initiatives are categorized under four sections as follows.

### **Physical and mental growth**

1. Establish mother to child body contact after children are born. Breast feeding including colostrum within one hour of delivery.
2. Exclusive breast feed up to 4-6 months. If possible, continue at least up to 2 years.
3. Supplementary food at 4-6 months and continuation of breast feeding until at least 2 years.
4. Children get vitamin A, D, iodine, iron and other nutrients added in their food or as supplementary to their food. Ensure that they get adequate sunlight.
5. By giving attention to needs of children and making their surroundings comfortable, develop their mental and social growth.

### **Prevention of disease**

6. Properly dispose stools (including that of children), wash hands after using toilet, before preparing food and giving care to children.
7. Help children to wash their faces every day to clean their teeth and take bath everyday..
8. Children living in malaria areas to sleep in impregnated nets, dry all mosquito breeding places.
9. Timely know and prevent child abuses, inhumane practices and take appropriate actions.
10. Promote behavioral changes among the society for AIDS prevention and provide support and care services to sick people, orphan children.
11. Use clean drinking water.

### **Care that can be given at home**

12. Give to children balanced food, much fluid including breast milk when children are sick.



13. Give appropriate treatment at home when children fall sick.
14. Protect children from any kind of accident and enable them to get appropriate treatment when they have accidents.
15. Control harmful traditional medical practices, such as tonsillectomy, removal of teeth, circumcision.

#### **Demand for health care and implementation of advices and treatment**

16. Take children regularly to health facilities for vaccination and growth monitoring
17. Help sick children when they need additional treatment from a trained professional
18. Respect health workers advice on treatment and follow up appointments.
19. Ensure that all pregnant women receive antenatal examination and adequate delivery services.
20. Encourage men and women to demand for reproductive health services.

#### **4.7.15.1. Main signs that help to promote key family behaviors**

##### **1. Breast feeding until 4-6 months**

- 1.1. Breast milk is children's food that has no substitute and has no food that can compete with it. Breast milk helps children grow strong and healthy and protects them from major childhood diseases.
- 1.2. A child should be made to rest on the chest of his mother to have body contact with his mother within one hour of his delivery. Apart from stimulating the flow of breast milk, breast feeding tremendously increases the love between mother and child.
- 1.3. There is no use to give to the child another food apart from breast milk before 4 months. It is very useful for the child to breast feed within one hour and to give him the colostrum. Since colostrum contains very useful and disease preventing nutrients, it is considered as the first vaccination.

- 1.4. The mother's breasts will produce more milk when the child sucks them well. If the child does not suck them well, the production will be reduced. Therefore, it is necessary to give adequate time for the child to breast feed and to breast feed at any time.
2. **It is necessary to start supplementary food for a child at 4-6 months of age. But breast feeding should continue up to 2 years or above.**
  - 2.1. After 4-6 months the child requires supplementary food to grow healthy and strong. At first, it is preferred to give him soft and thin food, in the form of liquid, and gradually go to thick foods.
  - 2.2. The food that would be served to the child should be fresh/ hot and shall contain a variety of mashed foods. For example, it can be prepared from a mix of cereals and grains such as wheat, barley, teff and others, and contains milk, fish, butter, and mashed vegetables. These will make the food complete and nutritious.
  - 2.3. It is necessary to encourage and feed the child.
  - 2.4. The child should continue to take food and breast milk even when he is sick. The food and the fluid will help the child to cope up with the disease he has and recover soon.
  - 2.5. Breast milk should be given until the child is 2 years old and if possible beyond two years. Breast milk's value, in terms of its volume, content and contribution in the prevention of diseases, is not that much strong after 4-6 months.
3. **Appropriately disposing stool/including stool of children/ and washing hands after using toilet, before preparing food and after feeding children.**
  - 3.1. It is possible to prevent diseases by washing hands with soap and water after using toilet, before preparing food and after feeding. Washing hands is very useful for killing germs and keeping hands clean.
  - 3.2. Stool that includes that of children should be dumped into a latrine.

4. **Children should complete all vaccinations before the age of one year on the basis of the said schedule or should be taken to a place where vaccination is given.**

4.1. All children shall be taken for vaccination. If they are not vaccinated, many children will die or will be disabled or will develop malnutrition.

4.2. Children should consistently take their vaccinations until they fully take the vaccinations they are supposed to take

4.3. It is possible to vaccinate sick children. For example, a child with common cold or diarrhea, or fever can be vaccinated without any problem

5. **Prevent malaria by making children sleep in insecticide impregnated bed nets.**

5.1. Children under 5 years of age shall always sleep in insecticide impregnated bed nets. If the child uses the net, the chance of being bitten by the malaria transmitting mosquito is very low. Therefore, it is possible to prevent malaria with this method.

5.2. The bed net should be impregnated every six months.

6. **It is important to continue giving food and fluid more than other times including breast milk when children are sick.**

6.1. More fluid should be given to children to replace the energy and fluid they lost while they are sick.

6.2. When a child gets sick, he should be given food which shall be equal to the amount he takes when he was healthy or more than he was taking before getting sick. This will help the child to replace the calorie or energy he lost while he was sick.

6.3. A child who has diarrhea should be given additional liquid food that is prepared at home or oral rehydration solution (ORS).

- 6.4. Instead of making children feed themselves, the family should take the responsibility of feeding them.
  - 6.5. Children should take at least one supplementary food a day for at least 2 weeks until they fully recover from their diseases.
7. **Children should be taken to a place where there is trained health worker when they have sign of illness.**
- 7.1. Children shall immediately be taken to health facilities when they are sick. If they are not taken, the illness will be severe and will die in a short time.
  - 7.2. Loss of consciousness (convulsions), lethargy, shivering, weak to eat and weak to suck breast, vomiting immediately after eating or drinking are signs of a serious illness to children. When these signs are observed, they should urgently be taken to health facilities for treatment.
  - 7.3. If children have cough, gasping, faster breathing than before, and wheezing, they should urgently be taken to a health facility.
8. **Giving properly the drugs prescribed by a health professional, understanding fully and implementing advices given to reduce deaths among sick children.**
- 8.1. It is important to properly give and finish the drugs prescribed for children.
  - 8.2. It is necessary to comply with the advices given by a health worker with regard to taking children to higher health facilities.
  - 8.3. Respecting appointments given by a health worker will contribute to giving continued treatment to sick children and full recovery from the illnesses that children suffer.

#### **4.7.15.2. Harmful traditional practices applied on children**

A healthy society is created from healthy children. The children of today are the leaders and productive forces of tomorrow. The major causes of child morbidity and mortality are lack of education on the part of parents about child health care, and means of preventing diseases. Harmful traditional practices that existed for a long time are being and still applied on children and women. The following are some of the harmful traditions that are practiced till now in Ethiopia.

#### **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 his 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 diarrhea is unremoved milk teeth. This is an explanation given due to lack of knowledge. Diarrhea 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 diarrhea.

### **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 eye brows does 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 pallate (soften) the child's abdomen. This is a thinking far away from the truth. Since the butter is heavy to the gastro intestinal

system of the child, it causes diarrhea 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.

#### **4.7.15.3. 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.
- Put 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 bomb blasts.
- 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 the above accidents. But, they must be immediately taken to a place where urgent assistance can be given to them when they are faced with accidents.

## **5. Expected outcomes**

1. Bring about social behavioral change by giving health education, using different methods, that focuses on prevailing major health problems.
2. The society will know well health services that are provided to mothers and children. It will become a beneficiary of these services.
3. The number of antenatal service users will increase
4. The number of women that benefit from delivery services provided by trained traditional birth attendants and nearby health facilities will increase.
5. Postnatal service coverage will increase.
6. The high maternal and child morbidity and mortality will be reduced by making women and children benefit from the antenatal, delivery, postnatal and child health services.
7. Women will be beneficiaries of reproductive health services.
8. Vaccination coverages will be increased by providing vaccinations on time to women and children. Hence, morbidity, mortality and disability from vaccine preventable diseases will be reduced.
9. By raising child vaccination coverages, the polio eradication campaign will be intensified.
10. The number of neonatal children that die from tetanus will be reduced by providing tetanus vaccine to mothers.
11. By educating the society to bring about behavioral changes, there will be reduction in harmful traditional practices that affect children.
12. Accidents/risks on children will be reduced by educating the society on domestic safety.

## **6. Methods of communication**

- The one to none communication method.  
Since the majority of the society has no access to the existing mass media, the one to one education and advisory service is more appropriate and effective.
- The team education method.



This is a method to provide public education and advice at meetings, religious and market places and at other public gathering places.

- The mass media.

These are the radio, television, newspapers, posters, leaflets etc.

## **7. Data collection, monitoring and evaluation.**

7.1. By health extension worker

7.1.1. Registration of people living in kebeles by number, sex, age, occupation.

7.1.2. Registration of schools, government and non-government organizations, farmer and women associations in the kebele.

7.1.3. Number of IEC materials that have been distributed to different social groups and institutions.

7.1.4. Number of people who received information and education at team meetings and public gathering places.

7.1.5. Number of new family planning beneficiaries.

7.1.6. Number of families that have been referred by health extension workers to get better family planning services to higher health facilities and have benefited from the family planning service provided to them.

7.1.7. Daily activities undertaken by the health extension worker. Advantages got from the package and results achieved, problems encountered during implementation of the package. Reports on these will be sent to the woreda health office on a monthly, quarterly and yearly basis.

## **7.2. Activities that will be implemented by woreda health offices.**

- Close follow up and supervision every three month or field visit as necessary with members of the woreda administration to ensure that the program is going towards the right direction, to solve the problems of the health extension workers, and to give close professional assistance.
- Compile and send to the regional health bureau, every three months, the reports received from the health extension workers.

### **7.3. Activities that will be undertaken by the Regional and Federal Ministry of Health**

- Develop a national standard form for collecting information and monitoring the implementation of the package.
- Reports received from woerdas every 3 months will be compiled and sent to the FMO by the regional health bureaus
- Monitor the implementation of the improved packages twice a year at regional and once a year at national levels with collaborating government and non-government organization representatives, kebele councils and beneficiaries of the package through the coordination of the federal bureau.
- On the basis of the outcome of the monitoring meetings and after analyzing the advantages and outcomes of the package, and identifying the problems encountered, develop a strategy that will help better implementation and monitoring of the package. This will be done jointly with the FMOH and regional bureaus.
- A workshop that involves all the regions that benefited from the package will be organized by the federal bureau once a year to jointly evaluate the package and share experiences. A report on the recommendations made at the workshop and a work plan for the next year will be prepared and sent to the regional bureaus for implementation.
- Questionnaires that would provide better information on the package, and other data collection instruments will be developed and sent to the regions and woredas whenever necessary. Activities that would improve the package or strengthen activities of the package will be undertaken on the basis of the information collected.

## **Core Indicators**

1. Number of mothers who got antenatal services from the health extension workers
2. Number of mothers who received delivery services from the health extension workers.
3. Number of mothers who received postnatal services from the health extension workers.
4. Number of mothers who received TT vaccination twice from health extension workers.
5. Number of children who are under 4 months of age and are exclusively on breast milk.
6. Number of children 6-9 months who are on breast milk and supplementary foods.
7. Number of children under 2 years of age whose weight is below the standard.
8. Number of children 12-15 months who are still on breast milk.
9. Number of children whose height is below the standard.
10. Number of children whose weight is very much below the standard.
11. Number of children under 2 years of the age whose weight is below the standard.
12. Number of children who sleep under impregnated bed nets.
13. Number of children that completed DPT<sub>3</sub> vaccination.
14. Number of children that took BCG vaccination.
15. Number of children that took vitamin A for preventing childhood diseases.
16. Number of children who received additional liquid foods while they were sick.
17. Number of children in malaria endemic areas who received appropriate anti-malaria drugs when they had fever.
18. Number of mothers and guardians who at least know two useful signs that alert mothers the need for immediate medical intervention for their children.
19. Number of children who had diarrhea within a specified time.
20. Number of children who had fatal respiratory diseases within specified time.