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INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (IMCI)

IMCI TRAINING MODULES

Government of the People's Republic of Bangladesh
2019

স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

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INTRODUCTION

INTRODUCTION

PNEUMONIA, **DIARRHOEA**, **MALARIA, MEASLES** and **MALNUTRITION** cause more than 70% of the deaths in children under five years of age. There are feasible and effective ways that health workers in clinics can care for children with these illnesses and prevent most of these deaths. WHO and UNICEF used updated technical findings to describe management of these illnesses in a set of integrated (combined) guidelines, instea
d of separate guidelines for each illness. They then developed this training package to teach the integrated case management process to health workers who manage sick children. This version of the guideline was updated by the icddr,b with technical assistance from WHO, UNICEF, Save the Children and Bangladesh Paediatric Association.

Health workers have experience in treating common childhood illnesses. They are often trained using separate disease-specific guidelines, such as guidelines for treating malaria, or guidelines for managing *diarrhoea*. However, they may have difficulty in combining different guidelines when caring for a sick child with several problems. They may not know which problems are most important to treat. With limited time and drugs, health workers may not be able to identify and treat all problems of a sick child. There are important relationships between the illnesses. For example, repeated diarrhoeal episodes often lead to *malnutrition* which often accompanies or follows measles is particularly severe. Therefore, effective case management needs to consider all symptoms and signs of a sick child.

A health worker can follow the integrated case management process taught in this course to quickly consider all symptoms & signs of a child and not overlook any problems. The health worker can determine if a child is severely ill and needs urgent referral. If not, the health worker can follow the guidelines to treat the child's illnesses. The guidelines also describe counselling for mothers and other caretakers.

The case management guidelines incorporate existing WHO guidelines, such as those for managing diarrhoeal disease, acute respiratory infections, malaria, and for immunization. In this course, health workers will see how the disease-specific guidelines fit into a more comprehensive and efficient process for management of a sick child.

The case management guidelines describe how to care for a child who presents at a clinic with an illness for the first time or for a scheduled follow-up visit to check the child's improvement. They address most but not all of the major reasons a child is brought to a clinic for illness. A child returning with chronic problems or less common illnesses may require special care which is not described in this course. The course does not describe the management of trauma or other acute emergencies due to accidents or injuries.

Case management can be effective only to the extent that families bring their sick children to a trained health worker for care in time. If a family waits to bring a child to a clinic until the child is extremely sick or takes the child to an untrained provider, the child is more likely to die from the illness. Therefore, teaching families when to seek care for a sick child is an important part of the case management process.

THE CASE MANAGEMENT PROCESS

The case management process is presented on a series of charts which show the sequence of steps and provide information for performing them. The charts describe the following steps:

- Assess the child or young infant
- Classify the illness
- Identify treatment
- Treat the child
- Counsel the mother
- Give follow-up care

These steps are probably similar to the way you care for sick children now, though you may have learnt different words to describe them. The step called “assess the child” means taking a history and doing a physical examination. “Classify the illness” means making a decision on the severity of the illness. You will select a category or “classification” for each of the child's major symptoms/signs which corresponds to the severity of the disease. Classifications are not specific disease diagnoses. Instead, they are categories that are used to determine treatment.

The charts recommend the appropriate treatment for each classification. While you are using this process, it is sufficient to select a classification on the chart to “identify treatment” for a child. For example, a child with the classification **VERY SEVERE DISEASE** could have meningitis, severe pneumonia or septicaemia. The treatments listed for **VERY SEVERE DISEASE** will be appropriate because they have been chosen to cover the most important diseases included in this classification.

“Treat" means giving treatment in the clinic, prescribing drugs or other treatments to be given at home and also teaching the mother how to carry out the treatments. “Counsel the mother” includes assessing how the child is fed and telling her about the foods and fluids to give the child and when to bring the child back to the clinic.

The case management process for sick children age 2 months up to 5 years is presented on three charts titled:

- *ASSESS AND CLASSIFY THE SICK CHILD*
- *TREAT THE CHILD*
- *COUNSEL THE MOTHER*

Management of the young infant age 0 day up to 2 months is somewhat different from older infants and children. It is described on a different chart titled *ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT*.

The charts are designed to help health workers to manage children correctly and efficiently. This course trains you to use the charts and gives you clinical practice managing sick children. After the course, the charts will help you recall and apply what you have learned when you manage sick children at your clinic.

PURPOSE OF THIS TRAINING COURSE

This training course is designed to teach the case management process to doctors, nurses and other health workers who manage sick children and infants. It is a case management process

for a first-level facility such as a clinic, a health centre or an outpatient department of a hospital. The course uses the word "clinic" throughout to mean any such setting.

You will learn to manage sick children according to the case management charts, including:

- Assessing signs and symptoms of illness and nutritional and immunization status
- Classifying the illness, identifying treatments for the child's classifications and deciding if a child needs to be referred
- Giving important pre-referral treatments (such as a first dose of an antibiotic, vitamin A and treatment to prevent low blood sugar) and referring the child
- Providing treatments in the clinic; such as, oral rehydration therapy, vitamin A and immunization
- Teaching the mother to give specific treatment at home, such as an oral antibiotic or antimalarials
- Counselling the mother about feeding and when to return
- When a child comes for scheduled follow-up, reassessing the problem and providing appropriate care

COURSE METHODS AND MATERIALS

In addition to the Chart booklet, you will receive a series of booklets, called modules, which explain each step. They are titled:

- *Assess and Classify the Sick Child Age 2 Months Up To 5 Years*
- *Identify Treatment*
- *Treat the Child*
- *Counsel the Mother*
- *Management of the Sick Young Infant Aged Up To 2 Months*
- *Follow-up*

The modules include exercises that will help you to learn the steps. Most exercises provide clinical information describing a sick child and ask questions. Some exercises use photographs or video. You will complete a module by reading it and working through the exercises.

For approximately half of each day, you will go to nearby clinics to observe and practice managing sick children. In these clinical sessions, you will assess, classify and treat sick children, including teaching their mothers how to care for them at home. The clinical sessions give you opportunities to try the skills that you learn about in the modules. You may ask questions and receive guidance if difficulties arise. By the end of the course, you will have experience in managing children according to the case management process and can feel comfortable continuing at your own clinic.

A facilitator will guide you through the activities and exercises in the modules, lead group discussions and review your individual work on the modules. A facilitator will also supervise your practice during clinical sessions. You are encouraged to discuss any questions or problems with a facilitator.

HOW TO SELECT THE APPROPRIATE CASE MANAGEMENT CHARTS

Most clinics have a procedure for registering children and identifying whether they have come because they are sick, or for some other reason, such as for a well-child visit or an immunization session or for care of an injury received in an accident. When a mother brings a child because the child is sick (due to illness, not trauma) and the child is sent to you for attention, you need to know the age of the child in order to select the appropriate chart and begin the assessment process. Depending on the procedure for registering patients at your clinic, the child's name, age and other information such as address may have been recorded already. If not, you may begin by asking the child's name and age.

Decide which age group the child is in:

- Age up to 2 months (0 day to 59 days)
- Age 2 months up to 5 years (2 months to 59 months)

If the child is age 2 months up to 59 months, select the chart *ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS.* 'Up to 5 years' means the child has not yet had his fifth birthday. For example, this age group includes a child who is 4 years 11 months but not a child who is 5 years old.

A child who is 2 months old would be in the group 2 months up to 5 years, not in the group 0 day up to 2 months.

If the child is not yet 2 months of age, the child is considered a young infant. Use the chart to *ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT AGED UPTO 2 MONTHS***.**

In the next module, *Assess and Classify the Sick Child,* you will learn how to assess and classify a child who is age 2 months up to 5 years. How to manage a young infant is taught later in the course in the module *Management of the Sick Young Infant Aged up to 2 months*.

GLOSSARY

Abscess:	A collection of pus
Abdomen:	The area of the body containing the stomach and bowel
Abdominal:	In the abdomen
Active feeding:	Encouraging a child to eat, for example, by sitting with him and helping to get the spoon to his mouth
Active neurological disease of the central nervous system:	Epilepsy and other current diseases of the brain or spinal cord. This does not include permanent, old neurological problems from cerebral palsy, polio, or injuries

AIDS:	Acquired Immune Deficiency Syndrome, caused by infection with the Human Immunodeficiency Virus (HIV). AIDS is the final and most severe phase of HIV infection. The immune system works poorly, and the patient may have various symptoms and diseases (such as *diarrhoea*, *fever*, wasting and **PNEUMONIA**)
Amoebiasis:	Amoebic dysentery; dysentery caused by the amoeba *E. histolytica*
Allergies:	Problems such as sneezing, a rash, or difficult breathing that affect certain people when specific things are breathed in, eaten, injected or touched
Anti-diarrhoeal drugs:	Drugs that are claimed to stop or decrease *diarrhoea*, such as anti-motility drugs. These drugs are not useful for children with *diarrhoea*. Some are dangerous
Antiemetics:	Drugs to control vomiting
Antimotility drugs:	Drugs that slow the movement of contents through the bowel by reducing its muscular activity
Appetite:	The desire to eat
Areola	The dark circle of skin around the nipple of the breast
Aspiration	Inhaling (breathing in) fluids
Assess	To consider the relevant information and make a judgement. As used in this course, to examine the child and identify the signs of illness
Axillary temperature	Temperature measured in the armpit
BCG	An immunization to prevent tuberculosis, given at birth. The initials stand for Bacille Calmette-Guerin
Bowel	Intestine
Breast cancer	Malignant tumour that starts in the breast
Breast milk substitute	Formula or milk given instead of or in addition to breastmilk. An example is cow's milk made as follows: Mix ½ cup (100 ml) boiled whole cow's milk with ¼ cup (50 ml) boiled water and 2 level teaspoons (10 grams) of sugar

Cerebral malaria	Falciparum malaria affecting the brain
Checking questions	Questions intended to find out what someone understands and what needs further explanation. After teaching a mother about feeding, a health worker might ask the checking question, “What foods will you feed your child?”
Chest indrawing	When the lower chest wall (lower ribs) goes in when a child breathes in. In a child age 2 months up to 5 years, if chest indrawing is clearly visible and present all the time during an examination, it is sign of **PNEUMONIA**
Chronic	Lasting a long time or recurring frequently
Classify	As used in this course, to select a category of illness and severity (called a classification) based on a child's signs and symptoms
Clinic	As used in this course, any first-level outpatient health facility such as dispensary, rural health post, health centre or the outpatient department of a hospital
Communication skills	As used in this course, skills used in teaching and counselling with mothers, including: Ask and Listen, Praise, Advise and Check Understanding
Complementary foods	Foods given in addition to breast milk, starting when a child is 6 months of age. By age 6 months, all children should be receiving a nutritious, thick complementary food, such as cereal mixed with oil and bits of meat, vegetables, or fish. Complementary foods are sometimes called ‘weaning foods’
Confidence	A feeling of being able to succeed
Contraindication	A situation or condition in which a certain treatment, procedure or drug should not be used
Corneal rupture	Bursting of the cornea, that is, the clear outer layer of the eye
Counsel	As used in this module, to teach or advise a mother as part of a discussion which includes: asking questions, listening to the mother's answers, praising and/or giving relevant advice, helping to solve problems, and checking understanding

Counselling	The process of teaching or advising as described above
Deficiency	A lack or shortage. Vitamin A deficiency is a shortage of vitamin A in the body
Dehydration	Loss of a large amount of water and salts from the body
Diagnostic testing	Special testing, such as laboratory tests or X rays to determine the type or cause of illness
Diarrhoeal episodes	Occurrences of *diarrhoea*
Digest	To process food so it can be absorbed and used in the body
Digital watch	A watch that shows the time in digits (numerals) instead of with moving hands
Disease	As used in this course, a specific illness or group of illnesses, classified on the basis of signs and symptoms, for example, **VERY SEVERE DISEASE**. This classification includes several illnesses such as meningitis, cerebral malaria and septicaemia
Energy-rich	Full of ingredients that give energy (or calories), such as starches or oil
Engorgement	A condition in which a mother's breasts are swollen, hard and painful because they are too full of milk
Episodes	Occurrences of a disease
Essential	Necessary. Essential vitamins and minerals (such as vitamins and iron) are those necessary for good health
Essential fatty acids	Fats those are necessary for a baby's growing eyes and brain. These fatty acids are not present in cow's milk or most brands of formula
Exclusive breastfeeding	Giving a child only breast milk and no additional food, water, or other fluids (with the exception of medicines and vitamins, if needed)
Expertise	A high level of skill in a particular area
Falciparum malaria	Malaria caused by the parasite *Plasmodium falciparum*
Family foods	Foods ordinarily eaten by the family
Febrile	Having *fever*
Feeding assessment	The process of asking questions to find out about a child's usual feeding and feeding during illness. (Appropriate questions are listed on the *COUNSEL* chart)
Feeding bottle	A bottle with a nipple or teat that a child

	sucks on. Feeding bottles should not be used
Feeding problems	Differences between a child's actual feeding and feeding recommendations listed on the *COUNSEL* chart, and other problems such as difficulty breastfeeding, use of a feeding bottle, lack of active feeding, or not feeding well during illness
Femoral artery	The main artery to the leg. Its pulsation can be felt in the groin (upper inner thigh)
Femoral vein	The main vein from the leg. It is located just medial to the femoral artery (that is, towards the middle of the body from the femoral artery)
Fever	As used in this course, *fever* includes: - a history of *fever* (as reported by the mother) - feeling hot to the touch - an axillary temperature of 37.5°C (99.5°F) or higher, or a rectal temperature of 38°C (100.4°F) or higher
First-level health facility	A facility such as a health centre, clinic, rural health post, dispensary or outpatient department of a hospital, which is considered the first facility within the health system where people seek care. In this course, the term clinic is used for any first-level health facility
Folate	Folic acid, a vitamin used in the treatment of **ANAEMIA**
Follow-up visit	A return visit requested by the health worker to see if treatment is working or if further treatment or referral is needed
Fontanelle	The soft spot on top of a young infant's head, where the bones of the head have not come together
Full reassessment	To do the entire assessment process on the *ASSESS & CLASSIFY* chart again to see if there has been improvement and also to assess and classify any new problems
Full-term	Word used to describe a baby born after 37 completed weeks of pregnancy
Glucose	A sugar used in oral rehydration salts and in IV fluids
Gruel	A food made by boiling cereal meal or legumes in milk or water. Gruel may be made thick like a porridge or thin like a

	drink. For complementary feeding, gruel should be made thick
Grunting	Soft, short sounds that a young infant makes when breathing out. Grunting occurs when a young infant is having trouble breathing
Guilty	A feeling of having done wrong
Haemoglobin	A protein containing iron that carries oxygen and makes the blood-red
Hepatitis B virus	One of several viruses that cause hepatitis; this virus also causes liver cancer. This virus is spread easily by blood, so needles and syringes must be sterile
Hookworm	A small worm that may live as a parasite in a person's intestine and suck blood. This blood loss may lead to **ANAEMIA**
Hospital	As used in this course, any health facility with inpatient beds, supplies, and expertise to treat a very sick child
Hygienically	Using clean utensils and clean hands, avoiding germs
Hypernatremia	Too much sodium in the blood
Hypothermia	Low body temperature (below 35.5°C axillary or 36°C rectal temperature)
Hypoxia	A condition in which too little oxygen is reaching the organs of the body
Illness	Sickness. As described in this course, the signs and symptoms of illness need to be assessed and classified in order to select treatment
Immune suppression	Weakening of the immune system so that the body has little resistance to disease
Immune system	The system that helps the body to resist disease by producing antibodies or special cells to fight disease-causing agents
Immunization status	A comparison of a child's past immunizations with the recommended immunization schedule. Immunization status describes whether or not a child has received all of the immunizations recommended for his age, and, if not, what immunizations are needed now
Incompetent	Lacking the ability or skill to do something
Infant	As used in this course, a baby up to age 12 months
Infant feeding formulas	Concentrated milk or soy products (to be combined with water) sold as a substitute for breast milk

Initial visit	The first visit to a health worker for an episode of an illness or problem
Inpatient	A patient who stays at a health facility and receives a bed and food as well as treatment
Integrated	Combined
Integrated case management process	A process for treating patients that includes consideration of all of their symptoms
Intramuscular (IM) injection	An injection (shot) put into a muscle, usually of the thigh
Intravenous (IV) infusion	Continuous slow introduction of a fluid into a vein
Intravenous (IV) injection	An injection (shot) put directly into a vein
Jaundiced	Having a yellow colour in the eyes and skin
Koplik's spots	Spots that occur in the mouth inside the cheek during the early stages of measles. They are small, irregular, bright red spots with a white spot in the centre. They do not interfere with drinking or eating and do not need treatment
Kwashiorkor	A type of protein-energy malnutrition due to lack of protein in the diet. A child with kwashiorkor has oedema, which may cause his limbs to appear puffy. The child may have sparse hair and dry scaly skin
Lactose	A sugar present in milk
Local	Present in the nearby geographic area. For example, local foods are those found in the area. (See 'local infections' below for another meaning of 'local')
Local infections	Infections located only in a specific place on the body, for example, in the eye or in the mouth
Low blood sugar	Too little sugar in the blood, also called hypoglycaemia
Low birth weight	Low weight at birth, due either to poor growth in the womb or to prematurity (being born early). Children less than 2500 grams have low birth weight
Main symptoms	As used in this course, those symptoms which the health worker should ask the mother about when assessing the child. The four main symptoms listed on the *ASSESS & CLASSIFY* chart are: *cough or difficult breathing*, *diarrhoea*, *fever* and *ear problem*
Malignant	Tending to spread and result in death
Marasmus	A type of protein-energy malnutrition due to long-term lack of calories and protein. A

	child with marasmus appears to be just 'skin and bones'
Mastoid	The skull bone behind the ear
Measles complications	Problems or infections that occur during or after measles. Some examples of measles complications are: *diarrhoea*, **PNEUMONIA**, stridor, mouth ulcers, ear infection and eye infection. A less common complication is encephalitis, an inflammation of the brain
Meningitis	A dangerous infection in which the spinal fluid and the membranes surrounding the brain and spinal cord become infected
Midwife	A health care worker who assists women in childbirth and may also provide other health care
Mouth ulcers	Sores on the inside of the mouth and lips or on the tongue. These may occur with measles and may be red or have white coating on them. They make it difficult to eat or drink
Nasogastric (NG) tube	A tube inserted through a patient's nose to his stomach. An NG tube may be used to give ORS solution to severely dehydrated patients when IV therapy is not available or to feed a severely malnourished child who cannot eat
Nutrient	A substance in food that helps one grow and be healthy, such as protein, minerals, and vitamins
Nutrient-rich	Full of the essential nutrients. These include protein as well as vitamins and minerals
Nutritional status	The degree to which a child shows or does not show certain signs of **MALNUTRITION** or **ANAEMIA** or **LOW WEIGHT**. In this course, a child's nutritional status may be classified as **COMPLICATED SEVERE ACUTE MALNUTRITION, UNCOMPLICATED SEVERE ACUTE MALNUTRITION, MODERATE ACUTE MALNUTRITION, NO ACUTE MALNUTRITION, SEVERE ANAEMIA, ANAEMIA** or **NO ANAEMIA**
Oedema	Swelling from excess fluid under the skin.

	Oedema usually occurs in the lower legs and feet, sometimes elsewhere
Opportunistic infections	Infections caused by microorganisms which the body's immune system is normally able to fight off. When the immune system is weakened, as in AIDS, opportunistic infections can take hold. For example, in a healthy person, there are organisms in the mouth which do not normally cause infection; however, in a person with a weakened immune system, these same organisms may cause oral thrush
Oral Rehydration Salts (ORS)	A mixture of glucose and salts conforming to the WHO recommended formula (in grams per litre): sodium chloride 3.5; trisodium citrate, dihydrate 2.9, or sodium bicarbonate 2.5; potassium chloride 1.5; and glucose 20.0
OPV	Oral polio vaccine. To prevent polio, it is given in 4 doses: at birth, 6 weeks, 10 weeks, and 14 weeks
Outpatient	A patient who does not stay overnight at a health facility
Ovarian cancer	Malignant tumours starting in the ovaries (the female sex glands in which eggs are formed)
Overwhelmed	Feeling as though there is too much to do or remember
Parasite	An organism living in or on another organism and causing it harm
Pathogen	An organism or microorganism that causes disease
Persist	To remain or endure
Pentavalent	Immunization to prevent diphtheria, pertussis (whooping cough), tetanus, Hemophillus Influenzae B and Hepatitis B by a single. For full protection, a child needs 3 injections: at 6 weeks, 10 weeks, and 14 weeks
Practical	Possible to do with the resources and time available
Pre-referral	Before referral to a hospital
Premature	Born early, before 37 weeks of pregnancy
Protein	A substance in food made up of amino acids needed for adequate growth. Meat, fish, eggs, milk and beans are examples of foods containing protein

Protein-energy malnutrition	A condition caused by lack of enough protein or energy in the diet or by frequent illness
Pulses	Legumes, such as peas, beans or lentils
Pulse Oximeter	Device that measures oxygen saturation (SpO_2) level in the blood
Pustule	A reddish bump on the skin containing pus
Radial pulse	The pulse felt over the radial artery, which is the main blood vessel at the wrist on the outside of the thumb
RDT	Rapid Diagnostic Test for Malaria
Reassessment	As used in this course, to examine the child again for signs of specific illness to see if the child is improving
Recommendations	Advice, instructions that should be followed
Recurrent convulsions	Spasms or fits that occur repeatedly
Reduce, reduction	Decrease
Referral	As used in this course, sending a patient for further assessment and care at a hospital
Re-lactation	Starting breastfeeding again and producing breastmilk after stopping
Respiratory distress	Discomfort from not getting enough air into the lungs
Semi-solid food	Food that is part solid and part liquid. A soft, wet food such as gruel or porridge is semi-solid
Semi-upright	Partly upright, leaning
Septicaemia	An infection of the blood, also called 'sepsis' in this course
Severe chest indrawing	Chest indrawing that is very deep and easy to see. In a young infant, mild chest indrawing is normal, but severe chest indrawing is a sign of serious illness
Severe classification	As used in this course, a very serious illness requiring urgent attention and usually referral or admission for inpatient care. Severe classifications are listed in pink-coloured rows on the *ASSESS & CLASSIFY* chart
Shock	A dangerous condition with severe weakness, lethargy or unconsciousness, cold extremities and fast, weak pulse. It is caused by *diarrhoea* with very severe dehydration, haemorrhage, or sepsis
Signs	As used in this course, physical evidence of a health problem which the health worker observes by looking, listening or feeling.

	examples of signs include: fast breathing, chest in-drawing, sunken eyes, stiff neck, pus draining from the ear, etc
Stable	Staying the same rather than getting worse
Sterile abscess	An abscess that contains no bacteria
Symptoms	As used in this course, health problems reported by the mother such as *cough*, *diarrhoea* or ear pain
Thrush	Ulcers or white patches on the inside of the mouth and tongue, caused by a yeast infection
Trophozoites	Stage of a protozoan organism such as *Giardia lamblia* or *E. histolytica;* the stage which causes tissue damage
Ulcer	A painful open sore
Upright	Vertical (standing up)
Urgent	Requiring immediate attention, important to save a child's life
Urgent referral	Sending a patient immediately for further care at a hospital
Uterus	Womb
Vulnerable	Endangered, likely to become ill
Weaning foods	Another term for complementary foods, given in addition to breast milk starting at 6 months of age
Whipworm	A small worm that may live as a parasite in a person's intestine
Young infant	As used in this course, a baby age up to 2 months

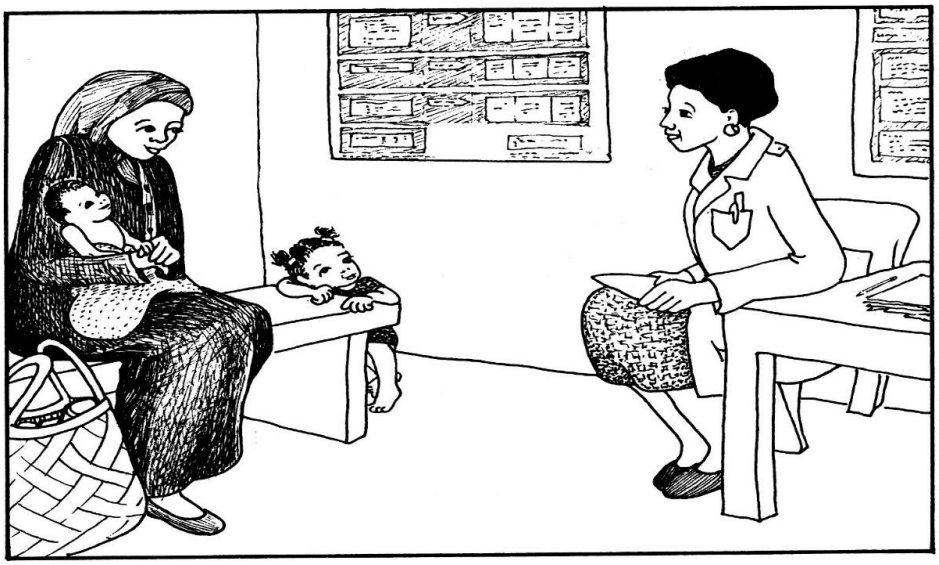
MODULE-2

ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

INTRODUCTION

A mother brings her sick child to the clinic for a particular problem or symptom. If you only assess the child for that particular problem or symptom, you might overlook other signs of disease. The child might have **PNEUMONIA**, **DIARRHOEA, MALARIA, MEASLES** or **MALNUTRITION**. These diseases can cause death or disability in young children if they are not treated.

The chart *ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS* describes how to assess and classify sick children so that signs of disease are not overlooked. According to the chart, you should ask the mother about the child's problem and check the child for general danger signs. Then ask about the four main symptoms: *cough or difficult breathing, diarrhoea, fever* and *ear problem*. A child who has one or more of the main symptoms could have a serious illness. When a main symptom is present, ask additional questions to help classify the illness. Check the child for malnutrition and anaemia. Also check the child's immunization and vitamin A supplementation status and assess other problems the mother has mentioned.



LEARNING OBJECTIVES

This module will describe and allow you to practice the following skills:

- Asking the mother about the child's problem
- Checking for general danger signs
- Asking the mother about the four main symptoms:
  - *Cough or difficult breathing*
  - *Diarrhoea*
  - *Fever*
  - *Ear problem*
- When a main symptom is present:
  - Assessing the child further for signs related to the main symptom
  - Classifying the illness according to the signs which are present or absent

- Checking for signs of malnutrition and anaemia and classifying the child's nutritional status
- Checking the child's immunization and vitamin A supplementation status and deciding if the child needs any immunizations or vitamin A supplements today
- Assessing any other problems

Your facilitator will tell you more about the *ASSESS & CLASSIFY* chart.

1.0 ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

A mother (or other family member such as, father, grandmother, sister or brother) usually brings the sick child to the health centre. Mothers also bring their child to the health centre for well child visit, immunization and to treat for injury. When a mother brings her sick child to the clinic, what steps should be taken are described in *ASSESS & CLASSIFY* chart. This chart should not be used to treat an injured or burnt child. In most of the clinics, when a patient comes, the health-care staff finds out the reason behind their visit. He takes the child's weight and body temperature and writes them down in a patient's chart or a written record or a small paper. Then the mother and child meet the health worker. When you see the mother and her sick child:

Greet the mother appropriately and ask her to sit with her child.

You need to know the child's age so you can choose the right case management chart. Look at the child's record to find the child's age.

- If the child is age 2 months up to 5 years, assess and classify the child according to the steps on the *ASSESS & CLASSIFY* chart
- If the child is 0 day up to 2 months, assess and classify the young infant according to the steps on the *YOUNG INFANT* chart. (You will learn more about managing sick young infants later in the course)

Look to see if the child's weight and temperature have been measured and recorded. If not, weigh the child and measure his temperature later when you assess and classify the child's main symptoms. Do not undress or disturb the child now.

Ask the mother what the child's problems are

Record what the mother tells you about the child's problems.

An important reason for asking this question is to open good communication with the mother. Using good communication helps to reassure the mother that her child will receive good care. When you treat the child's illness later in the visit, you will need to teach and advise the mother about caring for her sick child at home. So, it is important to have good communication with the mother from the beginning of the visit.

To use good communication skills:

- Listen carefully to what the mother tells you. This will show her that you are taking her concerns seriously
- Use words the mother understands. If she does not understand the questions you ask her, she cannot give the information you need to assess and classify the child correctly
- Give the mother time to answer the questions. For example, she may need time to decide if the sign you asked about is present
- Ask additional questions when the mother is not sure about her answer. When you ask about a main symptom or related sign, the mother may not be sure if it is present. Ask her additional questions to help her give clearer answers.

Determine if this is an initial or follow-up visit for this problem

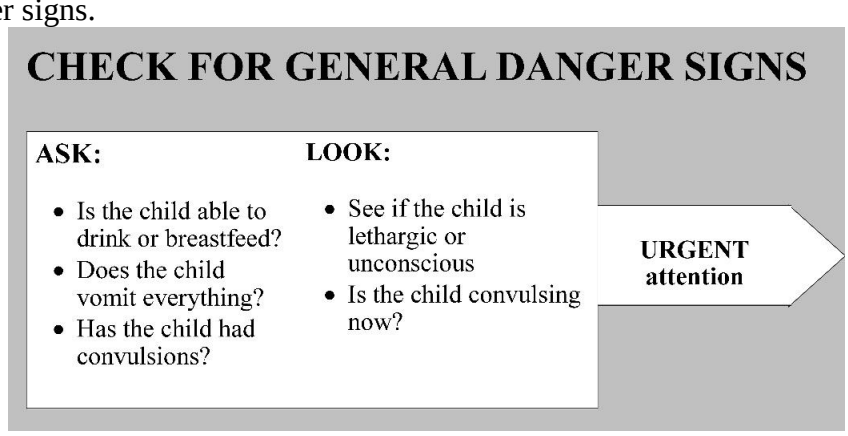
If this is the child's first visit for this episode of an illness or problem, then this is an initial visit. If the child was seen a few days ago for the same illness, this is a follow-up visit. A follow-up visit has a different purpose than an initial visit. During a follow-up visit, the health provider finds out if the treatment he gave during the initial visit has helped the child. If the child is not improving or is getting worse after a few days, the health provider **refers** the child to a hospital or changes the child's treatment. Whether it is an initial or follow-up visit depends on the patient registration system of your health centre and how the cause behind this visit is determined. Some health centres give follow-up slip, where the date is mentioned. Health workers of other health centres write the follow-up date on multi-visit card or chart; or during patient registration, the health-care staff asks mother about the reason of this visit. You will learn how to conduct follow-up visits at the end of this course. This module describes the children who comes for an initial visit.

2.0 CHECK FOR GENERAL DANGER SIGNS

Check all sick children for general danger signs. A general danger sign is present if one or more of the following is present:

- The child is not able to drink or breastfeed
- The child vomits everything
- The child has had convulsions
- The child is lethargic or unconscious
- The child is convulsing now

A child with a general danger sign has a serious problem. Most children with a general danger sign need **URGENT referral** to hospital. They may need lifesaving treatment with injectable antibiotics, oxygen or other treatments, which may not be available in your clinic. Complete the rest of the assessment quickly. How to provide urgent treatment is described in the module *Identify Treatment*. Here is the first box in the *Assess* column. It tells you how to check for general danger signs.



* A child with any general danger sign needs urgent attention; complete the assessment and any pre-referral treatment immediately so that **referral** is not delayed.

* If **referral** is not feasible, manage the child as described in Integrated Management of Childhood Illness, *TREAT THE CHILD*, Annex: Where **Referral** is not feasible, and WHO guidelines for inpatient care

When you check for general danger signs:

Ask**:** Is the child able to drink or breastfeed?

A child has the sign not able to drink or breastfeed if the child is not able to suck or swallow when offered a drink or breast milk. When you ask the mother if the child is

able to drink, make sure that she understands the question. If she says that the child is not able to drink or breastfeed ask her to describe what happens when she offers the child something to drink. For example, is the child able to take fluid into his mouth and swallow it? If you are not sure about the mother's answer, ask her to offer the child a drink of safe water or breast milk. Look to see if the child is swallowing the water or breast milk. A child who is breastfed may have difficulty sucking when his nose is blocked. If the child's nose is blocked, clear it. If the child can breastfeed after his nose is cleared, the child does not have the danger sign-not able to drink or breastfeed.

Ask**:** Does the child vomit everything?

A child who is not able to hold anything down at all has the sign-vomits everything. What goes down comes back up. A child who vomits everything will not be able to hold down food, fluids or oral drugs. A child who vomits several times but can hold down some fluids does not have this general danger sign. When you ask the question, use words the mother understands. Give her time to answer. If the mother is not sure if the child is vomiting everything, help her to make her answer clear. For example, ask the mother how often the child vomits. Also ask if each time the child swallows food or fluids, does the child vomit? If you are not sure of the mother's answers, ask her to offer the child a drink. See if the child vomits.

Ask: Has the child had convulsions?

During a convulsion, the child's arms and legs stiffen because the muscles are contracting. The child may lose consciousness or not be able to respond to spoken directions. Ask the mother if the child has had convulsions during this current illness. Use words the mother understands. For example, the mother may know convulsions as 'fits' or 'spasms'.

Look: See if the child is lethargic or unconscious

A lethargic child is not awake and alert when he should be. He is drowsy and does not show interest in what is happening around him. Often the lethargic child does not look at his mother or watch your face when you talk. The child may stare blankly and appear not to notice what is going on around him. An unconscious child cannot be wakened. He does not respond when he is touched, shaken or spoken to. Ask the mother if the child seems unusually sleepy or if she cannot wake the child. Look to see if the child wakens when the mother talks or shakes the child or when you clap your hands.

Look: See if the child is convulsing now?

During a convulsion the child's arms and legs stiffen or may shake whole body or may have a staring look. The child may lose consciousness or not be able to respond to spoken directions.

Note: If the child is sleeping and has *cough or difficult breathing*, count the number of breaths first before you try to wake the child.

If the child has a general danger sign, complete the rest of the assessment quickly. This child seems to have **VERY SEVERE DISEASE**. There must be no delay in his treatment.

* * *

You will learn to record information about the sick child on a special form. This form is called the IMCI Register**.** The Register has a similar box as *ASSESS & CLASSIFY* chart. It lists the questions to ask the mother and the signs for which you should look, listen and feel. In most of the exercises in this module, you will only use part of the Register. As you learn each step in the chart, you will use more of it. Your facilitator will show you a Register and tell you how to use it.

EXERCISE A

Note: This picture means you will do a written exercise. You will read case studies describing signs and symptoms in sick children. You will use the Register to record the child's signs and how you classified the illness. When you finish the exercise, a facilitator will discuss your work with you. The facilitator can also answer your questions about information in the module or on the chart.

* * *

Read the following case study and answer the questions.

Case study 1: Salina

Salina is 15 months old. She weighs 8.5 kg. Her temperature is 38.5ºC. The health provider asked, "What are the child's problems?" The mother said, "Salina has been *coughing* for 4 days, and she is not eating well". This is Salina's initial visit for this problem. The health provider checked Salina for general danger signs. He asked, "Is Salina able to drink or breastfeed?" The mother said, "No. Salina does not want to breastfeed." The health provider gave Salina some water. She was too weak to lift her head. She was not able to drink from a cup. Next, he asked the mother, "Is she vomiting?" The mother said, "No." Then he asked, "Has she had convulsions?" The mother said, "No." The health provider looked to see if Salina was lethargic or unconscious. When the health provider and the mother were talking, Salina watched them and looked around the room. She was not lethargic or unconscious.

Now answer the questions on the next page.Here is the overview of IMCI Register:

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):				
	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	☐ **Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:				**Severe persistent diarrhea** ‡ ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female		☐ Blood in the stool	☐ **Dysentery**		
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin for 5 days; Dose: ☐ If not available, Cotrimoxazole for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Visit: ☐ Initial ☐ Follow up	☐ Eye examination				
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Mother's name:					
	☐ Examination to diagnose other problems	☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
Father's name:					
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
Address: House Name/ Holding Number:					
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Village / Mahalla:					
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
Union:		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
Upazila:					
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:					
			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:					
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

In the register form-

a. Write Salina's name, age, weight, sex, address in the spaces provided on the first column and temperature, breaths per minute, arterial oxygen saturation (SpO_2) and date of starting symptoms on the second column of the register
b. Tick (✓) whether this is the initial or follow-up visit for this problem
c. Mark the child's problems

Case study 2: Iqbal

Iqbal is 4 years old. His weight is 10kg. His body temperature is 38° C. The health worker asked about the child's problems. His guardian said, "He is *coughing* and he has ear pain". This is his initial visit to these problems. The health worker asked, "Is your child able to drink or breastfeed?" The guardian said, "Yes." The health worker asked, "Does Iqbal vomit everything?" She said, "No." the health worker looked at Iqbal. The child is not lethargic or unconscious.

In the register form-

a. Write Iqbal's name, age, weight, sex, address in the spaces provided on the first column and temperature, breaths per minute, arterial oxygen saturation (SpO_2) and date of starting symptoms on the second column of the register
b. Mark Iqbal's problems
c. Tick (✓) whether this is the initial or follow-up visit for this problem

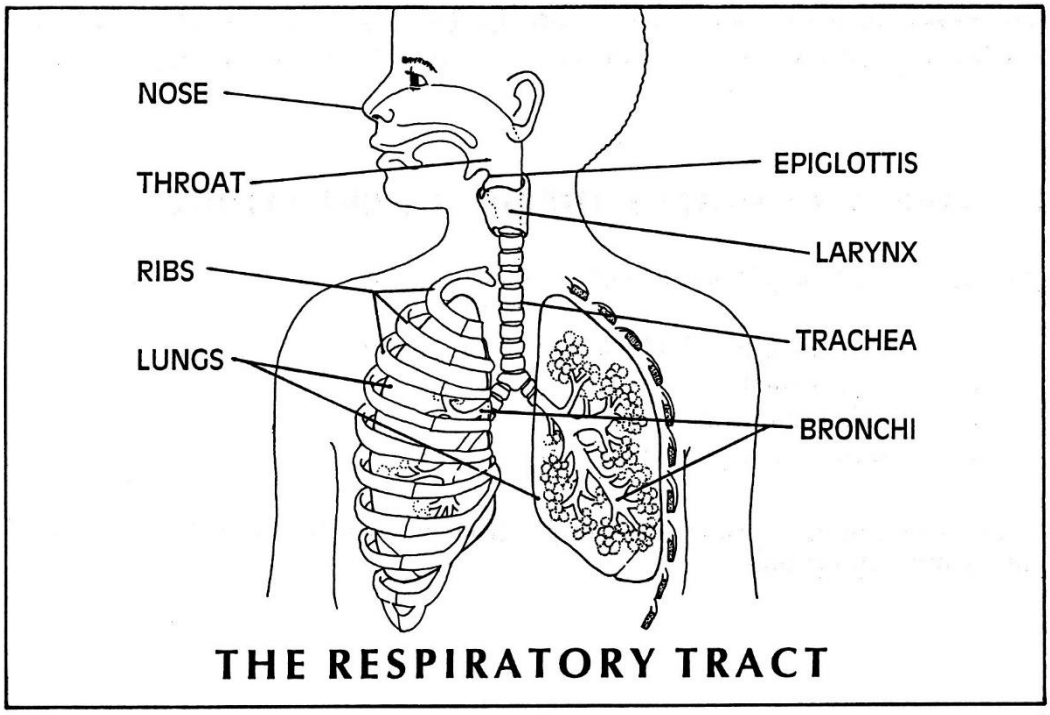
Tell the facilitator when you have completed this exercise

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: □ Male □ Female Visit: □ Initial □ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …… Height(Inch): …… Temperature (°C/ °F): …… Breaths/minute: …… Measure oxygen saturation (SpO_2) by pulse oximeter (%): …… Date of starting symptoms: …… □ Palm examination □ Eye examination □ Examination to diagnose Early Childhood Development (ECD) □ Examination to diagnose other problems	□ Not able to drink or breast feed □ Vomits everything □ Had convulsion or convulsing now □ Lethargic or unconscious □ Stridor in calm child	□ **Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
		□ Chest in-drawing □ Fast breathing-50 breaths per minute or more (2 months–11 months) □ Fast breathing-40 breaths per minute or more (12 months- 5 years)	□ **Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ Amoxicillin DT twice daily for 5 days; Dose: □ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
		□ No signs of pneumonia or very severe disease	□ **Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficultics □ If not improving, advise to FU in 5 days
		Dehydration Verification: □ Lethargic or unconscious □ Sunken eyes □ Not able to drink or drinking poorly □ Restless, irritable □ Drinks eagerly, thirsty □ Skin pinch goes back slowly □ Skin pinch goes back very slowly	**Dehydration** □ **Severe Dehydration** □ **Some Dehydration** □ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** □ **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
		Diarrhoea for 14 days or more: □ Dehydration present □ No dehydration □ Blood in the stool	□ **Severe Persistent Diarrhoea** □ **Persistent Diarrhoea** □ **Dysentery**	**Severe persistent diarrhea :** □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days **Dysentery:** □ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
		□ Tender swelling behind the ear	□ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		□ Ear pain □ Pus or water draining from the ear (<14 days)	□ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
		□ Pus or water draining from the ear (>14 days)	□ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
		□ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) □ Any general danger sign □ Stiff neck	□ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Malaria Risk □ Travel to Malaria risk areas □ RDT/ Other Malaria test positive □ No cause of fever	□ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Other causes of fever present	□ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		□ Any general danger sign □ Clouding of cornea □ Deep or extensive mouth ulcers	□ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
		□ Pus draining from the eye □ Mouth ulcers	□ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		□ Measles now or within the last 3 months	□ **Measles**		□ Vitamin A
		□ Oedema of both feet □ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm □ Medical complication present □ Not able to finish Nutritional therapy □ Breastfeeding problem	□ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm	□ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
		□ WFH/L z-scores: between -3 and -2 z-scores □ MUAC between 115 and 125 mm	□ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		□ Severe palmar pallor □ Some palmar pallor	□ **Severe Anaemia** □ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient; Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
			□ **Low birth weight (within 72 hours)** □ **Less weight than age (Underweight) (6-59 months)** □ **Less height than age (Stunting) (6-59 months)** □ **Less weight than height (Wasting) (6-59 months)**		
			□ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** □ **Watering from eye or accumulation of discharge** □ **Redness of eye (Corneal ulcer/Conjunctivitis)** □ **Injury of Eye ball and Adnexa** □ **Squint** □ **Structural deformity** □ **Dimness of vision** □ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
			□ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			□ **Drowning** □ **Illness due to injuries/accidents**		
			□ **Other problem (Specify):**		
		Other Nutritional Information			
		□ Exclusive breast feeding (0-6 months)			
		□ Nutritional therapy (6-23 months)			
		Counseling			
		□ IYCF □ Vitamin A □ IDD □ Anaemia □ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

3.0 ASSESS AND CLASSIFY COUGH OR DIFFICULT BREATHING

Respiratory infections can occur in any part of the respiratory tract such as the nose, throat, larynx, trachea, air passages or lungs.



A child with *cough or difficult breathing* may have **PNEUMONIA** or any other severe infection of the respiratory system. **PNEUMONIA** is infection of lungs. Bacteria and virus both can cause **PNEUMONIA.** In developing countries, bacteria is the cause of **PNEUMONIA**. Often, **PNEUMONIA** is caused by Streptococcus pneumoniae and Haemophilus influenzae. Children suffering from bacterial **PNEUMONIA** may die from hypoxia or sepsis. Some children come to the health centre with respiratory tract infections which are less severe. A child with *cough and difficult breathing* often suffer from simple infection. For example, a child with common cold may have *cough*, because he has post nasal drip. Or the child may have viral infection of airway, which is called bronchiolitis. These children are not severely ill. They do not need treatment with antibiotic. Family members can treat him at home.

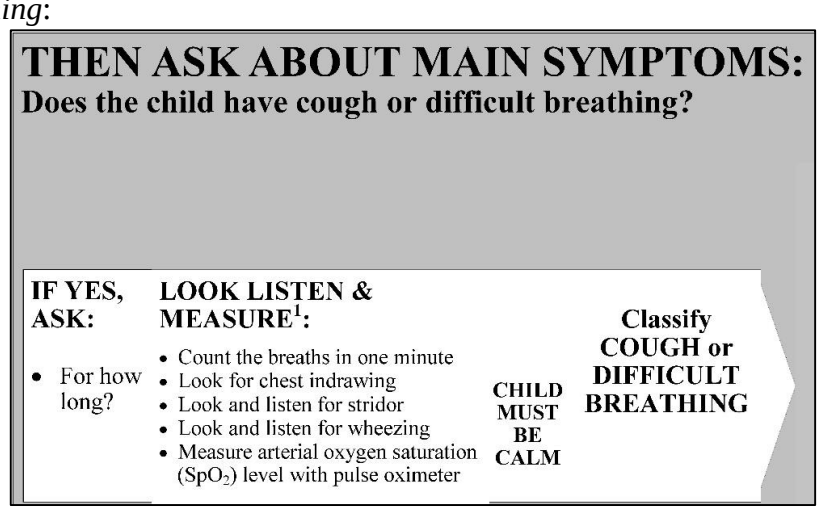
The healthcare provider might need to identify only a few children having *cough or difficult breathing* who needs antibiotic treatment. When the **PNEUMONIA** becomes more severe, the lungs become even stiffer. Chest indrawing may develop. Chest indrawing is a sign of **PNEUMONIA.** Luckily, the health worker can identify most of the cases of **PNEUMONIA** with only two clinical signs - fast breathing and chest indrawing. When children develop **PNEUMONIA**, their lungs become stiff. One of the body's responses to stiff lungs and hypoxia or oxygen saturation (SpO_2) <90% is fast breathing. Chest indrawing is also seen. Chest indrawing is another sign of **PNEUMONIA.**

3.1 Assess Cough or Difficult Breathing

A child with *cough or difficult breathing* is assessed for:

- How long the child has had *cough or difficult breathing*
- Count breathe in one minute
- Chest indrawing
- Stridor in a calm child
- Wheeze
- Measure arterial oxygen saturation with a pulse oximeter

Here is the box in the *Assess* column that lists the steps for assessing a child for *cough or difficult breathing*:



For all sick children, ask about *cough or difficult breathing*.

Ask**:** Does the child have *cough or difficult breathing*?

Difficult breathing is any unusual pattern of breathing. Mothers describe this in different ways. They may say that their child's breathing is "fast" or "noisy" or "interrupted". If the mother answers, "No", look to see if you think the child has *cough or difficult breathing*. If the child does not have *cough or difficult breathing*, ask about the next main symptom, *diarrhoea*. Do not assess the child further for signs related to *cough or difficult breathing*. If the mother answers, "Yes", ask the next question.

Ask**:** For how long?

A child who has had *cough or difficult breathing* for more than 30 days has a chronic *cough*. This may be a sign of tuberculosis, asthma, whooping *cough* or another problem.

Count the breaths in one minute.

You must count the breaths the child takes in one minute to decide if the child has fast breathing. The child must be quiet and calm when you look and listen to his breathing. If the child is frightened, crying or angry, you will not be able to obtain an accurate count of the child's breaths. Tell the mother you are going to count her child's breathing. Remind her to keep her child calm. If the child is sleeping, do not wake the child. To count the number of breaths in one minute:

1.Use a watch with a second hand or a digital watch

Ask another health provider to watch the second hand and tell you when 60 seconds have passed. You look at the child's chest and count the number of breaths

b. If you cannot find another health provider to help you, put the watch where you can see the second hand. A glance at the second hand as you count the breaths the child takes in one minute

2. Look for breathing movement anywhere on the child's chest or abdomen. Usually, you can see breathing movements even on a child who is dressed. If you cannot see this movement easily, ask the mother to lift the child's shirt. If the child starts to cry, ask the mother to calm the child before you start counting. If you are not sure about the number of breaths you counted (for example, if the child was actively moving and it was difficult to watch the chest, or if the child was upset or crying), repeat the count. The cut-off for fast breathing depends on the child's age. Normal breathing rates are higher in children age 2 months up to 11 months than in children age 12 months up to 5 years. For this reason, the cut-off for identifying fast breathing is higher in children 2 months up to 11 months than in children age 12 months up to 5 years.

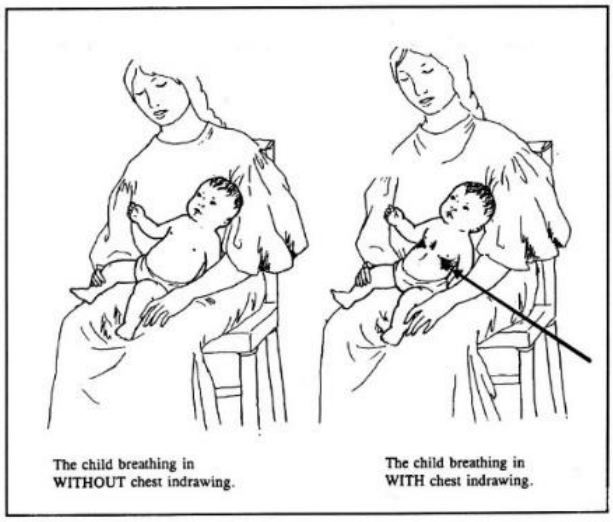
If the child is:	The child has fast breathing if you count:
2 months up to 11 months:	50 breaths per minute or more
12 months up to 5 years:	40 breaths per minute or more

Note: The child who is exactly 12 months old has fast breathing if you count 40 breaths per minute or more.

Before you look for the next two signs - chest indrawing and stridor , watch the child to determine when the child is 'breathing in' and when the child is 'breathing out'.

Look for chest indrawing

If you did not lift the child's shirt when you counted the child's breaths, ask the mother to lift it now. Look for chest indrawing when the child breathes in. Look at the lower chest wall. The child has chest indrawing if the lower chest wall goes in when the child breathes in. Chest indrawing occurs when the effort the child needs to breathe in is much greater than normal. In normal breathing, the whole chest wall (upper and lower) and the abdomen move out when the child breathes in. When chest indrawing is present, the lower chest wall goes in when the child breathes in. If you are not sure that chest indrawing is present, look again. If the child's body is bent at the waist, it is hard to see the lower chest wall move. Ask the mother to change the child's position so he is lying flat in her lap. If you still do not see the lower chest wall go in when the child breathes in, the child does not have chest indrawing. For chest indrawing to be present, it must be clearly visible and present all the time. If you only see chest indrawing when the child is crying or feeding, the child does not have chest indrawing. If only the soft tissue between the ribs goes in when the child breathes in (also called intercostal indrawing or intercostal retractions), the child does not have chest



indrawing. In this assessment, chest indrawing is lower chest wall indrawing.[1] It does not include intercostal indrawing.

Look and listen for stridor

Stridor is a harsh noise made when the child breathes in. Stridor happens when there is a swelling of the larynx, trachea or epiglottis.[2] This swelling interferes with air entering the lungs. It can be life-threatening when the swelling causes the child's airway to be blocked. A child who has stridor when calm has a dangerous condition. To look and listen for stridor, look to see when the child 'breathes in'. Then listen for stridor. Put your ear near the child's mouth because stridor can be difficult to hear. Sometimes you will hear a wet noise if the nose is blocked. Clear the nose, and listen again. A child who is not very ill may have stridor only when he is crying or upset. Be sure to look and listen for stridor when the child is calm. You may hear a whooshing sound when the child 'breaths out'. This is certainly not stridor.

Look and listen for wheeze

A musical noise on breathing out which is not always audible by ear but may be so by holding the ear near the child's mouth. A child with wheeze takes longer than normal to breathe out (prolonged expiratory phase) and makes an effort in doing so. Wheezing occurs when the airflow from the lungs is obstructed, due to narrowing of the small airway. Infection and allergic response causes narrowing of the airways. Main causes of wheezing are Bronchiolitis and other respiratory infections, Asthma (recurrent wheezing), inhaled foreign body & Tuberculosis may cause wheezing.

Look, listen and measure arterial oxygen saturation (SpO_2)

Measure arterial oxygen saturation (SpO_2) with a pulse oximeter. If pulse oximeter is not available, determine by only **ASK**, **LOOK** and **LISTEN**.

(Detail in the pulse oximeter user manual)

3.2 Classify Cough or Difficult Breathing

Classification Tables: Signs of illness and their classifications are listed on the *ASSESS & CLASSIFY* chart in classification tables. Most classification tables have three rows. If the chart is in colour, each row is coloured pink, yellow, or green. The colour of the rows tells you quickly if the child has a serious illness. You can also quickly choose the appropriate treatment. This colour coding is based on the colour coding system used in the Management of Sick children chart by ARI and CDD.

- A classification in a *pink* row needs urgent attention and **referral** or admission for inpatient care. This is **SEVERE PNEUMONIA OR VERY SEVERE DISEASE.** In such a situation, give Diazepam if convulsing now and give inhaled Salbutamol if wheezing. Give one dose of Paracetamol before **referring**
- A classification in a *yellow* row means that the child needs an appropriate antibiotic, Salbutamol (if wheezing) or other treatment. The treatment includes teaching the mother how to give oral drugs or to treat local infections at home. The health provider

[1] This is the same as subcostal indrawing or subcostal retractions.

[2] These conditions are often called croup

advises her about caring for the child at home and when she should return. This is **PNEUMONIA**

➢ A classification in a *green* row means the child does not need specific medical treatment such as antibiotics. The health provider teaches the mother how to care for her child at home. This is CO**UGH OR COLD**. However, if wheezing (or disappeared after inhaler Salbutamol) is present, give an inhaled Salbutamol for 5 days

Depending on the combination of the child's signs and symptoms, the child is classified in either the pink, yellow, or green row. That is, the child is classified only once in each classification table.

* * *

There are three possible classifications for a child with *cough or difficult breathing.* They are:

- **SEVERE PNEUMONIA OR VERY SEVERE DISEASE** or
- **PNEUMONIA** or
- **COUGH OR COLD**

Here is the classification table for *cough or difficult breathing*.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child or • Oxygen saturation (SpO_2) <90%	***Pink:*** **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Refer URGENTLY to hospital** ➢ **Give Diazepam if convulsing now** ➢ **Give inhaled Salbutamol if wheezing**
• Chest indrawing or • Fast breathing	***Yellow:*** **PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days** ➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaler Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	***Green:*** **COUGH OR COLD**	➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaled Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

[2] Dispersible Amoxicillin (Amoxicillin DT) as first line drugs in the treatment of **PNEUMONIA** if not available then Amoxicillin syrup is recommended

[3] In settings where inhaled Salbutamol is not available, syrup Salbutamol may be tried but not recommended for treatment of severe acute wheeze

How to use the classification table: After you assess for the main symptom and related signs, classify the child's illness. For example, to classify *cough or difficult breathing*:

1. Look at the pink (or top) row.

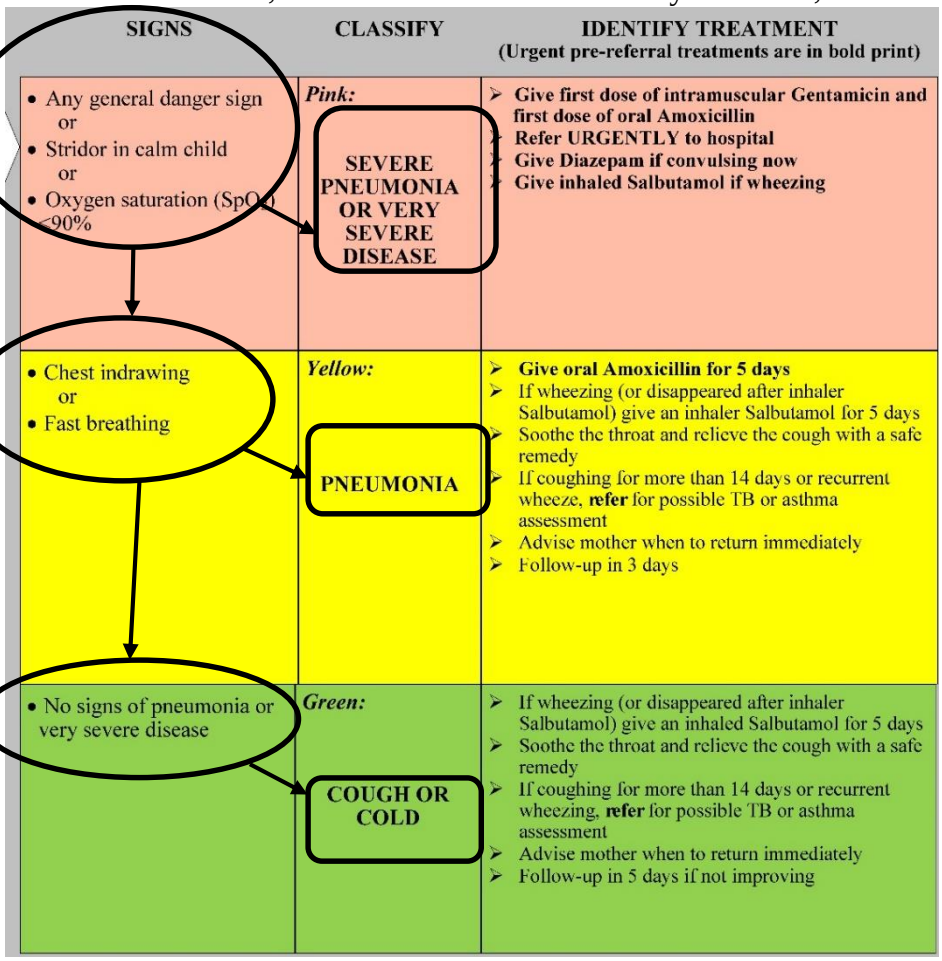
Does the child have a general danger sign? Does the child have stridor when calm? Is the child's arterial oxygen saturation <90%?

If the child has a general danger sign or any of the other signs listed in the pink row, select the severe classification, **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**.

2. If the child does not have the severe classification, look at the yellow (or second) row.

This child does not have a severe classification. Does the child have chest indrawing or fast breathing?

If the child has chest indrawing or fast breathing, a sign in the yellow row; and the child does not have a severe classification, select the classification in the yellow row, **PNEUMONIA**.



3. If the child does not have the severe classification or the classification in the yellow row, look at the green (or bottom) row.

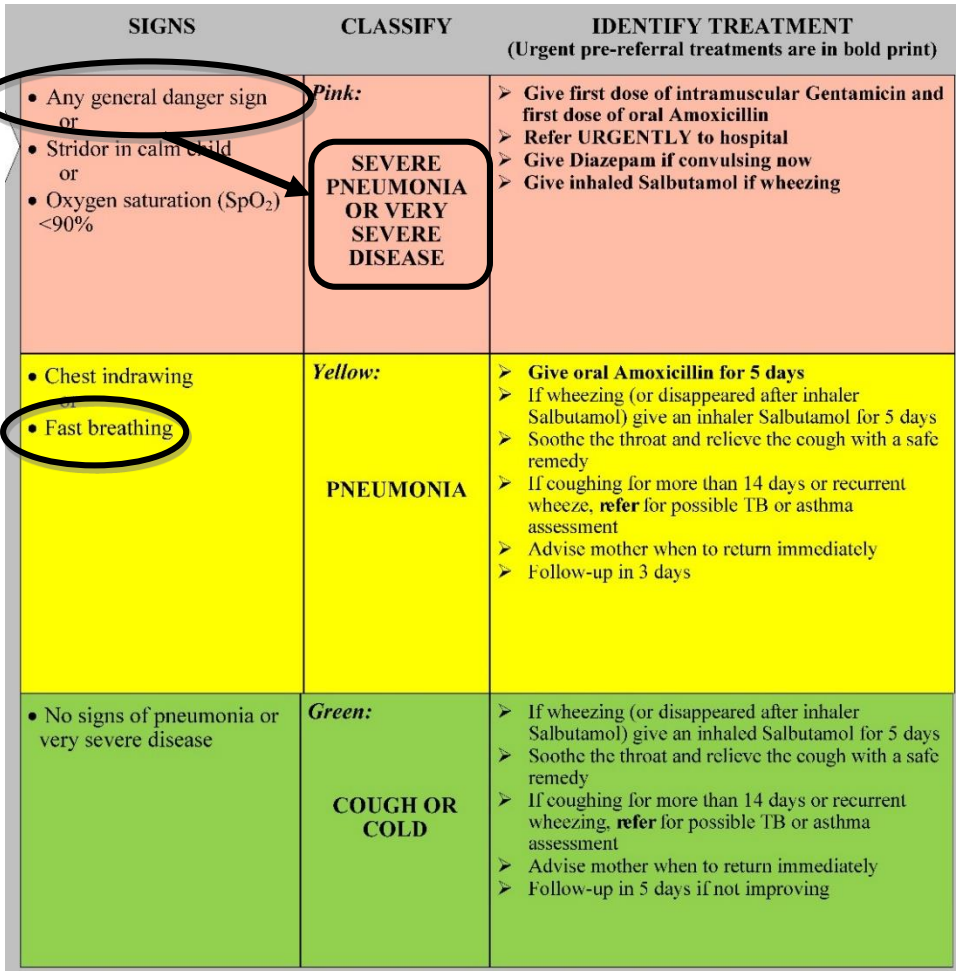
This child does not have any of the signs in the pink or yellow row.

If the child does not have any of the signs in the pink or yellow row, select the classification in the green row, **COUGH OR COLD.**

4. Whenever you use a classification table, start with the top row. In each classification table, a child receives only one classification. If the child has signs from more than one row, always select the more serious classification.

EXAMPLE: This child has a general danger sign and fast breathing.

Classify the child with the more serious classification - **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**.



Your facilitator will answer any questions you have about classifying illness according to the *ASSESS & CLASSIFY* chart

Here is a description of each classification for *cough or difficult breathing.*

SEVERE PNEUMONIA OR VERY SEVERE DISEASE

A child with *cough or difficult breathing* and with any of the following signs - any general danger sign or stridor or oxygen saturation <90% in a calm child, is classified with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE.** In developing countries, bacteria are the cause of **PNEUMONIA** in most of the cases. These patients need treatment with an antibiotic. A virus can be a cause of **PNEUMONIA** as well. There is no reliable method to differentiate a bacterial cause from a viral cause of **PNEUMONIA.** So, if the child has signs of **PNEUMONIA** give him appropriate antibiotic. If a child is classified with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**, he is very sick. He needs to be sent to hospital **URGENTLY** so that he receives oxygen, bronchodilator or antibiotic. Give him the first dose of intramuscular Gentamicin and oral Amoxicillin. Antibiotic will prevent further deterioration of **SEVERE PNEUMONIA**. This will also help in treating other severe bacterial

infection, such as, sepsis or meningitis. Treat the to prevent low blood glucose.

PNEUMONIA

A child with *cough or difficult breathing* who has fast breathing and chest indrawing, but no general danger signs, no stridor when calm and arterial oxygen saturation is not <90%, is classified with **PNEUMONIA**. A child with chest indrawing usually has **PNEUMONIA.** Or the child may have another serious acute lower respiratory infection such as bronchiolitis, pertussis, or a wheezing problem. Chest indrawing develops when the lungs become stiff. The effort the child needs to breathe in is much greater than normal. A child with chest indrawing has a higher risk of death from **PNEUMONIA** than the child who has fast breathing and no chest indrawing. If the child is tired, and if the effort the child needs to expand the stiff lungs is too great, the child's breathing slows down. Therefore, a child with chest indrawing may not have fast breathing. Chest indrawing may be the child's only sign of **PNEUMONIA**. Treat **PNEUMONIA** with oral Amoxicillin. Give inhaled Salbutamol for wheezing. Teach the mother how to give antibiotic, inhaler and safe remedy for *cough* and sore throat. Advise the mother when to return for a follow-up visit and also when to come back immediately.

COUGH OR COLD

A child with *cough or difficult breathing* who has no general danger signs, no stridor when calm or no chest indrawing and no fast breathing is classified with **COUGH OR COLD**. The child does not need any antibiotic for **COUGH OR COLD**. Antibiotic won't relieve the child's symptoms. It won't prevent the development of **PNEUMONIA** from **COUGH AND COLD**. The mother is worried about the child's sickness and that is why she has brought the child to health centre. Advise the mother to take good care of her child at home. Teach her to give hot tea with sugar in order to soothe the throat and relieve *cough*. If the child is unable to drink or breastfeed, gets sicker, develops *fever*, fast breathing or difficulty breathing, send him immediately to hospital. A child with a common cold gets well usually in a week or two. But if a child is suffering from persistent *cough*, he may have the possibility of having tuberculosis, asthma, pertussis or any other problem. A child suffering from persistent *cough* needs to be sent to hospital for further assessment.

Example: Read this case description. Also read, how the health worker has classified this child. Aziz is 18 months old. He is 11.5 kg. His body temperature is 37.5° C. So, his mother has brought him to clinic. She says that he has difficulty breathing. This is his initial visit for this problem. The health worker examines him for general danger sign. Aziz can drink. He has not vomited. He does not have convulsion. He is not lethargic or unconscious. The health worker asks, "For how long does Aziz have *cough*?" His mother says, "He has been *coughing* for last 6-7 days." Aziz is calm on her mother's lap. The health worker counts his breaths in one minute and it is 41 breaths per minute. He thinks, "As Aziz is more than 11 months old, his cut off point for fast breathing is 40. So, he has fast breathing."

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 1150/7 Date: 30.4.19 Child's name: Azi3 Date of birth: Age: 18mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Rahima Father's name: Khairul Address: House Name/	Weight (kg): 11·5 Height(Inch): Temperature (°C/ °F): 37·5° Breaths/ minute: 41 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 94% Date of starting symptoms: 23.4.19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☑ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
				Severe persistent diarrhoea: ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahallaı: Rampur

Union: Ramail

Upazilaı: Bhuapur

Districtı: Tangail

Mobile Noı:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**	☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**	☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**	☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**	☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**	
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**	
	☐ **Other problem (Specify):**	

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

1. The health worker does not see chest indrawing. He cannot hear any stridor. He measures arterial oxygen saturation to be 94% with a pulse oximeter. How the health worker recorded information on Aziz's disease as well as the symptoms, are shown below:
2. The health worker refers to *ASSESS & CLASSIFY* table to classify Aziz's sickness.
   a. First, he looks for any sign from the pink row. He thinks, "Does Aziz have any general danger sign? No, he does not have. Does Aziz have any sign from this row? No. Aziz has no sign of severe classification."
   b. Then the health worker looks at the yellow row. He thinks, "Does Aziz have any sign from a yellow row? He has difficult breathing."
   c. The health worker classifies Aziz as **PNEUMONIA**.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child or • Oxygen saturation (SpO_2) <90%	***Pink:*** **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Refer URGENTLY to hospital** ➢ **Give Diazepam if convulsing now** ➢ **Give inhaled Salbutamol if wheezing**
• Chest indrawing or • Fast breathing	***Yellow:*** **PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days** ➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaler Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	***Green:*** **COUGH OR COLD**	➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaled Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

3. He marks **PNEUMONIA** on the Register form.

EXERCISE B

In this exercise, you will practice recording signs related to *cough or difficult breathing*. You will also classify the child's illness. Read the following case studies. Record the child's signs on the Register and classify the illness. To do this exercise, look at a classification table for *cough or difficult breathing*. Use the one in your chart booklet or look at the job aid.

> **Note:** Be sure to tick (✓) 'initial visit' on the Register each time you do a case study in this module

Case 1: Kamrul

Kamrul is 6 months old. He weighs 5.5 kg. His temperature is 38°C. His mother said, "he has had *cough* for 2 days". The health provider checked for general danger signs. The mother said that Kamrul is able to breastfeed. He has not vomited during this illness. He has not had convulsions. Kamrul is not lethargic or unconscious. He is not convulsing now. The health provider said to the mother, "I want to check Kamrul's *cough*. You said he has had *cough* for 2 days now. I am going to count his breaths. He will need to remain calm while I do this."

a. The health provider counted 58 breaths per minute. He did not see chest indrawing. He did not hear stridor. He measured oxygen saturation level to be 95% with a pulse oximeter. Record Kamrul's signs on the Register below.

b. To classify Kamrul's illness, look at the classification table for *cough or difficult breathing* in your chart booklet. Look at the pink (or top) row.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	❑ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……	Diarrhoea for 14 days or more:		**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ❑ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	❑ Dehydration present ❑ No dehydration ❑ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	❑ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	❑ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		❑ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		❑ Exclusive breast feeding (0-6 months)			
		❑ Nutritional therapy (6-23 months)			
		Counseling			
		❑ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child or • Oxygen saturation (SpO_2) <90%	***Pink:*** **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Refer URGENTLY to hospital** ➢ **Give Diazepam if convulsing now** ➢ **Give inhaled Salbutamol if wheezing**
• Chest indrawing or • Fast breathing	***Yellow:*** **PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days** ➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaler Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	***Green:*** **COUGH OR COLD**	➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaled Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

- Decide: =Does Kamrul have a general danger sign? Yes___ No ___
- Does he have stridor when calm? Yes___No ___
- Is his oxygen saturation (SpO_2) <90%? Yes___No ___
- Does he have the severe classification of **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**? Yes___No___

c. If he does not have the severe classification, look at the yellow (or middle) row.

- Does Kamrul have fast breathing? Yes___ No___
- Does Kamrul have chest indrawing? Yes___No___

d. How would you classify Kamrul's illness? Mark the classification on the Register.

Case 2: Nasima

Nasima is 8 months old. She weighs 6 kg. Her temperature is 39°C. Her father told the health provider, "Nasima has had *cough* for 3 days. She is having trouble breathing. She is very weak." The health provider said, "You have done the right thing to bring your child today. I will examine her now." The health provider checked for general danger signs. The mother said, "Nasima did not breastfeed. She did not take any other drinks I offer her." Nasima does not vomit everything and has not had convulsions. Nasima is lethargic. She is not convulsing now. She did not look at the health provider or her parents when they talked. The health provider counted 55 breaths per minute. He saw chest indrawing. He decided Nasima had stridor because he heard a harsh noise when she breathed in. He measured oxygen saturation level to be 89% with a pulse oximeter. Record Nasima's signs on the Register below.

Now, look at the classification table for *cough or difficult breathing* on the chart. Classify this child's illness and mark your answer in the *Classify* column. Be prepared to explain to your facilitator how you selected the child's classification.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ **FU** in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ **FU** in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
Union:		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
Upazila:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 3: Masud

Masud is 18 months old. He is 9 kg. His body temperature is 37 °C. His mother brought him to the health centre because he has been *coughing* for past 3 days. The health worker checks for general danger sign. His mother said, "Masud is able to drink and he has not vomited anything". He did not have a convulsion. he is not lethargic or unconscious. He is not convulsing now. The health worker counters 38 breaths per minute. Mother removed cloth from the child's chest. The health worker did not see chest indrawing. When he was counting his breath, he did not hear any stridor. Masud's arterial oxygen saturation was 97%. Record Masud's signs on the Register on the next page. Then, refer to the *ASSESS & CLASSIFY chart.* Classify this child's illness and mark the classification on the Register.

Tell the facilitator when you are ready to discuss this exercise

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): …….	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): …….	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): …….	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: …….	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): …….	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: …….	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

EXERCISE C

Note: A picture like this one means you will do a video exercise. In a video exercise, you see examples of signs and practice identifying them. You also see demonstrations showing how to assess children for particular main symptoms. Sometimes you will see an actual case study. You will practice assessing and classifying the child's illness. In this exercise, you will practice identifying general danger signs. You will also practice assessing *cough or difficult breathing*.

1. For each of the children shown, answer the question:

	Is the child lethargic or unconscious?	
	YES	NO
Child 1		
Child 2		
Child 3		
Child 4		

2. For each of the children shown, answer the question:

			Does the child have fast breathing?	
	Age	Breaths per minute	YES	NO
Mano				
Wumbi				

3. For each of the children shown, answer the question:

	Does the child have chest indrawing?	
	YES	NO
Mary		
Jenna		
Ho		
Anna		
Lo		

4. For each of the children shown, answer the question:

	Does the child have stridor?	
	YES	NO
Petty		
Helen		
Simbu		
Hassan		

Video Case Study: Watch the case study and record the child's signs on this Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea** ☤ ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Blood in the stool ☐ Tender swelling behind the ear	☐ **Dysentery** ☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG, OPV-0, Penta-1, OPV-1, PCV-1, IPV, Penta-2, OPV-2, PCV-2, Penta-3, OPV-3, PCV-3, IPV, MR-1, MR-2, Vitamin A, Antihelminthic			Return for next immunization on: _____ (Date)

4.0 ASSESS AND CLASSIFY DIARRHOEA

Diarrhoea occurs when stool contains more water than normal. *Diarrhoea* is also called loose or watery stool. It is common in children, especially those between 6 months and 2 years of age. It is more common in babies under 6 months who are drinking cow's milk or infant feeding formulas. Frequent passing of normal stools is not *diarrhoea*. The number of stools normally passed in a day varies with the diet and age of the child. *Diarrhoea* is defined as three or more loose or watery stools in a 24-hour period. Mothers usually know when their children have *diarrhoea*. They may say that the child's stools are loose or watery. Mothers may use a local word for *diarrhoea*. Babies who are exclusively breastfed often have stools that are soft; this is not diarrhoea. The mother of a breastfed baby can recognize *diarrhoea* because the consistency or frequency of the stools is different than normal.

Types of Diarrhoea

Most *diarrhoea*s which cause dehydration are loose or watery. Cholera is one example of loose or watery *diarrhoea*. Only a small proportion of all loose or watery *diarrhoeas* are due to cholera.

If an episode of *diarrhoea* lasts less than 14 days, it is acute *diarrhoea*. Acute watery *diarrhoea* causes dehydration and contributes to *malnutrition*. The death of a child with acute *diarrhoea* is usually due to dehydration.

If the *diarrhoea* lasts 14 days or more, it is **PERSISTENT DIARRHOEA**. Up to 20% of episodes of *diarrhoea* become persistent. **PERSISTENT DIARRHOEA** often causes nutritional problems and contributes to deaths in children.

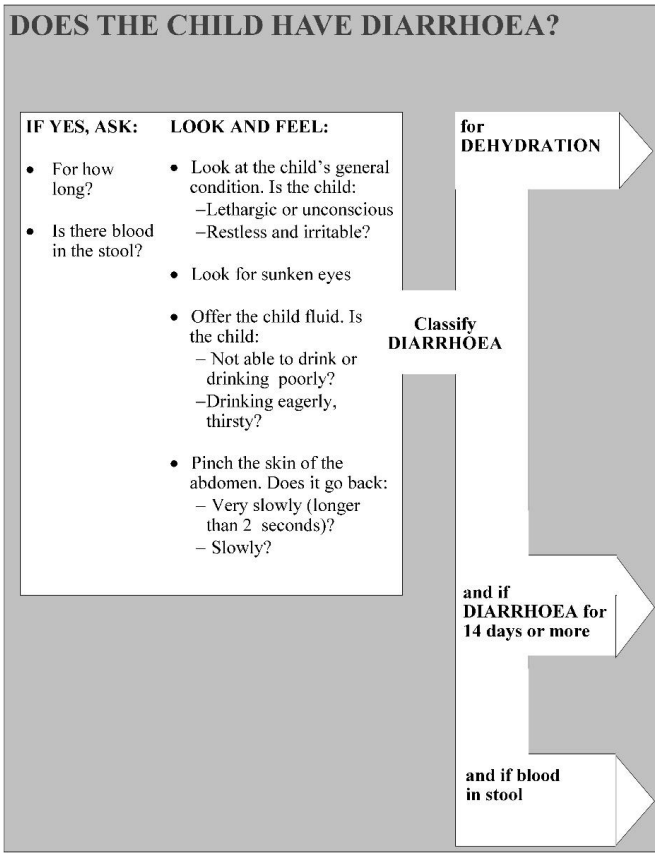
Diarrhoea with blood in the stool, with or without mucus, is called **DYSENTERY**. The most common cause of **DYSENTERY** is *Shigella* bacteria. Amoebic dysentery is not common in young children. A child may have both watery *diarrhoea* and **DYSENTERY**.

4.1 Assess Diarrhoea

A child with *diarrhoea* is assessed for:

- How long the child has had *diarrhoea*
- blood in the stool to determine if the child has **DYSENTERY,** and for
- Signs of dehydration

Look at the steps for assessing a child with *diarrhoea*:



Ask about *diarrhoea* in all children:

Ask**:** Does the child have *diarrhoea*?

Use words for *diarrhoea* the mother understands. If the mother answers, "No", ask about the next main symptom, *fever*. You do not need to assess the child further for signs related to *diarrhoea*. If the mother answers, "Yes", or if the mother said earlier that, *diarrhoea* was the reason for coming to the clinic, record her answer. Then assess the child for signs of dehydration, persistent *diarrhoea* and dysentery.

Ask**:** For how long?

Diarrhoea which lasts 14 days or more is **PERSISTENT DIARRHOEA**. Give the mother time to answer the question. She may need time to recall the exact number of days.

Ask**:** Is there blood in the stool**?**

Ask the mother if she has seen blood in the stools at any time during this episode of *diarrhoea*.

* * *

Next, check for signs of dehydration**.**

When a child becomes dehydrated, he is at first restless and irritable. If dehydration continues, the child becomes lethargic or unconscious.

As the child's body loses fluids, the eyes may look sunken. When pinched, the skin will go back slowly or very slowly.

* * *

Look and feel for the following signs:

Look at the child's general condition. Is the child lethargic or unconscious? Restless and irritable?

When you checked for general danger signs, you checked to see if the child was lethargic or unconscious. If the child is lethargic or unconscious, he has a general danger sign. Remember to use this general danger sign when you classify the child's diarrhoea. A child has the sign restless and irritable if the child is restless and irritable all the time or every time he is touched and handled. If an infant or child is calm when breastfeeding but again restless and irritable when he stops breastfeeding, he has the sign-restless and irritable. Many children are upset just because they are in the clinic. Usually, these children can be consoled and calmed. They do not have the sign restless and irritable.

Look for *sunken* eyes

The eyes of a child who is dehydrated may look sunken. Decide if you think the eyes are sunken. Then ask the mother if she thinks her child's eyes look unusual. Her opinion helps you confirm that the child's eyes are sunken.

Note: In a severely malnourished child who is visibly wasted (that is, who has marasmus), the eyes may always look sunken, even if the child is not dehydrated. Even though sunken eyes are less reliable in a visibly wasted child, still use the sign to classify the child's dehydration.

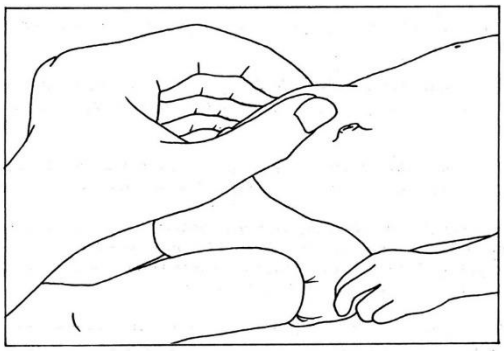
Offer the child fluid. Is the child not able to drink or drinking poorly? Drinking eagerly, thirsty?

Ask the mother to offer the child some water in a cup or spoon. Watch the child drink. A child is not able to drink if he is not able to suck or swallow when offered a drink. A child may not be able to drink because he is lethargic or unconscious. A child is drinking poorly if the child is weak and cannot drink without help. He may be able to swallow only if the fluid is put in his mouth. A child has the sign drinking eagerly, thirsty if it is clear that the child wants to drink. Look to see if the child reaches out for the cup or spoon when you offer him water. When the water is taken away, see if the child is unhappy because he wants to drink more. If the child takes a drink only with encouragement and does not want to drink more, he does not have the sign-drinking eagerly, thirsty.

Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?

Ask the mother to place the child on the examining table so that the child is flat on his back with his arms at his sides (not over his head) and his legs straight. Or, ask the mother to hold the child so he is lying flat in her lap. Locate the area on the child's abdomen halfway between the umbilicus and the side of the abdomen. To do the skin pinch, use your thumb and first finger. Do not use your fingertips because this will cause pain. Place your hand so that when you pinch the skin, the fold of skin will be in a lineup and down the child's body and not across the child's body. Firmly pick up all of the layers of skin and the tissue under them. Pinch the skin for one second and then release it. When you release the skin, look to see if the skin pinch goes back:

- Very slowly (longer than 2 seconds)
- Slowly
- Immediately



If the skin stays up for even a brief time after you release it, decide that the skin pinch goes back slowly.

Note: In a child with **SEVERE MALNUTRITION,** the skin may go back slowly even if the child is not dehydrated. In an overweight child or a child with oedema, the skin may go back immediately even if the child is dehydrated. Even though skin pinch is less reliable in these children, still use it to classify the child's dehydration.

EXERCISE D

In this exercise, you will look at photographs of children with *diarrhoea* and identify signs of dehydration.

Part 1: Look at photographs 1 and 2 in the photo booklet. Read the explanation for each photograph:

Photograph 1: This child's eyes are sunken.

Photograph 2: The skin pinch for this child goes back very slowly.

Part 2: Study photographs 3 through 7. Then write your answers to these questions:

Photograph 3: Look at the child's eyes. Are they sunken?

Photograph 4: Look at the child's eyes. Are they sunken?

Photograph 5: Look at the child's eyes. Are they sunken?

Photograph 6: Look at the child's eyes. Are they sunken?

Photograph 7: Look at this photo of a skin pinch. Does the skin go back slowly or very slowly?

When you have identified the signs of dehydration in these photographs, discuss your answers with the facilitator

4.2 Classify Diarrhoea

There are three classification tables for classifying *diarrhoea*:

- All children with *diarrhoea* are classified for dehydration
- If the child has had *diarrhoea* for 14 days or more, classify the child for **PERSISTENT DIARRHOEA**
- If the child has blood in the stool, classify the child for **DYSENTERY**

4.2.1 Classify Dehydration

There are three possible classifications of dehydration in a child with *diarrhoea*:

- **SEVERE DEHYDRATION**
- **SOME DEHYDRATION**
- **NO DEHYDRATION**

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If child has no other severe classification:** – **Give fluid for severe dehydration (Plan C)** **OR** **If child also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** – **Advise the mother to continue breastfeeding** ➢ **If child is 2 years or older and there is cholera in patient's area, give antibiotic for cholera**
Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	***Yellow:*** **SOME DEHYDRATION**	➢ Give fluid, Zinc supplementation and food for some dehydration (Plan B) ➢ **If child also has a severe classification:** **- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** **- Advise the mother to continue breastfeeding** ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving
• Not enough signs to classify as some or severe dehydration	***Green:*** **NO DEHYDRATIO**	➢ Give fluid, Zinc supplementation and food to treat diarrhoea at home (Plan A) ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

To classify the child's dehydration, begin with the pink (or top) row.

- If two or more of the signs in the pink row are present, classify the child with **SEVERE DEHYDRATION**
- If two or more of the signs are not present, look at the yellow (or middle) row. If two or more of the signs are present, classify the child with **SOME DEHYDRATION**
- If two or more of the signs from the yellow row are not present, classify the child with **NO DEHYDRATION**. This child does not have enough signs to be classified with having **SOME DEHYDRATION**. Some of these children may have one sign of dehydration or have lost fluids without showing signs

A child with only one sign for **SEVERE DEHYDRATION** and only one sign for **SOME DEHYDRATION** will be classified with **SOME DEHYDRATION**.

* * *

Example:

A child named Lalita of 4 months, is brought to the health centre because she has been passing frequent loose stool for last 5 days. She has no general danger sign. She does not have *cough*. The health worker assessed the child's *diarrhoea* and recorded the following signs:

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If child has no other severe classification:** – **Give fluid for severe dehydration (Plan C)** **OR** **If child also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** – **Advise the mother to continue breastfeeding** ➢ **If child is 2 years or older and there is cholera in patient's area, give antibiotic for cholera**
Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	***Yellow:*** **SOME DEHYDRATION**	➢ Give fluid, Zinc supplementation and food for some dehydration (Plan B) ➢ **If child also has a severe classification:** **- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** **- Advise the mother to continue breastfeeding** ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving
• Not enough signs to classify as some or severe dehydration	***Green:*** **NO DEHYDRATION**	➢ Give fluid, Zinc supplementation and food to treat diarrhoea at home (Plan A) ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

The child does not have any sign from the pink row. She does not have **SEVERE DEHYDRATION**. The child has 2 signs from the yellow row. The health worker classified the child with **SOME DEHYDRATION.** The health worker recorded Lalita's classification in the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 1087/13 Date: 20.4.19 Child's name: Lalita Date of birth: Age: 4mo Sex: ☐ Male ☑ Female Visit: ☑ Initial ☐ Follow up Mother's name: Bizli Father's name: Anup Address: House	Weight (kg): 3.5 Height(Inch): Temperature (°C/ °F): 36.5° Breaths/ minute: 47 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 93% Date of starting symptoms: 15.4.19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	[redacted]
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verifications: ☐ Lethargic or unconscious ☐ Sunken eyes ☑ Not able to drink or drinking poorly ☑ Restless, irritable ☑ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☑ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**	[redacted]	**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	[redacted]
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**	[redacted]	☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**	[redacted]	☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	[redacted]
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	[redacted]

Address: House Name/ Holding Number:

Village / Mahallat: Babupara

Union: Matiranga

Upazila: Matiranga

District: Khagrachori

Mobile No:

☐ Other causes of fever present			
☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	☐ FU in 3 days if fever persists
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

Here is a description of each classification for dehydration:

SEVERE DEHYDRATION

If the child has two of the following signs - lethargic or unconscious, sunken eyes, not able to drink or drinking poorly, skin pinch goes back very slowly; classify the dehydration as **SEVERE DEHYDRATION.** A child with dehydration needs extra fluid. If the child has **SEVERE DEHYDRATION**, he needs fluid quickly. Give him IV fluid treatment. How to give IV saline is described in Plan C: 'Treat Severe Dehydration Quickly' box in *TREAT THE CHILD chart.* You will learn more on IV fluid therapy in *Treat the Child* module.

SOME DEHYDRATION

If the child does not have signs of **SEVERE DEHYDRATION**, look at the next row. Does the child have signs of **SOME DEHYDRATION**? If the child has two or more of the following signs - restless, irritable, sunken eyes, drinks eagerly, thirsty, skin pinch goes back slowly; classify the child's dehydration with **SOME DEHYDRATION.** A child with **SOME DEHYDRATION** needs fluid and food. Treat the child with ORS. A child with **SOME DEHYDRATION** needs food besides fluid. An exclusively breastfed child should continue breastfeeding. Other children should be offered nutritious food after the completion of 4 hours ORS treatment. This treatment is described in Plan B: 'Treat **SOME DEHYDRATION** with ORS' box to *TREAT THE CHILD* chart.

NO DEHYDRATION

A child who does not have two or more signs in either the pink or yellow row is classified with **NO DEHYDRATION**. To prevent dehydration, the child needs excess fluid. A child with **NO DEHYDRATION** needs home treatment. Home treatment has 3 rules:

1. Give fluid frequently
2. Continue feeding
3. Advise the mother when to return immediately

Plan A: 'Treat Diarrhoea at home' describes teaching the mother how much and which fluid should be given. A child with **NO DEHYDRATION** needs food and the mother needs to be advised on when to come back to the health centre. There are feeding recommendations and information on follow-up in *COUNSEL THE MOTHER* chart.

Your facilitator will lead a drill to help you review the steps for checking a child for general danger signs. You will also review the steps for assessing a child with *cough or difficult breathing*

EXERCISE E

In this exercise, you will practice assessing and classifying dehydration in children with *diarrhoea*. Read the following case studies of children with *diarrhoea*. Use the dehydration classification table in the chart.

1. Helal has had *diarrhoea* for five days. He has no blood in the stool. He is irritable. His eyes are sunken. His father and mother also think that Helal's eyes are sunken. The health provider offers Helal some water and the child drinks eagerly. When the health provider pinches the skin on the child's abdomen, it goes back slowly.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If child has no other severe classification:** – **Give fluid for severe dehydration (Plan C)** **OR** **If child also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** – **Advise the mother to continue breastfeeding** ➢ **If child is 2 years or older and there is cholera in patient's area, give antibiotic for cholera**
Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	***Yellow:*** **SOME DEHYDRATION**	➢ Give fluid, Zinc supplementation and food for some dehydration (Plan B) ➢ **If child also has a severe classification:** **- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** **- Advise the mother to continue breastfeeding** ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving
• Not enough signs to classify as some or severe dehydration	***Green:*** **NO DEHYDRATION**	➢ Give fluid, Zinc supplementation and food to treat diarrhoea at home (Plan A) ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

Record the child's signs and classification for dehydration on the Register. Circle the child's signs on the classification table below to show how you selected the child's classification. Shamim has had *diarrhoea* for past 2 days. He is restless and irritable. His eyes are sunken. He is not able to drink. Skin pinch goes back slowly. Record the child's signs and classification for dehydration on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: ☐ Male ☐ Female Visit: ☐ Initial ☐ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …… Height(Inch): …… Temperature (°C/ °F): …… Breaths/minute: …… Measure oxygen saturation (SpO_2) by pulse oximeter (%): …… Date of starting symptoms: …… ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficultics ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days **Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

2. Belal has had *diarrhoea* for the last 5days. He does not have blood in the stool. The health worker assessed the child for dehydration. He is not lethargic or unconscious. He is not irritable or restless. His eyes seem normal, not sunken. He drinks eagerly. Skin pinch goes back immediately. Record the child's signs and classification for dehydration on the Register.

Tell your facilitator when you have completed this exercise

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: □ Male □ Female Visit: □ Initial □ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …… Height(Inch): …… Temperature (°C/ °F): …… Breaths/minute: …… Measure oxygen saturation (SpO_2) by pulse oximeter (%): …… Date of starting symptoms: …… □ Palm examination □ Eye examination □ Examination to diagnose Early Childhood Development (ECD) □ Examination to diagnose other problems	□ Not able to drink or breast feed □ Vomits everything □ Had convulsion or convulsing now □ Lethargic or unconscious □ Stridor in calm child	□ **Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
		□ Chest in-drawing □ Fast breathing-50 breaths per minute or more (2 months–11 months) □ Fast breathing-40 breaths per minute or more (12 months- 5 years)	□ **Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ Amoxicillin DT twice daily for 5 days; Dose: □ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
		□ No signs of pneumonia or very severe disease	□ **Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficultics □ If not improving, advise to FU in 5 days
		Dehydration Verification: □ Lethargic or unconscious □ Sunken eyes □ Not able to drink or drinking poorly □ Restless, irritable □ Drinks eagerly, thirsty □ Skin pinch goes back slowly □ Skin pinch goes back very slowly	**Dehydration** □ **Severe Dehydration** □ **Some Dehydration** □ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** □ **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
		Diarrhoea for 14 days or more: □ Dehydration present □ No dehydration	□ **Severe Persistent Diarrhoea** □ **Persistent Diarrhoea**	**Severe persistent diarrhea if** □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days
		□ Blood in the stool	□ **Dysentery**		**Dysentery:** □ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
		□ Tender swelling behind the ear	□ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		□ Ear pain □ Pus or water draining from the ear (<14 days)	□ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
		□ Pus or water draining from the ear (>14 days)	□ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
		□ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) □ Any general danger sign □ Stiff neck	□ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Malaria Risk □ Travel to Malaria risk areas □ RDT/ Other Malaria test positive □ No cause of fever	□ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Other causes of fever present	□ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		□ Any general danger sign □ Clouding of cornea □ Deep or extensive mouth ulcers	□ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
		□ Pus draining from the eye □ Mouth ulcers	□ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		□ Measles now or within the last 3 months	□ **Measles**		□ Vitamin A
		□ Oedema of both feet □ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm □ Medical complication present □ Not able to finish Nutritional therapy □ Breastfeeding problem	□ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm	□ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
		□ WFH/L z-scores: between -3 and -2 z-scores □ MUAC between 115 and 125 mm	□ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		□ Severe palmar pallor □ Some palmar pallor	□ **Severe Anaemia** □ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient; Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
			□ **Low birth weight (within 72 hours)** □ **Less weight than age (Underweight) (6-59 months)** □ **Less height than age (Stunting) (6-59 months)** □ **Less weight than height (Wasting) (6-59 months)**		
			□ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** □ **Watering from eye or accumulation of discharge** □ **Redness of eye (Corneal ulcer/Conjunctivitis)** □ **Injury of Eye ball and Adnexa** □ **Squint** □ **Structural deformity** □ **Dimness of vision** □ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
			□ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			□ **Drowning** □ **Illness due to injuries/accidents**		
			□ **Other problem (Specify):**		
		Other Nutritional Information			
		□ Exclusive breast feeding (0-6 months)			
		□ Nutritional therapy (6-23 months)			
		Counseling			
		□ IYCF □ Vitamin A □ IDD □ Anaemia □ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: (Date)

4.2.2 Classify Persistent Diarrhoea

After you classify the child's dehydration, classify the child for **PERSISTENT DIARRHOEA** if the child has had *diarrhoea* for 14 days or more. There are two classifications for **PERSISTENT DIARRHOEA**.

- **SEVERE PERSISTENT DIARRHOEA**
- **PERSISTENT DIARRHOEA**

• Dehydration present	***Pink:*** **SEVERE PERSISTENT DIARRHOEA**	➢ **Treat dehydration before referral unless the child has another severe classification** ➢ **Refer to hospital**
• No dehydration	***Yellow:*** **PERSISTENT DIARRHOEA**	➢ Advise the mother on feeding a child who has PERSISTENT DIARRHOEA ➢ Give Vitamin A, multivitamins and minerals (including Zinc) for 14 days ➢ Follow-up in 5 days

SEVERE PERSISTENT DIARRHOEA

If a child has had *diarrhoea* for 14 days or more and also has **SOME** or **SEVERE DEHYDRATION**, classify the child's illness with **SEVERE PERSISTENT DIARRHOEA**. If the child has *diarrhoea* for 14 days or more along with dehydration, he needs to be **referred**. These children need special attention so that the dehydration can be managed. They may need to change their feeding. They may need stool culture to find out the reason behind *diarrhoea*. If the child has no other severe classification, treat the child's dehydration before sending him to hospital. The management of dehydration, of a child with **SEVERE PERSISTENT DIARRHOEA** with any other severe classification, can be difficult. These children need to be treated at the hospital.

PERSISTENT DIARRHOEA

A child who has had *diarrhoea* for 14 days or more and who has no signs of dehydration is classified with **PERSISTENT DIARRHOEA**. The most important treatment of **PERSISTEN DIARRHOEA** is feeding the child. Feeding recommendations, for a child suffering from **PERSISTENT DIARRHOEA**, are described in *Counsel the Mother* module. Such children are given multivitamin/ mineral and vitamin A supplementation.

4.2.3 Dysentery

Classify a child with *diarrhoea* and blood in the stool with **DYSENTERY**. There is only one classification for **DYSENTERY**:

- **DYSENTERY**

• Blood in the stool	***Yellow:*** **DYSENTERY**	➢ **Give Ciprofloxacin for 3 days** ➢ Follow-up in 3 days

Manage the child's dehydration. Give the recommended antibiotic for *Shigella* in your area. You can assume, *Shigella* is the cause of **DYSENTRY**, because: - all life-threatening conditions are caused by Shigella. Stool culture is needed to detect the cause of **DYSENTRY**. But it takes minimum 3days for the result to come.

Note: A child who has *diarrhoea* can have more than one classification of *diarrhoea*. Record in the Register if the child has any classification of *diarrhoea*. For example, this child is classified with **DYSENTRY** but **NO DEHYDRATION**.

EXERCISE F

In this exercise, you will practice classifying several children with *diarrhoea*. Read these case studies. Record the child's signs and classify them on the Register. Refer to your chart.

Case 1: Sushila

Sushila has come to the clinic today as she has had *diarrhoea* for 4 days. Sushila is 25 months old. She is 9 kg. Her body temperature is 37° C. Sushila has no general danger sign. She does not have *cough or difficult breathing*. The health worker asked, "Was there blood in the stool after Sushila started having *diarrhoeal* episodes?" Mother said, "No". The health worker checked the signs of dehydration in this child. Sushila is not lethargic or unconscious. She is not irritable or restless. Her eyes are not sunken. If she is offered a drink, she drinks it eagerly. Skin pinch goes back immediately. Record the child's signs and classification for dehydration on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	❑ **Severe pneumonia or very severe disease**	❑ Amoxicillin DT 1st dose: ❑ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ❑ IM Gentamicin 1st dose: ❑ Per rectal Diazepam if convulsing ❑ Inhaled Salbutamol if wheezing ❑ **Refer URGENTLY**	
Date:	Height(Inch):	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	❑ **Pneumonia**	❑ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F):	❑ No signs of pneumonia or very severe disease	❑ **Cough or cold**	❑ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ If wheezing give Salbutamol for 5 days ❑ Advise to soothe the throat and relieve the cough ❑ Advise to come urgently if fast breathing or breathing difficulties ❑ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ❑ **Severe Dehydration** ❑ **Some Dehydration** ❑ **No Dehydration**	❑ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ❑ **Severe dehydration** ❑ **Some dehydration** ❑ **No dehydration** **In case of Some and No dehydration:** ❑ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ❑ Dehydration present ❑ No dehydration	❑ **Severe Persistent Diarrhoea** ❑ **Persistent Diarrhoea**	**Severe persistent diarrhea :** ❑ If any other severe classification- **refer** ❑ If no other severe classification- treat dehydration and refer	**Persistent diarrhea:** ❑ Recommend food supplementation as per age ❑ Give Vitamin A, Multivitamins and Minerals ❑ Advise to FU in 5 days
Sex: ❑ Male ❑ Female	Date of starting symptoms:	❑ Blood in the stool	❑ **Dysentery**		**Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ❑ Advise to FU in 3 days
	❑ Palm examination	❑ Tender swelling behind the ear	❑ **Mastoiditis**	❑ Amoxicillin DT 1st dose: ❑ Paracetamol 1st dose: ❑ **Refer URGENTLY**	
Visit: ❑ Initial ❑ Follow up	❑ Eye examination	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	❑ **Acute ear infection**		❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If not available, Cotrimoxazole twice daily for 5 days; Dose: ❑ Paracetamol; Dose: ❑ Advise to keep ear clean and restrict entry of water ❑ Advise to FU in 5 days
	❑ Examination to diagnose Early Childhood Development (ECD)	❑ Pus or water draining from the ear (>14 days)	❑ **Chronic ear infection:**		❑ Advise to keep ear clean and restrict entry of water ❑ Quinolone eardrops ❑ Advise to FU in 5 days
Mother's name:	❑ Examination to diagnose other problems	❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	❑ **Very severe febrile disease**	❑ Amoxicillin DT 1st dose: ❑ Paracetamol 1st dose: ❑ Artesumate 1st dose: ❑ Treat to prevent low blood sugar ❑ **Refer URGENTLY**	
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	❑ **Malaria**	❑ If fever is present every day for more than 7 days, **refer** to hospital	❑ Artesunate for 3 days; Dose: ❑ Paracetamol; Dose: ❑ FU in 3 days if fever persists
		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	❑ **Fever- No Malaria**	❑ If fever persists every day for > 7 days, **refer** to hospital	❑ Paracetamol; Dose: ❑ Treat for other specific causes of fever ❑ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	❑ **Severe Complicated Measles**	❑ Vitamin A ❑ Amoxicillin DT 1st dose: ❑ Treat clouding of cornea by Tetracycline ointment ❑ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	❑ **Measles with eye or mouth complications**		❑ Vitamin A ❑ If pus draining from eye-treat with Tetracycline ointment ❑ Oral ulcer-give Nystatin ointment and Riboflavin ❑ FU in 3 days
		❑ Measles now or within the last 3 months	❑ **Measles**		❑ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	❑ **Complicated severe acute malnutrition**	❑ Amoxicillin DT 1st dose: ❑ Treat to prevent low blood sugar ❑ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	❑ **Uncomplicated severe acute malnutrition**		❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ Give nutritional therapy ❑ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC between 115 and 125 mm	❑ **Moderate acute malnutrition**		❑ Treatment according to the category ❑ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	❑ **Severe Anaemia** ❑ **Anaemia**	**Severe Anaemia:** ❑ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ❑ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ❑ FU in 14 days
District:			❑ **Low birth weight (within 72 hours)** ❑ **Less weight than age (Underweight) (6-59 months)** ❑ **Less height than age (Stunting) (6-59 months)** ❑ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			❑ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ❑ **Redness of eye (Corneal ulcer/Conjunctivitis)** ❑ **Injury of Eye ball and Adnexa** ❑ **Squint** ❑ **Structural deformity** ❑ **Dimness of vision** ❑ **Visual Inattention**	**In case of any eye problem:** ❑ **Refer URGENTLY**	
			❑ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ❑ **Refer URGENTLY**	
			❑ **Drowning** ❑ **Illness due to injuries/accidents**		
			❑ **Other problem (Specify):**		
Other Nutritional Information					
❑ Exclusive breast feeding (0-6 months)					
❑ Nutritional therapy (6-23 months)					
Counseling					
❑ IYCF ❑ Vitamin A ❑ IDD ❑ Anaemia ❑ Micro-nutrient Program (MNP)					
Immunization Status (Circle immunization needed today)					
BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1 MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

Case 2: Rana

Rana is 14 months old. He weighs 12 kg. His temperature is 37.5°C. Rana's mother said the child has had *diarrhoea* for 3 weeks. Rana does not have any general danger signs. He does not have *cough or difficult breathing.* The health provider assessed his *diarrhoea*. He noted he has had *diarrhoea* for 21 days. He asked if there has been blood in the child's stool. The mother said, "No." The health provider checked Rana for signs of dehydration. The child is irritable throughout the visit. His eyes are not sunken. He drinks eagerly. The skin pinch goes back immediately.Record Rana's signs and classify them on the Register.

*

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	❑ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……	Diarrhoea for 14 days or more: ❑ Dehydration present ❑ No dehydration ❑ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhoea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days **Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	❑ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD)	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	❑ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		❑ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC: between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		❑ Exclusive breast feeding (0-6 months)			
		❑ Nutritional therapy (6-23 months)			
		Counseling			
		❑ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 3: Protima

Protima is 7 months old. She weighs 5.6kg. Her body temperature is 37° C. Her mother brought her to the health centre as she is suffering from *diarrhoea*. Protima has no general danger sign. She does not have *cough or difficult breathing.* The health worker assessed her dehydration. The mother said, she has had *diarrhoea* for 2days. There is no blood in the stool. She is not lethargic or unconscious. She is not irritable or restless. Her eyes are sunken. She is drinking eagerly because she is thirsty. The skin pinch goes back immediately. Record Protima's signs and classify them on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……..	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……..	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F): ……..	❑ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……..	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……..	Diarrhoea for 14 days or more: ❑ Dehydration present ❑ No dehydration ❑ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhoea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days **Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……..	❑ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
	☐ Palm examination	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	❑ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Mother's name:	☐ Examination to diagnose other problems	❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		❑ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC: between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		❑ Exclusive breast feeding (0-6 months)			
		❑ Nutritional therapy (6-23 months)			
		Counseling			
		❑ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 4: Heera

Heera is 3 years old. She weighs 10 kg. Her temperature is 37°C. Her mother came today because Heera has a *cough* and *diarrhoea*. She does not have any general danger signs. The health provider assessed her for *cough or difficult breathing*. She has had *cough* for 3 days. He counted 36 breaths per minute. She does not have chest indrawing, stridor or wheeze. Her oxygen saturation is 95%. When the health provider asked, "How long Heera has had *diarrhoea*?" The mother said, "For more than 2 weeks." There is no blood in the stool. Heera is irritable during the visit, but her eyes are not sunken. She is able to drink, but she is not thirsty. A skin pinch goes back immediately.Record Heera's signs and classify them on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……..	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……..	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F): ……..	❑ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……..	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……..	Diarrhoea for 14 days or more: ❑ Dehydration present ❑ No dehydration ❑ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhoea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days **Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……..	❑ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD)	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		❑ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		❑ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC: between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		❑ Exclusive breast feeding (0-6 months)			
		❑ Nutritional therapy (6-23 months)			
		Counseling			
		❑ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 5: Karim

Karim is 10 months old. His weight is 8kg. His body temperature is 38.5° C. His mother brought him to the health centre as he has had *diarrhoea* for 3days. The mother saw blood in his stool. He does not have any general danger sign. He does not have *cough or difficult breathing.* The health worker assessed the child for *diarrhoea* and said, "You said that Karim had blood in the stool, I will check his dehydration now." The child is not lethargic or unconscious. He is not restless or irritable. His eyes are not sunken. He drinks normally when offered a drink, but he does not seem thirsty. The skin pinch goes back immediately. Record Karim's signs and classify them on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……..	❑ Not able to drink or breast feed ❑ Vomits everything ❑ Had convulsion or convulsing now ❑ Lethargic or unconscious ❑ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……..	❑ Chest in-drawing ❑ Fast breathing-50 breaths per minute or more (2 months–11 months) ❑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	❑ Amoxicillin DT twice daily for 5 days; Dose: ❑ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ❑ If wheezing give Salbutamol for 5 days ❑ Advise to relieve cough ❑ For any general danger sign or stridor advise to come urgently ❑ FU in 3 days
Child's name:	Temperature (°C/ °F): ……..	❑ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……..	**Dehydration** Verification: ❑ Lethargic or unconscious ❑ Sunken eyes ❑ Not able to drink or drinking poorly ❑ Restless, irritable ❑ Drinks eagerly, thirsty ❑ Skin pinch goes back slowly ❑ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital **Severe persistent diarrhoea ǂ** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving **Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……..	Diarrhoea for 14 days or more: ❑ Dehydration present ❑ No dehydration ❑ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ❑ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……..	❑ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
	☐ Palm examination	❑ Ear pain ❑ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	❑ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	❑ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Any general danger sign ❑ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Mother's name:	☐ Examination to diagnose other problems	❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Malaria Risk ❑ Travel to Malaria risk areas ❑ RDT/ Other Malaria test positive ❑ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
Father's name:		❑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ❑ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		❑ Any general danger sign ❑ Clouding of cornea ❑ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		❑ Pus draining from the eye ❑ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		❑ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		❑ Oedema of both feet ❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm ❑ Medical complication present ❑ Not able to finish Nutritional therapy ❑ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		❑ WFH/L z-score: less than -3 z-scores ❑ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		❑ WFH/L z-scores: between -3 and -2 z-scores ❑ MUAC: between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		❑ Severe palmar pallor ❑ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ❑ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ❑ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		❑ Exclusive breast feeding (0-6 months)			
		❑ Nutritional therapy (6-23 months)			
		Counseling			
		❑ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

EXERCISE G

In this video exercise, you will see a demonstration of how to assess and classify a child with *diarrhoea*. You will see examples of signs and practice identifying them. Then you will see a case study and practice assessing and classifying the child's illness.

1. For each of the children shown, answer the question:

	Does the child have sunken eyes?	
	YES	NO
Child 1		
Child 2		
Child 3		
Child 4		
Child 5		
Child 6		

2. For each of the children shown, answer the question:

	Does the skin pinch go back:		
	Very slowly?	Slowly?	Immediately?
Child 1			
Child 2			
Child 3			
Child 4			
Child 5			

Video Case Study: Watch the case study and record the child's signs on this Register. Then classify the illness.

At the end of this videotape exercise, there will be a group discussion

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……..	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……..	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ **FU in 3 days**
Child's name:	Temperature (°C/ °F): ……..	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……..	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……..			**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……..	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

5.0 ASSESS AND CLASSIFY FEVER

A child with *fever* may have **MALARIA**, **MEASLES** or another severe disease. Or, a child with *fever* may have a simple **COUGH OR COLD** or other viral infection.

MALARIA

A parasite in the blood, called *Plasmodia*, causes **MALARIA**. They are transmitted by *Anopheles* mosquito. There are 4 species of *Plasmodia* which can cause **MALARIA**. But only one is dangerous and that is *Plasmodium falciparum.* In this chart and module **MALARIA** means *falciparum malaria. Fever* is the main symptom of malaria. *Fever* can be continuous or intermittent. Other signs of *falciparum malaria* are – chills and rigor and vomiting. There can be only one sign present in a child with **MALARIA** and that is anaemia (except *fever*). (Detailed of anaemia is on section 8.0). Signs of malaria can be masked under signs and symptoms of other diseases. For example, a child may have **MALARIA** along with *cough* with fast breathing, which is the signs of **PNEUMONIA**. In this case, the child needs treatment for both *falciparum malaria* and **PNEUMONIA. MALARIA** is the main cause of death of children, living in area with high or low risk of **MALARIA**. The complication of **MALARIA** can develop within 24 hours of *fever*. Complications of **MALARIA** include – cerebral malaria or anaemia. The child may die if not treated urgently.

*** * ***

Deciding the risk of **MALARIA**

To classify and treat a child with *fever*, you have to know the risk of **MALARIA** of that particular area.

- High or low-risk **MALARIA** areas are those areas where:

5% of children, of overall *fever* cases, are affected by **MALARIA**.

Research has shown that children with *fever* also has *cough* and fast breathing, whose blood test results came positive for *falciparum malaria.* Even expert physicians take help of laboratory tests to reliably differentiate **PNEUMONIA** with *cough* and fast breathing from a child with *falciparum malaria.*

- Those areas have no risk of malaria, where there are no cases of **MALARIA** infection

Risk of **MALARIA** can vary with the change of seasons. In dry seasons, there is limited or no chance of mosquito breeding. So, in dry seasons there is no risk of **MALARIA.** Some regions of Bangladesh, like, hill tracts (Rangamati, Khagrachari, Bandarban, Chattagram, Cox's Bazar, Kurigram, Sherpur, Mymensingh, Netrokona, Sunamgong, Sylhet, Habigonj) and rainy seasons are in favour of mosquito breeding. In rainy seasons there is a high risk of **MALARIA**, so many children are affected by it. *Fever*, anaemia and cerebral malaria are observed among them. During dry season, there is usually no outbreak of **MALARIA**. So, there is low chance of **MALARIA**. There are some regions in Asia where **MALARIA** is seen throughout the year. These are the high-risk **MALARIA** areas. Find out the risk of **MALARIA** in your area. If there is a seasonal risk, then you have already known when the risk is high or low and when there is no risk at all. If you do not have any definite information on the risk status of your area, then always assume that all the children, aged less than 5years, with *fever* are at high risk of **MALARIA**.

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* The definition of risk of **MALARIA** should be based upon the result of inquiring the causes of *fever* affecting the children.

Do RDT (Rapid Diagnostic Test) in a high or low **MALARIA** risk area

Do RDT on all patients with *fever* who lives in an area where **MALARIA** risk is high or low

It is also recommended to do RDT on patients who have a travel history to a **MALARIA** risk area within the past 30 days.

RDT in no **MALARIA** risk area or there is no history of travelling to **MALARIA** risk area

If the cause of *fever* cannot be diagnosed with certainty (such as *diarrhoea*, dysentery, respiratory tract infection, ear infection, urinary tract infection, typhoid, cellulitis, osteomyelitis, abscess, etc.) in no **MALARIA** risk areas or no travel history to **MALARIA** risk area, then perform RDT. If RDT is not available in your health centre, **refer** to nearest hospital where it is available, to rule out **MALARIA**. If this is not possible, then do other available tests. But it is not recommended to give a presumptive treatment of **MALARIA**.

RDT result may be positive or negative. This result of RDT won't influence the pre-referral treatment of **VERY SEVERE FEBRILE DISEASE**.

[4] Some areas have low **MALARIA** risk. But it is epidemic during a period of time in the year and at that time the morbidity and mortality rate of **MALARIA** is high. That is why, the inhabitants and health workers of that area, think that the risk of **MALARIA** is high in that area, although the risk is actually low there. So, these areas can be assumed to be of low risk, however, during epidemics the risk of **MALARIA** gets higher.

☐ Do a rapid diagnostic test (RDT)[1]

Organize the supplies

First, collect the supplies for doing the RDT (see below). Organize a table area to keep all supplies ready for use.

For each child with fever, collect these supplies for the RDT:

1. NEW unopened **test packet**
2. NEW unopened **spirit (alcohol) swab**
3. NEW unopened **lancet**
4. New pair of **disposable gloves**
5. **Buffer**
6. **Timer** (up to at least 15 minutes)
7. **Sharps box**

1. Test packet

2. Sprit (alcohol) swab

3. Lancet

4. Disposable gloves

5. Buffer

6. Timer

7. Sharps box

Perform the test

1. **Check the expiry date of the packet.**

   The expiry date marked on the test package must be after today's date to be confident of the effectiveness of the test materials.

2. **Put on the gloves. Use new gloves for each child.**

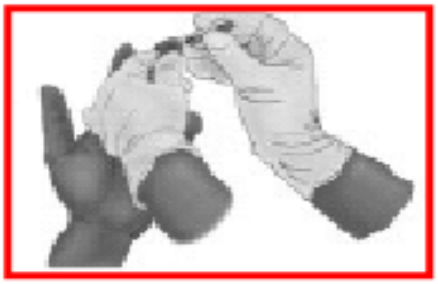
3. **Open the test packet and remove the test items: test, loop, and desiccant sachet.** (The desiccant sachet protects the test from humidity in the packet.)

[1] The instructions with diagrams, here and in Annex A, are taken from *How to use a rapid diagnostic test (RDT): A guide for training at a village and clinic level* (2006). The Quality Assurance Project (QAP) and the World Health Organization (WHO). Bethesda, MD, and Geneva, Switzerland.

4. **Write the child's name on the test.**

5. **Use the spirit swab to clean the child's fourth finger on the left hand** (or, if the child is left-handed, clean the fourth finger on the right hand). Then, allow the finger to dry.

6. **Open the lancet. Prick the child's fourth finger—the one you cleaned—to get a drop of blood.**



7. **Discard the lancet *immediately* in the sharps box.**

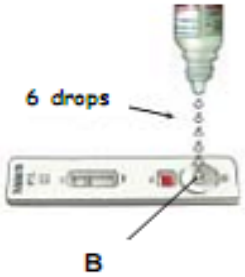
   Do not set the lancet down. There is an increased risk of poking yourself (with contamination by the blood) when you try to pick up the lancet later..

8. **Use the loop in the test kit to collect the drop of blood.**

9. **Use the loop to put the drop of blood into the square hole marked A.**

10. **Discard the loop in the sharps box.**

11. **Put six drops of the buffer into the round hole marked B.**

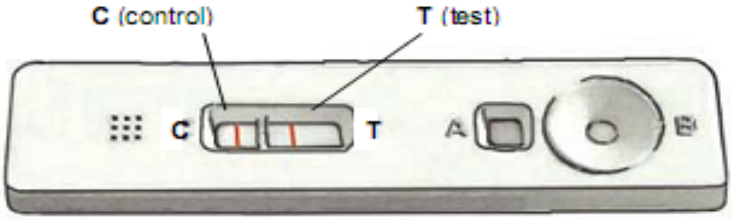


12. **Wait 15 minutes after adding the buffer.**

    Record the time you added the buffer. After 15 minutes the red blood will drain from the square hole **A.**

Read the test results

13. Read the results in the C (control) and T (test) windows.



14. How to read the results:

Result	Decide	Comment
POSITIVE: **One red line in window C** (control) **AND** **One red line in window T** (test) See the example in above test.	Child has **MALARIA**	The test is POSITIVE even if the red line in window T is faint
NEGATIVE: **One red line in window C** (control) **AND** **NO red line in window T** (test)	Child has **NO MALARIA**	
Invalid test: **No line in window C** (control)	Repeat the test with a new unopened test kit	The **C** (control) window must always have a red line. If it does not, the test is damaged. The results are INVALID.

15. Dispose of the gloves, spirit swab, desiccant sachet, and packaging in a non-sharps waste container.

Record the test results on the recording form. Tick [✓] the results of the test for malaria, __Positive or __Negative, in the fever box on the back of the recording form.

Then dispose of the test in a non-sharps waste container.

Each test can be used only once. For the safety of the child, start with a new unopened test packet, spirit (alcohol) swab, lancet, and disposable gloves. While doing the test and disposing of used items, prevent the possibility that one child's blood will be passed to yourself or to another child.

MEASLES

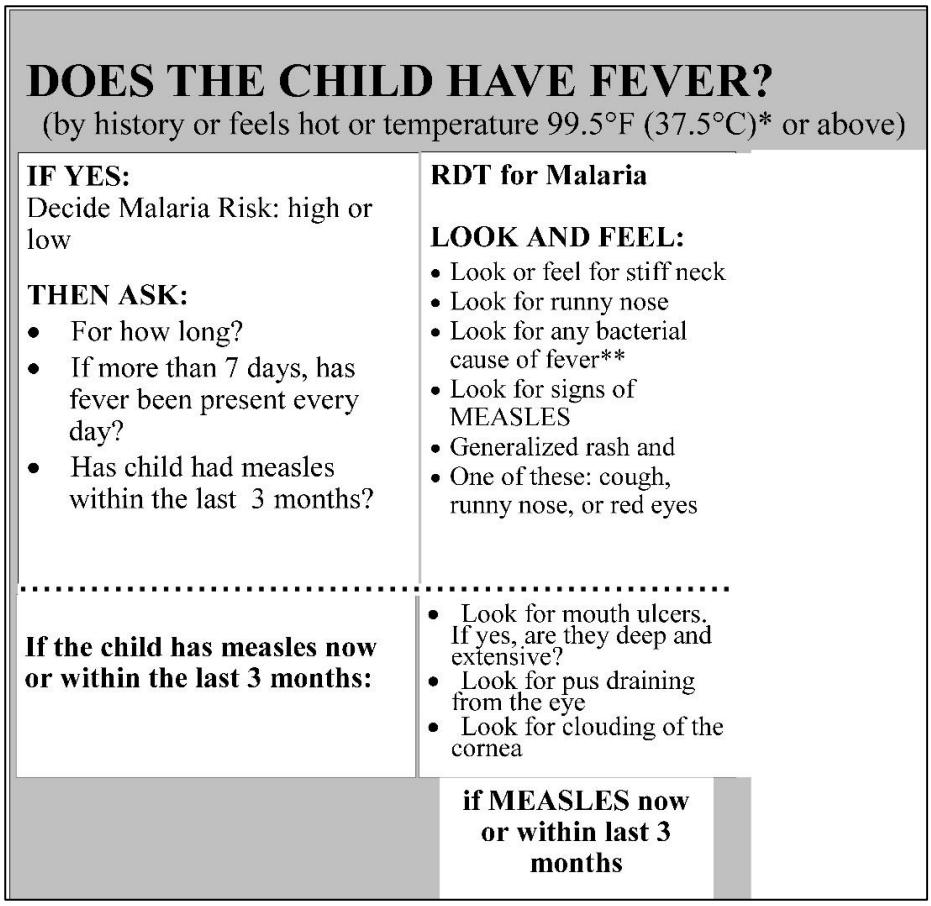
The main symptoms of **MEASLES** are *fever* and generalized rash. **MEASLES** is very contagious. Maternal antibody protects the child from **MEASLES** up to 9months. Later on, protection gradually decreases. This disease is seen to affect the child from 9 months

to 2years of age. Crowded house and low quality of life increase the risk of **MEASLES** easily. **MEASLES** is caused by a virus. This infects the covering layers of skin, lungs, eyes, mouth and trachea. After **MEASLES** infection, this virus destroys body's immune system for few weeks. For this reason, the risk of other infection increases. 30% of the infected children develop complications. Important complications are:

- Severe eye infection (which can cause corneal ulcer and blindness)
- Mouth ulcer
- Stridor
- **PNEUMONIA**
- *Diarrhoea* **(DYSENTERY** and **PERSISTENT DIARRHOEA**)
- Ear infection and
- *Malnutrition*

1 in 1000 children may develop encephalitis. A child with encephalitis may have general danger signs. Such as convulsion, lethargy or unconsciousness. **MEASLES** helps in the development of *malnutrition*, because it causes *diarrhoea*, high *fever* and mouth ulcer. These problems obstruct feeding. If a malnourished child develops **MEASLES**, he may suffer from severe complications. This is true for those children, who have vitamin A deficiency. 1 in every 10 children die of severe *malnutrition*, who have **MEASLES**. So, if the child develops **MEASLES** it is important to help the mother to continue feeding her child.

5.1 Assess *Fever*



* *Fever* and high *fever* are assessed by measuring axillary temperature in *ASSESS & CLASSIFY* chart. Rectal temperature is 0.5°C more. If the axillary temperature is measured in your health centre, then *fever* is 99.5° F(37.5°C) or more and high *fever* is 101.5°F (38°C) or more.

Decide the **MALARIA** risk (high or low). If there is no **MALARIA** risk in the area, ask the mother about travel:

Have you travelled with the child outside the area?

If yes, have you been to a high **MALARIA** risk area[5]?

If the child has travelled to a **MALARIA** risk area, decide the **MALARIA** risk is high.

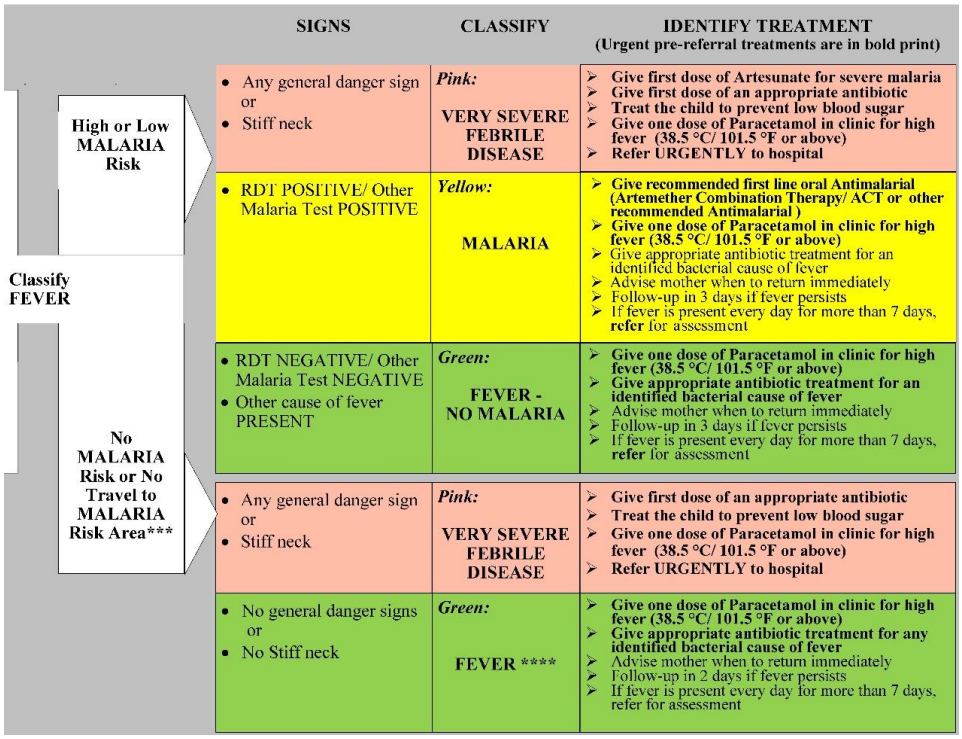
If the **MALARIA** risk is high then consider Rapid Diagnostic Test (RDT)/another diagnostic test for **MALARIA**.

Assess a child with *fever* for:

- How long the child has had a *fever*
- History of **MEASLES**
- Stiff neck
- Runny nose
- Any sign of bacterial infection
- Signs suggesting **MEASLES** - which are generalized rash and one of these: *cough*, runny nose, or red eyes.
- If the child has **MEASLES** now or within the last 3 months, assess for signs of **MEASLES** complications. They are: deep or extensive mouth ulcers, clouding of the cornea, pus draining from the eye.

* * *

The box on the next page lists the steps for assessing a child for *fever*. There are two parts to the box. The top half of the box (above the broken line) describes how to assess the child for signs of **MALARIA**, **MEASLES**, meningitis and other causes of *fever*. The bottom half of the box describes how to assess the child for signs of **MEASLES** complications if the child has **MEASLES** now or within the last 3 months.

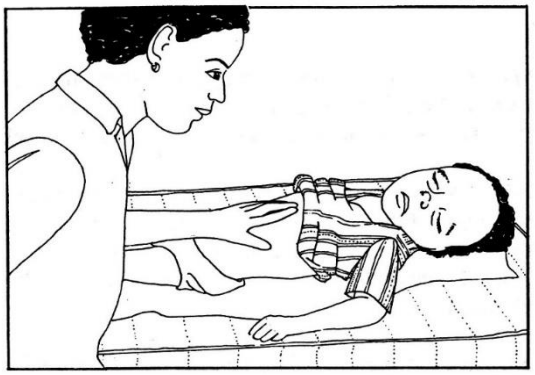


[5] **MALARIA** risk area in Bangladesh are - Rangamati, Khagrachari, Bandarban, Chattagram, Cox's Bazar, Kurigram, Sherpur, Mymensing, Netrokona, Sunamgonj, Sylhet, Hobigonj, and Moulavibazar

Ask about (or measure) *fever* in all sick children.

Ask: Does the child have a *fever*?

Check to see if the child has a history of *fever*, feels hot or has a temperature of 99.5°F (37.5°C) or above. The child has a history of *fever* if the child has had any *fever* with this illness. Use words for "*fever*" that the mother understands. Make sure the mother understands what *fever* is. For example, ask the mother if the child's body has felt hot. Feel the child's abdomen or axilla (underarm) and determine if the child feels hot. Look to see if the child's temperature was measured today and recorded on the child's chart. If the child has a temperature of 99.5°F (37.5°C) or above, the child has *fever*. If the child's temperature has not been measured, and you have a thermometer, measure the child's temperature. If the child does not have *fever* {by history, feels hot or temperature 99.5°F (37.5°C) or above}, do not put a tick (✓) in any option on the Register. Ask about the next main symptom, *ear problem*. Do not assess the child for signs related to *fever*. If the child has *fever* {by history, feels hot or temperature 99.5°F (37.5°C) or above}, assess the child for additional signs related to *fever*. Assess the child's *fever* even if the child does not have a temperature of 99.5°F (37.5°C) or above or does not feel hot now. History of *fever* is enough to assess the child for *fever*.



Decide **MALARIA** Risk: high or low or no **MALARIA** risk

Decide if the **MALARIA** risk is high or low or no **MALARIA** risk (Refer to 5.0 to review definitions of high or low-risk **MALARIA** or no **MALARIA** risk). In some areas, the **MALARIA** risk is always high or low and in others, it is absent. If **MALARIA** risk is absent in the local area, Ask the mother:

Have you travelled with the child outside the area?

If yes, name the area (assess the area if it is a high or low **MALARIA** risk area?)

Reclassify the **MALARIA** risk as high if there is a travel history to a high **MALARIA** risk area. The child may have acquired **MALARIA** during travel. Many mothers will know whether the area where they have travelled has **MALARIA** risk or not. If the mother does not know or is not sure, ask about the area and use the map to determine whether the area has **MALARIA** risk. If you are still not sure, assume the **MALARIA** risk is high. Tick(✓) on the **MALARIA** *risk* and *Travel to* **MALARIA** *vulnerable areas* boxes in the Register. You will use this information when you classify the child's *fever*.

Ask: For how long? If more than 7 days, has *fever* been present every day?

Ask the mother how long the child has had *fever*. If the *fever* has been present for more than 7 days, ask if the *fever* has been present every day. Most *fevers* due to viral illnesses go away within a few days. A *fever* which has been present every day for more than 7 days can mean that the child has a more severe disease such as typhoid *fever*. **Refer** this child for further assessment.

Ask: Has the child had **MEASLES** within the last 3 months?

MEASLES damages the child's immune system and leaves the child at risk for other infections for many weeks. A child with *fever* and a history of **MEASLES** within the last 3 months may have an infection due to complications of **MEASLES** such as an eye infection.

Look or Feel for stiff neck.

A child with *fever* and stiff neck may have meningitis. A child with meningitis needs urgent treatment with injectable antibiotics and a **referral** to a hospital. Sometimes children suffering from severe **MALARIA** (cerebral malaria) may have a stiff neck. While you talk with the mother during the assessment, look to see if the child moves and bends his neck easily as he looks around. If the child is moving and bending his neck, he does not have a stiff neck. If you did not see any movement, or if you are not sure, draw the child's attention to his umbilicus or toes. For example, you can shine a flashlight on his toes or umbilicus or tickle his toes to encourage the child to look down. Look to see if the child can bend his neck when he looks down at his umbilicus or toes. If you still have not seen the child bend his neck himself, ask the mother to help you lie the child on his back. Lean over the child, gently support his back and shoulders with one hand. With the other hand, hold his head. Then carefully bend the head forward toward his chest. If the neck bends easily, the child does not have stiff neck. If the neck feels stiff and there is resistance to bending, the child has a stiff neck. Often a child with a stiff neck will cry when you try to bend the neck.

Look for runny nose

A runny nose in a child with *fever* may mean that the child has a common cold. If the child has a runny nose, ask the mother if the child has had a runny nose only with this illness. If she is not sure, ask questions to find out if it is an acute or chronic runny nose. If there is no **MALARIA** risk, then a child with a runny nose and *fever*, does not need antimalarial. Probably this is common cold.

Look for signs suggesting **MEASLES**

Assess a child with *fever* to see if there are signs suggesting **MEASLES**. Look for a generalized rash and for one of the following signs: *cough*, runny nose or red eyes.

Generalized rash

In **MEASLES**, a red rash begins behind the ears and on the neck. It spreads to the face. During the next day, the rash spreads to the rest of the body, arms and legs. After 4 to 5 days, the rash starts to fade and the skin may peel. Some children with severe infection may have more rash spread over more of the body. The rash becomes more discoloured (dark brown or blackish) and there is more peeling of the skin. A **MEASLES** rash does not have vesicles (blisters) or pustules. The rash does not itch. Do not confuse **MEASLES** with other common childhood rashes such as chickenpox, scabies or heat rash or dengue. (The chickenpox rash is a generalized rash with vesicles. Scabies occurs on the hands, feet, ankles, elbows, buttocks and axilla. It also itches. Heat rash can be a generalized rash with small bumps and vesicles which itch. A child with heat rash is not sick. Rash due to dengue may be itchy and does not blanch on pressure). You can recognize **MEASLES** more easily during times when other cases of **MEASLES** are occurring in your community.

Cough, Runny Nose or Red Eyes

To classify a child with **MEASLES**, the child with *fever* must have a generalized rash and one of the following signs: *cough*, runny nose, or red eyes. The child has 'red eyes' if there is redness in the white part of the eye. In a healthy eye, the white part of the eye is clearly white and not discoloured.

EXERCISE H

Part 1: Study the photographs numbered 8 through 11. They show examples of common childhood rashes. Read the explanation for each of these photographs.

Photograph 8: This child has the generalized rash of **MEASLES** and red eyes.

Photograph 9: This example shows a child with heat rash. It is not the generalized rash of **MEASLES**.

Photograph 10: This is an example of scabies. It is not the generalized rash of **MEASLES**.

Photograph 11: This is an example of a rash due to chickenpox. It is not a **MEASLES** rash.

Part 2: Study photographs 12 through 21 showing children with rashes. For each photograph, tick (✓) whether the child has the generalized rash of **MEASLES**. Use the answer sheet on the next page.

Part 2 (continued):

	Is the generalized rash of **MEASLES** present?	
	YES	NO
Photograph 12		
Photograph 13		
Photograph 14		
Photograph 15		
Photograph 16		
Photograph 17		
Photograph 18		
Photograph 19		
Photograph 20		
Photograph 21		

Tell your facilitator when you are ready to discuss your answers to this exercise

If the child has **MEASLES** now or within the last 3 months:

Look to see if the child has mouth or eye complications. Other complications of **MEASLES** such as stridor in a calm child, **PNEUMONIA**, and *diarrhoea* are assessed earlier; *malnutrition* and ear infection are assessed later.

Look for mouth ulcers. Are they deep and extensive?

Look inside the child's mouth for mouth ulcers. Ulcers are painful open sores on the inside of the mouth and lips or the tongue. They may be red or have a white coating on them. In severe cases, they are deep and extensive. When present, mouth ulcers make it difficult for the child with **MEASLES** to drink or eat. Mouth ulcers are different than the small spots called Koplik spots. Koplik spots occur in the mouth inside the cheek during the early stages of the **MEASLES** infection. Koplik spots are small, irregular, bright red spots with a white spot in the centre. They do not interfere with drinking or eating. They do not need treatment.

EXERCISE I

In this exercise, you will look at photographs of children with **MEASLES**. You will practice identifying mouth ulcers.

Part 1: Study photographs 22 through 24 and read the explanation for each one.

Photograph 22: This is an example of a normal mouth. The child does not have mouth ulcers.

Photograph 23: This child has Koplik spots. These spots occur in the mouth inside the cheek early in a **MEASLES** infection. They are not mouth ulcers.

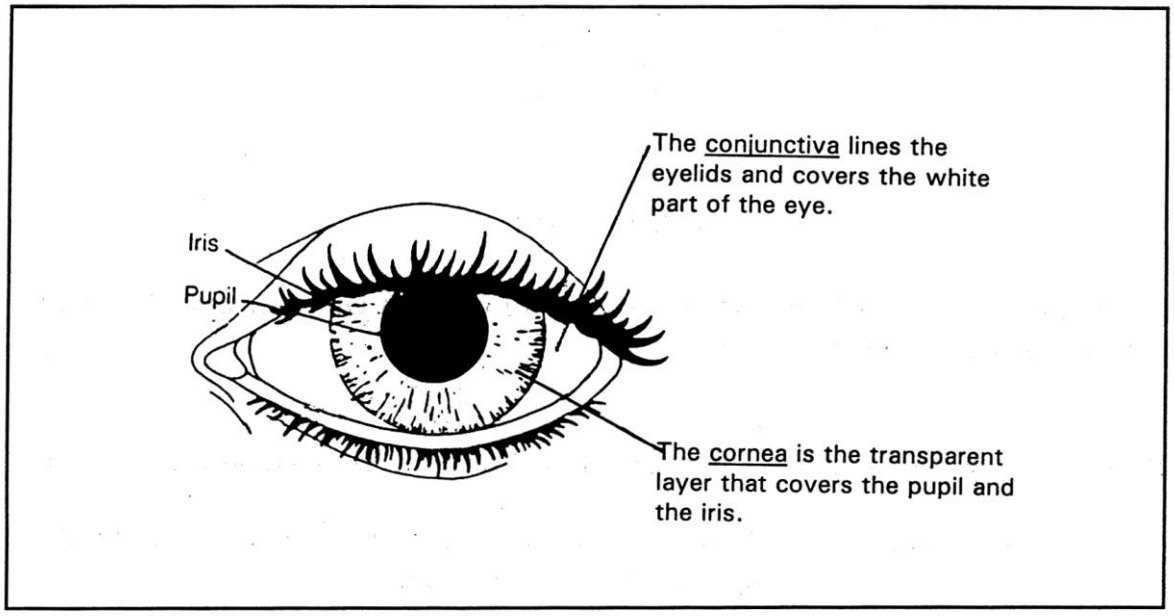
Photograph 24: This child has a mouth ulcer.

Part 2: Study photographs 25 through 27 showing children with **MEASLES**. Look at each photograph and tick (✓) if the child has mouth ulcers.

	Does the child have mouth ulcers?	
	YES	NO
Photograph 25		
Photograph 26		
Photograph 27		

Tell your facilitator when you are ready to discuss your answers to this exercise

Healthy eye:



Conjunctiva covers the white part of the eye and is stretched up to the eyelid. Iris is the coloured part of the eye. Normal cornea (transparent window of the eye) is bright and transparent. You can see, the iris as well as the round pupil at the centre, through it. A normal cornea is transparent. You will be able to see the colour of iris clearly. The pupil can be black or brown.

Look for pus draining from the eye

Pus draining from the eye is a sign of conjunctivitis. Conjunctivitis is an infection of the conjunctiva, the inside surface of the eyelid and the white part of the eye. If you do not see pus draining from the eye, look for pus on the conjunctiva or on the eyelids. Often the pus forms a crust when the child is sleeping and seals the eye shut. It can be gently opened with clean hands. Wash your hands after examining the eye of any child with pus draining from the eye.

Look for clouding of the cornea

The cornea is usually clear. When clouding of the cornea is present, there is a hazy area in the cornea. Look carefully at the cornea for clouding. The cornea may appear clouded or hazy, such as how a glass of water looks when you add a small amount of milk. The clouding may occur in one or both eyes. Corneal clouding is a dangerous condition. The corneal clouding may be due to vitamin A deficiency which has been made worse by **MEASLES**. If the corneal clouding is not treated, the cornea can ulcerate and cause blindness. A child with clouding of the cornea needs urgent treatment with vitamin A. A child with corneal clouding may keep his eyes tightly shut when exposed to light. The light may cause irritation and pain to the child's eyes. To check the child's eye, wait for the child to open his eye. Or, gently pull down the lower eyelid to look for clouding. If there is clouding of the cornea, ask the mother how long the clouding has been present. If the mother is certain that clouding has been there for some time, ask if the clouding has already been assessed and treated at the hospital. If it has, you do not need to **refer** this child again for corneal clouding.

EXERCISE J

In this photograph exercise, you will practice identifying eye complications of **MEASLES**.

Part 1: Study photographs 28 through 30.

Photograph 28: This is a normal eye showing the iris, pupil, conjunctiva and cornea. The child has been crying. There is no pus draining from the eye.

Photograph 29: This child has pus draining from the eye.

Photograph 30: This child has clouding of the cornea.

Part 2: Now look at photographs 31 through 37. For each photograph, answer each question by writing “yes” or “no” in each column. If you cannot decide if pus is draining from the eye or if clouding of the cornea is present, write "not able to decide." Write your answers below.

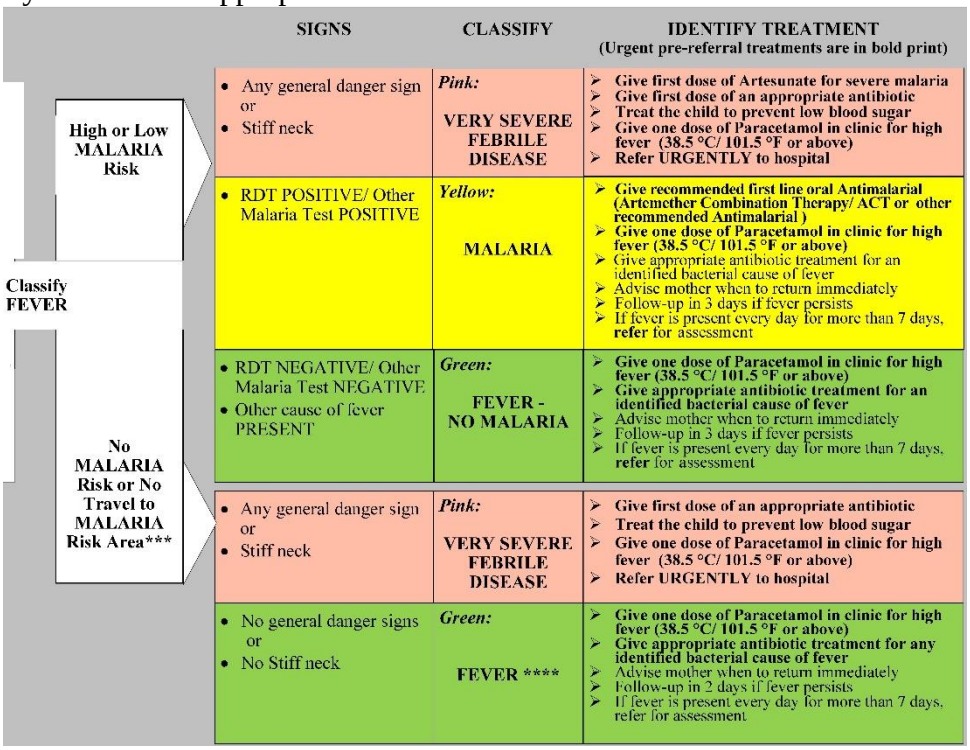
	Does the child have:	
	Pus draining from the eye?	Clouding of the cornea?
Photograph 31		
Photograph 32		
Photograph 33		
Photograph 34		
Photograph 35		
Photograph 36		
Photograph 37		

Tell your facilitator when you are ready to discuss your answers to this exercise

5.2

Classify Fever

If the child has *fever* and no signs of **MEASLES**, classify the child for *fever* only. If the child has signs of both *fever* and **MEASLES**, classify the child for *fever* and for **MEASLES**. There are two *fever* classification tables on the *ASSESS & CLASSIFY* chart. One is for classifying *fever* when the risk of **MALARIA** is high or low. The second is for classifying *fever* when there is no risk of **MALARIA** or s/he has not visited **MALARIA** prone area recently. To classify *fever*, you must know if the **MALARIA** risk is high or low or there is no **MALARIA** risk. Then you select the appropriate classification table.



Classify FEVER	SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
High or Low MALARIA Risk	• Any general danger sign or • Stiff neck	*Pink:* VERY SEVERE FEBRILE DISEASE	➢ **Give first dose of Artesunate for severe malaria** ➢ **Give first dose of an appropriate antibiotic** ➢ **Treat the child to prevent low blood sugar** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Refer URGENTLY to hospital**
	• RDT POSITIVE/ Other Malaria Test POSITIVE	*Yellow:* MALARIA	➢ **Give recommended first line oral Antimalarial (Artemether Combination Therapy/ ACT or other recommended Antimalarial)** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ Give appropriate antibiotic treatment for an identified bacterial cause of fever ➢ Advise mother when to return immediately ➢ Follow-up in 3 days if fever persists ➢ If fever is present every day for more than 7 days, **refer** for assessment
	• RDT NEGATIVE/ Other Malaria Test NEGATIVE • Other cause of fever PRESENT	*Green:* FEVER - NO MALARIA	➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Give appropriate antibiotic treatment for an identified bacterial cause of fever** ➢ Advise mother when to return immediately ➢ Follow-up in 3 days if fever persists ➢ If fever is present every day for more than 7 days, **refer** for assessment
No MALARIA Risk or No Travel to MALARIA Risk Area***	• Any general danger sign or • Stiff neck	*Pink:* VERY SEVERE FEBRILE DISEASE	➢ **Give first dose of an appropriate antibiotic** ➢ **Treat the child to prevent low blood sugar** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Refer URGENTLY to hospital**
	• No general danger signs or • No Stiff neck	*Green:* FEVER ****	➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Give appropriate antibiotic treatment for any identified bacterial cause of fever** ➢ Advise mother when to return immediately ➢ Follow-up in 2 days if fever persists ➢ If fever is present every day for more than 7 days, refer for assessment

*** *Fever* may be due to *diarrhoea, dysentery, respiratory infections, ear infection etc.*

High or Low Malaria Risk:

There are three possible classifications of *fever* when the **MALARIA** risk is high.

- **VERY SEVERE FEBRILE DISEASE**
- **MALARIA**
- **FEVER – NO MALARIA**

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stiff neck	***Pink:*** **VERY SEVERE FEBRILE DISEASE**	➢ **Give first dose of Artesunate for severe malaria** ➢ **Give first dose of an appropriate antibiotic** ➢ **Treat the child to prevent low blood sugar** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Refer URGENTLY to hospital**
• RDT POSITIVE/ Other Malaria Test POSITIVE	***Yellow:*** **MALARIA**	➢ **Give recommended first line oral Antimalarial (Artemether Combination Therapy/ ACT or other recommended Antimalarial)** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ Give appropriate antibiotic treatment for an identified bacterial cause of fever ➢ Advise mother when to return immediately ➢ Follow-up in 3 days if fever persists ➢ If fever is present every day for more than 7 days, **refer** for assessment
• RDT NEGATIVE/ Other Malaria Test NEGATIVE • Other cause of fever PRESENT	***Green:*** **FEVER - NO MALARIA**	➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Give appropriate antibiotic treatment for an identified bacterial cause of fever** ➢ Advise mother when to return immediately ➢ Follow-up in 3 days if fever persists ➢ If fever is present every day for more than 7 days, **refer** for assessment

VERY SEVERE FEBRILE DISEASE (High or low **MALARIA** Risk)

If the child with *fever* has any general danger sign or a stiff neck, classify the child with **VERY SEVERE FEBRILE DISEASE.** The child who has *fever* and any general danger sign or stiff neck may have meningitis, severe **MALARIA** (cerebral malaria) or sepsis. These severe diseases cannot be differentiated without testing in the laboratory. A child classified with **VERY SEVERE FEBRILE DISEASE** needs urgent treatment and **referred** to hospital. Before **referring URGENTLY**, give the necessary pre-referral treatment. Give the first dose of appropriate antibiotic for **MALARIA** or other severe bacterial infections. Also, treat the child to prevent low blood glucose. Give Paracetamol if *fever* is high.

MALARIA *(High or low* **MALARIA** *Risk)*

If a general danger sign or stiff neck is not present, look at the yellow row. Because the child has a *fever* {by history, feels hot, or temperature 99.5°F (37.5°C) or above} in a high **MALARIA** risk area, therefore, it is recommended that Rapid Diagnostic Test (RDT) for **MALARIA** should be done. If RDT is positive, classify the child with **MALARIA**. If RDT is negative, classify the child with **FEVER – NO MALARIA** . RDT should be method of choice for definitive diagnosis. If available, other tests can be done. Presumptive treatment for **MALARIA** is discouraged. In high or low **MALARIA** risk area, the chance of **MALARIA** being the cause of the child's *fever* is high. Give oral antimalarial treatment to a child diagnosed with **MALARIA**. If the child has *cough* and fast breathing along with, he may have **MALARIA** or **PNEUMONIA** or both. It is not possible to decide whether the child has **MALARIA** or **PNEUMONIA** without testing in the laboratory. Give this child Amoxicillin for five days. Give Paracetamol if the *fever* is high (axillary temperature 101.5°F (38.5°C) or more). Most of the viral infections last for less than 7days. If the *fever* is present every day for 7 days, then maybe it is a sign of typhoid or any other severe disease. Send the child to hospital for assessment if the *fever* is present every day for more than 7 days.

FEVER – NO MALARIA *(High or low* **MALARIA** *Risk)*

If the child does not have signs of **VERY SEVERE FEBRILE DISEASE** or is RDT negative for **MALARIA**, look at the last row. The chance that this child's *fever* is due to **MALARIA** is very low. Also assess for other bacterial causes of *fever* e.g., urinary tract infection, typhoid, cellulitis and osteomyelitis. Give Paracetamol if *fever* is high (axillary temperature 101.5°F (38.5°C) or more) and give antibiotic for bacterial infection. Advise the mother when to return immediately and to come back if *fever* persists continuously for 3 days. If *fever* is present every day for more than 7 days **refer** the child for an assessment.

No Malaria Risk or No Travel to Malaria Risk Area:

In some low **MALARIA** risk areas, there may be families who travel to high areas in search of a job within 30 days where **MALARIA** risk is high. If the mothers say that, she has taken the child to an area which you know to have high risk of **MALARIA**, use the classification table for *high or low* **MALARIA** *risk*. If you are not sure whether the risk of **MALARIA** is high or low or absent, assume it is high. This is a safer approach.

* * *

There are two possible classifications of *fever* in a child with no **MALARIA** risk and no travel to **MALARIA** Risk Area.

- **VERY SEVERE FEBRILE DISEASE**
- **FEVER**

• Any general danger sign or • Stiff neck	***Pink:*** **VERY SEVERE FEBRILE DISEASE**	➢ **Give first dose of an appropriate antibiotic** ➢ **Treat the child to prevent low blood sugar** ➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Refer URGENTLY to hospital**
• No general danger signs or • No Stiff neck	***Green:*** **FEVER ******	➢ **Give one dose of Paracetamol in clinic for high fever (38.5 °C/ 101.5 °F or above)** ➢ **Give appropriate antibiotic treatment for any identified bacterial cause of fever** ➢ Advise mother when to return immediately ➢ Follow-up in 2 days if fever persists ➢ If fever is present every day for more than 7 days, refer for assessment

VERY SEVERE FEBRILE DISEASE (*No* **MALARIA** *Risk or No Travel to* **MALARIA** *Risk Area)*

If a child has any general danger sign or stiff neck and who has no **MALARIA** risk or has not travelled to **MALARIA** risk area, classify him with **VERY SEVERE FEBRILE DISEASE**. The child needs to be **referred URGENTLY**. Give him the first dose of antibiotic and Paracetamol if the *fever* is high (axillary temperature 101.5°F (38.5°C) or more). Take the necessary precautions to prevent low blood glucose in this child.

FEVER (*No* **MALARIA** *Risk or No Travel to* **MALARIA** *Risk Area)*

If a child who does not have any general danger sign or stiff neck and has no **MALARIA** risk or has not travelled to **MALARIA** risk area, classify him with **FEVER**. The chance of **MALARIA** to be the cause of his *fever* is very low. Give Paracetamol for high *fever* (axillary temperature 101.5°F (38.5°C) or more) and antibiotics for bacterial infection. Advise the mother when to return immediately as well as to come back if the *fever* is present continuously for 2 days. If the *fever* is present

for more than 7 days, **refer** for reassessment.

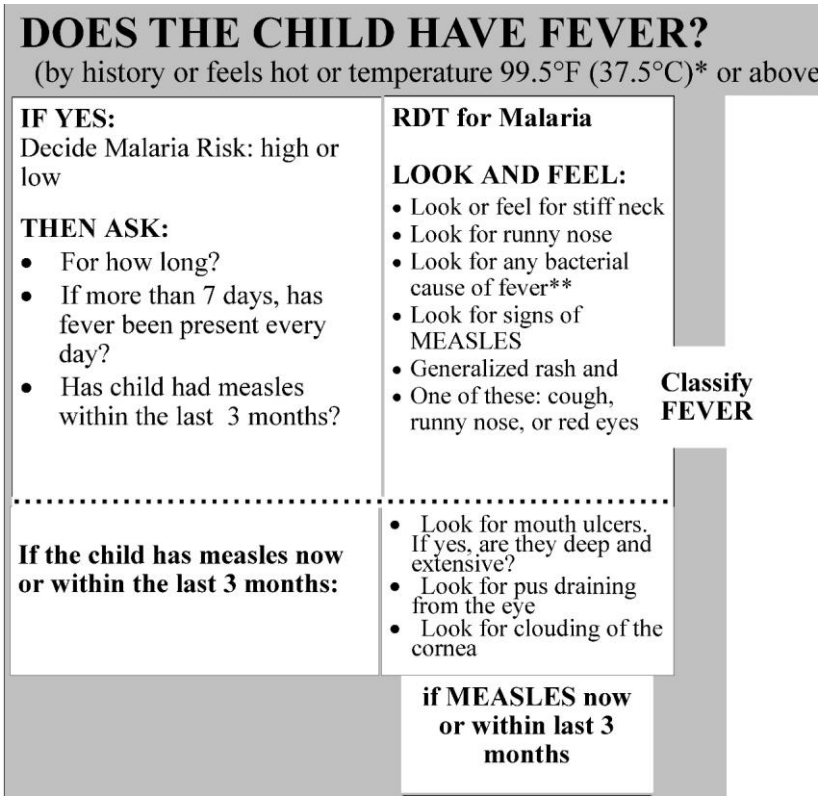
To classify *fever* when there is a no **MALARIA** risk, use the classification table for "No **MALARIA** Risk or no travel to **MALARIA** risk area."

EXAMPLE:

A 2-year old child is brought to the clinic because he has felt hot for 2 days. He does not have general danger signs. He does not have *cough or difficult breathing* or *diarrhoea*. The health provider assessed the child's *fever* and recorded signs.Because there is no risk of **MALARIA** and there has been no travel outside the area, the health provider selected the table for classifying *fever* when there is a No **MALARIA** Risk and No Travel to **MALARIA** Risk Area. The child does not have any of the signs in the pink row - general danger signs or stiff neck. The health provider did not select the severe classification of **VERY SEVERE FEBRILE DISEASE**. Then he looked at the green row. Because the child did not have any danger signs or any sign from the pink row, he classified the child with **FEVER**.

5.3 Classify Measles

A child who has the main symptom *fever* and **MEASLES** now (or within the last 3 months) is classified both for *fever* and for **MEASLES**. First you must classify the child's *fever*. Next you classify **MEASLES**.



If the child does not have a fever and has no signs suggesting **MEASLES**, or has not had **MEASLES** within the last three months, do not classify for **MEASLES**. Ask about the next main symptom, *ear problem*.

* * *

There are three possible classifications of **MEASLES**:

- **SEVERE COMPLICATED MEASLES**
- **MEASLES WITH EYE OR MOUTH COMPLICATIONS**
- **MEASLES**

The table for classifying **MEASLES** if present now or within the last 3 months is on the next page.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Clouding of cornea or • Deep or extensive mouth ulcers	***Pink:*** **SEVERE COMPLICATED MEASLES*****	➢ **Give Vitamin A** ➢ **Give first dose of an appropriate antibiotic** ➢ **If clouding of the cornea or pus draining from the eye, apply Tetracycline eye ointment** ➢ **Refer URGENTLY to hospital**
• Pus draining from the eye or • Mouth ulcers	***Yellow:*** **MEASLES WITH EYE OR MOUTH COMPLICATIONS********	➢ **Give Vitamin A** ➢ **If pus draining from the eye, treat eye infection with Tetracycline eye ointment** ➢ If mouth ulcers, treat with Nystatin ointment and Riboflovin ➢ Follow-up in 3 days
• Measles now or within the last 3 months	***Green:*** **MEASLES**	➢ Give Vitamin A

**** Other important complications of measles-**PNEUMONIA**, stridor, *diarrhoea*, ear infection and *malnutrition* are classified in other tables
N.B High, Moderate and Low risk are associated with High, Moderate and Low Endemic zones respectively

SEVERE COMPLICATED MEASLES

If the child has any general danger sign or clouding of cornea or deep or extensive mouth ulcers, classify the child with SEVERE COMPLICATED **MEASLES**. This child needs urgent treatment and **referral** to hospital. Children with **MEASLES** may have other serious complications of **MEASLES**. These include stridor in a calm child, **PNEUMONIA**, dehydration, ear infection or *malnutrition*. You assess and classify these signs in other parts of the assessment. Their treatments are appropriate for the child with **MEASLES**. Some complications are due to infection. Another cause is **MEASLES** virus which damages the respiratory and alimentary tract. Vitamin A deficiency causes some more complications, such as, corneal ulcer. Vitamin A superimposed with **MEASLES** infection has a worse prognosis. **MEASLES** complications can lead to severe disease which in turn may lead to death. A child with SEVERE COMPLICATED **MEASLES** needs urgent treatment. Treat the child with vitamin A. Give the appropriate antibiotic as well. If there is corneal clouding or pus draining from the eye, apply tetracycline ointment in the eye. If it not treated, a corneal ulcer may lead to blindness. Ask the mother if corneal clouding is present for some days. Enquire if the corneal clouding has been assessed and treated in the hospital. If so, there is no need to send this child to hospital for the same eye problem.

MEASLES WITH EYE OR MOUTH COMPLICATIONS

If the child has pus draining from the eye or mouth ulcers which are not deep or extensive, classify the child as having **MEASLES** WITH EYE OR MOUTH

COMPLICATIONS. A child with this classification does not need **referral**. You assess and classify the child for other complications of **MEASLES** (**PNEUMONIA**, *diarrhoea*, ear infection and *malnutrition*) in other parts of this assessment. Their treatments are appropriate for the child with **MEASLES**. If **MEASLES** is diagnosed and treated early, many deaths can be prevented. Treat the child with vitamin A. It will help to improve vitamin A deficiency and decrease the severity of complications. Teach the mother to treat eye infection or mouth ulcer at home. Treating mouth ulcer will help the child to start his usual feeding again soon.

MEASLES

A child with **MEASLES** now or within the last 3 months and with none of the complications listed in the pink or yellow rows is classified with **MEASLES**. Give the child vitamin A to help prevent **MEASLES** complications. All children with **MEASLES** should receive vitamin A.

EXERCISE K

In this exercise, you will classify illness in children with signs of *fever* and, if present, signs suggesting **MEASLES**. First, you will study an example. Then you will begin the exercise. Read the example case study that begins on this page. Also study how the health provider classified this child's illness. When all the participants are ready, there will be a group discussion about this example.

* * *

EXAMPLE:

Hashem is 10 months old. He weighs 8.2 kg. His temperature is 37.5°C. His mother says he has a rash and *cough*. The health provider checked Hashem for general danger signs. Hashem was able to drink, was not vomiting, did not have convulsions and was not lethargic or unconscious, he is not convulsing now. The health provider next asked about Hashem's *cough*. The mother said Hashem had been *coughing* for 5 days. He counted 43 breaths per minute. He did not see chest indrawing. He did not hear stridor and wheeze when Hashem was calm. His arterial oxygen saturation is 97%. Hashem did not have *diarrhoea*. Next the health provider asked about Hashem's *fever*. The **MALARIA** risk is high. The mother said Hashem has felt hot for 2 days. Hashem did not have a stiff neck. He has had a runny nose with this illness, his mother said. Hashem has a rash covering his whole body. Hashem's eyes were red. The health provider checked the child for complications of **MEASLES**. There were no mouth ulcers. There was no pus draining from the eye and no clouding of the cornea.

1. The health provider did RDT and result was positive. Here is how the health provider recorded Hashem's case information and signs of illness.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 786/5 Date: 9.9.19 Child's name: Hashem Date of birth: Age: 10mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Amena Father's name: Kamrul Address: House Name/	Weight (kg): 8.2 Height(Inch): Temperature (°C/°F): 99.5° Breaths/ minute: 43 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 94% Date of starting symptoms: 4.9.19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☑ No signs of pneumonia or very severe disease	☑ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☑ If wheezing give Salbutamol for 5 days ☑ Advise to soothe the throat and relieve the cough ☑ Advise to come urgently if fast breathing or breathing difficulties ☑ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
					Dysentery: ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☑ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahalla:

Union:

Upazila:

District:

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☑ Measles now or within the last 3 months	☑ **Measles**		☑ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☑ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Anthelminthic	Return for next immunization on: _____ (Date)

2. To classify Hashem's *fever*, the health provider looked at the table for classifying *fever* when there is a High or low **MALARIA** Risk.

a. He checked to see if Hashem had any of the signs in the pink row. He thought, "Does Hashem have any general danger signs? No, he does not. Does Hashem have a stiff neck? No, he does not. Hashem does not have any signs of **VERY SEVERE FEBRILE DISEASE**."

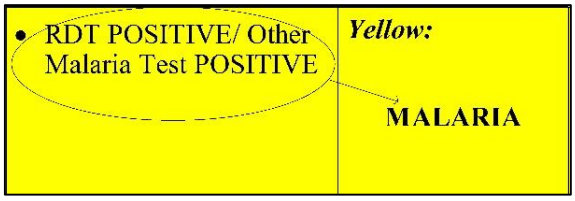
b. Next, the health provider looked at the yellow row. He thought, "Hashem has a *fever*. His temperature measures 37.5°C. He also has a history of *fever* because his mother says Hashem felt hot for 2 days. He did RDT and the result was positive." He classified Hashem with **MALARIA**.

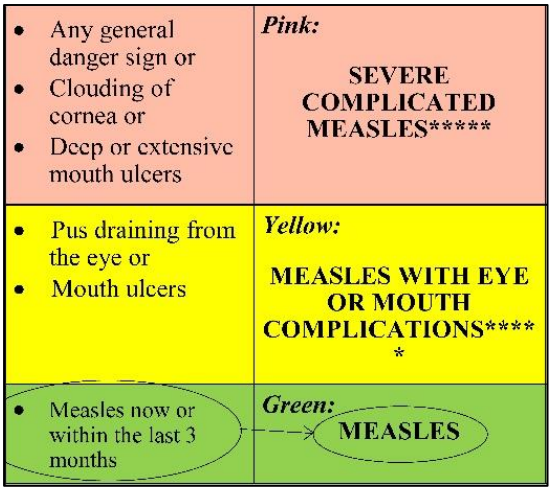
c. Because Hashem had a generalized rash and red eyes, Hashem has signs suggesting **MEASLES**. To classify Hashem's **MEASLES**, the health provider looked at the classification table for classifying **MEASLES**.

d. He checked to see if Hashem had any of the signs in the pink row. He thought, " Hashem does not have any general danger signs. The child does not have clouding of the cornea. There are no deep or extensive mouth ulcers. Hashem does not have **SEVERE COMPLICATED MEASLES**."

e. Next, the health provider looked at the yellow row. He thought, "Does Hashem have any signs in the yellow row? He does not have pus draining from the eye. There are no mouth ulcers. Hashem does not have **MEASLES WITH EYE OR MOUTH COMPLICATIONS**."

f. Finally, the health provider looked at the green row. Hashem has **MEASLES**, but he has no signs in the pink or yellow row. The health provider classified Hashem with **MEASLES**.





Exercise K, Case

* * *

Now read the following case studies. Record each child's signs and their classifications on the Register. Remember to look at the chart to classify the signs.

Case 1: Kamrul

Kamrul is 5 months old. His weight is 5.2kg. His axillary temperature is 37.5° C. His mother says, "He is not feeding well." She says, his body feels hot and she needs help from a health provider. Kamrul is able to drink, did not vomit, has no convulsion and is not lethargic or unconscious. Kamrul does not have *cough*. His mother says, he does not have *diarrhoea*. As Kamrul's body temperature is 37.5°C and he feels hot, the health provider assesses Kamrul more for signs of *fever*. It is rainy season and **MALARIA** risk is high. The mother says, the *fever* has started 2 days back. He does not have **MEASLES** within 3 months. He does not have stiff neck, runny nose or any other sign suggesting **MEASLES**. The healthcare provider did RDT and the result was positive. Record Kamrul's signs and classify them on the Register on the next page.

Exercise K: Case 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration – Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and refer	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
Union:		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
Upazila:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 2: Ismail

Ismail is 3 years old. His weight is 9.4 kg. His body temperature is 37° C. His mother said, she feels Ismail's temperature to be high. He also has *cough*. The health provider examined for general danger signs. Ismail is able to drink, did not vomit, has no convulsion, is not lethargic or unconscious. He is not convulsing now. The mother said, Ismail has been *coughing* for 3 days. The health provider counted his breath – 51 breaths per minute. He did not have chest indrawing. He did not have stridor or wheeze when he was calm. His arterial oxygen saturation was 99%. Ismail does not have *diarrhoea*. The health provider assessed further for the signs of *fever*. Ismail lives in sub-urban area and there is no **MALARIA** risk. The health provider asked if the mother took Ismail outside the area. The mother said, yes, she went to a relative's home 3 weeks ago and **MALARIA** cases are seen there during this rainy season. So, **MALARIA** risk is high. He is feeling hot for 5 days. He has not had **MEASLES** within 3 months. He does not have stiff neck, runny nose and generalized rash. The healthcare provider did RDT and the result was positive.Record the child's signs and classify them on the Register on the next page.

Exercise K: Case 2

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: □ Male □ Female Visit: □ Initial □ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …… Height(Inch): …… Temperature (°C/ °F): …… Breaths/minute: …… Measure oxygen saturation (SpO_2) by pulse oximeter (%): …… Date of starting symptoms: …… □ Palm examination □ Eye examination □ Examination to diagnose Early Childhood Development (ECD) □ Examination to diagnose other problems	□ Not able to drink or breast feed □ Vomits everything □ Had convulsion or convulsing now □ Lethargic or unconscious □ Stridor in calm child	□ **Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
		□ Chest in-drawing □ Fast breathing-50 breaths per minute or more (2 months–11 months) □ Fast breathing-40 breaths per minute or more (12 months- 5 years)	□ **Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ Amoxicillin DT twice daily for 5 days; Dose: □ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
		□ No signs of pneumonia or very severe disease	□ **Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficulties □ If not improving, advise to FU in 5 days
		Dehydration Verification: □ Lethargic or unconscious □ Sunken eyes □ Not able to drink or drinking poorly □ Restless, irritable □ Drinks eagerly, thirsty □ Skin pinch goes back slowly □ Skin pinch goes back very slowly	**Dehydration** □ **Severe Dehydration** □ **Some Dehydration** □ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** / **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
		Diarrhoea for 14 days or more: □ Dehydration present □ No dehydration	□ **Severe Persistent Diarrhoea** □ **Persistent Diarrhoea**	**Severe persistent diarrhea :** □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days
		□ Blood in the stool	□ **Dysentery**		**Dysentery:** □ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
		□ Tender swelling behind the ear	□ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		□ Ear pain □ Pus or water draining from the ear (<14 days)	□ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
		□ Pus or water draining from the ear (>14 days)	□ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
		□ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) □ Any general danger sign □ Stiff neck	□ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Malaria Risk □ Travel to Malaria risk areas □ RDT/ Other Malaria test positive □ No cause of fever	□ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Other causes of fever present	□ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		□ Any general danger sign □ Clouding of cornea □ Deep or extensive mouth ulcers	□ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
		□ Pus draining from the eye □ Mouth ulcers	□ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		□ Measles now or within the last 3 months	□ **Measles**		□ Vitamin A
		□ Oedema of both feet □ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm □ Medical complication present □ Not able to finish Nutritional therapy □ Breastfeeding problem	□ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm	□ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
		□ WFH/L z-scores: between -3 and -2 z-scores □ MUAC between 115 and 125 mm	□ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		□ Severe palmar pallor □ Some palmar pallor	□ **Severe Anaemia** □ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient: Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
			□ **Low birth weight (within 72 hours)** □ **Less weight than age (Underweight) (6-59 months)** □ **Less height than age (Stunting) (6-59 months)** □ **Less weight than height (Wasting) (6-59 months)**		
			□ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** □ **Watering from eye or accumulation of discharge** □ **Redness of eye (Corneal ulcer/Conjunctivitis)** □ **Injury of Eye ball and Adnexa** □ **Squint** □ **Structural deformity** □ **Dimness of vision** □ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
			□ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			□ **Drowning** □ **Illness due to injuries/accidents**		
			□ **Other problem (Specify):**		
		Other Nutritional Information			
		□ Exclusive breast feeding (0-6 months)			
		□ Nutritional therapy (6-23 months)			
		Counseling			
		□ IYCF □ Vitamin A □ IDD □ Anaemia □ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 3: Atika

Atika is 5 months old. Her weight is 5 kg. Her body temperature is 36.5°C. Her family members brought her to the health centre because she feels hot and she has been *coughing* for 2 days. She is able to drink, did not vomit, had not convulsion and not lethargic or unconscious. The health provider said, "Now I will assess her *cough*." The health provider counted her breath – 43 breaths per minute. She does not have chest indrawing, stridor or wheezing in a calm state. Her arterial oxygen saturation is 97%. Atika did not have *diarrhoea*. The health provider said, "Now I will assess her *fever*." **MALARIA** cases are seen throughout the year in the area where Atika lives (high **MALARIA** risk). Her mother said, she is having an intermittent *fever* for last 2 days. He has not had **MEASLES** within 3 months. She does not have stiff neck or runny nose. The healthcare provider did RDT and the result was negative. Atika has a generalized rash. Her eyes are red. She has mouth ulcer, but not deep and extensive. Pus is not draining from her eyes, she does not have corneal clouding. Record the child's signs and classify them on the Register on the next page.

Exercise K: Case 3

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	□ Not able to drink or breast feed □ Vomits everything □ Had convulsion or convulsing now □ Lethargic or unconscious □ Stridor in calm child	□ **Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
Date:	Height(Inch):				
		□ Chest in-drawing □ Fast breathing- 50 breaths per minute or more (2 months–11 months) □ Fast breathing-40 breaths per minute or more (12 months- 5 years)	□ **Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ Amoxicillin DT twice daily for 5 days; Dose: □ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
Child's name:	Temperature (°C/ °F):				
	Breaths/minute:	□ No signs of pneumonia or very severe disease	□ **Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficulties □ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: □ Lethargic or unconscious □ Sunken eyes □ Not able to drink or drinking poorly □ Restless, irritable □ Drinks eagerly, thirsty □ Skin pinch goes back slowly □ Skin pinch goes back very slowly	**Dehydration** □ **Severe Dehydration** □ **Some Dehydration** □ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** □ **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
Age:				**Severe persistent diarrhea ‡** □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: □ Dehydration present □ No dehydration	□ **Severe Persistent Diarrhoea** □ **Persistent Diarrhoea**		**Dysentery:** □ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
Sex: □ Male □ Female		□ Blood in the stool	□ **Dysentery**		
	□ Palm examination	□ Tender swelling behind the ear	□ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		□ Ear pain □ Pus or water draining from the ear (<14 days)	□ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
Visit: □ Initial □ Follow up	□ Eye examination				
	□ Examination to diagnose Early Childhood Development (ECD)	□ Pus or water draining from the ear (>14 days)	□ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
Mother's name:	□ Examination to diagnose other problems	□ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) □ Any general danger sign □ Stiff neck	□ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Malaria Risk □ Travel to Malaria risk areas □ RDT/ Other Malaria test positive □ No cause of fever	□ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
Father's name:					
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Other causes of fever present	□ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		□ Any general danger sign □ Clouding of cornea □ Deep or extensive mouth ulcers	□ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
Address: House Name/ Holding Number:		□ Pus draining from the eye □ Mouth ulcers	□ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		□ Measles now or within the last 3 months	□ **Measles**		□ Vitamin A
		□ Oedema of both feet □ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm □ Medical complication present □ Not able to finish Nutritional therapy □ Breast/feeding problem	□ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
Village / Mahalla:					
		□ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm	□ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
Union:		□ WFH/L z-scores: between -3 and -2 z-scores □ MUAC between 115 and 125 mm	□ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		□ Severe palmar pallor □ Some palmar pallor	□ **Severe Anaemia** □ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient; Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
Upazila:					
			□ **Low birth weight (within 72 hours)** □ **Less weight than age (Underweight) (6-59 months)** □ **Less height than age (Stunting) (6-59 months)** □ **Less weight than height (Wasting) (6-59 months)**		
District:					
			□ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** □ **Watering from eye or accumulation of discharge** □ **Redness of eye (Corneal ulcer/Conjunctivitis)** □ **Injury of Eye ball and Adnexa** □ **Squint** □ **Structural deformity** □ **Dimness of vision** □ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
Mobile No:					
			□ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			□ **Drowning** □ **Illness due to injuries/accidents**		
			□ **Other problem (Specify):**		
		Other Nutritional Information			
		□ Exclusive breast feeding (0-6 months)			
		□ Nutritional therapy (6-23 months)			
		Counseling			
		□ IYCF □ Vitamin A □ IDD □ Anaemia □ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Only for children who – has no malaria risk or no travel to **MALARIA** risk area:
If you don't come across such children who are not from **MALARIA** risk area or did not go to **MALARIA** risk area, then you do not need to classify the cases from 4 to 6. Tell the facilitator that, you are ready to discuss your answers of cases 1 to 3 with him. If you come across such children who are from no **MALARIA** risk and no travel history to **MALARIA** risk area, then classify cases from 4 to 6.

* * *

Case 4: Sabera

Sabera is 12 months old. Her weight is 7.2kg. Her axillary temperature is 36.5°C. Her mother has brought her to the health centre as her body feels hot. Sabera has no general danger sign. She does not have *cough or difficult breathing*. When asked about *diarrhoea*, her mother said, "Yes, she has *diarrhoea* for 2-3days." She did not see any blood in the stool. Sabera is not lethargic or unconscious. Her eyes are not sunken. She drinks normally, skin pinch goes back immediately. The health provider asked, "You have brought Sabira as she feels hot. I will assess her *fever*." There is no risk of **MALARIA**. she did not go outside the area. Her mother said, "Sabera has been feeling hot for 2 days. She did not have **MEASLES** within 3 months." She does not have neck stiffness or runny nose or generalized rash. The health provider did not consider RDT for **MALARIA**. Record the child's signs and classify them on the Register on the next page.

Exercise K: Case 4

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration + Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……			**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WT/H/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WT/H/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 5: Kajol

Kajol is 3 years old. She weighs 10 kg. Her axillary temperature is 38°C. Her mother brought her to the health centre because she has a *cough*. She also has a rash. The health provider checked Kajol for danger signs. She was able to drink, she had not been vomiting everything, and she did not have convulsions. She was not lethargic or unconscious. She is not convulsing now. The health provider assessed Kajol's *cough*. The mother told the health provider Kajol had been *coughing* for 2 days. The health provider counted 42 breaths per minute. The health provider did not see chest indrawing. He did not hear stridor or wheeze when Kajol was calm. Her arterial oxygen saturation was measured 98% with a pulse oximeter. When the health provider asked if Kajol had *diarrhoea*, the mother said, "No." Next, the health provider assessed Kajol's fever. There is no risk of **MALARIA** in the city where Kajol lives and she has not travelled outside the city. She has felt hot for 3 days, the mother said. She does not have stiff neck. She does not have a runny nose. The health provider did not consider RDT for **MALARIA**. Kajol has a generalized rash. Her eyes are red. She does not have mouth ulcers. Pus is not draining from the eye. There is no clouding of the cornea. Record the child's signs and classify them on the Register on the next page.

Exercise K: Case 5

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: □ Male □ Female Visit: □ Initial □ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …….. Height/(Inch): …….. Temperature (°C/ °F): …….. Breaths/minute: …….. Measure oxygen saturation (SpO2) by pulse oximeter (%): …….. Date of starting symptoms: …….. □ Palm examination □ Eye examination □ Examination to diagnose Early Childhood Development (ECD) □ Examination to diagnose other problems	□ Not able to drink or breast feed □ Vomits everything □ Had convulsion or convulsing now □ Lethargic or unconscious □ Stridor in calm child	□ **Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
		□ Chest in-drawing □ Fast breathing-50 breaths per minute or more (2 months–11 months) □ Fast breathing-40 breaths per minute or more (12 months- 5 years)	□ **Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ Amoxicillin DT twice daily for 5 days; Dose: □ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
		□ No signs of pneumonia or very severe disease	□ **Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficulties □ If not improving, advise to FU in 5 days
		Dehydration Verification: □ Lethargic or unconscious □ Sunken eyes □ Not able to drink or drinking poorly □ Restless, irritable □ Drinks eagerly, thirsty □ Skin pinch goes back slowly □ Skin pinch goes back very slowly	**Dehydration** □ **Severe Dehydration** □ **Some Dehydration** □ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** □ **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
				Severe persistent diarrhea : □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days
		Diarrhoea for 14 days or more: □ Dehydration present □ No dehydration	□ **Severe Persistent Diarrhoea** □ **Persistent Diarrhoea**		**Dysentery:** □ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
		□ Blood in the stool	□ **Dysentery**		
		□ Tender swelling behind the ear	□ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		□ Ear pain □ Pus or water draining from the ear (<14 days)	□ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
		□ Pus or water draining from the ear (>14 days)	□ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
		□ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) □ Any general danger sign □ Stiff neck	□ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Malaria Risk □ Travel to Malaria risk areas □ RDT/ Other Malaria test positive □ No cause of fever	□ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
		□ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) □ Other causes of fever present	□ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		□ Any general danger sign □ Clouding of cornea □ Deep or extensive mouth ulcers	□ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
		□ Pus draining from the eye □ Mouth ulcers	□ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		□ Measles now or within the last 3 months	□ **Measles**		□ Vitamin A
		□ Oedema of both feet □ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm □ Medical complication present □ Not able to finish Nutritional therapy □ Breastfeeding problem	□ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		□ WFH/L z-score: less than -3 z-scores □ MUAC: less than 115 mm	□ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
		□ WFH/L z-scores: between -3 and -2 z-scores □ MUAC between 115 and 125 mm	□ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		□ Severe palmar pallor □ Some palmar pallor	□ **Severe Anaemia** □ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient; Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
			□ **Low birth weight (within 72 hours)** □ **Less weight than age (Underweight) (6-59 months)** □ **Less height than age (Stunting) (6-59 months)** □ **Less weight than height (Wasting) (6-59 months)**		
			□ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** □ **Watering from eye or accumulation of discharge** □ **Redness of eye (Corneal ulcer/Conjunctivitis)** □ **Injury of Eye ball and Adnexa** □ **Squint** □ **Structural deformity** □ **Dimness of vision** □ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
			□ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			□ **Drowning** □ **Illness due to injuries/accidents**		
			□ **Other problem (Specify):**		
		Other Nutritional Information			
		□ Exclusive breast feeding (0-6 months)			
		□ Nutritional therapy (6-23 months)			
		Counseling			
		□ IYCF □ Vitamin A □ IDD □ Anaemia □ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 6: Akram

Akram is 24 months old. His weight is 9.5kg. His axillary temperature is 37.5° C. His mother said, Akram is not feeding well for a few days and that is why she is worried. The health worker checked for general danger signs. He is able to drink, did not vomit, had no convulsion and is not lethargic or unconscious. He is not convulsing. Akram does not have *cough* and *diarrhoea*. The health worker asked if Akram has *fever*. The mother said, he has been feeling hot for 2 days. There is no risk of **MALARIA**. They travelled but not to a **MALARIA** risk area. He did not have **MEASLES** within 3months. His does not have stiff neck, runny nose. He does not have generalized rash, he has no sign suggesting **MEASLES**. He has no other cause of *fever*. The health provider did not consider RDT for **MALARIA**. Record the child's signs and classify them on the Register on the next page.

Tell your facilitator when you are ready to discuss your answers

Exercise K: Case 6

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ↑ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……			**Severe persistent diarrhea ⇕** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WT/H/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WT/H/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

EXERCISE L

In this exercise, you will watch a demonstration of how to assess and classify a child with *fever*. You will see examples of signs related to *fever* and **MEASLES.** You will practice identifying stiff neck. Then you will watch a case study. For each of the children shown, answer the question:

	Does the child have a stiff neck?	
	YES	NO
Child 1		
Child 2		
Child 3		
Child 4		

Video Case Study: Record the child's signs and their classifications on the IMCI Register below.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: ☐ Male ☐ Female Visit: ☐ Initial ☐ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …….. Height(Inch): …….. Temperature (°C/ °F): …….. Breaths/minute: …….. Measure oxygen saturation (SpO_2) by pulse oximeter (%): …….. Date of starting symptoms: …….. ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
				Severe persistent diarrhea : ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

6.0 ASSESS AND CLASSIFY EAR PROBLEM

A child with an *ear problem* may have an ear infection. If a child has an *ear problem*, pus collects behind his eardrum. He suffers from ear pain and often develops *fever*. If the infection is not treated, eardrum can rupture. Then pus drains out and the child feels less pain. Although *fever* and other symptoms can subside, the child's hearing gets impaired because his eardrum is already ruptured. Usually eardrum heals spontaneously. However, sometimes pus continues to drain, eardrum does not heal and the child cannot hear. Sometimes the infection can spread from the ear to the bone behind the ear (the mastoid) causing mastoiditis. Infection can also spread from the ear to the brain causing meningitis. These are severe diseases. They need urgent attention and **referral**. Ear infection rarely leads to death. However, a child suffers for a long time due to ear problems. In developing countries, the main cause of deafness is ear infection and this deafness creates difficulty in schooling. *ASSESS & CLASSIFY* chart will help you to classify *ear problems* due to ear infection.

6.1 Assess Ear Problem

A child with an *ear problem* is assessed for:

- Ear pain
- Ear discharge and
- If the discharge is present, how long the child has had discharge, and
- Tender swelling behind the ear, a sign of mastoiditis.

Here is the box from the *Assess* column that tells you how to assess a child for the *ear problem*.

DOES THE CHILD HAVE AN EAR PROBLEM?	
IF YES, ASK:	**LOOK AND FEEL:**
• Is there ear pain? • Is there ear discharge? - If yes, for how long?	• Look for pus draining from the ear • Feel for tender swelling behind the ear

Ask about ear problem in all sick children.

Ask: Does the child have an ear problem?

If the mother answers, "No", record her answer. Do not assess the child for *ear problem*. Go to the next question and check for *malnutrition* and *anaemia*. If the mother answers, "Yes", ask the next question:

Ask: Does the child have ear pain?

Ear pain can mean that the child has an ear infection. If the mother is not sure that the child has ear pain, ask if the child has been irritable and rubbing his ear.

Ask: Is there an ear discharge? If yes, for how long?

Ear discharge is also a sign of infection. When asking about ear discharge, use words the mother understands. If the child has had ear discharge, ask for how long. Give her time to answer the question. She may need to remember when the discharge started. You will classify and treat the *ear problem* depending on how long the ear discharge has been present.

- An ear discharge that has been present for less than 2 weeks is treated as an **ACUTE EAR INFECTION**

- An ear discharge that has been present for 2 weeks or more is treated as a **CHRONIC EAR INFECTION**

You do not need more accurate information about how long the discharge has been present.

Look for pus draining from the ear

Pus draining from the ear is a sign of infection, even if the child no longer has any pain. Look inside the child's ear to see if pus is draining from the ear.

Feel for tender swelling behind the ear

Feel behind both ears. Compare them and decide if there is tender swelling of the mastoid bone. In infants, the swelling may be above the ear. Both tenderness and swelling must be present to classify **MASTOIDITIS,** a deep infection in the mastoid bone. Do not confuse this swelling of the bone with swollen lymph nodes.

6.2 Classify Ear Problem

There are four classifications for *ear problem*:

- **MASTOIDITIS**
- **ACUTE EAR INFECTION**
- **CHRONIC EAR INFECTION**
- **NO EAR INFECTION**

Here is the classification table for *ear problem* from the *ASSESS & CLASSIFY* chart.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold
• Tender swelling behind the ear	***Pink:*** **MASTOIDITIS**	➢ **Give first dose of an appropriate antibiotic** ➢ **Give first dose of Paracetamol for pain** ➢ **Refer URGENTLY to hospital**
• Ear pain or • Pus is seen draining from the ear and discharge is reported for less than 14 days	***Yellow:*** **ACUTE EAR INFECTION**	➢ **Give an antibiotic for 5 days** ➢ **Give Paracetamol for pain** ➢ Dry the ear by wicking ➢ Follow-up in 5 days
• Pus is seen draining from the ear and discharge is reported for 14 days or more	***Yellow:*** **CHRONIC EAR INFECTION**	➢ Dry the ear by wicking ➢ Treat with topical quinolone ear drops for 14 days ➢ Follow-up in 5 days
• No ear pain and • No pus seen draining from the ear	***Green:*** **NO EAR INFECTION**	➢ No treatment

MASTOIDITIS

If a child has tender swelling behind the ear, classify the child with **MASTOIDITIS**. **Refer** the child immediately. This child needs an injectable antibiotic. He might need operation. Give first dose of an appropriate antibiotic before sending for hospital. Also give one dose of Paracetamol if there is pain.

ACUTE EAR INFECTION

If there is ear pain or if you see pus draining from the ear and/or discharge has been present for less than 14 days, classify the child's illness as **ACUTE EAR INFECTION**. Give an appropriate antibiotic to a child suffering from **ACUTE EAR INFECTION**. The antibiotic for **PNEUMONIA** is also effective against the bacteria of ear infection. Give Paracetamol for pain (or high fever). If pus is draining from the ear, then wick the child's ear.

CHRONIC EAR INFECTION

If you see pus draining from the ear and/or discharge has been present for 14 days or more, classify the child's illness as **CHRONIC EAR INFECTION.** The agents responsible for **ACUTE EAR INFECTION** are different from those causing **CHRONIC EAR INFECTION.** For this reason, oral antibiotics are not effective for **CHRONIC EAR INFECTION.** Do not give the same antibiotic course repeatedly for pus draining from the ear. Local quinolone drop is more effective here. Ear wicking is the most important and effective treatment for **CHRONIC EAR INFECTION**. Teach the mother how to wick her child's ear.

NO EAR INFECTION

If there is no ear pain and no pus is seen draining from the ear, the child's illness is classified with **NO EAR INFECTION** and no additional treatment is needed. If the child has other problem like hearing impairment, foreign body **refer** the child for further assessment.

EXERCISE M

These two case descriptions are on those children who have *ear problem*. Record signs of each child and classify them on the part for *ear problem* on the Register. Refer to the chart booklet or Job Aid to classify the signs.

Case 1: Yasmin

Yasmin is 3 years old. Her weight is 13 kg. Her body temperature is 99.5°F (37.5°C). Her mother has brought her to the health centre today. Because Yasmin is feeling hot for 2 days. Last night she was crying and complaining of ear pain. The health worker assessed her and saw no general danger sign. Yasmin does not have *cough or difficult breathing*. She does not have *diarrhoea*. She has high risk of **MALARIA**. she was classified with **MALARIA**. Later, the health worker asked about Yasmin's *ear problem*. The mother said, she is sure that she has ear pain. The child cried almost the whole night due to ear pain. The mother said, "Pus has been draining from Yasmin's ear on and off for almost one year." The health worker did not see any pus draining from the child's ear. He touched behind both ears and found a tender swelling behind one ear. The child started to cry after touching. Record Yasmin's signs of *ear problems* and classify them on the Register.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): ……	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute: ……	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 2: Khaleda

Khaleda is 18 months old. Her weight is 9 kg. Her body temperature is 98°F (36.6°C). Her mother has brought her to the health centre today. Because pus has been draining from Khaleda's ear for 3 days. Khaleda has no general danger sign. She does not have *cough or difficult breathing.* She does not have *diarrhoea* and *fever*. The health worker asked about Khaleda's *ear problem*. The mother said, Khaleda does not have ear pain but, pus has been draining from the ear for 3 to 4 days. The health worker saw pus is draining from the right ear. He did not find any tender swelling behind her ears. Record the signs of Khaleda's *ear problems* and classify them on the Register.

Tell your facilitator when you are ready to discuss your answers

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height/Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Visit: ☐ Initial ☐ Follow up	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

7.0 CHECK FOR MALNUTRITION

Check all sick children for signs suggesting *malnutrition*.

A mother may bring her child to the clinic because the child has an acute illness. The child may not have specific complaints that point to *malnutrition*. A sick child can be malnourished, but the health provider or the child's family may not notice the problem. A child with *malnutrition* has a higher risk of many types of disease and death. Even children with moderate *malnutrition* have an increased risk of death. Identifying children with *malnutrition* and treating them can help prevent many severe diseases and death. Some *malnutrition* cases can be treated at home. Severe cases need **referral** to hospital for special feeding, blood transfusion or specific treatment of a disease contributing to *malnutrition* (such as tuberculosis).

Causes of *malnutrition*: There are many causes of *malnutrition*. The causes may vary from country to country. If a child has a deficiency in recommended amount of vitamin and mineral, he may have *malnutrition*. The child may not eat the recommended amount of specific vitamin (such as vitamin A) or mineral (such as, iron).

- Vitamin A deficiency develops if vitamin A enriched food is not eaten. A child with vitamin A deficiency has a higher risk of death due to **MEASLES** and *diarrhoea*. The child also has the risk of blindness.
- Iron deficiency or anaemia may develop if iron-enriched food is not taken. Anaemia is a decrease in number of red blood cells or amount of haemoglobin in each red blood cell.

Anaemia can also develop from the following reasons:

- Infection
- Parasite, such as, hookworm and roundworm. They suck blood from the intestine and cause anaemia.
- Malaria, which destroys red blood cells rapidly. Anaemia occurs if children are infected by malaria frequently or if they get inadequate treatment. Anaemia develops slowly. Often, these children have anaemia due to malnutrition and malaria both.

7.1 Assess for Malnutrition

Here is the box from the *Assess* column on the *ASSESS & CLASSIFY* chart. It describes how to assess a child for *malnutrition*.

CHECK FOR MALNUTRITION

LOOK AND FEEL:

- Look for signs of acute malnutrition
- Look for oedema of both feet
- Determine WFH/L*___ (z score)
  or
- Measure MUAC** _____mm in a child 6 months or older

If WFH/L less than -3 z-scores or MUAC less than 115 mm, then:

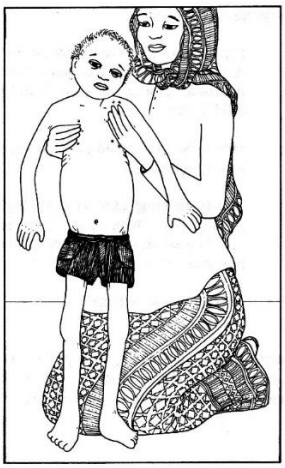
- **Check for any medical complication present:**
  - Any general danger signs
  - Any severe classification
  - Pneumonia with chest indrawing
- **If no medical complications present:**
  - **Child is 6 months or older, offer Nutrition therapy*** to eat. Is the child:**
    - Not able to finish Nutrition therapy?
    - Able to finish Nutrition therapy?
  - **Child is less than 6 months, assess breastfeeding:**
    - Does the child have a breastfeeding problem?

*WFH/L is Weight-for-Height or Weight-for-Length determined by using the WHO growth standard charts.
**MUAC is Mid-Upper Arm Circumference measure using MUAC tape in all children 6 months or older.

Assess all sick children for *malnutrition*:

Look and feel for oedema of both feet

A child with oedema of both feet may have kwashiorkor, another form of severe *malnutrition*. Oedema is when an unusually large amount of fluid gathers in the child's tissues. The tissues become filled with the fluid and look swollen or puffed up. Look and feel to determine if the child has oedema of both feet. Use your thumb to press gently for a few seconds on the top side of each foot (dorsum). The child has oedema if a dent remains in the child's foot when you lift your thumb.



EXERCISE M

In this exercise, you will look at photographs in the booklet of still photographs and practice identifying signs of oedema in children with malnutrition.

Part 1: Now study photograph 50.

Photograph 50: This child has oedema of both feet.

Part 2: Now look at photograph 59 and tick whether the child has oedema of both feet.

	Does the child have oedema of both feet?	
	YES	NO
Photograph 59		

Tell your facilitator when you are ready to discuss your answers to this exercise

Determine weight for Height or Length (WFH/L)

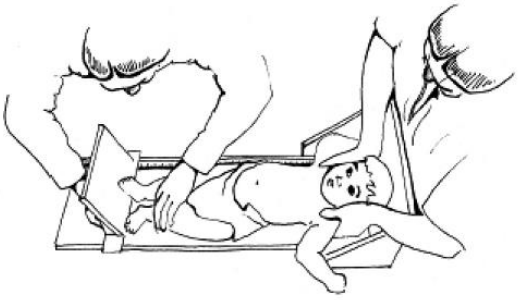
By comparing a child's weight to his/her height or length, you can measure how thin the child is. If the weight-for-height or length is low, the child is wasted. This is an important measurement of acute malnutrition. You might be familiar with other ways to measure a child's growth, like weight-for-age, or height-for-age. These measurements do not indicate acute malnutrition in the same way that weight-for-height does. There is an important difference between height and length for you to remember. They are measured differently for certain age groups.

- Length is measured when the child is lying down. This is used for children below 2 years of age or if the child is too weak to stand
- Height is measured when the child is standing upright. This is used for all other children

NOTE: The height of a child is 0.7 cm shorter than length. Therefore, in case you measure a child 2 years or older using length instead of height, subtract 0.7 cm from the measurement.

How will you measure a child's length?

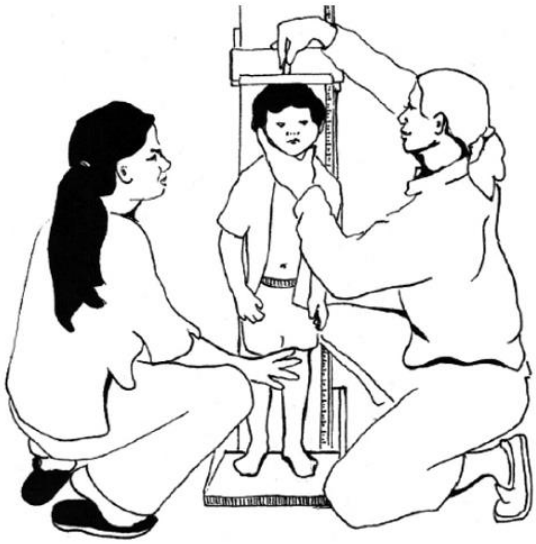
Remember that length is used for children under 2 years, or those too weak to stand. One assistant should hold the child's head over the ears and with straight arms. The measurer hold one hand on the child's knees keeping the legs straight and the other on the foot-place to read the length. The child should lie flat on the board.



Once you have measured the child's length, you will use the weight and length to calculate a child's Z-score

How will you measure a child's height?

Remember that height is used for children 2 years and older. The assistant should hold the child's knees to keep the legs straight with one hand, and the other hand on the shins to keep the heels against the back and base of the board. The measurer should hold one hand the child's chin and the other on the head-piece to read the height. The child's eyes should the in horizontal level and the body flat against the board.



Once you have measured the child's height, you will use the weight and height to calculate a child's Z-score

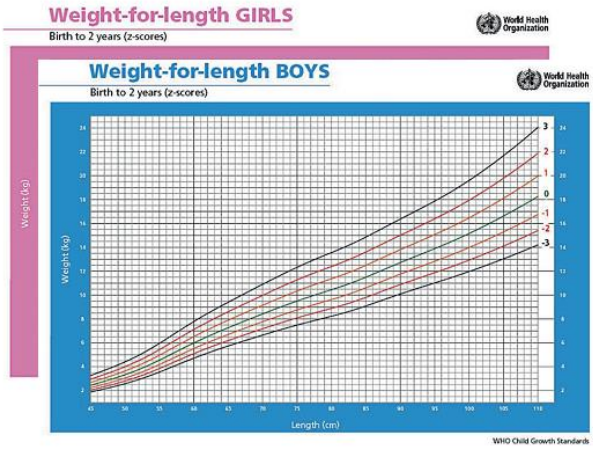
How do you calculate a child's Z-score?

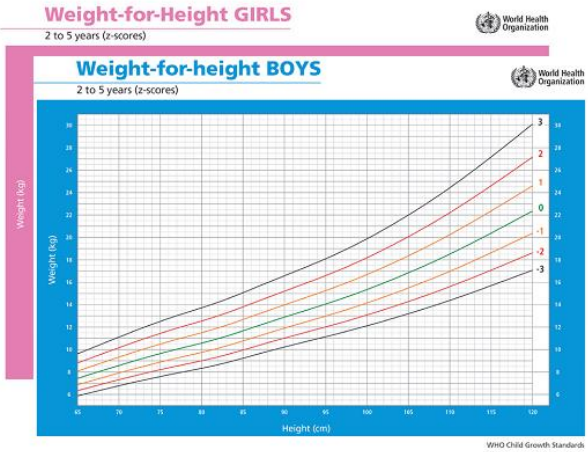
Once you have the child's weight and height/length, you will calculate their Z-score. This is basically a score comparing the weight-for-height/length of children across the world. Children with low Z-scores have low weight-for-height/length. The Z-score does not require any math. You will use an easy chart, which you can refer to your IMCI Chart Booklet.

1. There are separate charts for height (2 to 5 years) and length (birth to 2 years)
2. Determine which chart to use based on the child's sex

It is important to note that there are two separate charts for females and males.

They cannot be used interchangeably.

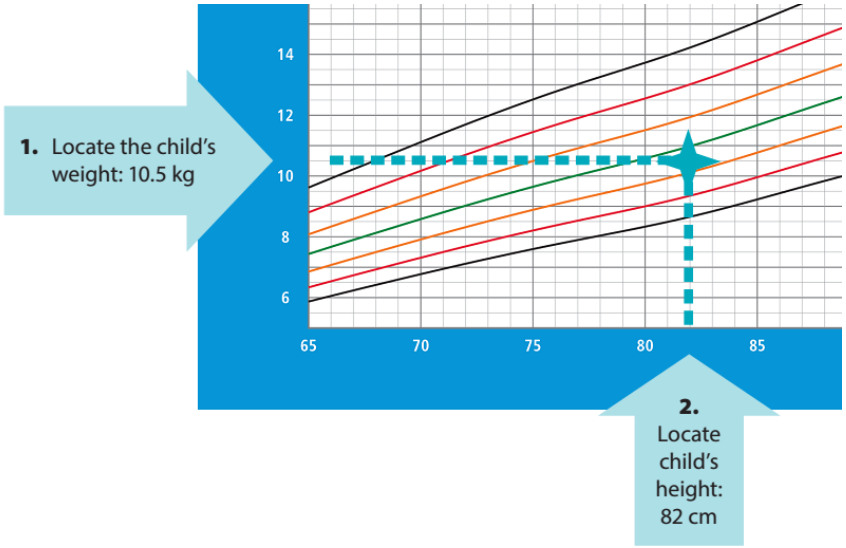




3. Mark the intersection of the child's weight and height

Next you will find the intersection of the weight and height. The numbers for weight (kg) run up the chart, and guiding lines run across the chart. The numbers for height (cm) are along the bottom of the chart, and the guiding lines run up the chart.

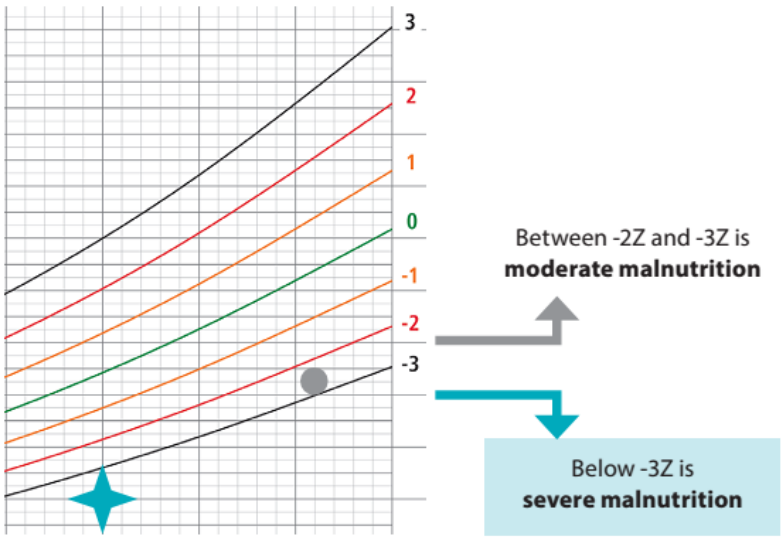
Let us review an example. Ben is 10.5 kg and 82 cm. See how we find the intersection:



4. Use the intersection point to find the z- score

Think about the Z-scores like zones between two lines. Look at the figure below. You should be most worried about any weight-for-height intersection points that fall:

- Between the -2Z and -3Z lines, like the circle below. This is a moderate malnutrition.
- Below the -3Z line, like the star below. This is severe malnutrition.



What do you do after calculating a child's Z-score?

Children above the -2Z score are not malnourished. However, you should routinely check children because their nutrition status can change rapidly. If children are between -2Z and -3Z, or below -3Z, you will use this information to classify their acute malnutrition. You will learn this in the next section.

REMEMBER! WFH/L below -3Z means severe acute malnutrition

Measure MUAC (only for children 6-59 months)

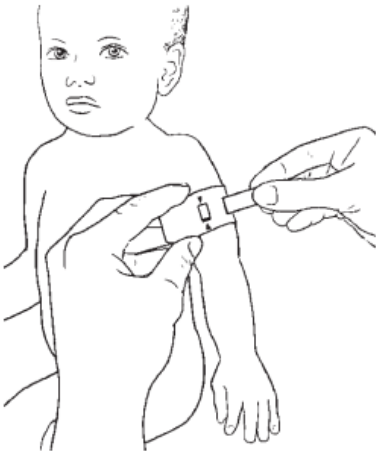
What is MUAC?

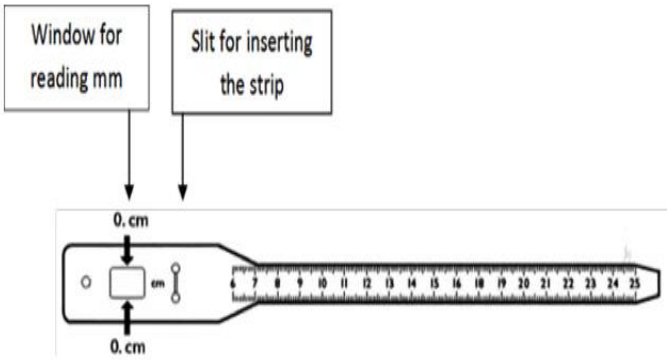
The measurement around the middle of a child's upper arm is an important indicator of acute malnutrition in a child. This is called mid-upper arm circumference (MUAC). The MUAC strip is a flexible measuring tape that measures in millimetres (mm).

MUAC can only be used for children 6–59 months.

How do you read the MUAC strip?

Examine your own MUAC strip, and refer to the picture below. The first thing you should note about your MUAC strip is that there are three different colours: green, yellow, and red to note the danger of child's MUAC.





There are two important pieces of the MUAC strip you should note in the picture above. The first is the slit where you will insert the MUAC strip. The next is the window where you will read the child's MUAC in mm.

Children with a MUAC less than 115 mm have severe acute malnutrition.
This measurement is red on the MUAC strip. These children need special treatment.

How do you measure the child's MUAC?

- The steps and the figure below explain how to measure the child's MUAC:
- Find the mid-point of the child's upper arm between the shoulder and elbow
- Use MUAC tape to mark the midpoint on the child's arm

- Hold the large end of the strap against the arm at the midpoint of the arm
- Put the other end of the strap around the child's arm. Thread the end up through the second small slit in the strap. The end will come from behind
- Pull both ends until the strap fits closely. It should not be so tight that it makes folds in the skin. It should also not be too loose
- Gently press the window. At the marks note the measurement and colour

REMEMBER! MUAC below 115 mm (RED) means severe acute malnutrition

Signs of Severe Acute Malnutrition: A Review

Below Are the Signs of a Child Less than 6 Months with Complicated SAM:

- Infant has oedema of both feet
- Weight-for-length is less than 3 z-score and has any of the following –
  - Medical complication
  - Breastfeeding problem

Below are the signs of a child 6 months and older with Complicated SAM:

- The child has oedema of both feet
- Weight-for-height/length is less than 3 z-score
- MUAC is 115 mm or below and has any of the following –
  - Medical complication
  - Unable to finish Nutritional therapy
  - Breastfeeding problem

What do you do if any of these signs are present?

If any signs are present, you will look for other clinical complications. You will learn about these next.

What if no signs of SAM are present?

If none of the three signs above are present, you will move to classify the child's nutrition status using your IMCI charts.

When SAM, assess for complications

If the child is under 6 months, you will do two steps:

1. Check the child for medical complications. These are discussed below.
2. Check the child for a breastfeeding or feeding problem. Refer to the sick young infant assessment chart for **FEEDING PROBLEM**.

If the child is aged 6 months or more, then you will do including the aforementioned two steps:

1. Give Nutritional therapy. Assess whether the child can complete the nutritional therapy within the specific time

When will you check a child for clinical complications?

If the child has the following complications, it must be noted for their assessment:

- General danger sign or sign of severe illness, done at the beginning of assess
- Any severe (pink) classification
- **PNEUMONIA**

When to offer nutrition therapy?

If there is no medical complication, the child (6 months or older) will be offered to eat nutrition therapy. If the child is less than 6 months assess breastfeeding.

Assess Child's Appetite

All children aged 6 months or more with SEVERE ACUTE MALNUTRITION (oedema of both feet or WFH/L less than -3 z-scores or MUAC less than 115 mm) and no medical complication should be assessed for appetite. Appetite is assessed on the

initial visit and at each follow-up visit to the health facility. Arrange a quiet corner where the child and mother can take their time to get accustomed to eating the Nutritional therapy. Usually the child eats the Nutritional therapy portion in 30 minutes.

Explain to the mother:

- The purpose of assessing the child's appetite
- What is Nutritional therapy?
- How to give Nutritional therapy:
  - Wash hands before giving the Nutritional therapy
  - Sit with the child on the lap and gently offer the child Nutritional therapy to eat
  - Encourage the child to eat the Nutritional therapy without feeding by force

Offer appropriate amount of Nutritional therapy to the child to eat:

- After 30 minutes check if the child was able to finish or not able to finish the amount of Nutritional therapy given and decide:
  - Child **ABLE** to finish at least one-third of a packet of Nutritional therapy portion (92 g) or 3 teaspoons from a pot within 30 minutes
  - Child **NOT ABLE** to eat one-third of a packet of Nutritional therapy portion (92 g) or 3 teaspoons from a pot within 30 minutes

7.2 Classify Nutritional Status

There are four classifications for a child's nutritional status. They are:

- **COMPLICATED SEVERE ACUTE MALNUTRITION**
- **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**
- **MODERATE ACUTE MALNUTRITION**
- **NO ACUTE MALNUTRITION**

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)

• Oedema of both feet
or
• WFH/L less than –3 z-scores
or
• MUAC less than 115mm and any one of the following:
  • Medical complication present
  or
  • Not able to finish Nutritional therapy
  or
  • Breastfeeding problem
	Pink:
	
	COMPLICATED SEVERE ACUTE MALNUTRITION
		➢ **Give first dose appropriate antibiotic**
		➢ **Treat the child to prevent low blood sugar**
		➢ **Keep the child warm**
		➢ **Refer URGENTLY to hospital**

• WFH/L less than –3 z-scores or • MUAC less than 115 mm and • Able to finish nutrition therapy	***Yellow:*** **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**	➢ Give oral antibiotics for 5 days ➢ Give Nutrition Therapy for a child aged 6 months or more ➢ Counsel the mother on how to feed the child ➢ Assess for possible TB infection ➢ Advise mother when to return immediately ➢ Follow up in 7 days
• WFH/L less than –3 and –2 z-scores or • MUAC 115 up to 125 mm	***Yellow:*** **MODERATE ACUTE MALNUTRITION**	➢ Assess the child's feeding and counsel the mother on the feeding recommendations ➢ If feeding problem, follow up in 7 days ➢ Assess for possible TB infection ➢ Advise mother when to return immediately ➢ Follow-up in 30 days
• WFH/L –2 z-scores or more or • MUAC 125 mm or more	***Green:*** **NO ACUTE MALNUTRITION**	➢ If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the feeding recommendations ➢ If feeding problem, follow-up in 7 days

Now you will read about each of these classifications.

COMPLICATED SEVERE ACUTE MALNUTRITION (PINK)

Remember that signs of severe acute malnutrition that you have assessed for include MUAC less than 115 mm, weight-for-height lower than -3 Z, or include oedema of both feet.

The child is classified with **COMPLICATED SEVERE ACUTE MALNUTRITION** when they have severe acute malnutrition and one of the following complications:

- At least one medical complication, including any general danger sign, any severe classification, or **PNEUMONIA** with chest indrawing
- No appetite, determined failed appetite test in a child 6 months or older
- A feeding problem in children under 6 months according to the **FEEDING PROBLEM** classification for the young infant

Children classified with **COMPLICATED SEVERE ACUTE MALNUTRITION** are at high risk of death from **PNEUMONIA**, *diarrhoea*, **MEASLES**, and other severe diseases. These children need **URGENT referral** to the hospital where their treatment can be carefully monitored. They may need special feeding, antibiotics or blood transfusions. Before the child leaves for a hospital you should give:

- The first dose of Amoxicillin
- 50 ml of 10% glucose or sucrose solution; if you do not have a solution this is one rounded teaspoon of sugar in three tablespoons of water
- Keep the child warm

UNCOMPLICATED SEVERE ACUTE MALNUTRITION (YELLOW)

If the child has at least one sign of severe acute malnutrition, but passed the appetite test or does not other signs of complication, they are classified with **UNCOMPLICATED SEVERE ACUTE MALNUTRITION.** These children need urgent treatment-based Nutrition Therapy, deworming, and oral antibiotics. These

children are at risk of death from serious diseases. Check if the child has been vaccinated for **MEASLES**, and test for **MALARIA**. You will learn how to provide treatment-based Nutrition Therapy later in this module. You will also learn how to counsel the caregiver on giving Nutrition Therapy. A child with **UNCOMPLICATED SEVERE ACUTE MALNUTRITION** should return for follow-up after 14 days.

MODERATE ACUTE MALNUTRITION (YELLOW)

If the child's weight-for-age is between -3 and -2 Z-score or MUAC between 115 and 125, classify with **MODERATE ACUTE MALNUTRITION**. A child classified with **MODERATE ACUTE MALNUTRITION** has a higher risk of severe disease. Assess the child's feeding and counsel the caregiver about feeding her child according to the recommendations in the food box on the *COUNSEL THE MOTHER* chart and in the *Counsel the Mother* module. You should also consider screening the child for TB and same medications as above. If the child has a feeding problem, they should follow-up in 7 days. If there is no feeding problem, the child should follow-up in 30 days.

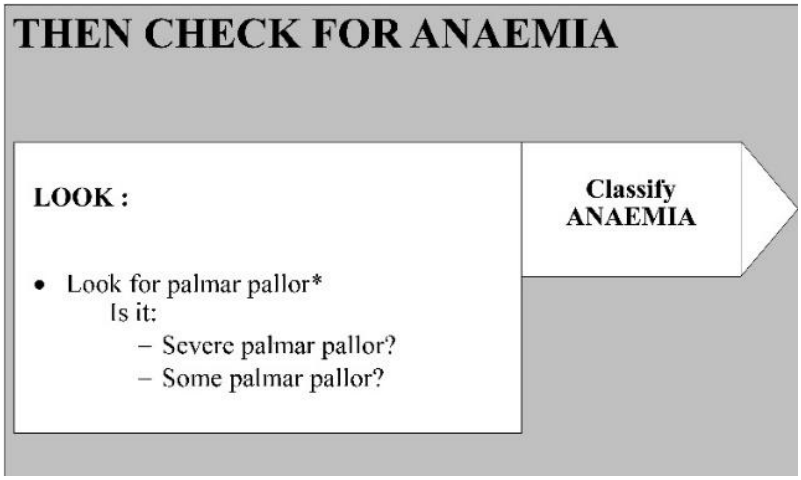
NO ACUTE MALNUTRITION (GREEN)

If the child has a weight-for-age over -2 Z-scores, and has no other signs of *malnutrition*, classify with **NO ACUTE MALNUTRITION**. If the child is less than 2 years of age, assess the child's feeding. Children less than 2 years of age have a higher risk of *feeding problems* and *malnutrition* than older children. Counsel the caregiver about feeding her child according to the recommendations in the food box on the *COUNSEL THE MOTHER* chart.

8.0 ASSESS AND CLASSIFY ANAEMIA

8.1 Assess for Anaemia

Here is the box from the *Assess* column on the *ASSESS & CLASSIFY* chart. It describes how to assess a child for **ANAEMIA**.

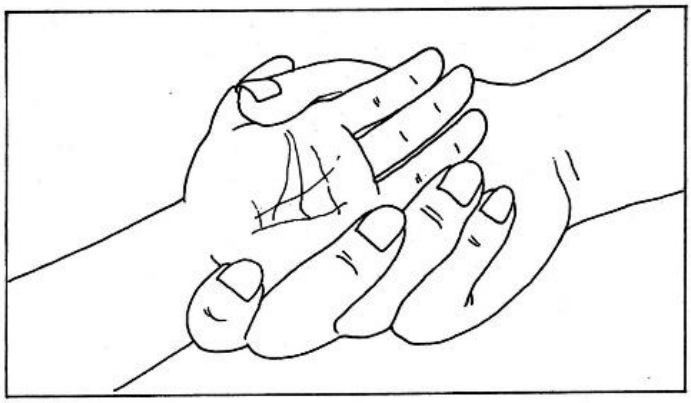


Assess all sick children for **ANAEMIA**:

Look for palmar pallor.

Pallor is unusual paleness of the skin. It is a sign of **ANAEMIA**.

To see if the child has palmar pallor, look at the skin of the child's palm. Hold the child's palm open by grasping it gently from the side. Do not stretch the fingers backwards. This may cause pallor by blocking the blood supply. Compare the colour of the child's palm with your own palm and with the palms of other children. If the skin of the child's palm is pale, the child has some palmar pallor. If the skin of the palm is very pale or so pale that it looks white, the child has severe palmar pallor. If the skin of the child's palm is pink, then the child has no palmar pallor.



EXERCISE N

In this exercise, you will look at photographs in the photograph booklet and practice identifying children with palmar pallor.

Part 1: Study the photographs numbered 38 through 40b. Read the explanation below for each photograph.

Photograph 38:	This child's skin is normal. There is no palmar pallor.
Photograph 39a:	The hands in this photograph are from two different children. The child on the left has some palmar pallor.
Photograph 39b:	The child on the right has no palmar pallor.
Photograph 40a:	The hands in this photograph are from two different children. The child on the left has no palmar pallor.
Photograph 40b:	The child on the right has severe palmar pallor.

Part 2: Now look at photographs numbered 41 through 46. For each photograph, tick (✓) whether the child has severe, some or no palmar pallor. Use the answer sheet on the next page.

	Does the child have:		
	Severe pallor	Some pallor	No pallor
Photograph 41			
Photograph 42			
Photograph 43a			
Photograph 43b			
Photograph 44			
Photograph 45			
Photograph 46			

Tell your facilitator when you are ready to discuss your answers to this exercise

8.2 Classify Anaemia

There are three classifications for a child's anaemia. They are:

- **SEVERE ANAEMIA**
- **ANAEMIA**
- **NO ANAEMIA**

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Severe palmar pallor	***Pink:*** **SEVERE ANAEMIA**	➢ **Refer URGENTLY to hospital**
• Some palmar pallor	***Yellow:*** **ANAEMIA**	➢ Give iron** or Multiple Micro-Nutrient ➢ Give Mebendazole/ Albendazole if child is 1 year or older and has not had a dose in the previous 6 months ➢ Advise mother when to return immediately ➢ Follow-up in 14 days
• No palmar pallor	***Green:*** **NO ANAEMIA**	➢ If child is less than 2 years old, assess the child's feeding and counsel the mother according to the feeding recommendations ➢ Provide Iron Folate (IFA) or Multivitamin Micronutrient (MMN) if the child is 6 months or older ➢ If feeding problem, follow-up in 5 days

SEVERE ANAEMIA

If a child has severe palmar pallor classify the child with **SEVERE ANAEMIA.** **Refer** the child immediately.

ANAEMIA

A child with some palmar pallor may have **ANAEMIA**. Hookworm and roundworm infections contribute to **ANAEMIA** because the loss of blood from the gut results in iron deficiency. Treat the child with iron or multiple micronutrients. Give the child Albendazole or Mebendazole if the child is 1 year or older and not have a dose in the previous 6 months. Advise the mother when to return immediately and to return for follow-up in 14 days.

NO ANAEMIA

If the child has no palmar pallor classify the child with **NO ANAEMIA**. Give the child iron folate or multivitamin micronutrient if his age is 6 months or more.

EXERCISE O

Read the following case studies. Record the child's signs and their classifications on the Register Form. Refer to the classification tables on the chart.

Case 1: Shahida

Shahida is 18 months old. She weighs 7 kg. Her length is 82cm. Her temperature is 38.5°C. Her mother brought her today because the child has felt hot and has a rash. The health provider saw that Shahida looks like skin and bones. The health provider checked for general danger signs. Shahida is able to drink, has not vomited, has not had convulsions, and is not lethargic or unconscious and not convulsing now. She does not have *cough or difficult breathing*. She does not have *diarrhoea*. Because Shahida's mother said the child felt hot, and because her temperature is 38.5°C, the health provider assessed her for fever. Shahida lives where there is no **MALARIA** risk. However, her mother takes her to the market every week in a nearby area which is a high **MALARIA** area. She has had *fever* for 5 days. Her rash is generalized rash, and she has red eyes. She has **MEASLES**. She does not have a stiff neck. She does not have a runny nose.
RDT for malaria was positive. The health provider assessed her for signs of **MEASLES** complications. Shahida does not have mouth ulcers. There is no pus draining from the eye and no clouding of the cornea. Shahida does not have an *ear problem*. The health provider next checked her for *malnutrition*. She does not have oedema of both feet. The health provider determined her weight for length. (Look at the weight for height chart in your chart booklet. Determine if this child's weight for length is very low and record this on the Register). Then he checked for *anaemia*. There is no palmar pallor. Record Shahida's signs and classify them on the Register on the next page.

EXERCISE O, Case 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): …….	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): …….	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months-11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): …….				
	Breaths/minute: …….	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	…….			**Severe persistent diarrhea :** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female	…….				
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 2: Arif

Arif is 11 months old. He is 8kg. His length is 84cm. His body temperature is 37°C. His mother said, "He has been suffering from dry *cough* for 3 weeks." Arif had no general danger sign. The health worker assessed his *cough*. He has been *coughing* for 21 days. The health worker counted 41 breaths per minute. He did not see any chest indrawing. The child did not have wheeze or stridor. His arterial oxygen saturation was 99%. Arif does not have *diarrhoea*. He had no *fever* during this illness. He has no *ear problem*. The health worker assessed Arif for *malnutrition* and *anaemia*. He has oedema of both feet. He has severe palmar pallor and it is almost white. The health worker determined Arif's weight for length. (Look at the weight for height chart in your chart booklet. Determine if this child's weight for length is very low and record this on the Register). Record Arif's signs and their classification on the Register on the next page.

Exercise O, Case 2

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:		☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Blood in the stool ☐ Tender swelling behind the ear	☐ **Dysentery** ☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 3: Reza

Reza is 9 months old. His weight is 5kg. His length is 60.5cm. His body temperature s 36.8° C. His parents are very worried because he has *diarrhoea* for a few days. So, they have brought him to health centre today. He has no general danger sign. He does not have *cough or difficult breathing*. He has *diarrhoea* for 5 days. There is no blood in his stool. Reza is not restless or irritable. He is not lethargic or unconscious. His eyes are not sunken. He is thirsty and drinks eagerly when offered water. The skin pinch goes back slowly. He does not have *fever*. He has no *ear problem.* Later, the health worker assessed his signs for *malnutrition* and *anaemia*. He does not have oedema. He does not have palmar pallor. The health worker determined his weight for length. Record Reza's signs and their classification on the Register on the next page.

Exercise O, Case 3

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Blood in the stool ☐ Tender swelling behind the ear	☐ **Dysentery** ☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 4: Mahbub

Mahbub is 37 months old. He weighs 9.5 kg. His height is 84cm. His temperature is 37.5°C. His mother says he feels hot. He has been crying and rubbing his ear. The health provider checks Mahbub for general danger signs. He is able to drink, does not vomit everything he drinks, has not had convulsions and is not lethargic or unconscious. He is not convulsing now. He does not have *cough* or *diarrhoea*. Because his mother has reported a history of *fever* and because his temperature is 37.5°C, the health provider assesses Mahbub for *fever*. The risk for **MALARIA** is high. He has had *fever* for 3 days, says his mother. He has not had **MEASLES** in the last 3 months. His neck moves easily. He has a runny nose and there are no signs suggesting **MEASLES**. The health worker did RDT and the result was positive. The health provider asks if Mahbub has an *ear problem.* The mother says he has had ear pain. She also says she has seen ear discharge for about 5 days. The health provider sees pus draining from the ear. He does not feel any tender swelling behind either ear. He then checks the child for *malnutrition* and *anaemia*. Mahbub looks thin. He does not have oedema of both feet. He does not have palmar pallor. The health provider determined his weight for height. Record Mahbub's signs and their classification on the Register on the next page.

EXERCISE O, Case 2

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

9.0 CHECK THE CHILD'S IMMUNIZATION, DEWORMING, VITAMIN A SUPPLEMENTATION AND MMN/MNP SUPPLEMENTATION STATUS

9.1 Check the Child's Immunization Status

Check the immunization status for all sick children. Have they received all the immunizations recommended for their age? Do they need any immunizations today?

Use a Recommended Immunization Schedule

Use your country's recommended immunization schedule when you check the child's immunization status. Look at the *ASSESS & CLASSIFY* chart and locate the recommended immunization schedule. Refer to it as you read how to check a child's immunization status.

IMMUNIZATION SCHEDULE: *According to Bangladesh national guidelines*

AGE	VACCINE				
Birth	BCG	+ OPV-0			
6 weeks	Penta - 1	+ OPV-1	+ PCV-1	+ IPV	
10 weeks	Penta - 2	+ OPV-2	+ PCV-2		
14 weeks	Penta - 3	+ OPV-3	+ PCV-3	+ IPV	
9 months	MR - 1				
15 months	MR - 2				

Give the recommended vaccine[3] when the child is the appropriate age for each dose. If the child receives an immunization when the child is too young, the child's body will not be able to fight the disease very well. Also, if the child does not receive an immunization as soon as he is old enough, his risk of getting the disease increases. All children should receive all the recommended immunizations before their first birthday. If the child does not come for an immunization at the recommended age, give the necessary immunizations any time after the child reaches that age. Give the remaining doses at least 4 weeks apart. You do not need to repeat the whole schedule.

Observe Contraindications to Immunization

In the past some health providers thought minor illness was a contraindication to immunization (a reason to not immunize the child). They sent sick children away and

[3] In exceptional situations where **MEASLES** morbidity and mortality before nine months of age represent a significant problem (more than 15% of cases and deaths), an extra dose of **MEASLES** vaccine is given at 6 months of age. This is in addition to the scheduled dose given as soon as possible after 9 months of age. This schedule is also recommended for groups at high risk of **MEASLES** death, such as infants in refugee camps, infants admitted to hospitals, infants affected by disasters and during outbreaks.

told the mothers to bring them back when the children are well. This is a bad practice because it delays immunization. The mother may have travelled a long distance to bring her sick child to the clinic and cannot easily bring the child back for immunization at another time. The child is left at risk of getting **MEASLES**, polio, diphtheria, pertussis, tetanus or tuberculosis. It is very important to immunize sick and malnourished children against these diseases. There are only three situations at present which are contraindications to immunization:

- Do not give BCG to a child known to have AIDS
- Do not give PENTA to a child who has had convulsions or shock within 3 days of the most recent dose
- Do not give PENTA to a child with recurrent convulsions or another active neurological disease of the central nervous system

In all other situations, here is a good rule to follow:

There are no contraindications to immunization of a sick child if the child is well enough to go home

If a child is going to be **referred**, do not immunize the child before **referral.** The hospital staff at the referral site should make the decision about immunizing the child when the child is admitted. This will avoid delaying **referral**.

Children with *diarrhoea* who are due for OPV should receive a dose of OPV (oral polio vaccine) during this visit. However, do not count the dose. The child should return in 4 weeks for an extra dose of OPV.

Advise the mother to be sure the other children in the family are immunized. Give the mother tetanus toxoid, if required.

To decide if the child needs an immunization today:

Look at the child's age on the clinical record

If you do not already know the child's age, ask about the child's age. Ask the mother if the child has an immunization card. If the mother answers, "Yes", ask her if she has brought the card to the clinic today:

- If she has brought the card with her, ask to see the card
- Compare the child's immunization record with the recommended immunization schedule. Decide whether the child has had all the immunizations recommended for the child's age
- On the Register, check all immunizations the child has already received. Write the date of the immunization the child received most recently. Circle any immunizations the child needs today
- If the child is not being **referred**, explain to the mother that the child needs to receive an immunization (or immunizations) today

If the mother says that she does not have an immunization card with her:

- Ask the mother to tell you what immunizations the child has received
- Use your judgement to decide if the mother has given a reliable report. If you have any doubt, immunize the child. Give the child OPV, PENTA and **MEASLES** vaccine according to the child's age
- Give an immunization card to the mother and ask her to please bring it with her each time she brings the child to the clinic

9.2 Check the Child's Deworming Status

Many children age 1 years or older in Bangladesh have **ANAEMIA** that is caused or made worse by hookworm and roundworm infections. Mebendazole or Albendazole will reduce or eliminate the infection. As Mebendazole or Albendazole is not absorbed, it is a very safe drug. After 6 months children often become re-infected and the treatment should be repeated.

DEWORMING

Give every child Mebendazole or Albendazole every 6 months from the age of one year. Record the dose on the child's card

Give Mebendazole or Albendazole

Give Mebendazole or Albendazole as a single dose in clinic if the child is 1 year of age or older, and has not had a dose in previous 6 months.

AGE	Mebendazole Dose	Albendazole Dose
1- 2 year	500 mg	200 mg
2- 5 year	500 mg	400 mg

To check the child's deworming status:

Look at the child's age

You will only give Mebendazole or Albendazole if the child's age is 1 year or older

Look at the child's card or ask the mother

If no Mebendazole or Albendazole has been given in the last 6 months, the child should receive a dose. Circle Antihelminth on the Register

9.3 Check the Child's Vitamin A Supplementation Status

Vitamin A is given both to treat and to prevent disease.

- It is given as treatment to children with **MEASLES** or **SEVERE ACUTE MALNUTRITION**
- It is given as a supplement to prevent vitamin A deficiency

Many children in Bangladesh have some degree of vitamin A deficiency which does not show. Therefore, giving vitamin A to all children age 6 months or older will prevent vitamin A deficiency. In several studies, this approach has been shown to reduce mortality in areas with vitamin A deficiency. Another important way to prevent deficiency is to make sure that infants are breastfed and that after 6 months of age they are fed complementary foods which are rich in vitamin A. When given vitamin A as a supplement to prevent deficiency, make sure that is not given more often than every 6 months. Record the date on which the vitamin A dose is given on the child's card. When supplies of vitamin A are adequate, all children age 6 months up to 5 years should receive vitamin A every 6 months. Visits to clinic for illness are an opportunity to check when the child most recently received vitamin A. If the child age is 6 months or older and has not received vitamin A in the previous 6 months, give a single dose of vitamin A in the clinic. Giving vitamin A for treatment of **PERSISTENT DIARRHOEA** or **MEASLES** is the most important use. If vitamin A supplies are limited, use what vitamin A you have to treat children with these illness.

VITAMIN 'A' SUPPLEMENTATION

Give every child a dose of Vitamin 'A' every 6 months from the age of 6 months. Record the dose on the child's card.

VITAMIN 'A' TREATMENT

- Give an extra dose* of Vitamin 'A' (same dose as for supplementation) as part of **treatment** if the child has:
  - **MEASLES or PERSISTENT DIARRHOEA**
- If the child has had a dose of Vitamin 'A' within the past month, DO NOT GIVE VITAMIN 'A'

AGE	VITAMIN 'A' DOSE
6 months up to 12 months	100,000 IU
One year and older	200,000 IU

- Always record the dose of Vitamin 'A' given on the child's card

To check a child's vitamin A supplementation status:
Look at the child's age

You will only give the vitamin A supplement if the child is age 6 months or older.
Look at the child's card

- See if there is a record of previous vitamin A doses
- If no vitamin A has been given in the last 6 months, the child should receive a dose.

Circle the Vitamin A Supplementation box on the Register

-

9.4 Prophylactic MMN/MNP (Multivitamin Micronutrient)/ Iron Folic Acid

Give 1 sachet of MMN or 20 mg elemental iron + 100 mcg folic acid (one tablet of Pediatric IFA or 5 ml of IFA syrup or 1 ml of IFA drops) for a total of 100 days in a year after the child has recovered from acute illness if:

- The child 6 months of age or older, and
- Has not received Pediatric IFA Tablet/syrup/drops for 100 days in last year

**** PROPHYLACTIC MMN/MNP*** **(Multivitamin Micronutrient)/ Iron Folic Acid** Give 1 sachet of MMN or 20 mg elemental iron + 100 mcg folic acid (one tablet of Pediatric IFA or 5 ml of IFA syrup or 1 ml of IFA drops) for a total of 100 days in a year after the child has recovered from acute illness if : • The child 6 months of age or older, and • Has not recieved Pediatric IFA Tablet/syrup/drops for 100 days in last year	***Multiple Micro-nutrient***	
	AGE	**MMN/MNP Sachets (Fe 12.5 mg, Zn 5 mg, Vitamin A 300 micro gram, Folic Acid 160 micro-gram and Vitamin C 50 mg)**
	6 months up to 5 years	1 sachet every alternate day – total 60 sachets in 4 months. May be repeated after 6 months to prevent recurrence.

EXERCISE P

Part 1: Review the information in section 8.1 about contraindications to immunizations. Then decide if a contraindication is present for each of the following children:

If the child:	Immunize this child today if due for immunization	Do not immunize today
will be treated at home with antibiotics		
has a local skin infection		
had convulsion immediately after PENTA 1 and needs PENTA 2 and OPV 2 today		
has a chronic heart problem		
is being referred for severe classification		
is exclusively breastfed		
older brother had convulsion last year		
was jaundiced at birth		
is **VERY LOW WEIGHT**		
is known to have AIDS and has not received any immunizations at all		
has **COUGH OR COLD**		

Part 2: Read about the following children. For each one, decide if the child needs any immunizations or vitamin A supplementation today.

1. Ali, 6 months old. No general danger signs. Classified **with COUGH OR COLD** and **NO ANAEMIA** and **NO ACUTE MALNUTRITION.**
   Immunization history: BCG, OPV 0, OPV 1, OPV 2, PENTA 1 and PENTA 2.
   OPV 2 and PENTA2 were given 6 weeks ago.

a. Is Ali up-to-date with his immunizations?

b. What immunizations, if any, does Ali need today?

c. When should he return for his next immunization?

d. Should he be given vitamin A today?

2. Asha, 3 months old. No general danger signs. Classified with *diarrhoea* with **NO DEHYDRATION** and also **ANAEMIA.**

Immunization history: BCG, OPV 0, OPV 1 and PENTA 1.
OPV 1 and PENTA 1 given 5 weeks ago.

a. Is Asha up-to-date with her immunizations?

b. What immunizations, if any, does Asha need today?

c. Asha has *diarrhoea*. What immunizations will she receive at her next visit?

d. When should she return for her next immunization?

e. Should she be given vitamin A today?

3. Raju, 9 months old. No general danger signs. Classified with **PNEUMONIA, MALARIA, NO ANAEMIA** and **NO ACUTE MALNUTRITION**.
Immunization history: BCG, OPV 0, OPV 1 and PENTA. When Raju was 7 months old, he received OPV 2 PENTA 2.

a. Is Raju up-to-date with his immunizations?

b. What immunizations, if any, does Raju need today?

c. When should he return for his next immunizations?

d. Should he be given vitamin A today?

Tell your facilitator when you have completed this exercise

Your facilitator will lead a drill to give you practice using a weight-for-height chart

10.0 ASSESS OTHER PROBLEMS

The last box on the *ASSESS* side of the chart reminds you to assess any other problems that the child may have. Since the *ASSESS & CLASSIFY* chart does not address all of a sick child's problems, you will now assess other problems the mother told you about. For example, she may have said the child has a skin infection, itching or swollen neck glands. Or you may have observed another problem during the assessment. Identify and treat any other problems according to your training, experience and clinic policy. **Refer** the child for any other problem you cannot manage in the clinic.

* * * * *

The last box on the *CLASSIFY* side of the chart has an important warning. It says:

> **MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED** after first dose of an appropriate antibiotic and other urgent treatments.
>
> **Exception:** Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed.

This note reminds you that a child with any general danger sign needs urgent treatment and **referral**. It is possible, though uncommon, that a child may have a general danger sign, but may not have a severe classification for any of the main symptoms. How to decide and plan for **referral** of a child with a general danger sign and without any other severe classification is taught in the module *Identify Treatment.*

EXERCISE Q

Read the case studies and practice using the entire process as described on the *ASSESS & CLASSIFY* chart. Record the child's signs and classify them on the Register for each exercise. Refer to the chart as you do the exercise.

Case 1: Nuru

Nuru is 9 months old. He is 9.5kg. His length is 91cm. His body temperature is 39.5°C. Nuru's mother said, "He has been suffering from *diarhhoea* for 1month." Nuru has no general danger sign. He does not have *cough or difficult breathing*. The health worker assessed Nuru for signs of *diarrhoea*. The mother said earlier, "Nuru has been suffering from *diarrhoea* since last week." Nuru does not have blood in his stool. He is not restless or irritable. He is not lethargic or unconscious. His eyes are sunken. He is thirsty and drinks eagerly when offered water. The skin pinch goes back slowly. Then the health worker assessed more for signs of *fever*. Nuru's mother said, he has been feeling hot for 2 days. That area has no risk of **MALARIA.** He has not had **MEASLES** for last 3 months. He does not have a stiff neck and runny nose. He has no sign suggesting **MEASLES**. He has no *ear problem.* The health worker assessed him for signs of *malnutrition* and *anaemia*. He does not have oedema. The health worker determined his weight for length. Nuru does not have palmar pallor. Nuru has received: BCG, PENTA 1, PENTA 2, PENTA 3, OPV 0, OPV 1, OPV 2, OPV 3, PCV 1, PCV2, PCV 3 and IPV. Nuru has not had vitamin A.

Classify Nuru's signs on the Register on the next page

EXERCISE Q, Case 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):			**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Case 2: Meena

Meena is 4 months old. She weighs 5.5 kg. Her length is 62cm. Her temperature is 38.0°C. She is in the clinic today because she has *diarrhoea*. She does not have any general danger signs. She is not *coughing* and does not have *difficult breathing*. The health provider assessed her further for signs of *diarrhoea*. She has had *diarrhoea* for 2 days and there is blood in the stool, said the mother. Meena was not restless or irritable; she was not unconscious or lethargic. Her eyes were not sunken. She drank normally and did not seem to be thirsty. Her skin pinch went back immediately. The health provider next assessed her for *fever*. There is low **MALARIA** risk and meena has not travelled since her birth 4 months ago. Meena has had *fever* for 2 days, said the mother. She has not had **MEASLES** in the last 3 months. She does not have a stiff neck or a runny nose. There are no signs suggesting **MEASLES.** The health worker did not do RDT for **MALARIA**. Meena does not have an *ear problem*. The health provider checked for *malnutrition* and *anaemia*. There is no oedema of both feet and no palmar pallor. The health provider determined her weight for length. At birth Meena received BCG and OPV 0. Four weeks ago, she received PENTA 1 and OPV 1. Record Meena's signs and their classifications on the Register on the next page.

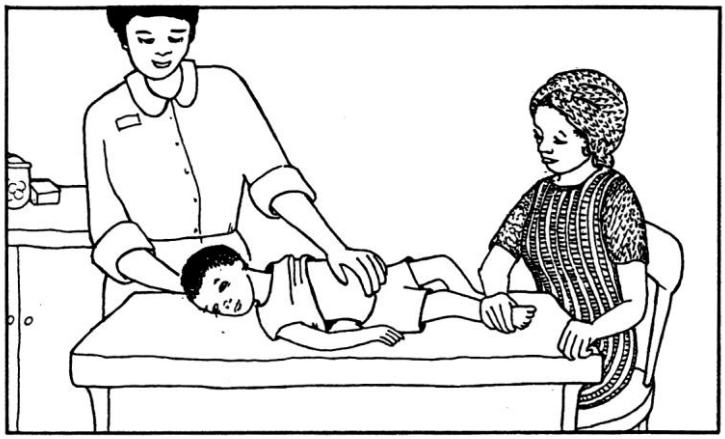
EXERCISE Q, Case 2

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
	Temperature (°C/ °F):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:					
	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:		☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		
Sex: ☐ Male ☐ Female		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
Other Nutritional Information					
☐ Exclusive breast feeding (0-6 months)					
☐ Nutritional therapy (6-23 months)					
Counseling					
☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)					
Immunization Status (Circle immunization needed today)					
BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2 Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

Case 3: Saleena

Saleena is 37 months old. She weighs 15.3 kg. Her height is 105cm. Her temperature is 38.5°C. Saleena's family brought her to the clinic today because she has a stomach ache, feels hot, has a runny nose and rash, and is *coughing*.



The health provider checked her for general danger signs. She was able to drink, did not vomit everything she drank, did not have convulsions, and was not lethargic or unconscious. The health provider assessed the child for *cough or difficult breathing.* The parents said she has been *coughing* for 2 days. The health provider counted 55 breaths a minute. He did not see chest indrawing. He did not hear any unusual noise when she breathed in. The oxygen saturation level was found 94%. Saleena does not have *diarrhoea*, said the parents. However, she has been feeling hot, they said. Her risk of **MALARIA** is high. She has had *fever* for two days. She has not had **MEASLES** in the last 3 months. Her neck moves easily. She has a runny nose. The health provider looked for signs suggesting **MEASLES**. Her rash was not generalized; it was only on her hand. The health worker did RDT and the result was positive. Saleena did not have an *ear problem*, said the parents. The health provider checked Saleena for *malnutrition* and *anaemia*. She does not have oedema of both feet. The health provider determined her weight for height. Saleena does not have palmar pallor. Saleena has received BCG, OPV 0, OPV 1, OPV 2, OPV 3, OPV 4, PENTA 1, PENTA 2 and PENTA 3. There is no record that she has ever received Vitamin A. Record Saleena's signs and their classifications on the Register on the next page.

EXERCISE Q, Case 3

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg): ……	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch): ……	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F): ……				
	Breaths/minute: ……	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficultics ☐ If not improving, advise to FU in 5 days
Date of birth:		**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	☐ **Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%): ……			**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms: ……	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Blood in the stool ☐ Tender swelling behind the ear	☐ **Dysentery** ☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose:: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG, OPV-0, Penta-1, OPV-1, PCV-1, IPV, Penta-2, OPV-2, PCV-2, Penta-3, OPV-3, PCV-3, IPV, MR-1, MR-2, Vitamin A, Antihelminthic			Return for next immunization on: _____ (Date)

Case 4: Mita

Mita is 6months old. She is 4kg. Her length is 60cm. Her body temperature is 37°C. Mita's mother has brought her to the health centre today because she has *cough*. Her mother is worried because she looks thin. The health worker did not find any general danger sign. The health worker assessed her *cough*. Her mother said Mita has had *cough* for 4days. The health worker counted 52 breaths per minute. Mita does not have chest indrawing and she does not have stridor or wheeze when calm. Her oxygen saturation is 95%. The health worker assessed her for *malnutrition* and *anaemia.* She has oedema of both feet She does not have palmar pallor.. The health worker determined her weight for length. Mita has received BCG, OPV 0, OPV 1 and PENTA 1 so far. Record Mita's signs and their classifications on the Register on the next page.

EXERCISE Q, Case 4

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
Child's name:	Temperature (°C/ °F):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Date of birth:	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Sex: ☐ Male ☐ Female	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days **Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
Other Nutritional Information					
☐ Exclusive breast feeding (0-6 months)					
☐ Nutritional therapy (6-23 months)					
Counseling					
☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)					
Immunization Status (Circle immunization needed today)					
BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1 MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

EXERCISE R: VIDEO EXERCISE CASE 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
	Temperature (°C/ °F):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:		**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
		☐ Blood in the stool	☐ **Dysentery**		
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Visit: ☐ Initial ☐ Follow up	☐ Eye examination				
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
Other Nutritional Information					
☐ Exclusive breast feeding (0-6 months)					
☐ Nutritional therapy (6-23 months)					
Counseling					
☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)					
Immunization Status (Circle immunization needed today)					
BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1 MR-2	Vitamin A Antihelminthic
Return for next immunization on: _____ (Date)					

EXERCISE R

In this video exercise, you will watch the demonstration of how a child with *ear problem* is assessed and how the signs of *anaemia* and *malnutrition* are understood. You will watch a case study. Record the child's signs and classify them on the Register on the next page.

EXERCISE R: VIDEO EXERCISE CASE 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):				
	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:		☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female		☐ Blood in the stool	☐ **Dysentery**		
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
Other Nutritional Information					
☐ Exclusive breast feeding (0-6 months)					
☐ Nutritional therapy (6-23 months)					
Counseling					
☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)					
Immunization Status (Circle immunization needed today)					
BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2 Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

EXERCISE S

In this video exercise, you will see 2 case studies. Record the signs and classification of these 2 children on the Registers on next pages.

EXERCISE S, Video Case 1

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):				
	Temperature (°C/ °F):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:					
	Breaths/minute:	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:					
	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:		☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly		**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
	Date of starting symptoms:	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
Sex: ☐ Male ☐ Female		☐ Blood in the stool	☐ **Dysentery**		
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
Union:		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
Upazila:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
District:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
Mobile No:			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

EXERCUSE S, Case 2

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no:	Weight (kg):	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose: ☐ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: ☐ IM Gentamicin 1st dose: ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
Date:	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name:	Temperature (°C/ °F):	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth:	Breaths/minute:	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age:	Measure oxygen saturation (SpO_2) by pulse oximeter (%):	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhea ‡** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☐ Female	Date of starting symptoms:	☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: ☐ Advise to FU in 3 days
	☐ Palm examination	☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ **Refer URGENTLY**	
Visit: ☐ Initial ☐ Follow up	☐ Eye examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If not available, Cotrimoxazole twice daily for 5 days; Dose: ☐ Paracetamol; Dose: ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
Mother's name:	☐ Examination to diagnose other problems	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ Amoxicillin DT 1st dose: ☐ Paracetamol 1st dose: ☐ Artesunate 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Father's name:		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Artesunate for 3 days; Dose: ☐ Paracetamol; Dose: ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Paracetamol; Dose: ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Address: House Name/ Holding Number:		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Vitamin A ☐ Amoxicillin DT 1st dose: ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		☐ Vitamin A
Village / Mahalla:		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ Amoxicillin DT 1st dose: ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
Union:		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ Give nutritional therapy ☐ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
Upazila:		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient; Dose : ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
District:			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
Mobile No:			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

Annex: Empty Register Form (2 months to 5 year)

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: Date: Child's name: Date of birth: Age: Sex: □ Male □ Female Visit: □ Initial □ Follow up Mother's name: Father's name: Address: House Name/ Holding Number: Village / Mahalla: Union: Upazila: District: Mobile No:	Weight (kg): …… Height(Inch): …… Temperature (°C/ °F): …… Breaths/minute: …… Measure oxygen saturation (SpO_2) by pulse oximeter (%): …… Date of starting symptoms: …… □ Palm examination □ Eye examination □ Examination to diagnose Early Childhood Development (ECD) □ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	**Severe pneumonia or very severe disease**	□ Amoxicillin DT 1st dose: □ If Amoxicillin DT is not available- Amoxicillin syrup 1st dose: □ IM Gentamicin 1st dose: □ Per rectal Diazepam if convulsing □ Inhaled Salbutamol if wheezing □ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	**Pneumonia**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT twice daily for 5 days; Dose: ☐ If DT not available, Amoxicillin syrup twice daily for 5 days; Dose: □ If wheezing give Salbutamol for 5 days □ Advise to relieve cough □ For any general danger sign or stridor advise to come urgently □ FU in 3 days
		☐ No signs of pneumonia or very severe disease	**Cough or cold**	□ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	□ If wheezing give Salbutamol for 5 days □ Advise to soothe the throat and relieve the cough □ Advise to come urgently if fast breathing or breathing difficultics □ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	□ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category □ **Severe dehydration** □ **Some dehydration** □ **No dehydration** **In case of Some and No dehydration:** □ FU in 5 days if not improving
				Severe persistent diarrhea ‡ □ If any other severe classification- **refer** □ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhea:** □ Recommend food supplementation as per age □ Give Vitamin A, Multivitamins and Minerals □ Advise to FU in 5 days
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Ciprofloxacin twice daily for 3 days; Dose: □ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		□ Amoxicillin DT twice daily for 5 days; Dose: □ If not available, Cotrimoxazole twice daily for 5 days; Dose: □ Paracetamol; Dose: □ Advise to keep ear clean and restrict entry of water □ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		□ Advise to keep ear clean and restrict entry of water □ Quinolone eardrops □ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	□ Amoxicillin DT 1st dose: □ Paracetamol 1st dose: □ Artesunate 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	□ If fever is present every day for more than 7 days, **refer** to hospital	□ Artesunate for 3 days; Dose: □ Paracetamol; Dose: □ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	□ If fever persists every day for > 7 days, **refer** to hospital	□ Paracetamol; Dose: □ Treat for other specific causes of fever □ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	□ Vitamin A □ Amoxicillin DT 1st dose: □ Treat clouding of cornea by Tetracycline ointment □ **Refer URGENTLY**	
		☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		□ Vitamin A □ If pus draining from eye-treat with Tetracycline ointment □ Oral ulcer-give Nystatin ointment and Riboflavin □ FU in 3 days
		☐ Measles now or within the last 3 months	☐ **Measles**		□ Vitamin A
		☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	□ Amoxicillin DT 1st dose: □ Treat to prevent low blood sugar □ **Refer URGENTLY**	
		☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		□ Amoxicillin DT twice daily for 5 days; Dose: □ Give nutritional therapy □ FU in 7 days
		☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		□ Treatment according to the category □ FU in day 30
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** □ **Refer URGENTLY**	**Anaemia:** □ Give Iron or Multiple Micro-nutrient; Dose : □ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months □ FU in 14 days
			☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
			☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** □ **Refer URGENTLY**	
			☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** □ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries/accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		☐ Nutritional therapy (6-23 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0 Penta-1 OPV-1 PCV-1 IPV Penta-2 OPV-2 PCV-2 Penta-3 OPV-3 PCV-3 IPV MR-1 MR-2 Vitamin A Antihelminthic			Return for next immunization on: _____ (Date)

MODULE-3

IDENTIFY TREATMENT

IDENTIFY TREATMENT

INTRODUCTION

In the previous module you learned to assess the sick child age 2 months up to 5 years and to classify the child's illness or illnesses. The next step is to identify the necessary treatments. In some instances, the very sick child will need **referral** to a hospital for additional care. If so, you will begin urgent treatments before the child's departure.

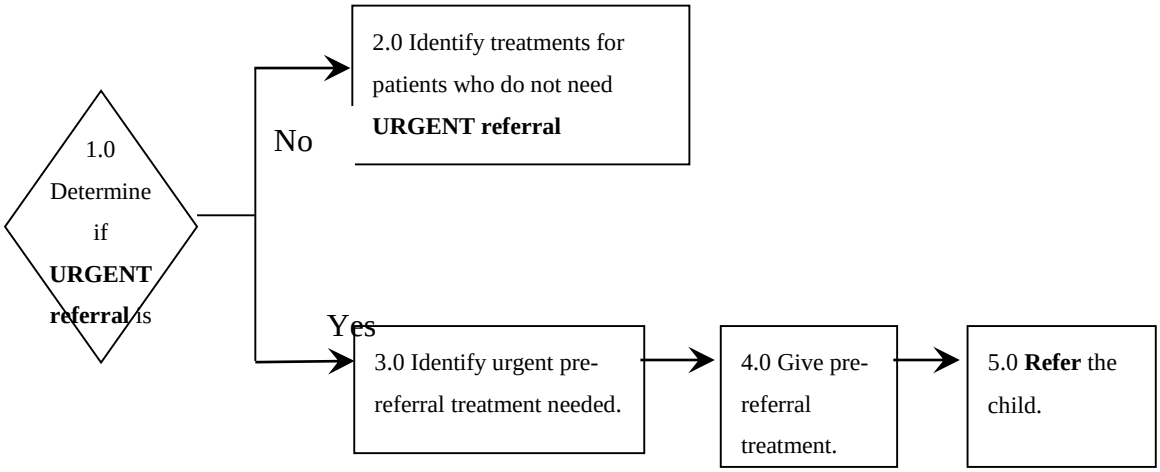
LEARNING OBJECTIVES

This module will describe and allow you to practice the following skills:

- Determining if an **URGENT referral** is needed
- Identifying treatments needed
- For patients who need **URGENT referral**:
  - identifying the urgent pre-referral treatments
  - explaining the need for **referral** to the mother
  - writing the **referral** note

This module will focus on identifying which treatments are needed. The next module, *Treat the Child*, will teach how to give the treatments.

This flowchart shows the steps involved in identifying treatment. Each step corresponds to a section in the module. Most patients will not need an **URGENT referral** and will be covered in step 2.0. However, for those patients who do need an **URGENT referral**, you will go straight to step 3.0.



In this module, you will use the *Identify Treatment* column of the *ASSESS & CLASSIFY* chart. If a child has only one classification, it is easy to see what to do for the child. However, many sick children have more than one classification. For example, a child may have both **PNEUMONIA** and an **ACUTE EAR INFECTION**. When a child has more than one classification, you must look in more than one place on the *ASSESS & CLASSIFY* chart to see the treatments listed. Some of the treatments may be the same. For example, both **PNEUMONIA** and **ACUTE EAR INFECTION** require an antibiotic. You must notice which treatments are the same and can be used for both problems, and which treatments are different. For some children, the *ASSESS & CLASSIFY* chart says to "**Refer URGENTLY** to hospital." By hospital, we mean a health facility with inpatient beds, supplies and expertise to treat a very

sick child. If you work in a health facility with inpatient beds, a **referral** may mean admission to the inpatient department of your own facility.
If the child must be **referred URGENTLY**, you must decide which treatments to do before **referral**. Some treatments (such as wicking an ear) are not necessary before **referral**. This module will help you identify urgent pre-referral treatments. If there is no hospital in your area, you may make some decisions differently than described in this module. You should only **refer** a child if you expect the child will actually receive better care. In some cases, giving your very best care is better than sending a child on a long trip to a hospital that may not have the supplies or expertise to care for the child. If **referral** is not feasible, or if the parents refuse to take the child, the health provider should help the family care for the child. The child may stay near the clinic to be seen several times a day. Or a health provider may visit the home to help give drugs on schedule and to help give fluids and food. There is an annex in the module *Treat the Child* which explains what to do when **a referral** is needed but not feasible.

1.0 DETERMINE IF URGENT REFERRAL IS NEEDED

Referral For Severe Classifications

Look at the severe classifications on the *ASSESS & CLASSIFY* chart. These are coloured pink and include:

SEVERE PNEUMONIA OR VERY SEVERE DISEASE
SEVERE DEHYDRATION
SEVERE PERSISTENT DIARRHOEA
VERY SEVERE FEBRILE DISEASE (Both for High/Low MALARIA or No MALARIA Risk Area)
SEVERE COMPLICATED MEASLES
MASTOIDITIS
COMPLECATED SEVERE ACUTE MALNUTRITION
SEVERE ANAEMIA

Notice the instruction "**Refer URGENTLY** to the hospital" in the lists of treatments for these classifications. This instruction means to **refer** the child immediately after giving any necessary pre-referral treatments. Do not give treatments that would unnecessarily delay **referral**. Exception: For **SEVERE PERSISTENT DIARRHOEA**, the instruction is simply to "**Refer** to the hospital". This means that **referral** is needed, but not as **URGENTLY**. There is time to identify treatments as described in section 2.0 of this module and give all of the treatments before **referral**. There is one more possible exception: You may keep and treat a child whose only severe classification is **SEVERE DEHYDRATION** if your clinic has the ability to treat the child. This child may have a general danger sign related to dehydration. For example, he may be lethargic, unconscious, or not able to drink because he is severely dehydrated.

The Child with Diarrhoea and SEVERE DEHYDRATION

Read the section about **SEVERE DEHYDRATION** from the *ASSESS & CLASSIFY* chart:

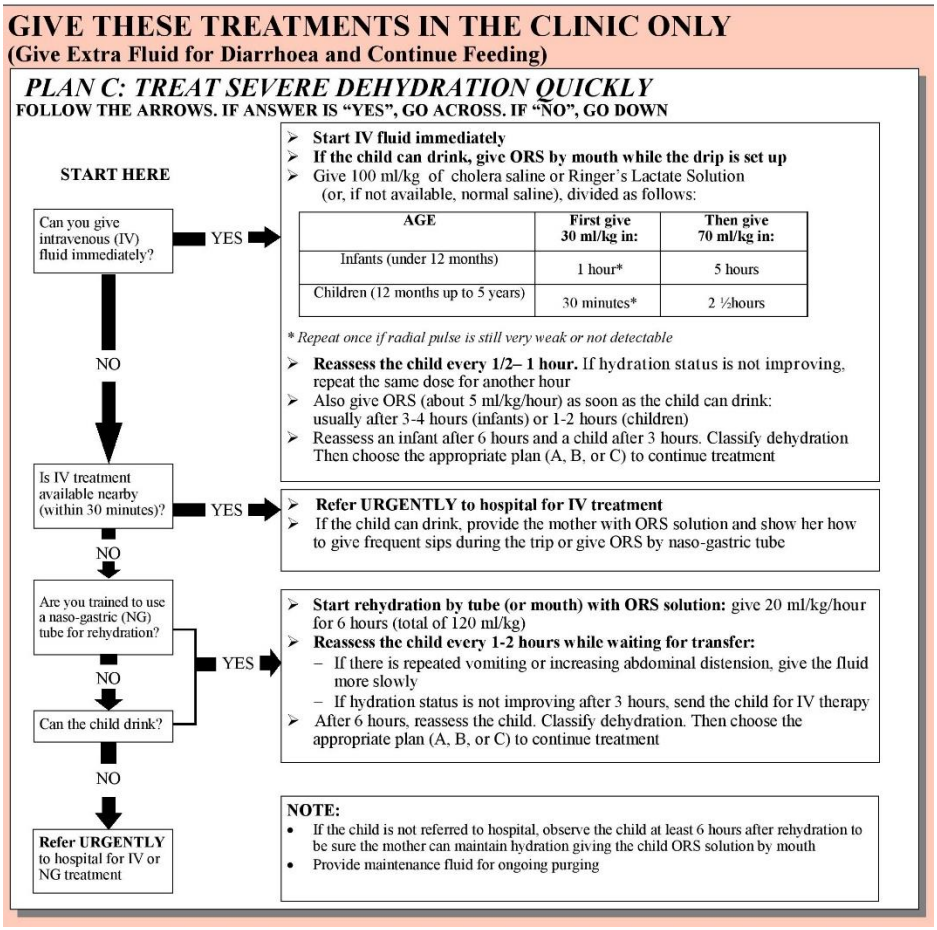
SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If child has no other severe classification:** **– Give fluid for severe dehydration (Plan C)** **OR** **If child also has another severe classification:** **– Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** **– Advise the mother to continue breastfeeding** ➢ **If child is 2 years or older and there is cholera in patient's area, give antibiotic for cholera**

If the child's only severe classification is **SEVERE DEHYDRATION**, you will use Plan C to decide whether to **refer** the child. Plan C appears on the *TREAT THE CHILD* chart. It helps you decide if your clinic can treat the severely dehydrated child. The left-hand side of Plan C, showing the decisions to be made, is reprinted on the next page. The right-hand side of the chart has been simplified. You will learn how to give the fluid treatments in the module *Treat the Child*. If the child has another severe classification in addition to **SEVERE DEHYDRATION**, you will **refer** the child. Special expertise is required to rehydrate this child, as too much fluid given too quickly could endanger his life.

Your facilitator will explain the following chart

Decisions involved in Plan c:

Treat Severe Dehydration Quickly



You will learn Plan C in the next module. Plan C includes reassessment for dehydration after fluid treatment. If you can successfully rehydrate the child, a **referral** will not be necessary.

Referral for General Danger Signs

Most children who have a general danger sign also have a severe classification. They will be **referred** for their severe classification (or possibly treated if they have **SEVERE DEHYDRATION** only). In rare instances, children may have general danger signs without a severe classification. These children should be **referred URGENTLY**. There is a note at the bottom of the *ASSESS & CLASSIFY* chart to remind you:

> A child with any general danger sign needs **URGENT** attention; complete the assessment and any pre-referral treatment immediately so that **referral** is not

Referral for Other Severe Problems

The *ASSESS & CLASSIFY* chart does not include all the problems that children may have. You must ask yourself:

Does the child have any other severe problem that cannot be treated at this clinic?

For example, the child may have a severe problem that is not covered on the chart, such as severe abdominal pain. If you cannot treat a severe problem, you will need to **refer to** the child.

Remember: Most children will have none of the general danger signs, severe classifications, or other severe problems. If the child has none of these, the child does not need **URGENT referral** to a hospital. You will identify treatments needed as described in section 2.0 of this module

Example-1:

Kamala is 2 years old. She has no general danger sign. **MALARIA** risk is high and her body temperature is 39.5°C. So, she is classified with **MALARIA**. Kamala also had ear pain and the health worker noticed pus draining from the ear. Her mother said, she has not noticed any pus before. So, Kamala is also classified with **ACUTE EAR INFECTION**. Kamala is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION.** She has no other classification. As she has no general danger sign and no severe classification, she does not need to be **referred**.

Example-2:

Raju is 4month old. He has no general danger sign but he has *cough* and stridor. His oxygen saturation (SpO_2) is 88%. He is classified with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE.** He has *fever* as well and he is classified with **MALARIA**. Raju must be **referred URGENTLY** for severe classification.

Example-3:

Rashida is 7months old. She has a general danger sign: she is lethargic. She has *diarrhoea* with **SEVERE DEHYDRATION** and she has no other severe classification. So, the health worker will treat her according to Plan C. As the health worker can give IV saline treatment, he will treat Rashida with IV saline. If Rashida can be successfully rehydrated, she won't be lethargic anymore and she won't need to be **referred** to the hospital.

Example-4:

Shamim is a 3 months old girl. She is unconscious. She has no main problem from *ASSESS & CLASSIFY* chart. Shamim needs to be **referred** to hospital due to the presence of general danger sign.

EXERCISE A

In this exercise you will decide whether or not **URGENT referral** is needed. Tick (✓) the appropriate answer.

1. Nasrin is an 11-month-old girl. She has no general danger signs. She has:
   PNEUMONIA
   ACUTE EAR INFECTION
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications
   Does Nasrin need **URGENT referral**? ___ YES ___ NO
2. Lolita is a 6-month-old girl. She has no general danger signs. She has:
   COUGH OR COLD
   Diarrhoea with **NO DEHYDRATION**
   PERSISTENT DIARRHOEA
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications
   Does Lolita need **URGENT referral**? ___ YES ___ NO
3. Jyoti is a 7-month-old boy. He has no general danger signs. He has:
   MASTOIDITIS
   MALARIA
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications
   Does Joti need **URGENT referral**? ___ YES ___ NO
4. Helal is a 2-year-old boy. He had a convulsion this morning and is not eating well. He has:
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications.
   Does Helal need **URGENT referral**? ___ YES ___ NO
5. Habib is a 9-month-old boy. He is lethargic. He has:
   Diarrhoea with **SEVERE DEHYDRATION**
   MALARIA
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications
   The clinic can provide IV therapy. Does Habib need **URGENT referral**?
   ___ YES ___ NO
6. Salek is 15 months old. He is unable to drink. He has:
   Diarrhoea with **SEVERE DEHYDRATION**
   NO ACUTE MALNUTRITION
   NO ANAEMIA

No other classifications

The clinic cannot provide saline through IV or NG tube. Does Salek need **URGENT referral**? ___ YES ___ NO

7. Hasina is 2 years old. She has no general danger sign. She has:

Diarrhoea with **SEVERE DEHYDRATION**
UNCOMPLICATED SEVERE ACUTE MALNUTRITION
SEVERE ANAEMIA
No other classifications
Does Hasina need **URGENT referral**? ___ YES ___ NO

When you have finished this exercise, discuss your answers with a facilitator

2.0 IDENTIFY TREATMENTS FOR PATIENTS WHO DO NOT NEED URGENT REFERRAL

Your facilitator will present the examples in this section and will show you how to use the IMCI Register. The facilitator will show you how to:

- Notice the *Classify* column of the IMCI Register
- Look at the *ASSESS & CLASSIFY* chart to find the treatments needed for each of the child's classifications
- Mark each treatment needed on the IMCI Register

For each classification listed on the IMCI Register, you will mark the treatments needed on the Register. The treatments that may be needed are in the *Identify Treatment* column of the *ASSESS & CLASSIFY* chart. You will mark only the treatments that apply to the specific child being treated. Be sure to include items that begin with the words "Follow-up". These mean to tell the mother to return in a certain number of days. The follow-up visit is very important to see if the treatment is working, and to give other treatment if needed. If several different times are specified for follow-up, you will look for the earliest definite time. (A definite time is one that is not followed by the word "if"). For example:

'Follow-up in 2 days' gives a definite time for follow-up

'Follow-up in 2 days if *fever* persists' is not definite. The child only needs to come back if the *fever* persists

Record the earliest definite time for follow-up in the appropriate space on the IMCI Register. This is the follow-up visit to tell the mother about. (Also tell her about any earlier follow-up that may be needed if a condition such as *fever* persists.) Later, when the mother returns for follow-up, you can tell her about any additional visits needed. Also, be sure to list non- urgent referral for further assessment. For example, for a *cough* which has lasted more than 30 days, or for *fever* which has lasted 7 days or more, you would select, "**Refer** for assessment". Although the mother should take the child for assessment promptly, these **referrals** are not as **URGENT**. Any other necessary treatments may be done before **referral**. You will need to teach each mother the signs enlisted in the 'When to Return Immediately' box, that means she should return immediately for more care for her child. You will learn these signs later in this module.

Note: You will learn to complete the feeding sections of the IMCI Register in the module *Counsel the Mother*. When a feeding assessment is needed, it may be done at any convenient time during the visit, after the child's immediate needs are taken care of.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 322/15 Date: 5.5.19 Child's name: Ashraf Age: 30mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Rumana Father's name: Faruk Address: House	Weight (kg): 10 Height(Inch): Temperature (°C/ °F): 37° Breaths/ minute: 40 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 96% Date of starting symptoms: 20.4.19 ☑ Palm examination ☑ Eye examination ☑ Examination to diagnose Early Childhood Development (ECD) ☑ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☑ Restless, irritable ☑ Drinks eagerly, thirsty ☑ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☑ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☑ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☑ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☑ Pus or water draining from the ear (>14 days)	☑ **Chronic ear infection:**		☑ Advise to keep ear clean and restrict entry of water ☑ Quinolone eardrops ☑ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahallat: Ghatandi

Union: Ghatandi

Upazilat: Bhuapur

District: Tangail

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ✓Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0 | ✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV | ✓Penta-2 ✓OPV-2 ✓PCV-2 | ✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV | ✓MR-1 | ✓MR-2 | Vitamin A → 1 cap (2 lac IU) | Antihelminthic → Mebendazole

Return for next immunization on:

_____

(Date)

Some treatments are listed for more than one problem. For example, vitamin A is listed for both **MEASLES** and **SEVERE MALNUTRITION**. If a patient has both of these problems, you need only list vitamin A once on your Register.

However, if different antibiotics are needed for more than one problem, you should list it each time, for example:

- Antibiotic for **PNEUMONIA**
- Antibiotic for Shigella

When the same antibiotic is appropriate for two different problems, you can give that single antibiotic, but two problems may require different antibiotics. You will learn about choosing antibiotics in the module *Treat the Child*.

Most instructions in the *Identify Treatment* column of the ASSESS & CLASSIFY chart are easily understood. However, there are some instructions that require special explanation:

- **ANAEMIA:** A child with palmar pallor should begin iron treatment for **ANAEMIA**. If the child is 1 year of age or older and has not had a dose of Mebendazole or Albendazole in the past 6 months, the child should also be given a dose of Mebendazole or Albendazole for possible hookworm or roundworm infection.

EXAMPLE

Study the IMCI Register for Seema. The health provider referred to the *Identify Treatment* column of the *ASSESS & CLASSIFY* chart and marked the treatments needed on the Register.

Seema does not need **referral** as she has no general danger signs and no severe classifications. She will be treated at the clinic. Notice that the earliest definite follow-up visit was selected in the appropriate space on the form.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 458/11	Weight (kg): 11	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	[redacted]
Date: 1.6.19	Height(Inch):	☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☑ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☑ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☑ If wheezing give Salbutamol for 5 days ☑ Advise to relieve cough ☑ For any general danger sign or stridor advise to come urgently ☐ FU in 3 days
Child's name: Seema	Temperature (°C/ °F): 38.5°	☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
Date of birth: 1.12.17	Breaths/ minute: 46	**Dehydration** Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
Age: 18 mo	Measure oxygen saturation (SpO_2) by pulse oximeter (%): 96%	Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
Sex: ☐ Male ☑ Female	Date of starting symptoms: 25.5.19	☐ Blood in the stool	☐ **Dysentery**	[redacted]	**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	[redacted]
	☐ Palm examination	☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**	[redacted]	☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
Visit: ☑ Initial ☐ Follow up	☐ Eye examination	☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**	[redacted]	☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
	☐ Examination to diagnose Early Childhood Development (ECD)	☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	[redacted]
Mother's name: Liza		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☑ FU in 3 days if fever persists
	☐ Examination to diagnose other problems	☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, refer to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
Father's name: Fakhrul		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	[redacted]
Address: House Name/					

Address: House Name/ Holding Number:

Village / Mahallat: Choudhurypara

Union: Matiranga

Upazila: Matiranga

District: Khagrachori

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**	☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**	☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**	☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**	☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**	
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**
	☐ **Drowning** ☐ **Illness due to injuries/accidents**	
	☐ **Other problem (Specify):**	

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☑ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	✓Penta-2 ✓OPV-2 ✓PCV-2	✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV	✓MR-1	✓MR-2	Vitamin A Antihelminthic	→ 1cap (2 Lac IU) → Mebendazole

Return for next immunization on:

_____

(Date)

EXERCISE B

In this exercise you will identify treatments for children who do not need **URGENT referral**. For the first case, you will read the case description and then briefly list the treatments needed in the space provided. For the next case, you will complete a IMCI Register. Refer to the *Identify Treatment* column of the *ASSESS & CLASSIFY* chart as you list treatments needed.

1. Atiya is 15 months old. She has no general danger signs. She has:

   PNEUMONIA
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications

   Atiya has received BCG and PENTA3 and OPV3. There is no record that she has ever received vitamin A.

   a. What treatments are needed for her **PNEUMONIA**?

   b. Look in the *Identify Treatment* column for **NO ACUTE MALNUTRITION**. Does Atiya need a feeding assessment?

   c. What treatments are needed for her **NO ANAEMIA?**

   d. What immunization does Atiya need today?

   e. Should she be given vitamin A supplementation today?

   f. What is the earliest definite time for Atiya to return for a follow-up?

2. Jaman is 2 years old. He has no general danger sign. He has:

   Diarrhoea with **SOME DEHYDRATION**
   DYSENTRY
   MALARIA (High MALARIA risk, temperature recorded in the health complex is 37.5°C, he has *fever* for 2 days)
   NO ANAEMIA
   NO ACUTE MALNUTRITION
   No other classification

   Jaman has completed the immunization schedule and received a dose of vitamin A at 9months of age.

a. What treatment is needed for **SOME DEHYDRATION**?

b. What treatment is needed for **DYSENTRY**?

c. What is the treatment for **MALARIA**?

d. Review the *Identify Treatment* column for **NO ANAEMIA** and **NO ACUTE MALNUTRITION.** Does he need a feeding assessment?

e. Does he need vitamin A supplementation today?

f. When is the earliest specific date for follow-up?

3. IMCI Registers for Saiful. Study the form; then mark the treatments in the appropriate spaces.

Note: Mebendazole was never given to Saiful. There is hookworm prevalence in the area. 2 months ago, she was given a dose of vitamin.

When you have completed this exercise, please discuss your answers with a facilitator

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 500/7 Date: 15.6.19 Child's name: Saiful Age: 36mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Korimon Father's name: Nazrul Address: House Name/	Weight (kg): 15 Height(Inch): Temperature (°C/ °F): 38.5° Breaths/ minute: 50 Date of birth: Measure oxygen saturation (SpO_2) by pulse oximeter (%): Date of starting symptoms: 12.6.19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	[redacted]
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☑ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☑ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☑ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☑ If wheezing give Salbutamol for 5 days ☑ Advise to relieve cough ☑ For any general danger sign or stridor advise to come urgently ☑ FU in 3 days
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**	[redacted]	**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	[redacted]
		☑ Ear pain ☑ Pus or water draining from the ear (<14 days)	☑ **Acute ear infection**	[redacted]	☑ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☑ Paracetamol ☑ Advise to keep ear clean and restrict entry of water ☑ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**	[redacted]	☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	[redacted]
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☑ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	[redacted]

Address: House Name/ Holding Number:

Village / Mahallat: Gobindapur

Union: Gobindapur

Upazila: Mirpur

District: Habigonj

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

When to Return Immediately

For all children going home, you will advise the mother when to return immediately. This means to teach the mother certain signs that mean to return immediately for further care. These signs are listed on the *COUNSEL THE MOTHER* chart in the section WHEN TO RETURN. Use local terms that the mother will understand.

WHEN TO RETURN IMMEDIATELY

Advise mother to return immediately if the child has any of these signs:	
Any sick child	• Not able to drink or breastfeed • Becomes sicker • Develops fever
If child has COUGH OR COLD, also return if:	• Fast breathing • Difficult breathing
If child has Diarrhoea, also return if:	• Blood in stool • Drinking poorly

This is an extremely important section of WHEN TO RETURN. Tell every mother to return immediately if her child is:

- Not able to drink or breastfeed
- Becomes sicker, or
- Develops a *fever*

Exception: If the child already has *fever*, you do not need to tell the mother to return immediately for *fever*.

Tell mothers of children with a simple **COUGH OR COLD** to watch for the following signs that mean the child may have developed **PNEUMONIA**:

- Fast breathing
- Difficult breathing

Carefully explain these signs of possible **PNEUMONIA**. If mothers do not understand the importance of these signs, they may not return when the child develops **PNEUMONIA**, and the child may die.

Advise mothers of children with *diarrhoea* to watch for:

- Blood in the stool
- Drinking poorly

Exception: If the child already has blood in the stool, you do not need to tell the mother to return immediately for blood, just for drinking poorly.

EXERCISE C

In this exercise you will describe when to return immediately for different cases. You will list the signs that you will teach the mother to watch for.

1. A child has:
   No general danger signs
   ACUTE EAR INFECTION
   NO ANAEMIA
   NO ACUTE MALNUTRITION
   No other classifications.
   What are the signs to return immediately?

2. A child has:
   no general danger signs
   Diarrhoea with **NO DEHYDRATION**
   PERSISTENT DIARRHOEA
   NO ANAEMIA
   MODERATE ACUTE MALNUTRITION
   No other classifications
   What are the signs to return immediately?

3. A child has:
   no general danger signs
   COUGH OR COLD
   NO ACUTE MALNUTRITION
   NO ANAEMIA
   No other classifications
   What are the signs to return immediately?

4. A child has:
   no general danger signs
   Diarrhoea with **NO DEHYDRATION**
   DYSENTERY
   MALARIA (*fever* 38°C in clinic, *fever* present for 3 days, high **MALARIA** risk, RDT positive)
   NO ANAEMIA
   NO ACUTE MALNUTRITION
   No other classifications
   What are the signs to return immediately?

5. A child has:

No general danger signs
PNEUMONIA
FEVER – NO MALARIA
NO ANAEMIA
NO ACUTE MALNUTRITION
No other classifications

What are the signs to return immediately?

When you have completed this exercise, please discuss your answers with a facilitator. Your facilitator will lead a drill on when to return immediately

3.0 IDENTIFY URGENT PRE-REFERRAL TREATMENT NEEDED

When a child needs **URGENT referral**, you must quickly identify and begin the most urgent treatments for that child. The following are urgent treatments. They are in bold print on the *ASSESS & CLASSIFY* chart. You will give just the first dose of the drugs before **referral**.

- Give Diazepam to stop convulsion
- Give an antimalarial
- Give an appropriate antibiotic
- Give vitamin A (For the treatment of **SEVERE ACUTE MALNUTRITION, MEASLES** or **PERSISTENT DIARRHOEA**)
- Treat the child to prevent low blood sugar (This involves giving breastmilk, milk, or sugar water as described on the *TREAT THE CHILD* chart.)
- Give paracetamol for high *fever* (101.5°F/38.5°C or above) or pain from mastoiditis
- Apply Tetracycline eye ointment (if clouding of the cornea or pus draining from eye)
- Provide ORS solution so that the mother can give frequent sips on the way to the hospital

The first five treatments above are more important because they can prevent serious consequences such as progression of bacterial meningitis or cerebral **MALARIA**, corneal rupture due to lack of vitamin A, or brain damage from convulsion and low blood sugar. The other listed treatments are also important to prevent worsening of the illness. Do not delay **referral** to give non-urgent treatments such as wicking the ear or oral iron/MMN treatment. If immunizations or Vitamin A supplementation is needed, do not give it before **referral**. Let hospital personnel determine when to give immunizations and vitamin A supplementation for prevention. This will avoid delaying **referral**(so give vitamin A when it is needed for treatment of a child with **MEASLES, PERSISTENT DIARRHOEA** or **SEVERE ACUTE MALNUTRITION**).

EXAMPLE

Shahida is a 15-month-old girl. She has no general danger signs. She has **COUGH OR COLD**. She is at high risk of **MALARIA**, and she has a *fever* of 39°C and stiff neck, so she is classified with **VERY SEVERE FEBRILE DISEASE**. She is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION** and has no other classifications. Shahida needs **URGENT referral**. Before going to the hospital, she should be given:

Give the first dose of antimalarial (Artemether combination therapy or other recommended antimalarial)
Appropriate antibiotic (first dose)
Treatment to prevent low blood sugar
Paracetamol (first dose)

The health provider should not take time to teach how to soothe the throat and relieve the *cough* with a safe remedy since that is not an urgent treatment. the health provider should not take time to assess feeding and counsel the mother on feeding.


HOSPITAL

EXERCISE D

In this exercise you will practice identifying urgent pre-referral treatments. Remember that these are in **bold** print on the *ASSESS & CLASSIFY* chart.

1. Minu is a 15-month-old girl. She has no general danger signs. She has **COUGH OR COLD, MASTOIDITIS, NO ACUTE MALNUTRITION, NO ANAEMIA** and no other classifications. Minu needs **URGENT referral** for **MASTOIDITIS**. Following is a list of treatments for all of Minu's classifications. Tick (✓) the urgent, pre-referral treatment(s):

a. _____ Soothe the throat and relieve the *cough* with a safe remedy
b. _____ Advise the mother when to return immediately
c. _____ Follow-up in 5 days if not better
d. _____ Give first dose of an appropriate antibiotic
e. _____ Give first dose of Paracetamol for pain
f. _____ **Refer URGENTLY** to hospital
g. _____ Assess the child's feeding and counsel the mother on feeding. If feeding problem, follow-up in 5 days
h._____ Give MMN today

2. Sajeda is 18 months old. She has no general danger signs. She has **NO DEHYDRATION, PERSISTENT DIARRHOEA, COMPLICATED SEVERE ACUTE MALNUTRITION** and **SEVERE ANAEMIA**. She has no other classifications. Sajeda needs to be **referred** for **COMPLICATED SEVERE ACUTE MALNUTRITION** and **SEVERE ANAEMIA**. Following is a list of treatments for all of Sajeda's classifications. Tick (✓) the urgent, pre-referral treatment(s):

a. _____ Give fluid and food to rehydrate the child (Plan A)
b. _____ Advice the mother when to return immediately
c. _____ Teach the mother how to feed a child suffering from **PERSISTENT DIARRHOEA**
d. _____ Give multivitamin/ mineral supplementation
e. _____ Ask her to return for follow-up in 5days
f. _____ Give vitamin A
g. _____ Treat the child to prevent low blood glucose
h. _____ **Refer** the child immediately

3. Salam is a 2-year-old boy. He is lethargic. He is at high risk of **MALARIA** and has a *fever* of 39°C. The health provider classifies Salam as having **VERY SEVERE FEBRILE DISEASE** and **CHRONIC EAR INFECTION**. He has some palmar pallor so is classified with **ANAEMIA**. He has **NO ACUTE MALNUTRITION**. He has never had a dose of Mebendazole or Albendazole. Salam needs **referral** for **VERY SEVERE FEBRILE DISEASE**. Following is a list of treatments for all of Salam's classifications. Tick (✓) the urgent, pre-referral treatments:

a. _____ Give first dose of Artesunate for severe **MALARIA**
b. _____ Give first dose of an appropriate antibiotic
c. _____ Treat the child to prevent low blood sugar

d. _____ Give one dose of Paracetamol in clinic for high *fever* (38.5°C or above)
e. _____ **Refer URGENTLY** to hospital
f. _____ Dry the ear by wicking
g. _____ Follow-up in 5 days
h. _____ Assess the child's feeding and counsel the mother on feeding. If feeding problem, follow up in 5 days
i. _____ Give iron
j. _____ Give oral antimalarial
k._____ Give mebendazole or albendazole
l. _____ Advise mother when to return immediately
m._____ Follow-up in 14 days (for pallor)

4. Liza is 4years old. She is lethargic. She is classified with *diarrhoea* with **SEVERE DEHYDRATION, COMPLICATED SEVERE ACUTE MALNUTRITION** and **SEVERE ANAEMIA**. She has no other classifications. She can drink. She lives in an area where there is cholera prevalence. **Refer** Liza **URGENTLY** for severe classifications. Tick (✓) the urgent, pre-referral treatments:

a. _____ Give ORS to feed the child frequently on the way to hospital.
b. _____ Ask her to continue breastfeeding
c. _____ Give antibiotic for cholera
d. _____ Give vitamin A
e. _____ Treat the child to prevent low blood glucose
f. _____ **Refer** the child immediately

5. Ruma is 9months old. She has no general danger signs. She has S**EVERE PNEUMONIA OR VERY SEVERE DISEASE** and **FEVER – NO MALARIA** (No risk of **MALARIA**, temperature is 38.5°C.). she has *fever* for 2 days. She has **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. She needs to be **referred URGENTLY** for **SEVERE PNEUMONIA AND VERY SEVERE DISEASE.** Following is a list of treatments for all of Ruma's classifications. Tick (✓) the urgent, pre-referral treatment(s):

a. _____ Give first dose of an appropriate antibiotic
b. _____ Treat the child to prevent low blood glucose
c. _____ Give Paracetamol in the health centre for high *fever* (38.5°C or more)
d. _____ Advice the mother when to return immediately
e. _____ Ask to return for follow-up in 2days if *fever* persists
f. _____ Assess the child for feeding and advice the mother on this regard. If there is still feeding problem, ask to return for follow-up in 5days

6. Study the following IMCI Register for Rahim. On the form, mark only the urgent pre-referral treatments. These are in **bold** print on the *ASSESS & CLASSIFY* chart.

When you have completed this exercise, please discuss your answers with a facilitator

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 520/13 Date: 18·6·19 Child's name: Rahim Age: 15mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Saima Father's name: Jabbar Address: House	Weight (kg): 9 Height(Inch): Temperature (°C/ °F): 39° Breaths/ minute: 38 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 93% Date of starting symptoms: 15·6·19 ☑ Palm examination ☑ Eye examination ☑ Examination to diagnose Early Childhood Development (ECD) ☑ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	[redacted]
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☑ No signs of pneumonia or very severe disease	☑ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☑ If wheezing give Salbutamol for 5 days ☑ Advise to soothe the throat and relieve the cough ☑ Advise to come urgently if fast breathing or breathing difficulties ☑ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
				Severe persistent diarrhoea: ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**	[redacted]	**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	[redacted]
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**	[redacted]	☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**	[redacted]	☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	[redacted]
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☑ Clouding of cornea ☐ Deep or extensive mouth ulcers	☑ **Severe Complicated Measles**	☑ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☑ **Refer URGENTLY**	[redacted]

Address:
House
Name/
Holding
Number:

Village /
Mahallat
Moulovibazar

Union:
Moulvibazar

Upazila:
Moulvibazar

District:
Moulvibazar

Mobile No:

☐ Any general danger sign ☑ Clouding of cornea ☐ Deep or extensive mouth ulcers	**☑ Severe Complicated Measles**	☑ Give Vitamin A ☑ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☑ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☑ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	✓Penta-2 ✓OPV-2 ✓PCV-2	✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV	✓MR-1	✓MR-2	Vitamin A Anthelminthic	1 cap (2 lac IU)

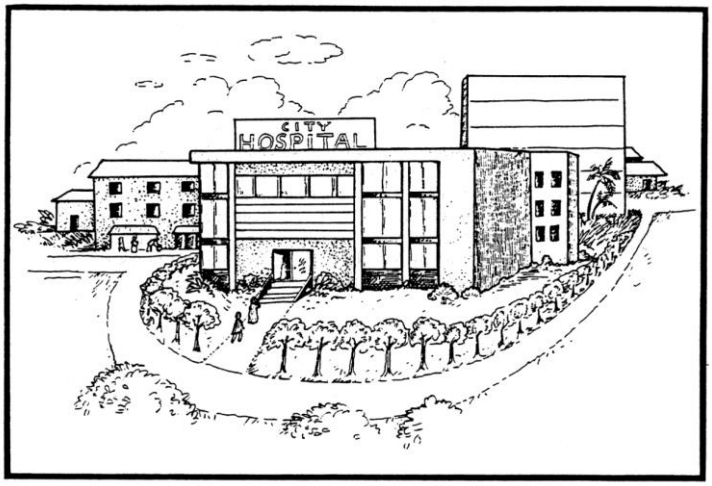
Return for next immunization on:
_____
(Date)

4.0 GIVE URGENT PRE-REFERRAL TREATMENT

The next module will describe how to do treatments presented on the *TREAT THE CHILD* chart. All urgent, pre-referral treatments are included on that chart. When **referring** a child, do the treatments quickly. Do not take time to teach the mother as you would in a non-urgent situation.

Many severe cases need the first dose of an antibiotic before **referra**l and may need Diazepam per rectal Diazepam to control (if the child is convulsing now). However, if a child cannot drink, is vomiting everything, is having convulsions, or cannot be wakened, the child will not be able to take an oral antibiotic, other oral drugs, or drinks such as ORS or breastmilk. The child with these danger signs will need to be given injection Gentamicin and oral amoxicillin. For **VERY SEVERE FEBRILE DISEASE** first dose of the Artesunate is to be given along with an antibiotic. Dosages are given in the next module. ORS or oral drugs such as Paracetamol will need to be given at the hospital when the child is able to take them. If the child needs treatment to prevent low blood sugar, and you are able to insert an NG tube, give sugar water or breast milk substitute by NG before **referral**.

5.0 REFER THE CHILD



Do four steps to **refer** a child to the hospital:

1. Explain to the mother the need for **referral**, and get her agreement to take the child. If you suspect that she does not want to take the child, find out why. Possible reasons are:
    - She thinks that hospitals are places where people often die, and she fears that her child will die there too
    - She does not think that the hospital will help the child
    - She cannot leave because:
        - There is no one to take care of her other children, or
        - She is needed for farming or household work, or
        - She may lose a job
    - She does not have money to pay for transportation, hospital bills, medicines or food for herself during the hospital stay
2. Calm the mother's fears and help her resolve any problems. For example:
    - If the mother fears that her child will die at the hospital, reassure her that the hospital has physicians, supplies and equipment that can help cure her child
    - Explain what will happen at the hospital and how that will help her child

- If the mother needs help at home while she is at the hospital, ask questions and make suggestions about who could help. For example, ask whether her husband, sister or mother could help with the other children or with meals while she is away
- Discuss with the mother how she can travel to the hospital. Help arrange transportation if necessary

You may not be able to help the mother solve her problems and be sure that she goes to the hospital. However, it is important to do everything you can to help. If a **referral** is not feasible, there are some things you can do for the child from your clinic. These are described in an annex of the module *Treat the Child*.

3. Write a referral note for the mother to take with her to the hospital. Tell her to give it to the health provider there. Write:

- The name and age of the child
- The date and time of **referral**
- Description of the child's problems
- The reasons for **referral** (symptoms and signs leading to severe classification)
- Results of RDT/another **MALARIA** test (in case of suspected MALARIA case)

Treatment that you have given

- Any other information that the health provider at the hospital needs to know in order to care for the child, such as earlier treatment of the illness or immunizations needed
- Your name and the name of your clinic

4. Give the mother any supplies and instructions needed to care for her child on the way to the hospital:

- If the hospital is far, give the mother additional doses of antibiotic and tell her when to give them during the trip (according to dosage schedule on *TREAT THE CHILD* chart). If you think the mother will not actually go to the hospital, give her the full course of antibiotics, and teach her how to give them
- Tell the mother how to keep the young child warm during the trip
- Advise the mother to continue breastfeeding or give sugar water if not breastfed
- If the child has **SOME** or **SEVERE DEHYDRATION** and can drink, give the mother some ORS solution for the child to sip frequently on the way

Example of Referral Note

Government of the Peoples' Republic of Bangladesh
Directorate General of Health Services

Referral Note

Health Facility	Mohera UHFWC
Date: Day/Month/Year	05/05/2019
Time: Hour : Minutes	11 : 00 AM/PM
Name of Child	Shirajul Islam
Age	Young infant's (0-59 days): I___I___I days
	Children (2 months-5 years): I_1_I_8_I Months
Monthly Serial No.	I_9_I_5_I_2_I_8_I
Referred Hospital: (Name of Hospital)	Tangail District Hospital
Reason for emergency referral	
Young infant (0-59 days)	Children (2 months-5 years)
☐ Possible Severe Bacterial Infection or Very Severe Disease- Critical Illness	☐ Severe pneumonia or very severe disease
☐ Possible Severe Bacterial Infection or Very Severe Disease– Clinical Severe Infection	☑ Severe dehydration
☐ Possible Severe Bacterial Infection or Very Severe Disease- Fast Breathing Pneumonia (0-6 days)	☐ Severe persistent diarrhea
☐ Severe Jaundice	☐ Very severe febrile disease
☐ Severe dehydration	☐ Severe complicated measles
☐ Very low weight for age	☐ Mastoiditis
	☑ Complicated severe acute malnutrition
	☐ Severe anaemia
☐ Other problem (Specify):	☑ Other problem (Specify): Refusing to breastfeed, Only cough - no fast breathing, no chest indrawing

Treatment provided before referring to the hospital (first dose):

☑ Oral Amoxicillin (Specify dose) 3 tablets BD
☐ Injectable Gentamycin (Specify dose) _____
☐ Other oral antibiotic (Specify name and dose) _____
☑ Others (Specify name and dose) Sugar water by cup & spoon, ORS - Mother to give sips on way to hospital

Mizanur Rahman

Health Provider name and signature

Phone number: 01739522568

EXERCISE E

In this exercise you will review the steps related to **referral** through a case study. You will use this same case study in a role play.
First, study the IMCI Register for Masum on the next page. Masum is 3 months old and is exclusively breastfed.

1. Should Masum be **referred**? Why or why not?

2. What urgent, pre-referral treatments are needed? Record these on the IMCI Register. .

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 397/15 Date: 1·7·19 Child's name: Masum Ahmed Date of birth: Age: 3mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Farida Father's name: Matin Address: House	Weight (kg): 7 Height(Inch): Temperature (°C/ °F): 38° Breaths/ minute: 54 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 98%. Date of starting symptoms: 24·6·19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☑ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☑ **Severe pneumonia or very severe disease**	☑ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☑ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☑ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☑ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☑ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☑ **No dehydration** **In case of Some and No dehydration:** ☑ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahallat:

Union: Kamalakondo

Upazilat: Kamalakondo

District: Netrokona

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

3. Write a referral note for Masum to a hospital. Use today's date and the current time. Use your own name as that of the health provider.

Referral Note for Masum

Government of the Peoples' Republic of Bangladesh
Directorate General of Health Services

Referral Note

Health Facility	
Date: Day/Month/Year	__ __ / __ __ / 2 __ __
Time: Hour : Minutes	__ __ : __ __ AM/PM
Name of Child	
Age	Young infant's (0-59 days): I___I___I days
	Children (2 months-5 years): I___I___I Months
Monthly Serial No.	I___I___I___I___I
Referred Hospital: (Name of Hospital)	
Reason for emergency referral	
Young infant (0-59 days)	Children (2 months-5 years)
☐ Possible Severe Bacterial Infection or Very Severe Disease- Critical Illness	☐ Severe pneumonia or very severe disease
☐ Possible Severe Bacterial Infection or Very Severe Disease– Clinical Severe Infection	☐ Severe dehydration
☐ Possible Severe Bacterial Infection or Very Severe Disease- Fast Breathing Pneumonia (0-6 days)	☐ Severe persistent diarrhea
☐ Severe Jaundice	☐ Very severe febrile disease
☐ Severe dehydration	☐ Severe complicated measles
☐ Very low weight for age	☐ Mastoiditis
	☐ Complicated severe acute malnutrition
	☐ Severe anaemia
☐ Other problem (Specify):	☐ Other problem (Specify):

Treatment provided before referring to the hospital (first dose):

- ☐ Oral Amoxicilin (Specify dose) _____
- ☐ Injectable Gentamycin (Specify dose) _____
- ☐ Other oral antibiotic (Specify name and dose) _____
- ☐ Others (Specify name and dose) _____

_____

Health Provider name and signature

Phone number:

When you have finished this part of the exercise, tell the facilitator that you are ready for the group discussion and role play

Role Play Instructions

Health provider: Explain the need for **referral** to Masum's mother and give her instructions. Discuss any problems she may have about going to the hospital. Assume that the hospital is about an hour away and that transportation is similar to what is available in your own area. If you have a telephone in your own clinic, assume that one is available in the role play.

Mother: You will be given a card that describes your attitude and situation. Try to act as a real mother might act if her child needed **referral**.

Observers: Watch the role play. Be prepared to comment on what was done well and what could be improved. Be prepared to answer the questions:

> Is this mother likely to go to the hospital? Why or why not?
>
> Has she been given all the necessary instructions? If not, what information was missing?

EXERCISE F

In this exercise you will review the steps taught in this module to identify treatment. Study the IMCI Register for Rahima on the next page. Then answer the following questions and complete the specified part of the form.

1. Does Rahima need **referral**? Why or why not?

2. Mark the treatments needed by Rahima on the IMCI Register.

3. Mark the earliest definite time to return for follow-up in the appropriate space.

4. What are the signs that Rahima should return immediately?

5. Which immunizations does Rahima need today?

6. Does Rahima need vitamin A supplementation today?

7. When should Rahima return for her next immunizations?

When you have completed this exercise, please discuss your answers with a facilitator

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 1220/18 Date: 7.8.19 Child's name: Rahima Date of birth: Age: 18mo Sex: ☐ Male ☑ Female Visit: ☑ Initial ☐ Follow up Mother's name: Fulbanu Father's name: Karim Address: House	Weight (kg): 9.5 Height(Inch): Temperature (°C/ °F): 38° Breaths/ minute: 38 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 99% Date of starting symptoms: 3.8.19 ☐ Palm examination ☐ Eye examination ☐ Examination to diagnose Early Childhood Development (ECD) ☐ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	[redacted]
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☑ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☑ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☑ No dehydration ☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☑ **Persistent Diarrhoea** ☐ **Dysentery**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
				[redacted]	**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	[redacted]
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**	[redacted]	☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**	[redacted]	☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	[redacted]
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	[redacted]

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Village / Mahallat: Sherpur

Union: Sherpur

Upazila: Sherpur

District: Sherpur

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**	☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☑ Measles now or within the last 3 months	☑ **Measles**	☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**	☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**	☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**	
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**
	☐ **Drowning** ☐ **Illness due to injuries/accidents**	
	☐ **Other problem (Specify):**	

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	✓Penta-2 ✓OPV-2 ✓PCV-2	✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV	✓MR-1	✓MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)

MODULE-4

TREAT THE CHILD

TREAT THE CHILD

INTRODUCTION

In the previous module, you learned to identify the treatment needed for sick children age 2 months up to 5 years. Sick children often begin treatment at a clinic and need to continue treatment at home. The chart *TREAT THE CHILD* describes the treatments.

In this module, you will use the chart to learn how to give each treatment. You will also learn how to teach the mother to continue giving treatment at home.

Learning Objectives

This module will describe and allow you to practice the following skills:

- Determining appropriate oral drugs and dosages for a sick child
- Giving oral drugs (including antibiotics, antimalarials, Paracetamol, Vitamin A, Mebendazole/ Albendazole and Iron /Iron Folic Acid /Multivitamin Micronutrient) and teaching the mother how and when to give oral drugs at home
- To teach the mother how to make a spacer at home and to use spacer with rapid-acting bronchodilator by inhaler
- Treating local infections (such as eye infections, ear drainage, mouth ulcers, sore throat, and cough) and teaching the mother how and when to give the treatments at home
- Checking a mother's understanding
- Giving drugs administered in the clinic only (per rectal Diazepam and intramuscular injection Gentamicin)
- Preventing low blood sugar
- Treating different classifications of dehydration and teaching the mother about extra fluid to give at home
- Immunizing and giving vitamin A, MMN/MNP supplementation and anthelminthic to children

1.0 SELECT THE APPROPRIATE ORAL DRUG AND DETERMINE THE DOSE AND SCHEDULE

Use the *TREAT THE CHILD* chart to select the appropriate drug and to determine the dose and schedule. There are some points to remember about each oral drug.

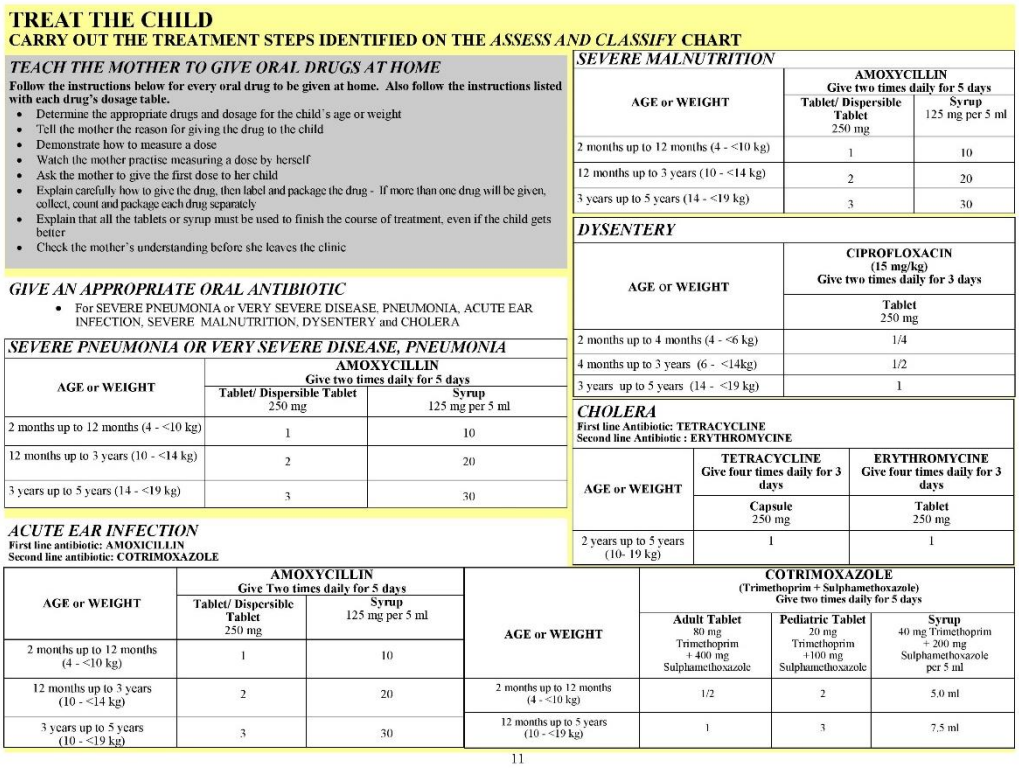
1.1 Give an Appropriate Oral Antibiotic

Children with the following classifications need an antibiotic.

- **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**
- **PNEUMONIA**
- **SEVERE OR SOME DEHYDRATION** with cholera in the area
- **DYSENTERY**
- **VERY SEVERE FEBRILE DISEASE**
- **SEVERE COMPLICATED MEASLES**
- **MASTOIDITIS**
- **ACUTE EAR INFECTION**
- **COMPLICATED SEVERE ACUTE MALNUTRITION**
- **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**

In many health facilities, more than one type of antibiotic will be available. You must learn to select the most appropriate antibiotic for the child's illness. If the child is able to drink, give an oral antibiotic.

The appropriate oral antibiotic for each illness varies by country. The antibiotics recommended in Bangladesh are on your *TREAT THE CHILD* chart. Refer to the chart on the following page.



TREAT THE CHILD

CARRY OUT THE TREATMENT STEPS IDENTIFIED ON THE *ASSESS AND CLASSIFY* CHART

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home. Also follow the instructions listed with each drug's dosage table.

- Determine the appropriate drugs and dosage for the child's age or weight
- Tell the mother the reason for giving the drug to the child
- Demonstrate how to measure a dose
- Watch the mother practise measuring a dose by herself
- Ask the mother to give the first dose to her child
- Explain carefully how to give the drug, then label and package the drug - If more than one drug will be given, collect, count and package each drug separately
- Explain that all the tablets or syrup must be used to finish the course of treatment, even if the child gets better
- Check the mother's understanding before she leaves the clinic

GIVE AN APPROPRIATE ORAL ANTIBIOTIC

- For SEVERE PNEUMONIA or VERY SEVERE DISEASE, PNEUMONIA, ACUTE EAR INFECTION, SEVERE MALNUTRITION, DYSENTERY and CHOLERA

SEVERE PNEUMONIA OR VERY SEVERE DISEASE, PNEUMONIA

AGE or WEIGHT	AMOXYCILLIN Give two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	10
12 months up to 3 years (10 - <14 kg)	2	20
3 years up to 5 years (14 - <19 kg)	3	30

SEVERE MALNUTRITION

AGE or WEIGHT	AMOXYCILLIN Give two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	10
12 months up to 3 years (10 - <14 kg)	2	20
3 years up to 5 years (14 - <19 kg)	3	30

DYSENTERY

AGE or WEIGHT	CIPROFLOXACIN (15 mg/kg) Give two times daily for 3 days
	Tablet 250 mg
2 months up to 4 months (4 - <6 kg)	1/4
4 months up to 3 years (6 - <14kg)	1/2
3 years up to 5 years (14 - <19 kg)	1

CHOLERA

First line Antibiotic: TETRACYCLINE
Second line Antibiotic : ERYTHROMYCINE

AGE or WEIGHT	TETRACYCLINE Give four times daily for 3 days	ERYTHROMYCINE Give four times daily for 3 days
	Capsule 250 mg	Tablet 250 mg
2 years up to 5 years (10- 19 kg)	1	1

ACUTE EAR INFECTION

First line antibiotic: AMOXICILLIN
Second line antibiotic: COTRIMOXAZOLE

AGE or WEIGHT	AMOXYCILLIN Give Two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	10
12 months up to 3 years (10 - <14 kg)	2	20
3 years up to 5 years (10 - <19 kg)	3	30

AGE or WEIGHT	COTRIMOXAZOLE (Trimethoprim + Sulphamethoxazole) Give two times daily for 5 days		
	Adult Tablet 80 mg Trimethoprim + 400 mg Sulphamethoxazole	Pediatric Tablet 20 mg Trimethoprim +100 mg Sulphamethoxazole	Syrup 40 mg Trimethoprim + 200 mg Sulphamethoxazole per 5 ml
2 months up to 12 months (4 - <10 kg)	1/2	2	5.0 ml
12 months up to 5 years (10 - <19 kg)	1	3	7.5 ml

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Give the first-line oral antibiotic if it is available. It has been chosen because it is effective[4], easy to give and inexpensive. You should give the second-line antibiotic only if the first-line antibiotic is not available, or if the child's illness does not respond to the first-line antibiotic.
Some children have more than one illness that requires antibiotic treatment. Whenever possible, select one antibiotic that can treat all of the child's illnesses.

- Sometimes one antibiotic can be given to treat the illness(es)

For example, a child with **PNEUMONIA** and **ACUTE EAR INFECTION** can be treated with a single antibiotic.

When treating a child with more than one illness requiring the same antibiotic, do not double the size of each dose or give the antibiotic for a longer period of time.

- Sometimes more than one antibiotic must be given to treat the illness(es)

For example, the antibiotic used to treat **PNEUMONIA** is not effective against cholera in your country. In this situation, a child who needs treatment for cholera and **PNEUMONIA** must be treated with two antibiotics.

The *TREAT THE CHILD* chart indicates the schedule for giving the antibiotic and the correct dose of the antibiotic to give to the child. The schedule tells you how many days and how many times each day to give the antibiotic. Most antibiotics should be given for 5 days. Only cholera and **DYSENTERY** cases receive antibiotics for 3 days. The number of times to give the antibiotic each day varies (2 or 4 times per day). To determine the correct dose of the antibiotic:

- Refer to the column that lists the concentration of tablets or syrup available in your clinic
- Choose the row for the child's weight or age. The weight is better than the age when choosing the correct dose. The correct dose is listed at the intersection of the column and row

Your facilitator will review how to use the chart to select the appropriate oral antibiotic and determine the schedule and dose in your country.

[4] Recommended 1st and 2nd line antibiotics may need to be changed based on resistance data and national policy.

EXERCISE A1

In this exercise, you will practice using the box 'Give an Appropriate Oral Antibiotic'. Use your *TREAT THE CHILD* chart. Select the correct oral antibiotic, and write the dose and schedule for each of the cases below. Assume that this is the first time each child is being treated for the illness and that the child has no other classification. Record your answer in the space provided.

1. A 6-month-old (7 kg) child needs the first dose of an antibiotic for **MASTOIDITIS**.

2. A child (10 kg) needs the first dose of an antibiotic for **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**.

3. A 2-year-old (11 kg) child needs an antibiotic for **PNEUMONIA** and **ACUTE EAR INFECTION.**

4. A child (16 kg) needs an antibiotic for **DYSENTERY**.

5. A child (5 kg) needs an antibiotic for **DYSENTERY** and **ACUTE EAR INFECTION**.

6. A 36-month-old child (15 kg) needs an antibiotic for **PNEUMONIA** and **SEVERE DEHYDRATION** because there is cholera in the area.

Check your answers with a facilitator when you have finished this exercise

1.2 Give Inhaled Salbutamol for Wheezing

Use of a spacer

A spacer is a way of delivering the bronchodilator drugs effectively into the lungs. No child under 5 years should be given an inhaler without a spacer. A spacer works as well as a nebulizer if correctly used.

- From Salbutamol metered dose inhaler (100 µg/puff) give 2 puffs
- Repeat up to 3 times every 15 minutes before classifying **PNEUMONIA**

Spacers can be made in the following way:

- Use a 500ml drink bottle or similar
- Cut a hole in the bottle base in the same shape as the mouthpiece of the inhaler. This can be done using a sharp knife
- Cut the bottle between the upper quarter and the lower 3/4 and disregard the upper quarter of the bottle
- Cut a small V in the border of the large open part of the bottle to fit to the child's nose and be used as a mask
- Flame the edge of the cut bottle with a candle or a lighter to soften it
- In a small baby, a mask can be made by making a similar hole in a plastic (not polystyrene) cup.
- Alternatively, commercial spacers can be used if available

To use an inhaler with a spacer:

- Remove the inhaler cap. Shake the inhaler well
- Insert mouthpiece of the inhaler through the hole in the commercial spacer/bottle or plastic cup
- The child should put the opening of the bottle into his mouth and breath in and out through the mouth
- A carer then presses down the inhaler and sprays into the bottle while the child continues to breathe normally
- Wait for three to four breaths and repeat for a total of five sprays
- For younger children place the cup over the child's mouth and use a spacer in the same way
- If a spacer is being used for the first time, it should be primed by 4-5 extra puffs from the inhaler
- If wheezing, give inhaled Salbutamol three times twenty minutes apart. If the baby does not respond, do not use inhaled Salbutamol

Note: Once the child has improved and there is no inhaled Salbutamol available or affordable, then oral Salbutamol (in syrup or tablets) can be given 6 to 8 hourly.

AGE	SALBUTAMOL	
	Tablet 2 mg	Syrup 2 mg/5 ml
Up to 1 year	1/2	2.5 ml
1 year up to 5 years	1	5 ml

EXERCISE A2

In this exercise you will practice using the box 'Give inhaled and oral Salbutamol for wheeze. Use your *TREAT THE CHILD* chart. Select the correct dose, write the dose and schedule for each of the cases below.

Assume that this is the first time each child is being treated for wheeze and that the child has no other classification. Record your answer in the space provided.

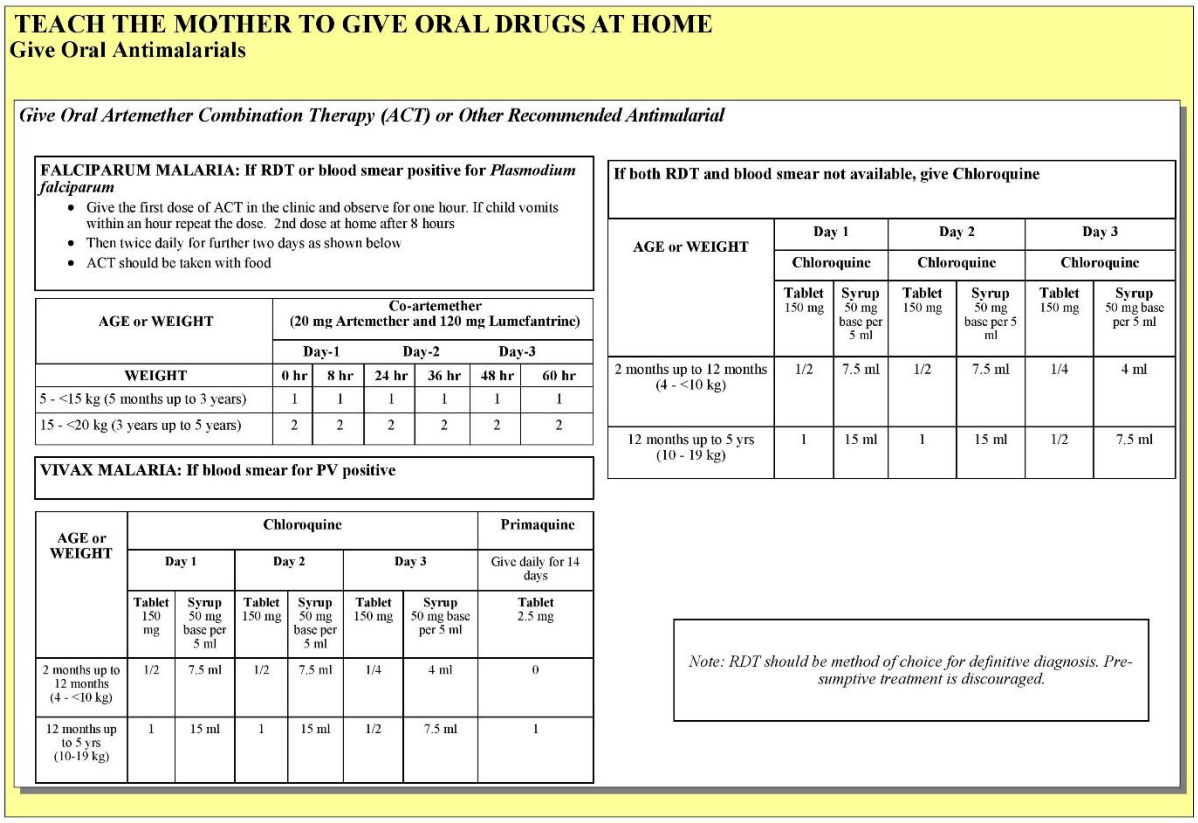
1. A 9-month-old (7 kg) child having cough and wheeze

2. A child 38 months old having wheeze.

1.3 Give an Oral Antimalarial

Oral antimalarials vary by country. In some countries, chloroquine and sulfadoxine pyrimethamine[2] are used as a first and second line of drugs accordingly. According to national guidelines of Bangladesh First line antimalarial drug is an Artemisinin-based combination Therapy (ACT), Tab Co-Artem for falciparum and Tab. Chloroquine (CQ) for vivax **MALARIA**.

As you have followed the *TREAT THE CHILD* chart in order to select the dose and schedule for oral antibiotic drugs, do the same for antimalarial.



TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME
Give Oral Antimalarials

Give Oral Artemether Combination Therapy (ACT) or Other Recommended Antimalarial

FALCIPARUM MALARIA: If RDT or blood smear positive for *Plasmodium falciparum*

- Give the first dose of ACT in the clinic and observe for one hour. If child vomits within an hour repeat the dose. 2nd dose at home after 8 hours
- Then twice daily for further two days as shown below
- ACT should be taken with food

AGE or WEIGHT	Co-artemether (20 mg Artemether and 120 mg Lumefantrine)					
	Day-1		Day-2		Day-3	
WEIGHT	0 hr	8 hr	24 hr	36 hr	48 hr	60 hr
5 - <15 kg (5 months up to 3 years)	1	1	1	1	1	1
15 - <20 kg (3 years up to 5 years)	2	2	2	2	2	2

VIVAX MALARIA: If blood smear for PV positive

AGE or WEIGHT	Chloroquine						Primaquine
	Day 1		Day 2		Day 3		Give daily for 14 days
	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 2.5 mg
2 months up to 12 months (4 - <10 kg)	1/2	7.5 ml	1/2	7.5 ml	1/4	4 ml	0
12 months up to 5 yrs (10-19 kg)	1	15 ml	1	15 ml	1/2	7.5 ml	1

If both RDT and blood smear not available, give Chloroquine

AGE or WEIGHT	Day 1		Day 2		Day 3	
	Chloroquine		Chloroquine		Chloroquine	
	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml
2 months up to 12 months (4 - <10 kg)	1/2	7.5 ml	1/2	7.5 ml	1/4	4 ml
12 months up to 5 yrs (10 - 19 kg)	1	15 ml	1	15 ml	1/2	7.5 ml

Note: RDT should be method of choice for definitive diagnosis. Presumptive treatment is discouraged.

Important points to remember about giving oral antimalarials

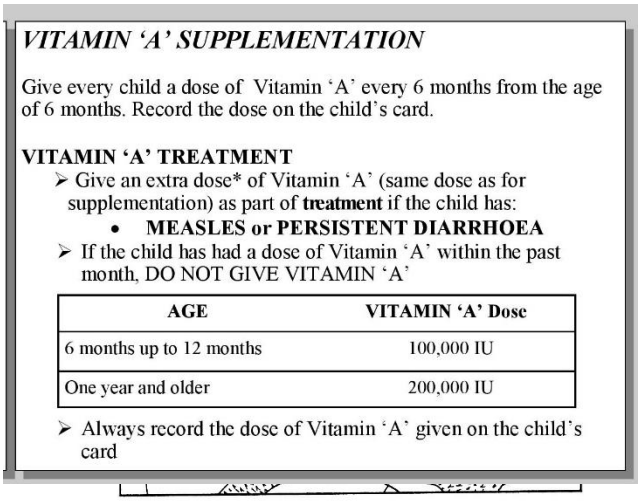
- The second dose of Co-artem should be taken 8 hours after first dose for better action. It should be taken with fatty food as this increase the absorption of Co-artem
- While treating with Chloroquine it is assumed that the child had not had any Chloroquine therapy yet. Be sure from the mother on this matter. Ask her, had the child received any dose of Chloroquine during this *fever*? If it has been given and if the child still had *fever* then consider this visit as follow up. Follow the directions from the *TREAT THE CHILD* chart regarding the follow up treatment for **MALARIA**.
- Chloroquine is given for 3days. If the child is less than 10kgs and you have given him 150mg tablet of Chloroquine, then, give the same dose (that means 1/2 tablets) for 2days and ¼ tablet on the 3rd day.
- Inform the mother that, itching is a possible side effect of Chloroquine. It is not dangerous. The mother should continue giving the medicine. The child does not need to be brought to the health centre for itching.

1.4 Give Paracetamol for High Fever (≥ 101.5°F/ ≥ 38.5°C) or Ear Pain

Paracetamol lowers a *fever* and reduces pain.

- If the child has a high *fever*, give one dose of Paracetamol in clinic
- Give 3 additional doses of Paracetamol for use at home every 6 hours until high *fever* or ear pain is gone.

1.5 Give Vitamin A



VITAMIN 'A' SUPPLEMENTATION

Give every child a dose of Vitamin 'A' every 6 months from the age of 6 months. Record the dose on the child's card.

VITAMIN 'A' TREATMENT

- Give an extra dose* of Vitamin 'A' (same dose as for supplementation) as part of **treatment** if the child has:
  - **MEASLES or PERSISTENT DIARRHOEA**
- If the child has had a dose of Vitamin 'A' within the past month, DO NOT GIVE VITAMIN 'A'

AGE	VITAMIN 'A' Dose
6 months up to 12 months	100,000 IU
One year and older	200,000 IU

- Always record the dose of Vitamin 'A' given on the child's card

Vitamin A is given to every child as supplementation from 6 months of age as first dose thereafter every 6 months. Vitamin A should be given for children with **MEASLES** or **PERSISTENT *DIARRHOEA***. Vitamin A helps to repair the damage due to the **MEASLES** virus infection in the eye as well as in the layer of cells that line the lung, gut, mouth and throat. It may also help the immune system to prevent other infections. Corneal clouding, a sign of vitamin A deficiency, can progress to blindness if vitamin A is not given. Vitamin A is available in a capsule. Use the child's age to determine the dose. Make sure the child swallows the vitamin A capsule whole. If the child is not able to swallow a whole capsule or needs only a half capsule, open the capsule. Tear off or cut across the nipple with a clean instrument (a surgical blade, razor blade, scissors or sharp knife). If the vitamin A capsule does not have a nipple, pierce the capsule with a needle.

- Squirt the vitamin A liquid into the child's open mouth
- Make sure that the child swallows all of the liquid. Do not let the child spit it out

Record the date each time you give vitamin A to a child. This is important. If you give repeated doses of vitamin A in a short period of time, there is danger of an overdose which may cause headaches, severe vomiting, bulged fontanelle and convulsion.

1.6 Give Iron/Iron Folate

A child with some palmar pallor may have **ANAEMIA.** A child with **ANAEMIA** needs Iron.

Give Iron or Multiple Micro-nutrient

- Give one dose daily for 14 days

AGE or WEIGHT	IRON/FOLATE Tablet Ferrous Sulfate 200 mg + 250 µg Folate (60 mg elemental iron) (60 mg elemental iron)	IRON Syrup Ferrous Fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - <6 kg)		1.0 ml (<1/4 tsp.)
4 months up to 12 months (6 - <10 kg)		1.25 ml (1/4 tsp.)
12 months up to 3 years (10 - <14 kg)	1/2 tablet	2.0 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

Give syrup to the child under 12 months of age. If the child is 12 months or older, give Iron/Iron Folate tablets.

Give the mother enough Iron /Iron Folate for 14 days. Tell her to give her child 1 dose daily for the next 2 months. Ask her to collect more Iron/Iron Folate in 14 days. Also, tell her that the Iron /Iron Folate may make the child's stools black.

Tell the mother to keep the Iron/Iron Folate out of reach of the child. An overdose of iron can

be fatal or make the child very ill.

1.7 Give Mebendazole/ Albendazole

Hookworm and roundworm is a public health problem in Bangladesh that can cause **ANAEMIA** because of Iron loss through intestinal bleeding, *malnutrition* and other complications.

Give Mebendazole or Albendazole as a single dose in the clinic if the child is 1 year of age or older, and has not had a dose in previous 6 months.

If your area has hookworm and roundworm problem, a child of 1year or older with **ANAEMIA** needs Mebendazole or Albendazole. Hookworm and roundworm are treated with Mebendazole or Albendazole. This infection causes **ANAEMIA** through intestinal bleeding by decreasing Iron.

DEWORMING

Give every child Mebendazole or Albendazole every 6 months from the age of one year. Record the dose on the child's card.

Give Mebendazole or Albendazole

Give Mebendazole or Albendazole as a single dose in clinic if the child is 1 year of age or older, and has not had a dose in previous 6 months.

AGE	Mebendazole Dose	Albendazole Dose
1- 2 year	500 mg	200 mg
2- 5 year	500 mg	400 mg

Give 400mg Albendazole or 500mg Mebendazole as a single dose in the health center. If your health facility has Mebendazole, give one 500mg tablet or five 100mg tablets.

Enquire, whether the child got 1 dose of Albendazole or Mebendazole within the past 6 months. If so, there is no need to give Mebendazole or Albendazole.

1.8 Give Multivitamin/ Mineral Supplement

Prophylactic use:

Give 1 sachet of MMN (Multivitamin micronutrient)/ or 20 mg elemental Iron + 100 mcg folic acid (one tablet of Pediatric IFA or 5 ml of IFA syrup or 1 ml of IFA drops) for a total of 100 days in a year as prophylaxis after the child has recovered from acute illness if:

- The child 6 months of age or older, and
- Has not received Pediatric IFA Tablet/syrup/ for 100 days in last year

FOR **PERSISTENT DIARRHOEA**:

Children with **PERSISTENT DIARRHOEA** can become deficient in important vitamins and minerals, particularly if they are malnourished. Giving a Multivitamin/ Mineral supplement daily for 10 days can help the child recover from **PERSISTENT DIARRHOEA**. Use of Multivitamin/ Mineral supplement recommended in the treatment box below. The supplement will provide a broad range of vitamins or minerals, including at least five key ingredients: Folic Acid, Vitamin A, Zinc, Magnesium and Copper.

Give MULTIVITAMIN supplement for persistent diarrhoea

Give one dose of multivitamin mixture for 10 days and give also one dose of Vitamin A in health facility/hospital.

EXERCISE B

In this exercise, you will practice using the *TREAT THE CHILD* chart to determine the appropriate oral drug, and the correct dose and schedule. Refer to your *TREAT THE CHILD* chart. Select the concentration of each drug that is available at your clinic.

Assume that this is the first time each child is being treated for the illness unless otherwise indicated. Record your answer in the space provided.

1. A 6-kg-child needs an oral antimalarial for *falciparum **MALARIA*** (RDT +ve)

2. A 4-month-old needs an antibiotic for an **ACUTE EAR INFECTION** and an oral antimalarial for **MALARIA.**

3. A 4-year-old needs vitamin A for **MEASLES**.

4. A 2-year-old child (11 kg) has **ANAEMIA** with some palmar pallor and needs Iron and antihelminth. The child's card shows he was given Mebendazole/ Albendazole and vitamin A 3 months ago.

Check your answers with a facilitator when you have finished this exercise

Your facilitator will lead a drill to give you more practice on selecting the appropriate oral drug and determining it's schedule and dose

2.0 USE GOOD COMMUNICATION SKILLS

A child who is treated at a clinic needs to continue treatment at home. The success of home treatment depends on how well you communicate with the child's mother. She needs to know how to give the treatment. She also needs to understand the importance of the treatment.
Good communication is important when teaching a mother to give treatment at home.

- Ask questions to find out what the mother is already doing for her child
- Praise the mother for what she has done well
- Advise her how to treat her child at home
- Check the mother's understanding

These skills are described below.

2.1 Advise the Mother How to Treat Her Child at Home

Some advice is simple. For example, you may only need to tell the mother to return with the child for follow-up in 2 days. Other advice requires that you teach the mother how to do a task. Teaching how to do a task requires several steps. Think about how you learned to write, cook or do any other task that involved special skills. You were probably the first given instruction. Then you may have watched someone else. Finally, you tried doing it yourself.
When you teach a mother how to treat a child, use 3 basic teaching steps:

1. Give information
2. Show an example
3. Let her practice

Give information: Explain to the mother how to do the task. For example, explain to the mother how to:

- Apply eye ointment
- Prepare ORS
- Soothe a sore throat, or
- Clear block nose

Show an example: Show how to do the task. For example, show the mother:

- How to hold a child still and apply eye ointment,
- A packet of ORS and how to mix the right amount of water with ORS,
- A safe remedy to soothe the throat which she could make at home, or
- How to clear block nose

Let her practice: Ask the mother to do the task while you watch. For example, have the mother:

- Apply eye ointment in her child's eye,
- Mix ORS solution,
- Describe how she will prepare a safe remedy to soothe the throat, or
- Ask the mother to clear the blocked nose

It may be enough to ask the mother to describe how she will do the task at home. Letting a mother practice is the most important part of teaching a task. If a mother does a task while you observe, you will know what she understands and what is difficult. You can then help her do it better. The mother is more likely to remember something that she has practiced than something she has heard. When teaching the mother:

- Use words that she understands
- Use teaching aids that are familiar, such as common containers for mixing ORS solution
- Give feedback when she practices. Praise what was done well and make corrections. Allow more practice, if needed
- Encourage the mother to ask questions. Answer all questions

2.2 Check the Mother's Understanding

After you teach a mother how to treat her child, you want to be sure that she understands how to give the treatment correctly. Checking questions find out what a mother has learned. Asking good checking questions is also an important communication skill. The structure of checking question should be as such that the mother's answer is more than 'Yes" or 'No". Good checking questions are those which answer 'why', 'how' and 'when' will you give the treatment while describing them. You will be able to tell whether she has learned what you have taught about the treatment and have understood you by listening to her answers. If she cannot give the correct answers then, give her more information and clearly state your directions. For example, teach the mother how to give an antibiotic. Then ask,

Do you know how will you give medicine to your child?

She will probably answer, "Yes", whether she has understood or not. She may be embarrassed to say that she has not understood. However, if you ask some checking questions, such as-

When will you give your child the medicine?

How many tablets will you give your child each time?

For how many days will you give tablets?

Ask the mother to repeat the directions you have given her. Good checking questions will help you to be sure that the mother has learned and remembered how to treat her child. The following questions will help to check if the mother has understood correctly. For 'Good checking questions' the mother needs to describe how to treat her child correctly. These checking questions are usually, formed with words like 'why', 'what', 'how', 'when', 'how many times' and 'how much'? How much the mother knowns cannot be actually understood with 'weak questions' which answer "Yes" or "No".

GOOD CHECKING QUESTIONS	POOR QUESTIONS
How will you prepare the ORS solution?	Do you remember how to mix the ORS?
How often should you breastfeed your child?	Should you breastfeed your child?
On what part of the eye would you apply the ointment?	Have you used ointment on your child before?
How much extra fluid will you give after each loose stool?	Do you know how to give extra fluids?
Why is it important for you to wash your hands?	Will you remember to wash your hands?

Pause after one question, give her time to think, then let her answer. Don't answer on her behalf. Don't ask questions too fast. Asking checking questions requires patience. The mother may know the answer but her pace of answering might be slow. She may be confused about the answer you are actually looking from her. She may be afraid that her answer may be incorrect. She may feel shy to answer in front of an authority figure. Wait for her answer. Encourage her. If the mother gives an incorrect answer or says that she cannot remember, then keep in mind that she must not feel uncomfortable. Provide more information, examples and practice sessions to ensure that she understands. Then, ask her checking questions again.

A mother can say that she has understood but she won't be able to do exactly the way you are expecting. She may have a problem or obstacle. The common problems are lack of money or time for the treatment. A mother can complain that her child was given oral drugs instead of injection or preventive measures instead of medicine. Let her think of the possible solutions to those problems and listen to her complains. For example:

If you ask,

"When will you apply ointment to your child's eyes?"

The mother may answer that she does not stay at home during the daytime. She may tell you that, she can treat her child only in the morning and evening.

Ask her if she can appoint someone (grandfather, grandmother, elder brother, sister) who will stay at home during the daytime and give treatment at noon. Help the mother

to make arrangements to teach the person who will stay at home in the daytime on how to give treatments.

If you ask,

"Which container will you use to measure half a liter water to mix ORS?"

She may say, there is no half liter container at home.

Ask her, what kind of container she has at home. Show her how to measure half a litre with her container. Explain her how to mark half litre on her container with appropriate tool or how to measure half litre with a number of small containers.

If you ask,

"How will you soothe your child's throat?"

She may say, she does not like your recommended preventive measure, rather, she was expecting a tablet or injection. Explain her the importance of prevention over medicine. Clear your explanation.

The mother might have to explain the logic behind prevention to the family members who are expecting to treat the child in a different way.

When checking the mother's understanding:

- Ask questions that require the mother to explain what, how, how much, how many, when, or why. Do not ask questions that can be answered with just a "Yes" or "No"
- Give the mother time to think and then answer
- Praise the mother for correct answers
- If she needs it, give more information, examples or practice

EXERCISE C

In this exercise, you will review good communication skills. Answer the questions in the space provided.

1. Health care provider Majid must teach a mother to prepare ORS solution for her child with *diarrhoea*. First, he explains how to mix the ORS, then he shows her how to do it. He asks the mother, "Do you understand?" The mother answers "Yes". So, Majid gives her 2 ORS packets and says good-bye.

   a. What information did Majid give the mother about the task?

   b. Did he show her an example?

   c. Did he ask her to practice?

   d. How did Majid check the mother's understanding?

   e. Did Majid check the mother's understanding correctly?

   f. How would you have checked the mother's understanding?

2. Which of the following is the best checking question after advice about increasing fluids during *diarrhoea*? (Tick (✓) one.)

   ___ a. Do you remember some good fluids to give your child?
   ___ b. Will you be sure to give your child extra fluid?
   ___ c. How much fluid will you give your child?

3. The following questions can be answered "Yes" or "No". Rewrite the questions as good checking questions.

   a. Do you remember when to give the antimalarial?

   b. Do you understand how much syrup to give your child?

   d. Did the nurse explain to you how to apply the ointment?

   d. Can you wick your child's ears?

   e. Do you know how to get to the hospital?

When you finish this exercise, discuss your answers with a facilitator

Your facilitator will lead a drill
to give you more practice on asking checking questions

3.0 TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

The oral drugs listed on the chart are given for different reasons, in different doses and on different schedules. However, the way to give each drug is similar.

This section will teach you the basic steps of teaching mothers to give oral drugs. If a mother learns how to give a drug correctly, then the child will be treated properly. Follow the instructions below for every oral drug you give to the mother.

- Determine the appropriate drugs and dosage for the child's age or weight
  - Use the *TREAT THE CHILD* chart to determine the appropriate drug and dosage to give the child.
- Tell the mother the reason for giving the drug to the child, including:
  - Why you are giving the oral drug to her child, and
  - What problem it is treating
- Demonstrate how to measure a dose
  - Collect a container of the drug and check its expiry date. Do not use expired drugs. Count out the amount needed for the child. Close the container
  - If you are giving the mother tablets:
- Show the mother the amount to give per dose. If needed, show her how to divide a tablet
- If a tablet has to be crushed before it is given to a child, add a few drops of clean water and wait a minute or so. The water will soften the tablet and make it easier to crush
- If you are giving the mother syrup:
  - Show the mother how to measure the correct number of milliliters (ml) for one dose at home. Use the bottle cap or a common spoon, such as a spoon used to stir sugar into tea or coffee. Show her how to measure the correct dose with the spoon
  - One teaspoon (tsp) equals approximately 5.0 ml (see below)

MILLILITRES (ml)	TEASPOONS (tsp)
1.25 ml	¼ tsp
2.5 ml	½ tsp
5.0 ml	1 tsp
7.5 ml	1½ tsp
10.0 ml	2 tsp
15.ml	3 tsp

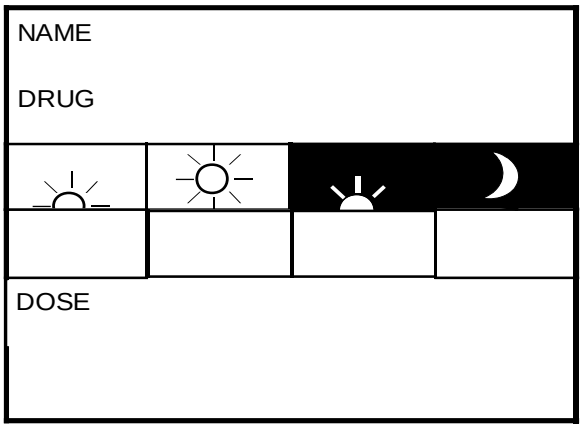
  - Adjust the above amounts based on the common spoons in your area
- If you are giving the mother vitamin A capsules:
  - Show the mother the amount to give per dose. If a child needs a half vitamin A capsule (or cannot swallow a whole capsule), show the mother how to open the capsule and squirt a half or all the liquid into the child's mouth

Watch the mother practice measuring a dose by herself

Ask the mother to measure the dose by herself. If the dose is in tablet form and the child cannot swallow a tablet, tell the mother to crush the tablet. Watch her doing the work. Tell her how much she has done it correctly. If she has measured the dose incorrectly, show her again how to measure properly.

Ask the mother to give the first dose to her child

If the child is vomiting, explain the mother to give the drug even if the child vomits it. Tell the mother to watch the child for 30 minutes. If the child vomits within the 30 minutes (the tablet or syrup may be seen in the vomit), give another dose. If the child is dehydrated and vomiting, wait until the child is rehydrated before giving the dose again.



Explain carefully how to give the drug, then label and package the drug

Tell the mother how much drug the child needs to be given. Inform her how many times the dose should be given every day. Tell her when and for how many days it has to be given.

To write a label on the drugs:

- Write the full name of the drug and the total amount of the tablet, capsule or syrup to complete the treatment
- Write the correct dose (Number of the tablet, capsule, drops or level spoon, that means ½, 1 ½ …). Write down when to give the dose (early morning, during meal at noon, during meal at night, before bed)
- Write down the daily dose and schedule, like –

  ½ tablet twice daily, 5 days

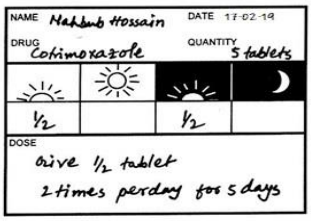
Write clearly so that an educated person can read and understand the directions.

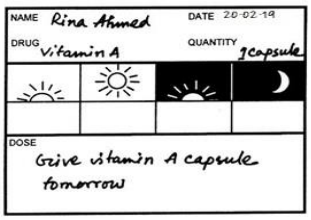
Pour the total amount of every drug in the labeled medicine container (envelope, paper, tube or bottle). Keep the medicine clean. Use clean container.

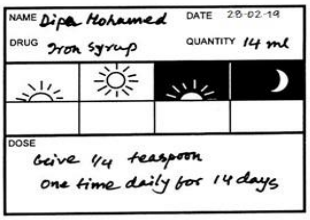
Give the medicine after labeling and packaging. Ask her checking questions to be sure that she has understood how to treat her child.

Different examples of labeling medicine:

Examples of Drug Labels for Various Treatments







If more than one drug will be given, collect, count and package each drug separately.

Give one drug at a time. Write down the directions on the label. Count the necessary quantity. Keep an adequate amount of the drug inside the labeled packet. Complete packaging this medicine before opening a new container. Explain to the mother that her child is getting more than one drug because he has more than one illness. Show the mother different drugs. Explain how to give each drug. If necessary, draw a summary of the drugs and times to give each drug during the day. Explain that all the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better. Explain to the mother that if the child seems better, continue to treat the child. It is important because bacteria or **MALARIA** parasite can remain inside even after the signs/ symptoms of the disease subside. Advise the mother to keep all medicines out of the reach of children. Also, tell her to preserve the medicines in dry and dark place where there is no rat or insect infestations.

Check the mother's understanding before she leaves the clinic

Ask the mother checking questions, like:

- "How much will you give every time?"
- "When will you give it?" "For how long?"
- "How will you prepare it?"
- "Which medicine will you give 3 times a day?"

If you think that the mother will face difficulty in giving the medicine to her child then give her more information, examples and exercises. It is important to treat correctly to make the child healthy.

Some health centers have one medicine-giver who teaches the mother to give treatment and checks whether the mother has understood correctly or not. If this is your case, then teach the medicine-giver the skills you have learned here. Ask the medicine-giver to read and practice the exercises in section 2.0 Good Communication Skills and section 3.0 Teach the Mother How to Give Oral Drugs. Give information, examples, and exercises if necessary. Check if the medicine-giver can do this important work properly or not. Ask the mother some checking questions before leaving the health centre. You will understand from the answers, whether the medicine giver has taught them the correct way to give the medicines or not.

EXERCISE D

Read the case description. Answer the questions. Refer to your *TREAT THE CHILD* chart and use the recommended drugs for your country.

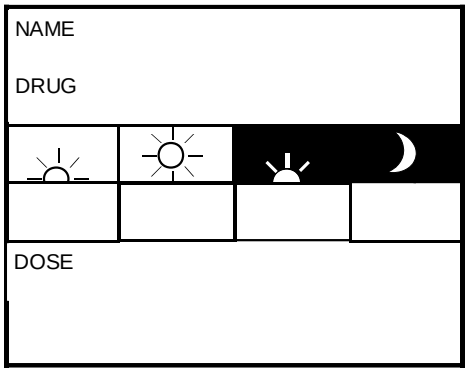
Seven-month-old (7 kg) Jhuma was brought to the clinic because she is coughing and seems very sick. After assessing Jhuma, the health care provider finds that she has no general danger signs, no *diarrhoea*, no *feve*r and no *ear problems*. She has *cough* with fast breathing, but no chest indrawing and no stridor. Her oxygen saturation (SpO_2) is 98%. The health care provider classifies Jhuma with **PNEUMONIA**, **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. The health care provider will give an oral antibiotic.

1. Determine the appropriate antibiotic, dose and schedule for Jhuma. Write it in the space below

2. Write the major steps of how to teach Jhuma's mother to give the oral antibiotic to her child in the space that follows

*
*

3. Show how you would label the drug envelope for Jhuma's mother.



4. List at least 3 checking questions to ask Jhuma's mother to make sure she understands how to give the oral antibiotic.

5. When should the mother bring Jhuma back to the clinic for a follow-up visit? When should the mother bring Jhuma back immediately?

6. List at least 3 checking questions to ask Jhuma's mother to make sure she knows when to bring Jhuma back to the clinic.

Discuss your answers with the facilitator when you finish this exercise

4.0 TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

This section of the module will teach you how to treat local infections. Local infections include cough, sore throat, eye infection, mouth ulcers and ear infection.

You will also learn how to teach a mother to treat a local infection at home. When teaching a mother:

- Explain to the mother what the treatment is and why it should be given
- Describe the treatment steps listed in the appropriate box below
- Watch the mother as she does the first treatment in the clinic (except remedy for cough or sore throat)
- Tell her how often to do the treatment at home
- If needed for treatment at home, give the mother the tube of tetracycline ointment or a small bottle of Nystatin or Riboflavin
- Check the mother's understanding before she leaves the clinic

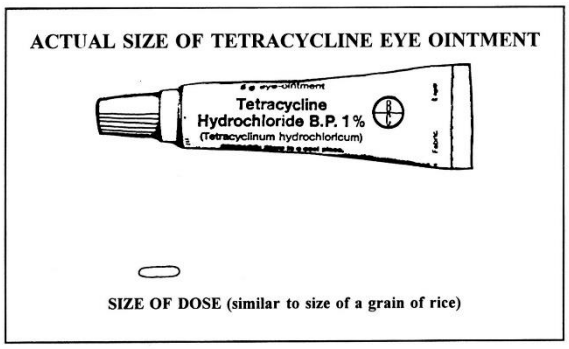
Some treatments for local infections cause discomfort. Children often resist having their eyes, ears or mouth treated. Therefore, it is important to hold the child still. This will prevent the child from interfering with the treatment. The drawing on the right shows a good position for holding a child. Tilt the child's head back when applying eye ointment or treating mouth ulcers. Tilt the child's head to the side when wicking the ear. Do not attempt to hold the child still until immediately before treatment.

4.1 Treat Eye Infection with Tetracycline Eye Ointment

Treat Eye Infection with Tetracycline Eye Ointment

- **Clean both eyes four times daily**
  - Wash hands
  - Use clean cloth and water to gently wipe away pus
- **Then apply Tetracycline eye ointment in both eyes four times daily**
  - Squirt a small amount of ointment on the inside of the lower lid
  - Wash hands again
- **Treat until there is no pus discharge**
- **Do not put anything else in the eye**

If the child needs to be sent, clean his eyes with care. Pull the lower eyelid downwards. Apply the first dose of Tetracycline ointment inside the lower lid. The size of the dose is similar to one rice grain.



If the child does not need to be sent, teach the mother how to apply the Tetracycline ointment. Give the mother the following information. Tell her, it is essential to treat both eyes to prevent their damage. Also tell her, the ointment will hurt the child's eyes mildly.

Tell the mother:

- Wash her hands before treating the eyes
- To clean the child's eyes before applying the Tetracycline eye ointment. Use a clean cloth to clean the eyes.
- Do this procedure (cleaning the eyes and applying the ointment) four times a day, morning, noon afternoon and night.

Later, show the mother how to treat the eyes.

Don't forget to wash your hands.

- Pull the child's lower eyelid downward. Look at the lower eyelid. Tell the mother, this is the place where the ointment needs to be applied. Ask the mother to be careful so that the tube does not touch the eye or the lid
- Ask someone to hold the child still
- Wipe the child's one eye with a cloth. Apply the ointment on the front of lower eyelid. Make sure that the mother has watched where and how much (rice grain size) ointment needs to be applied

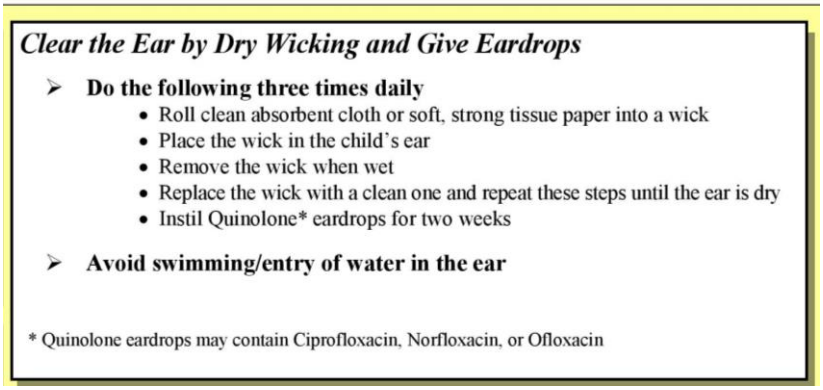
Ask the mother to practice cleaning and applying the ointment on the child's other eye. Watch and give opinion while she is doing the work. After finishing, give her the following additional information:

- Treat both eyes until the redness is gone from the infected eye. The infected eye is improving if there is less pus in the eye or the eyes are not stuck shut in the morning
- Don't give any other eye ointment, drop or other optional treatment. These may be harmful to the child's eyes and the eyes may be damaged. If anything harmful is applied to the eye it may cause blindness
- If there is still pus draining after 2 days, then bring the child back to the health centre again

Then let the mother take the tube home. Give her the ointment which you used at your health centre. Before leaving, ask her checking questions. Check, whether she has understood how to treat the eyes. For example, ask:

"Can you treat one or two eyes?"
"How much ointment will you apply? Show me"
"How often will you treat?"
"When will you wash hands?"

4.2 Dry the Ear by Wicking

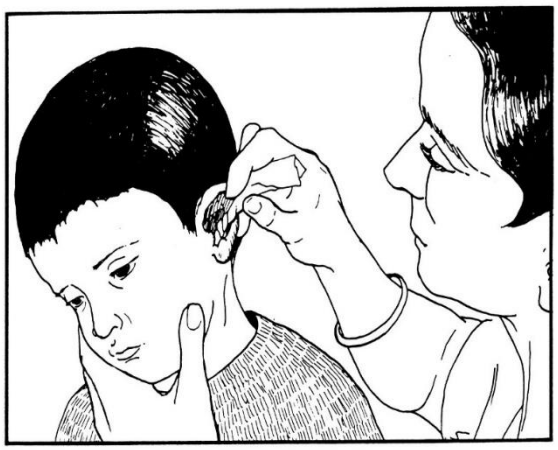


In order to teach the mother how to keep the ear dry, you will have to tell her first, it is important to keep it dry to help the infected ear heal. Then, then teach her, how to clean the child's ear with a dry soft cloth.

To dry the child's ear, tell the mother to:

- Wrap a dry soft cloth around a stick. Don't use cotton or any kind of paper that can get loose or break inside the ear after insertion
- Keep the dry cloth inside the ear until it is wet
- Change the wet cloth with a dry soft cloth

▪ Repeat the steps until the cloth comes out dry. If the cloth comes out dry after inserting into the ear then you will know that the ear has been dried



When the mother is practicing then observe her, give opinion. After completion, give her the following information:

- Dry the ear 3 times a day
- Continue the treatment as long as it is needed. When you will see that, pus is no longer draining out and the dry cloth no longer gets wet after inserting into the ear, then stop the treatment
- While treating with the dry cloth don't give anything else (oil, fluid or anything else) into the ear. Don't let the child swim. It won't be good for the ear if water enters

Ask her checking questions, like:

"What will you use while treating the ear at home?"
"How often will you dry the ear with a dry cloth?"
"What else will you give into the child's ear?"

If the mother thinks, it will be difficult for her to keep the ear dry with a dry cloth, then help her to solve her problems. Observe the mother as she practices.

4.3 Treat Mouth Ulcers with Nystatin and Riboflovin

Treating mouth ulcers controls infection and helps the child to eat.

Treat Mouth Ulcers with Nystatin and Riboflovin

- **Treat the mouth ulcers twice daily**
  - Wash hands
  - Wash the child's mouth with a clean soft cloth wrapped around the finger and wet with salt water
  - Paint the mouth with Nystatin
  - Wash hands again
  - Give Riboflovin
  - Give Paracetamol for pain relief

Teach the mother to treat mouth ulcers with Nystatin and Riboflavin. Tell her:

▪ If she applies for medicine on her child's mouth ulcers then he will be able to eat food normally very soon. Child's eating is important

▪ Clean the child's mouth. Wrap a clean soft cloth around the finger. Dip it into saltwater. Clean the mouth

▪ Apply nystatin on the mouth ulcer with a clean cloth or cotton wrapped around a stick. It destroys the ulcer producing fungus. Take some Nystatin on the stick or cloth. Don't let the child eat it

▪ Treat the mouth ulcer 2 times a day – morning and evening

▪ Treat the mouth ulcer for 5 days

▪ Give Riboflavin to the child even after the ulcer has healed

▪ Give Paracetamol for pain relief

Wrap a clean cloth around your finger and dip it in drinkable water. First, show the mother

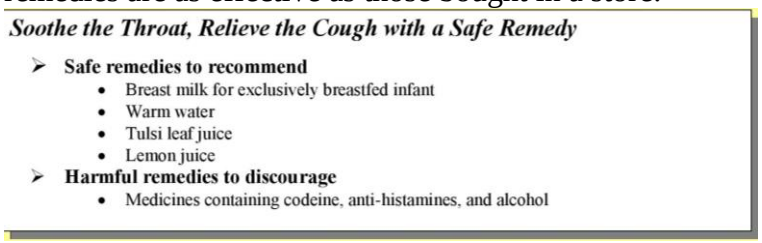
how to wipe the child's mouth. Then, apply Nystatin inside the child's mouth.
Ask the mother to practice. Watch her cleaning her child's mouth and applying Nystatin on the ulcers. Tell her what she has done well during the procedure and give her a tube of Nystatin for taking home. Tell her to come back in 3 days for follow-up. If the child cannot eat or drink or if the ulcers have gotten **worse** then tell her to come to the health centre before the fixed time. Before leaving the health complex, ask the mother checking questions. For example, ask her:

- "What will you use to clean the child's mouth?"
- "When will you wash your hand?"
- "How often and for how many days will you treat the child's mouth?"

Ask her, whether she will face any problem in giving the treatment. Help her to solve the problems.

4.4 Soothe the Throat, Relieve the Cough with a Safe Remedy

To soothe the throat or relieve a cough, use a safe remedy. Such remedies can be home-made, given at the clinic, or bought at a pharmacy. It is important that they are safe. Home-made remedies are as effective as those bought in a store.



TREAT THE CHILD chart recommends safe and soothing remedy for the children suffering from a cough or sore throat. If the child is exclusively breastfed, do not give other drinks or remedies. Breastmilk is the best soothing remedy for an exclusively breastfed child. A harmful remedy might be used in your area. If so, those are recorded in the specific box. Never use any remedy which contains harmful ingredients. Such as, Atropine, Codeine or derivatives of Codeine or alcohol. These kinds of stuff can make the child drowsy. These can create reluctance in child's feeding. It can also create obstacle in getting the secretion out of the lungs through cough. Nasal drop containing medicine should not be used (that is, anything mixed with the nasal drop except salt). It is not necessary to observe how the mother is giving a safe remedy to the child while explaining it to her. This treatment does not require exact dose measurement.

DETERMINE PRIORITY OF ADVICE

When a child has only one problem to be treated, give all of the relevant treatment instructions and advice listed on the charts. When a child has several problems, the instructions to mothers can be quite complex. In this case, you will have to limit the instructions to what is most important. You will have to determine:

- How much can this mother understand and remember?
- Is she likely to come back for follow-up treatment? If so, some advice can wait until then

What advice is most important to get the child well?

If a mother seems confused or you think that she will not be able to learn or remember all the treatment instructions, select only those instructions that are most essential for the child's survival. Essential treatments include giving antibiotics or antimalarial drugs **and** giving fluids to a child with *diarrhoea*. Teach a few treatments well and check that the mother remembers them.

If necessary, omit or delay the following:

- Feeding assessment and feeding counseling
- Soothing remedy for **COUGH OR COLD**
- Paracetamol*
- The second dose of vitamin A*
- Iron treatment
- Wicking an ear

You can give the other treatment instructions when the mother returns for the follow-up visit.

---

*Give the first dose of Paracetamol or vitamin A. Do *not* dispense the other doses. Do *not* overwhelm the mother with instruction for later doses.

EXERCISE E

In this exercise you will answer questions about how to teach a mother to treat local infections at home. You will also practice determining the priority of advice.

Part 1: Teaching a mother to treat local infections at home.

1. Treat an Eye Infection

a. What would you tell a mother about why it is important to treat an eye infection?

b. What major step of how to teach a mother to treat an eye infection is missing from the list below?

- Explain how and why to treat the eye
- Demonstrate how to clean the eye and apply tetracycline eye ointment
- Tell her how often and for how many days to treat the eye and tell her to not put anything else in the child's eye
- Give her one tube of eye ointment
- Ask checking questions to make sure she understands the instructions

c. Change these questions into checking questions.

1. Do you know how to treat your child's eye?

2. Can you hold your child still while you apply the ointment?

2. Treat Mouth Ulcers

a. What would you tell a mother about why it is important to treat mouth ulcers?

b. What are the major steps you would follow when teaching a mother to treat mouth ulcers at home?

c. List 3 checking questions you could ask to make sure the mother understands how to treat mouth ulcers at home

3. Soothe the Throat, Relieve the Cough with a Safe Remedy

a. What is meant by a safe remedy? Give an example

b. Give at least 2 examples of remedies that are not safe.

c. When should a child classified with **COUGH OR COLD** return immediately for treatment?

When you have finished Part 1, discuss your answers with a facilitator

Part 2: Practice determining priority of advice.
The facilitator will read aloud a case description for a child named Mita.
1. Listen to the case description of Mita. Mark the findings of Mita's assessment and classification on the Register on the next page.
2. Identify all of Mita's treatments. Mark the treatments on the Register.
3. The facilitator will continue reading the case description.
4. Review your list of treatments, instructions and advice that Mita needs. Which ones are the most important for the health care provider to teach the grandmother?

5. Which treatments, instructions or advice could be omitted or delayed if the grandmother is clearly overwhelmed?

When everyone is ready, there will be a group discussion

5.0 GIVE THESE TREATMENTS IN CLINIC ONLY

In the module *Identify Treatment*, you learned to **refer** a child with a severe classification **URGENTLY** to a hospital. You may have to give one or more of the following treatments in the clinic before the child leaves for the hospital.

- Per rectal Diazepam to stop convulsion
- Intramuscular antibiotic if the child cannot take an oral antibiotic
- Breastmilk or sugar water to prevent low blood sugar

When giving an intramuscular antibiotic:

- ➢ Explain to the mother why the drug is given
- ➢ Determine the dose appropriate for the child's weight (or age)
- ➢ Use a sterile needle and sterile syringe when giving an injection
- ➢ Measure the dose accurately
- ➢ Give the drug as an intramuscular injection
- ➢ If the child cannot be **refer**red, follow the instructions provided

5.1 Give Diazepam to Stop Convulsions

Active convulsion is a life-threatening condition. To stop convulsion is an emergency treatment. Diazepam per rectally is a very good drug to control active convulsion. If a child is convulsing now, control convulsion by per rectal Diazepam.

Give Diazepam to Stop Convulsions

- Give 0.5 mg/kg Diazepam injection solution per rectum using a small syringe (like a tuberculin syringe) without a needle, or using a catheter
- If convulsions have not stopped after 10 minutes repeat Diazepam dose

WEIGHT	AGE	DOSE OF DIAZEPAM (10 mg/ 2 ml)
< 5 kg	<6 months	0.5 ml
5 - <10 kg	6 months up to 12 months	1.0 ml
10- <14 kg	12 months up to 3 years	1.5 ml
14 - 19 kg	3 years up to 5 years	2.0 ml

Procedure for per rectal Diazepam:

Take 0.5mg/kg (from the table) Diazepam injection solution using a 3 cc syringe and then take off the Needle. By using a nasogastric tube of 6FR or a tube of a butterfly needle (after cutting the needle) introduce it into the rectum. Now push Diazepam into the rectum, then take out the syringe after squeezing the tube with another hand and draw 2cc of air /normal saline and push through the tube. Then withdraw the tube and approximate the buttocks by hand for some time.

5.2 Give an Intramuscular Antibiotic

A child may need an intramuscular antibiotic before he leaves for the hospital. If a child:

- Is not able to drink or breastfeed, or
- Vomits everything, or
- Has convulsions, or
- Is lethargic or unconscious, or

- The child is convulsing now

If a child cannot take an oral antibiotic give the child a single dose of Gentamicin by intramuscular injection. Then **refer** the child **URGENTLY** to the hospital.
Use the following table to determine the dose.
Choose the dose from the row of the table which is closest to the child's weight (or age, if weight is not known).

GIVE THESE TREATMENTS IN THE CLINIC ONLY

- **Explain to the mother why the drug is given**
- **Determine the dose appropriate for the child's weight (or age)**
- **Use a sterile needle and sterile syringe when giving an injection**
- **Measure the dose accurately**
- **Give the drug as an intramuscular injection**
- **If the child cannot be referred, follow the instructions provided**

Give Intramuscular Antibiotic

GIVE TO CHILDREN BEING REFERRED URGENTLY

GENTAMICIN

- **Use undiluted 2 ml vial (80 mg/ 2 ml)**
- **Of the dose range provided below, use lower dose for children with weight at lower end of the category, and higher dose for children at the higher end of the category**

IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the Gentamicin injection once daily for 2 days

AGE	WEIGHT	GENTAMICIN 2 ml vial at 80 mg/ 2 ml
2 up to 4 months	4 – <6 kg	0.5 - 1.0 ml
4 up to 12 months	6 – <10 kg	1.1 - 1.8 ml
1 year up to 3 years	10 – <15 kg	1.9 - 2.7 ml
3 years up to 5 years	15 – 20 kg	2.8 - 3.5 ml

Treat the Child to Prevent Low Blood Sugar during transportation/referral

If the child is able to breastfeed:

- Ask the mother to breastfeed the child

If the child is not able to breastfeed but is able to swallow:

- Give expressed breast milk or breast-milk substitute
- If neither of these is available give sugar water
- Give 30-50 ml of milk or sugar water before departure

** To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water*

If the child is not able to swallow:

- Give 50 ml of milk or sugar water by Naso-Gastric tube
- If NG tube is not available, give one teaspoon of sugar moistened with 1-2 drops of water sublingually and repeat doses every 20 minutes to prevent relapse

Give Diazepam to Stop Convulsions

- Give 0.5 mg/kg Diazepam injection solution per rectum using a small syringe (like a tuberculin syringe) without a needle, or using a catheter
- If convulsions have not stopped after 10 minutes repeat Diazepam dose

WEIGHT	AGE	DOSE OF DIAZEPAM (10 mg/ 2 ml)
< 5 kg	<6 months	0.5 ml
5 - <10 kg	6 months up to 12 months	1.0 ml
10- <14 kg	12 months up to 3 years	1.5 ml
14 - 19 kg	3 years up to 5 years	2.0 ml

Procedures for Giving Gentamicin Injections

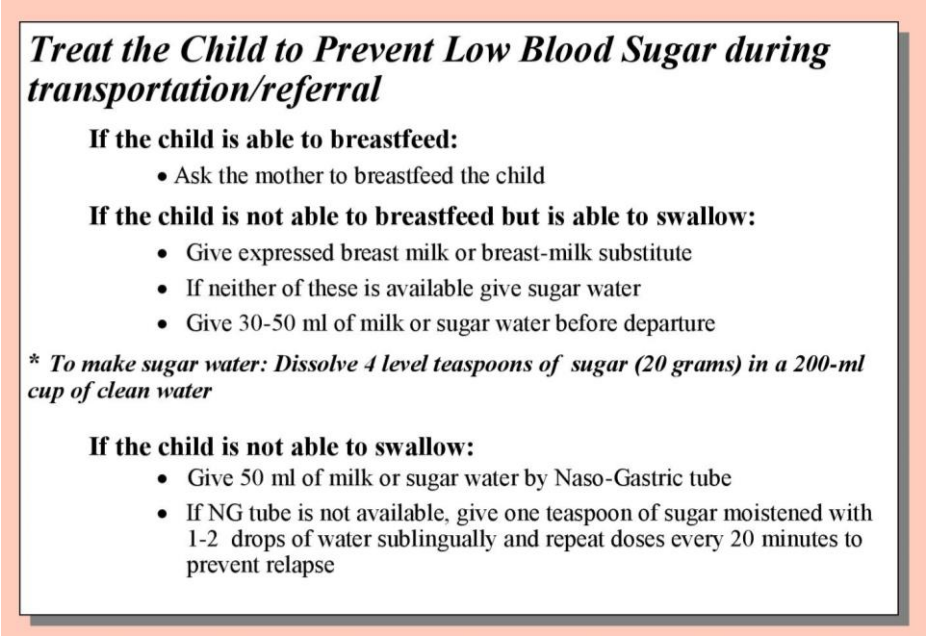
Follow these steps when giving a Gentamicin injection if you are skilled to give an intramuscular injection. If not, ask someone who is skilled to give the injection. (Later someone can teach you how to give the injections.)

1. Use the *TREAT THE CHILD* chart to determine the appropriate dose. Check which concentration is available in your clinic. Make sure you read the chart correctly for the concentration you are using.
2. Use a sterile needle and insulin syringe to give the injection.
   Below is an illustration of the type of syringe used for Gentamicin injections. Measure the dose accurately.

4. Give the drug as a deep intramuscular injection in the front of the child's thigh, ***not*** in the buttock.
5. Refer the child URGENTLY. The child should be carried.

5.3 Treat the Child to Prevent Low Blood Sugar

Preventing low blood sugar is an urgent pre-referral treatment for children with **VERY SEVERE DISEASE, SEVERE *DIARRHOEA*, VERY SEVERE FEBRILE DISEASE OR COMPLICATED SEVERE ACUTE MALNUTRITION**. Low blood sugar occurs in serious infections such as severe **MALARIA** or meningitis. It also occurs when a child has not been able to eat for many hours. It is dangerous because it can cause brain damage. Giving some breastmilk, formula milk (if not breastfeed) or sugar water provides some glucose to treat and prevent low blood sugar. This treatment is given only once, before sending for the hospital. If the child cannot swallow, **refer** the child immediately.



EXERCISE F

In this exercise, you will determine correct doses and practice measuring different dosages of drugs.

Part 1: Practice determining correct doses.

1. What dose would you give the following children?

Child's weight	If Gentamicin is needed 2ml vial 80mg/2ml
5 kg	_____
7 kg	_____
13 kg	_____
18 kg	_____

2. Ali, a 12-month-old (10 kg) boy, was brought to the clinic this morning because he has had *fever* for 2 days and has been sleeping since yesterday. He is from **NO MALARIA** risk area. A health care provider assessed Ali and found that he is lethargic. He classified Ali with **VERY SEVERE FEBRILE DISEASE, NO ANAEMIA** and **NO ACUTE MALNUTRITION**. The health care provider will give Ali an intramuscular and oral antibiotic. He will also give him sugar water by cup and spoon since Ali is able to swallow. Then the health care provider will **refer** Ali **URGENTLY** to the nearest hospital. Specify the dose of each treatment that Ali will receive.

Amoxicillin: _____

Gentamicin: _____

Sugar water by cup & spoon: _____

When you have finished Part 1,
discuss your answers with the other members of your group

6.0 GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

You have learned to assess a child with *diarrhoea*, classify dehydration and select one of the following treatment plans:

Plan A - Treat *Diarrhoea* at Home
Plan B - Treat **SOME DEHYDRATION** with ORS
Plan C - Treat **SEVERE DEHYDRATION** Quickly

All three plans provide fluid to replace water and salts lost in *diarrhoea*. An excellent way to both, rehydrate and prevent dehydration in a child is to give him a solution made with oral rehydration salts (ORS). IV fluid should be used only in cases of **SEVERE DEHYDRATION**. The only types of *diarrhoea* that should be treated with antibiotics are *diarrhoea* with **SEVERE DEHYDRATION** with cholera in the area and **DYSENTERY**[5]. The antibiotics for cholera and **DYSENTERY** are discussed in sections 1.1 and 6.5.

You will now learn how to do Plans A, B and C.

6.1Plan A: Treat Diarrhoea at Home

This section describes PLAN A, treatment of a child who has *diarrhoea* with **NO DEHYDRATION.** The 4 Rules of Home Treatment are:

1. GIVE EXTRA FLUID (as much as the child will take)
2. GIVE ZINC SUPPLEMENTS (age 2 months up to 5 years)
3. CONTINUE FEEDING
4. WHEN TO RETURN

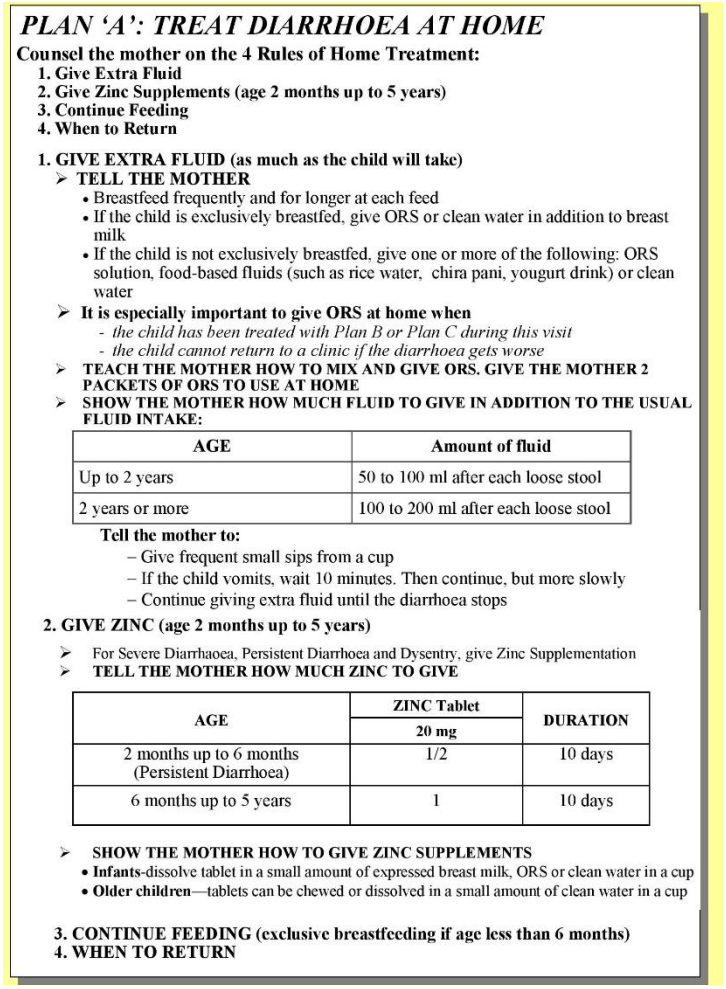
In this section how to advise the mother on "GIVE EXTRA FLUID", the first rule for home treatment, is described. You will teach the mother to give extra fluid to the child frequently to prevent dehydration. Giving extra fluid to the child means giving more fluid than usual. Information on how to continue feeding will be discussed in *COUNCIL THE MOTHER* module. You have learned when the mother has to return to the healthcare provider in the previous module, "IDENTIFY TREATMENT".

Plan A is an important treatment plan. Children with *diarrhoea* who come to a health provider with **NO DEHYDRATION** will be put on Plan A. Children with dehydration need to be re-hydrated on Plan B or C, then on Plan A. Eventually, all children with *diarrhoea* will be on Plan A.

Plan A involves counseling the child's mother about the 4 Rules of Home Treatment. Therefore, your teaching and advising skills are very important for Plan A. Now study Plan A.

---

[5] Antibiotics are not effective in treating most *diarrhoea*. They rarely help and make some children sicker. Unnecessary use of antibiotics may increase the resistance of some pathogens. In addition, antibiotics are costly. Money is often wasted on ineffective treatment. Therefore, do not give antibiotics routinely. Only give antibiotics in *diarrhoea* cases with **SEVERE DEHYDRATION** with cholera in the area and **DYSENTERY**.
Never give anti-diarrhoeal drugs and antiemetics to children and infants. They rarely help in treating *diarrhoea*, and some are dangerous. The dangerous drugs include antimotility drugs (such as codeine, diphenoxylate, loperamide) or drugs to treat vomiting (such as chlorpromazine). Some of these harmful drugs can cause paralysis of the gut or they can make the child abnormally sleepy. Some can be fatal, especially if used in infants. Other anti-diarrhoeal drugs, though not dangerous, are not effective *diarrhoea* treatments. These include adsorbents such as kaolin, attapulgite, smectite and activated charcoal. Using anti-diarrhoeal drugs may cause delay in ORT treatment.



PLAN 'A': TREAT DIARRHOEA AT HOME

Counsel the mother on the 4 Rules of Home Treatment:

1. **Give Extra Fluid**
2. **Give Zinc Supplements (age 2 months up to 5 years)**
3. **Continue Feeding**
4. **When to Return**

1. GIVE EXTRA FLUID (as much as the child will take)

- **TELL THE MOTHER**
  - Breastfeed frequently and for longer at each feed
  - If the child is exclusively breastfed, give ORS or clean water in addition to breast milk
  - If the child is not exclusively breastfed, give one or more of the following: ORS solution, food-based fluids (such as rice water, chira pani, yougurt drink) or clean water
- **It is especially important to give ORS at home when**
  - *the child has been treated with Plan B or Plan C during this visit*
  - *the child cannot return to a clinic if the diarrhoea gets worse*
- **TEACH THE MOTHER HOW TO MIX AND GIVE ORS. GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME**
- **SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:**

AGE	Amount of fluid
Up to 2 years	50 to 100 ml after each loose stool
2 years or more	100 to 200 ml after each loose stool

Tell the mother to:

- Give frequent small sips from a cup
- If the child vomits, wait 10 minutes. Then continue, but more slowly
- Continue giving extra fluid until the diarrhoea stops

2. GIVE ZINC (age 2 months up to 5 years)

- For Severe Diarrhaoea, Persistent Diarrhoea and Dysentry, give Zinc Supplementation
- **TELL THE MOTHER HOW MUCH ZINC TO GIVE**

AGE	ZINC Tablet	DURATION
	20 mg	
2 months up to 6 months (Persistent Diarrhoea)	1/2	10 days
6 months up to 5 years	1	10 days

- **SHOW THE MOTHER HOW TO GIVE ZINC SUPPLEMENTS**
  - **Infants**-dissolve tablet in a small amount of expressed breast milk, ORS or clean water in a cup
  - **Older children**—tablets can be chewed or dissolved in a small amount of clean water in a cup

3. CONTINUE FEEDING (exclusive breastfeeding if age less than 6 months)

4. WHEN TO RETURN

The First Rule of Home Treatment for Diarrhoea

The first rule of home treatment is Give Extra Fluid

- Tell the mother:

Give as much fluid as the child will take. The purpose of giving extra fluid is to replace the fluid lost in *diarrhoea* and thus to prevent dehydration. The critical action is to give more fluid than usual, as soon as the *diarrhoea* starts.

Tell the mother to breastfeed frequently and for longer at each feed. Also explain that she should give other fluids. ORS solution is one of several fluids recommended for home use to prevent dehydration.

If the child is exclusively breastfed, it is important for this child to be breastfed more frequently than usual. Also give ORS solution or clean water. Breastfed children under 6 months should first be offered a breastfeed then given ORS.

If a child is not exclusively breastfed, give one or more of the following:

- ORS solution
- Food-based fluids
- Clean water

In most cases a child who is not dehydrated does not really need ORS solution. Give him extra food-based fluids such as, rice water, chira pani and yoghurt drinks, and clean water (preferably given along with food). In your country, the national programme for control of *diarrhoea*l diseases may have specified several food-based fluids to use at

home.

In plan A, two conditions are mentioned when the mother should give ORS at home:

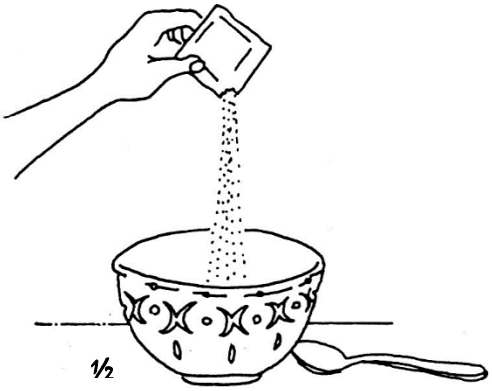
- The child has been treated with plan B and C during this visit. That is this child is rehydrated now. In this child's case, drinking ORS will prevent further dehydration
- If *diarrhoea* has **worse**ned and the child cannot return to the health centre. For example, the family lives very far or the mother has a job from where she cannot take a leave now

➢ Teach the mother how to mix and give ORS. Give the mother 2 packets of ORS to use at home

When you give the mother ORS, show her how to mix the ORS solution and give it to her child. Ask the mother to practice doing it herself while you observe her.

The steps for making ORS solution are:

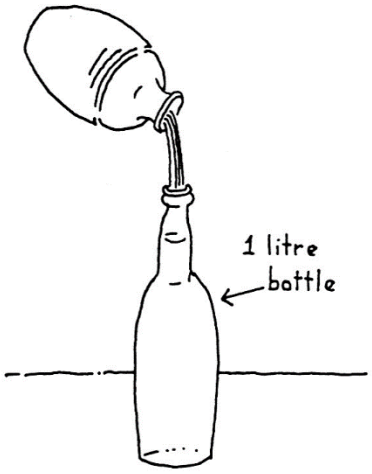
- Wash your hands with soap and water



- Pour all the powder from one packet into a clean container
Use any available container,
such as a jar, bowl or bottle

- Measure half a litre of clean water (or correct amount for packet used). It is best to boil and cool the water, but if this is not possible, use the cleanest drinking water available
- Pour the water into the container. Mix well until the powder is completely dissolved

- Taste the solution so you know how it tastes



- Explain to the mother that she should mix fresh ORS solution each day in a clean container, keep the container covered, and throw away any solution remaining from the day before.

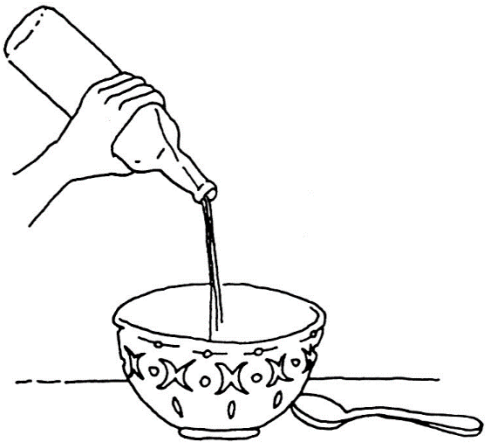
- Give the mother 2 packets of ORS to use at home. (Give 2 half a litre packets or the equivalent.)

➢ Show the mother how much fluid to give in addition to the usual fluid intake:

Explain to the mother that her child should drink the usual fluids that the child drinks each day and extra fluid. Show the mother how much extra fluid to give after each loose stool:

Up to 2 years	50 to 100 ml after each loose stool
2 years or more	100 to 200 ml after each loose stool

Explain to the mother that the *diarrhoea* should stop soon. ORS solution will not stop *diarrhoea*. The benefit of ORS solution is that it replaces the fluid and salts that the child loses in the *diarrhoea* and prevents the child from getting sicker.



Tell the mother to:

▪ Give frequent small sips from a cup or spoon. Use a spoon to give fluid to a young child

▪ If the child vomits, wait 10 minutes before giving more fluid. Then resume giving the fluid, but more slowly

▪ Continue giving extra fluid until the *diarrhoea* stops

Illustration #16 from Mother's Card: Mother giving fluid to her child

Use a Mother's Card and Check the Mother's Understanding

Some health care providers have Mother's Cards to give mothers to take home[6]. A Mother's Card helps the mother remember important information, including what kind of fluids and food to give her child.

Before the mother leaves, check her understanding of how to give extra fluid according to Plan A. Use questions such as:

"What kinds of fluid will you give?"
"How much fluid will you give your child?"
"How often will you give the ORS solution to your child?"
"Show me how much water you will use to mix ORS"
"How will you give ORS to your child?"
"What will you do if the child vomits?"

Ask the mother what difficulties she expects when she gives fluid to her child. For example, if she says that she does not have time, help her plan how to teach someone else to give the fluid. If she says that she does not have a half litre container for mixing ORS, show her how to measure half a litre using a smaller container. Or, show her how to measure half a litre in a larger container and mark it with an appropriate tool.

The Second Rule of Home Treatment for Diarrhoea

The second rule of home treatment is Give Zinc Supplements (age 2 months up to 5 years). Providing Zinc supplementation during the episode of *diarrhoea* reduces duration and severity of *diarrhoea*l episode and it also lowers the incidence of diarrhea in the following 4 – 6 months. Give Zinc tablet to each child with *diarrhoea*. Show mother how to give a zinc tablet to the child. Infants aged 2 months to 6 months who has **PERSISTENT DIARRHOEA** should receive half tablet (10 mg) for 10 days. Dissolve tablet in a small amount of expressed breast milk, ORS or clean water in a cup and give the child once daily.

[6] The use of the Mother's Card will be more fully taught in the module *Counsel the Mother*.

Older infants can chew the tablet or the whole tablet (20 mg) may be dissolved in a small amount of water.

The Third and Fourth Rules of Home Treatment for Diarrhoea

The third rule of home treatment is Continue Feeding.
In the module, *Counsel the Mother*, you will learn to counsel on feeding. If a child is classified with **PERSISTENT DIARRHOEA**, you will teach the mother some special feeding recommendations.

The fourth rule of home treatment is When to Return.

You have learned the signs when a mother should return immediately to a health provider. Tell the mother of any sick child that the signs to return are:

- Not able to drink or breastfeed
- Becomes sicker
- Develops a *fever*

If the child has *diarrhoea*, also tell the mother to return if the child has:

- Blood in stool
- Drinking poorly

"Drinking poorly" includes "not able to drink or breastfeed." These signs are listed separately, but it may be easier to combine them. You could simply tell the mother to return if the child is "drinking or breastfeeding poorly."

EXERCISE G

1. Kashim is a 3-month-old boy who has *diarrhoea*. He has no general danger signs. He was classified with **NO DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. He is exclusively breastfed. What should the health care provider tell his mother about giving him extra fluids?

2. For which children with **NO DEHYDRATION** is it especially important to give ORS at home?

3. The following children came to the clinic because of *diarrhoea*. They were assessed and found to have no general danger signs. They were classified with **NO DEHYDRATION, NO ACUTE MALNUTRITION** and **NO ANAEMIA**. Write the amount of extra fluid that the mother should give after each stool.

	Name	Age	Amount of extra fluid to give after each loose stool
a)	Rina	6 months	
b)	Munna	2 years	
c)	Meena	15 months	
d)	Lotifa	4 years	

4. A 4-year-old boy has *diarrhoea*. He has no general danger signs. He was classified with **NO DEHYDRATION, NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The health care provider has taught his mother Plan A and given her 2 packets of ORS to use at home and some zinc tablets.
Tick all the fluids that the mother should encourage her son to drink as long as the *diarrhoea* continues.

____ a. Tea that the child usually drinks with meals
____ b. Fruit juice that the child usually drinks each day
____ c. Water from the water jug. The child can get water from the jug whenever he is thirsty
____ d. ORS after each loose stool
____ e. Chira pani drink when the mother makes some for the family

_____ f. He should take zinc supplement for 10 days

5. At your clinic, what are the recommended fluids for children with *diarrhoea* with **NO DEHYDRATION**?

Is ORS solution a recommended fluid for all children on Plan A?

If not, which children receive ORS on Plan A?

6. In Plan A what are the recommended doses for Zinc supplementation?

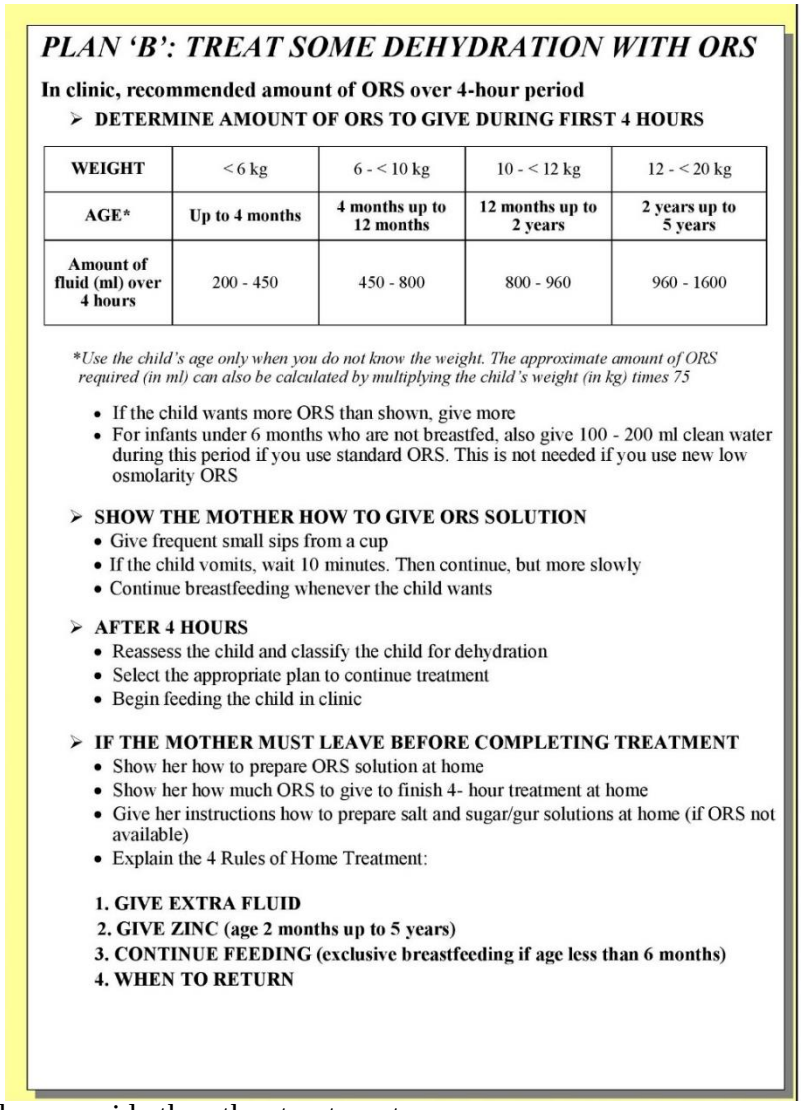
When you have finished this exercise, discuss your answers with a facilitator

6.2 Plan B: Treat SOME DEHYDRATION with ORS

This section describes Plan B, treatment of a child who has *diarrhoea* with **SOME DEHYDRATION**. Plan B includes an initial treatment period of 4 hours in the clinic. During the 4 hours, the mother slowly gives a recommended amount of ORS solution. The mother gives it by spoonful or sips. It is helpful to have an ORT corner in your clinic. Refer to Annex B if you need to set up an ORT corner.

A child who has a severe classification and **SOME DEHYDRATION** needs urgent **referral** to hospital[7]. Do not try to rehydrate the child before leaving the health centre. Quickly give the mother some ORS solution. Show her how to give frequent sips of it to the child on the way to the hospital.

Otherwise, if a child who has **SOME DEHYDRATION** needs treatment for other problems, you should start treating the dehydration first. Then provide the other treatments.



PLAN 'B': TREAT SOME DEHYDRATION WITH ORS

In clinic, recommended amount of ORS over 4-hour period

➢ **DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS**

WEIGHT	< 6 kg	6 - < 10 kg	10 - < 12 kg	12 - < 20 kg
AGE*	**Up to 4 months**	**4 months up to 12 months**	**12 months up to 2 years**	**2 years up to 5 years**
Amount of fluid (ml) over 4 hours	200 - 450	450 - 800	800 - 960	960 - 1600

**Use the child's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the child's weight (in kg) times 75*

- If the child wants more ORS than shown, give more
- For infants under 6 months who are not breastfed, also give 100 - 200 ml clean water during this period if you use standard ORS. This is not needed if you use new low osmolarity ORS

➢ **SHOW THE MOTHER HOW TO GIVE ORS SOLUTION**
- Give frequent small sips from a cup
- If the child vomits, wait 10 minutes. Then continue, but more slowly
- Continue breastfeeding whenever the child wants

➢ **AFTER 4 HOURS**
- Reassess the child and classify the child for dehydration
- Select the appropriate plan to continue treatment
- Begin feeding the child in clinic

➢ **IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT**
- Show her how to prepare ORS solution at home
- Show her how much ORS to give to finish 4- hour treatment at home
- Give her instructions how to prepare salt and sugar/gur solutions at home (if ORS not available)
- Explain the 4 Rules of Home Treatment:

1. GIVE EXTRA FLUID
2. GIVE ZINC (age 2 months up to 5 years)
3. CONTINUE FEEDING (exclusive breastfeeding if age less than 6 months)
4. WHEN TO RETURN

After 4 hours, reassess and classify the child for dehydration using the *ASSESS AND CLASSIFY* chart. If the signs of dehydration are gone, the child is put on Plan A. If there is still **SOME DEHYDRATION**, the child repeats Plan B. If the child now has **SEVERE DEHYDRATION**, the child should be put on Plan C.

Now study Plan B.

➢ Determine Amount of ORS to Give During First 4 Hours:

Use the chart in Plan B to determine how much ORS to give. A range of amounts is given. Look below the child's weight (or age if the weight is not known) to find the recommended amount of ORS to give. For example, a 5-kg-child will usually need 200-

[7] The exception is a child with the severe classification, **SEVERE PERSISTENT DIARRHOEA**. This child should be rehydrated then referred.

450 ml of ORS solution in the first 4 hours. The amounts shown in the box are to be used as guides. The age or weight of the child, the degree of dehydration and the number of stools passed during rehydration will all affect the amount of ORS solution needed. The child will usually want to drink as much as he needs. If the child wants more than the estimated amount, give him what he wants.

Another way to estimate the amount of ORS solution needed (in ml) is described below the box. Multiply the child's weight (in kilograms) by 75. For example, a child weighing 8 kg would need:

8 kg × 75 ml = 600 ml of ORS solution in 4 hours

Notice that this amount fits in the range given in the box. The box will save you this calculation.

Giving ORS solution should not interfere with a breastfed baby's normal feeding. The mother should pause to let the baby breastfeed whenever the baby wants to, then resume the ORS solution. For infants under 6 months who are not breastfed, the mother should give 100-200 ml clean water during the first 4 hours in addition to the ORS solution. Breastmilk and water will help prevent hypernatraemia[8] in infants.

- Show the Mother How to Give ORS Solution

Find a comfortable place in the clinic for the mother to sit with her child. Tell her how much ORS solution to give over the next 4 hours. Show her the amount in units that are used in your area. If the child is less than 2 years, show her how to give a spoonful frequently. If the child is older, show her how to give frequent sips from a cup. Sit with her while she gives the child the first few sips from a cup or spoon. Ask her if she has any questions.

If the child vomits, the mother should wait about 10 minutes before giving more ORS solution. She should then give it more slowly. Encourage the mother to pause to breastfeed whenever the child wants to. When the child finishes breastfeeding, resume giving the ORS solution again. The mother should not give the child food during the first 4 hours of treatment with ORS.

Show the mother where she can change the child's nappy or where the child can use a toilet or potty. Show her where to wash her hands and the child's hands afterward.

[8] If a child has hypernatraemia, a child has excessive sodium in his blood.

Check with the mother from time to time to see if she has problems. If the child is not drinking the ORS solution well, try another method of giving the solution. You may try using a dropper or a syringe without the needle. While the mother gives ORS solution at the clinic during the 4 hours, there is plenty of time to teach her how to care for her child. However, the first concern is to rehydrate the child. When the child is obviously improving, the mother can turn her attention to learning. Teach her about mixing and giving ORS solution and about Plan A. It is a good idea to have printed information that the mother can study while she is sitting with her child. The information can also be reinforced by posters on the wall.

- After 4 Hours:

  After 4 hours of treatment on Plan B, reassess the child using the *ASSESS AND CLASSIFY* chart. Classify the dehydration. Choose the appropriate plan to continue treatment.

Note: Reassess the child before 4 hours if the child is not taking the ORS solution or seems to be getting **worse**.

If the child has improved and has **NO DEHYDRATION**, choose Plan A. Teach the mother Plan A if you have not already taught her during the past 4 hours. Before the mother leaves the clinic, ask good checking questions. Help the mother solve any problems she may have given the child extra fluid at home.

Note: If the child's eyes are puffy, it is a sign of overhydration. It is not a danger sign or a sign of hypernatraemia. It is simply a sign that the child has been rehydrated and does not need any more ORS solution at this time. The child should be given clean water or breastmilk. The mother should give ORS solution according to Plan A when the puffiness is gone. If the child still has **SOME DEHYDRATION**, choose Plan B again. Begin feeding the child in the clinic. Offer food, milk or juice. After feeding the child, repeat the 4-hour Plan B treatment. Offer food, milk and juice every 3 or 4 hours. Breastfed children should continue to breastfeed frequently. If the clinic is closing before you finish the treatment, tell the mother to continue treatment at home. If the child is **worse** and now has **SEVERE DEHYDRATION**, you will need to begin Plan C (discussed later in this module).

- If the Mother Must Leave Before Completing Treatment:

  Sometimes a mother must leave the clinic while her child is still on Plan B, that is, before the child is rehydrated. In such situations, you will need to:

  - Show the mother how to prepare ORS solution at home. Have her practice this before she leaves
  - Show her how much ORS solution to give to complete the 4-hour treatment at home
  - Give her enough packets to complete rehydration. Also give her 2 more packets as

recommended in Plan A

- Explain the 4 Rules of Home Treatment:

1. Give Extra Fluid

   Explain what extra fluids to give. Since the child is being treated with Plan B during this visit, the mother should give ORS at home. Explain how much ORS solution to give after each loose stool.

2. Give Zinc Supplements

   Explain why Zinc supplementation is given.

3. Continue Feeding

   Instruct her on how to continue feeding during and after *diarrhoea*. This is discussed in the module *Counsel the Mother*.

4. When to Return

   Teach her the signs to bring a child back immediately. These signs are on the *COUNSEL* chart and the Mother's Card.

EXERCISE H

1. The following children came to the clinic because of *diarrhoea*. They were assessed and found to have **SOME DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. Write the range of amounts of ORS solution each child is likely to need in the first 4 hours of treatment:

	Name	Age or Weight	Range of Amounts of ORS Solution
a)	Jalil	3 years	
b)	Gitta	10 kg	
c)	Rozi	7.5 kg	
d)	Belal	11 months	

2. Jhuma is 5 months old and has *diarrhoea*. She is classified with **SOME DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. There is no scale for weighing Jhuma at the small clinic. Jhuma's mother died during childbirth, so Jhuma has been taking infant formula. Her grandmother has recently started giving cooked food as well.

a.Jhuma should be given _____ ml of _____ _____during the first _____ hours of treatment. She should also be given_____ ml of _____ during this period.

b. What should the grandmother do if Jhuma vomits during the treatment?

c. When should the health worker reassess Jhuma?

d. When Jhuma is reassessed, she has **NO DEHYDRATION**. What treatment plan should Jhuma be put on?

e. How many half-liter packets of ORS should the health worker give the grandmother?

f. To continue treatment at home, the grandmother should give Jhuma _____ ml of _____ after each _____

3. Yasmin is 9 months old and weighs 8 kg. Her mother brought her to the clinic with *diarrhoea*. The health worker assesses Yasmin as **SOME DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The health worker chooses Plan B. He asks if Yasmin still breastfeeds. Her mother says that she breastfeeds several times each day. She also eats 3 meals each day of rice along with vegetables, pulses and sometimes bits of meat.

a. Approximately how much ORS solution should Yasmin's mother give her during the first 4 hours?

b. During the first 4 hours of treatment, should Yasmin eat or drink anything in addition to the ORS solution? If so, what?

c. After 4 hours of treatment, the health worker reassesses Yasmin. She is still classified with **SOME DEHYDRATION**. What is the appropriate plan to continue her treatment?

d. Describe the treatment to give Yasmin now. (Hint: Your answer should include more than ORS solution.)

4. A mother and her child must leave the clinic before the child is fully rehydrated. What should the health worker do before the mother leaves? Complete the list below:

- Show her how to prepare ORS solution at home.

- Explain the 4 Rules of Home Treatment:
  1.
  2.
  3.
  4.

Ask the facilitator to review your answers when you have finished the exercise

Your facilitator will lead a drill to practice determining amounts of ORS to give children on Plan B

6.3 Plan C: Treat SEVERE DEHYDRATION Quickly

Severely dehydrated children need to have water and salts quickly replaced. Intravenous (IV) fluids are usually used for this purpose.

Rehydration therapy using IV fluids or using a nasogastric (NG) tube is recommended only for children who have **SEVERE DEHYDRATION**.

The treatment of the severely dehydrated child depends on:

- The type of equipment available at your clinic or at a nearby clinic or hospital
- The training you have received, and
- Whether the child can drink

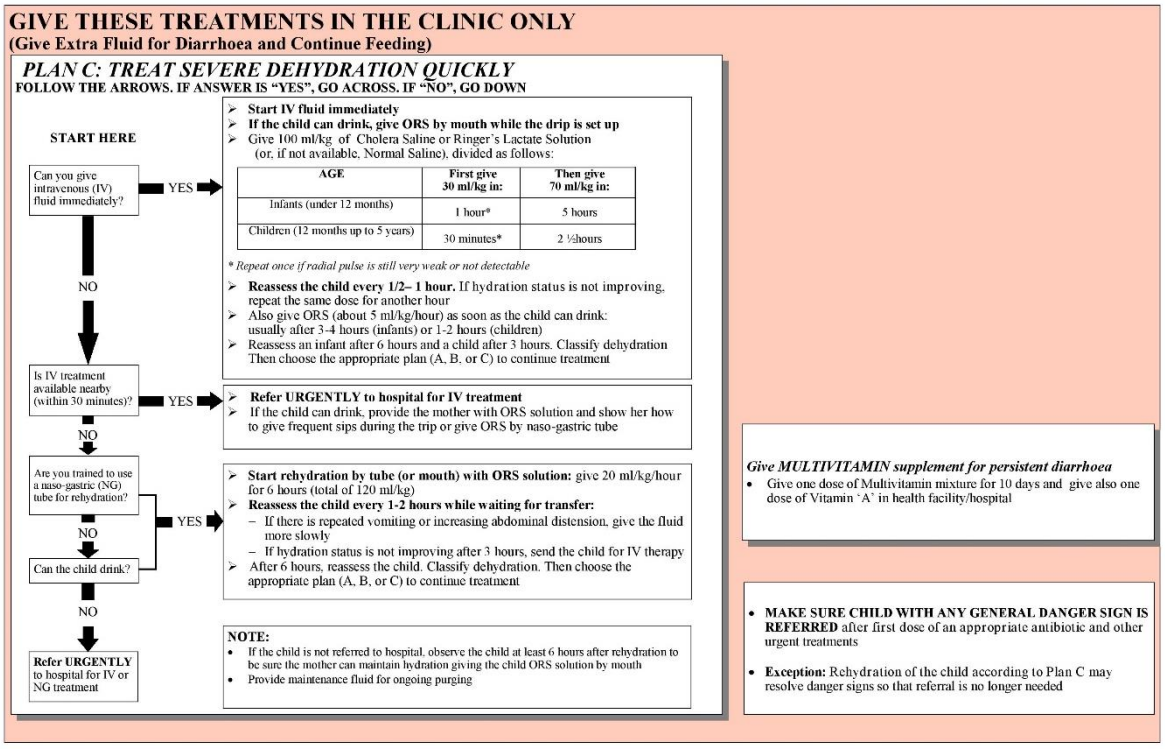
To learn how to treat a severely dehydrated child according to Plan C at your clinic, you will read and study an Annex that matches your situation.

1. Annex C-1 teaches you how to treat according to Plan C if:
   - Your clinic has IV equipment and acceptable fluids[9], and
   - You have been trained to give an IV fluid
2. Annex C-2 teaches you how to treat according to Plan C if:
   - You cannot give IV fluid at your clinic, and
   - IV treatment is available at another clinic or hospital that can be reached within 30 minutes
3. Annex C-3 teaches you how to treat according to Plan C if:
   - You cannot give IV fluid at your clinic
   - There is no clinic or hospital offering IV treatment nearby
   - Your clinic has nasogastric equipment, and
   - You are trained to use a nasogastric (NG) tube
4. Annex C-4 teaches you how to treat according to Plan C if:
   - You cannot give IV fluid at your clinic
   - There is no clinic or hospital offering IV treatment nearby
   - You cannot give NG therapy, and
   - The child can drink

[9] See Annex D for acceptable IV fluids.

If you cannot give IV or NG fluid and the child cannot drink, refer the child urgently to the nearest clinic or hospital which can give IV or NG treatment.

To determine how you will treat a child who needs Plan C treatment, refer to the flowchart below. Read the questions in order from top to bottom and answer for the situation at your clinic. Note the first time you answer YES. Turn to the appropriate C Annex (as indicated on the flowchart) and continue reading.



6.4 Treat PERSISTENT DIARRHOEA

The treatment for **PERSISTENT DIARRHOEA** requires special feeding and giving the child a vitamin A and multivitamin/mineral supplement. You should advise the mother on feeding her child who is suffering from **PERSISTENT DIARRHOEA**. There are recommendations on feeding children suffering from this disease in the *COUNSEL THE MOTHER* chart. Detailed elaboration is in the *COUNSEL THE MOTHER* module. Give a Vitamin A, MMN (Zinc). Refer to the box "GIVE MMN" on the TREAT THE CHILD CHART. Follow up after 5 days.

6.5 Treat DYSENTERY

Give an oral antibiotic recommended for Shigella in your area to treat **DYSENTERY**. Tell the mother to return in 3 days for follow-up care to be sure the child is improving.

The box "Give an Appropriate Oral Antibiotic" on the *TREAT THE CHILD* chart tells the recommended antibiotics. How to give the antibiotic is described in this module in section 1.0 - Teach the Mother to Give Oral Drugs at Home.

7.0 IMMUNIZE EVERY SICK CHILD, AS NEEDED

It is assumed in this module that you are already trained in immunization. You will find detailed description of how to give the vaccine in the WHO EPI schedule. This training module on immunization helps those healthcare providers who give the vaccine. If you immunize children with the appropriate vaccine at the appropriate time, you prevent **MEASLES**, polio, diphtheria, pertussis, tetanus, Hepatitis B, Hemophillus influenzae type b and tuberculosis. Check the immunization status of every child you treat at your clinic. Immunize, as needed. Review the following points about preparing and giving immunizations:

- If a child is well enough to go home, give him any immunizations he needs before he leaves the clinic
- Use a sterile needle and a sterile syringe for each injection. This prevents transmission of HIV and the Hepatitis B virus
- If only one child at the clinic needs an immunization, open a vial of the vaccine and give him the needed immunization
- Discard opened vials of BCG and **MEASLES** vaccines at the end of each immunization session. You may keep opened vials of OPV and PENTAVALENT vaccines if:
  - They are fitted with rubber stoppers
  - The expiry date has not been passed, and
  - The vaccines are clearly labeled and stored under proper cold chain conditions
- The OPV and PENTAVALENT vials may be used in later immunization sessions until the vial is empty
- Do not give OPV 0 to an infant who is more than 14 days old
- Record all immunizations on the child's immunization card. Record the date you give each dose. Also keep a record of the child's immunizations in the immunization register or the child's chart, depending on what you use at your clinic
- If a child has *diarrhoea* and needs OPV, give it to the child. Do ***not*** record the dose on the immunization record. Tell the mother to return in 4 weeks for an extra dose of OPV. When the child returns for the repeat dose, consider it to be the one that was due at the time of the *diarrhoea*. Record the date when the repeat dose is given on the immunization card and in your clinic's immunization register.

Tell the mother which immunizations her child will receive today. Tell her about the possible side effects. Below is a brief description of the side effects of each vaccine.

- BCG: A small red tender swelling then an ulcer appears at the place of the immunization after about 2 weeks. The ulcer heals by itself and leaves a small scar. Tell the mother a small ulcer will occur and to leave the ulcer uncovered. If necessary, cover it with a dry dressing only.
- OPV: No side effects
- PENTAVALENT: *Fever*, irritability and soreness are possible side effects of PENTAVALENT. They are usually not serious and need no special treatment. *Fever* means the treatment is working. Tell the mother that if the child feels very hot or is in pain, she should give Paracetamol. She should not wrap the child up in more clothes than usual.
- **MEASLES**: *Fever* and a mild **MEASLES** rash are possible side effects of the **MEASLES** vaccine. A week after you give the vaccine, a child may have a *fever* for 1-3 days (*Fever* means the treatment is working.)Tell the mother to give Paracetamol if the *fever* is high (>101.5^{0}F).

EXERCISE I

In this exercise, you will review checking the immunization status of several children. Answer the questions in the space provided.

1. Lata is 6 months old. She is brought to the clinic by her grandmother. The health worker classifies her with **PNEUMONIA**, **MALARIA**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. Her immunization card shows that it is time to give Lata a dose of PENTAVALENT 1, PCV 1 and OPV 1. Should Lata be given the immunizations today?

2. Health care provider Rashida works at a busy clinic near a squatter's settlement. Food is scarce at the settlement. Many of the children brought to the clinic are classified with **MODERATE ACUTE MALNUTRITION** and **ANAEMIA**. Should Rashida immunize children with **MODERATE ACUTE MALNUTRITION** and **ANAEMIA**?

3. A 15-day-old infant is brought to the clinic. Health worker Azad finds that the infant did not receive OPV 0 at birth. Should Azad give the infant OPV 0 today?

4. A mother brings her 5-month-old daughter, Rozi, to the clinic because she has *diarrhoea* with blood in the stool. The health worker classifies Rozi with **NO DEHYDRATION**, **DYSENTERY**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. Rozi's immunization card shows she had OPV 2 and PENTAVALENT 2 five weeks ago.

   a. Should the health worker give Rozi OPV 3 and PENTAVALENT 3 today?

   The mother says that she does not want Rozi to be immunized again. She tells the health worker that Rozi had a *fever* and was irritable after the last time.

   b. What should the health worker tell the mother about the possible side effects of OPV and PENTAVALENT vaccines?

   The mother agrees to let Rozi be immunized. The health worker gives Rozi the immunizations.

   c. How should the health worker record the immunizations?

4. Health worker Sultana wants to immunize a 1-year-old child for **MEASLES**. The child has been classified with **PNEUMONIA**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The child's mother does not want her child to be immunized. She says that she will return for immunization when the child is better. Describe what you would say to a child's mother to try to convince her to have her child immunized for **MEASLES** today.

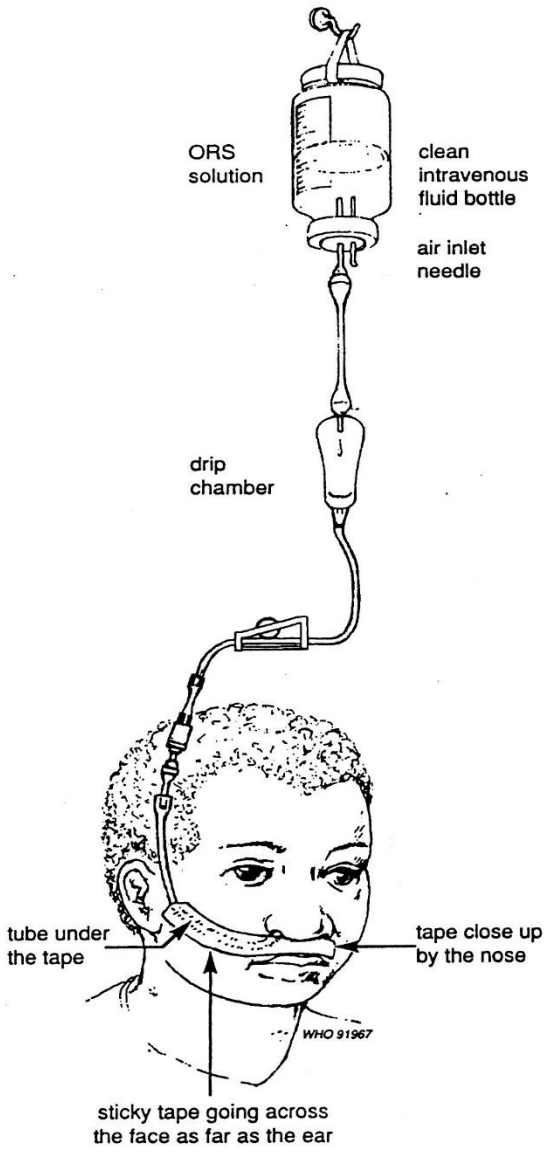
When you finish this exercise, discuss your answers with a facilitator

ANNEXES

Annex A: Nasogastric Rehydration

1. Use a clean rubber or plastic nasogastric (NG) tube. Use a tube that is 4.0mL - 6.9 mL for a grown-up or 2.0mm - 2.7mm in diameter for a child
2. Place the patient on his or her back, with the head slightly raised. Older children and adults may prefer to sit up
3. Measure the length of the tube to be swallowed by placing the tip just above the navel. Then stretch the tube over the back of the ear and forward to the tip of the nose. Mark the tube with a piece of tape where it touches the end of the nose. This mark shows the length of tube needed to reach from the tip of the nose to the stomach
4. Moisten the tube with a water-soluble lubricant or plain water; do not use oil
5. Pass the tube through the nostril with the largest opening. Gently advance it until the tip is in the back of the throat. Each time the patient swallows, advance the tube another 3-5cm. If the patient is awake, ask him or her to drink a little water
6. If the patient chokes, coughs repeatedly or has trouble breathing, the tube has probably passed into the trachea. Pull it back 2cm - 4cm until the coughing stops and the patient is comfortable. Wait a minute, and then try to insert the tube again
7. Advance the tube each time the patient swallows until the tape marker reaches the nose. If the patient is comfortable and not coughing, the tube should be in the stomach
8. Look into the patient's mouth to be certain that the tube is not coiled in the back of the throat. Confirm that the tube is in the stomach by attaching a syringe and withdrawing a little stomach fluid. You could also do this by placing a stethoscope just above the navel. Inject air into the tube with an empty syringe. Listen for the air entering the stomach
9. Fasten the tube to the face with tape and attach an IV tube that is connected to a clean IV bottle containing ORS solution. Regulate the infusion to a rate of 20 ml/kg per hour, or less
10. If an IV bottle is not available, a syringe (with the barrel removed) can be attached to the tube and used as a funnel. Hold the syringe above the patient's head and pour ORS solution into it at regular intervals

TECHNIQUE FOR NASOGASTRIC REHYDRATION



Source: King, M.et al. *Primary child care: a manual for health workers.* Book One. Oxford University Press, 1978

Annex B: ORT Corner

An ORT corner is an area in a health facility available for oral rehydration therapy (ORT). This area is needed because mothers and their children who need an ORS solution will have to stay at the clinic for several hours. When there are no *diarrhoea* patients using the ORT corner, the area can be used for treating other problems. Then space is not wasted. When there are dehydrated patients, this conveniently located and adequately equipped ORT corner will help the staff to manage the patients easily.

The ORT corner should be:

- Located in an area where staff frequently pass by but not in a passageway. The staff can observe the child's progress and encourage the mother.
- Near a water source
- Near a toilet and washing facilities
- Pleasant and well-ventilated

The ORT corner should have the following furniture.

- Table for mixing ORS solution and holding supplies
- Shelves to hold supplies
- Bench or chairs with a back where the mother can sit comfortably while holding the child
- A small table where the mother can conveniently rest the cup of ORS solution

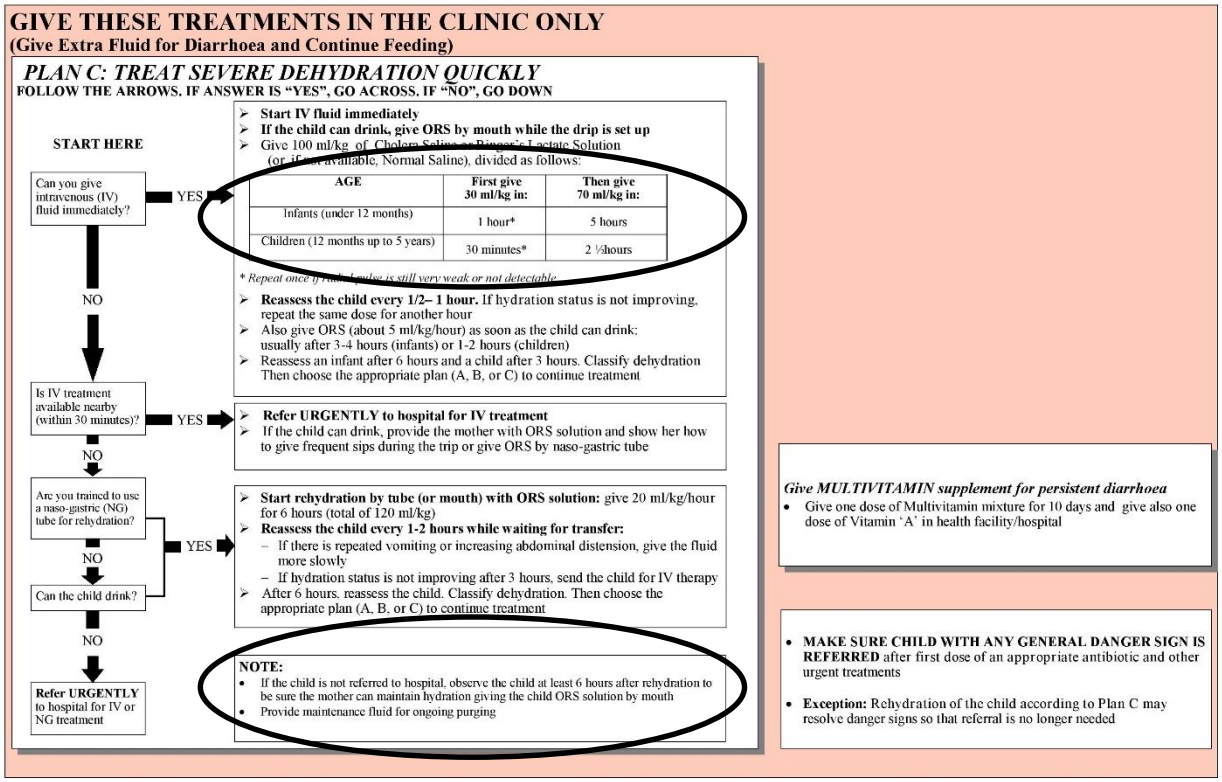
The ORT corner should have the following supplies. These supplies are for a clinic that receives 25-30 *diarrhoea* cases in a week.

- ORS packets (a supply of at least 300 packets per month)
- 6 bottles that will hold the correct amount of water for mixing the ORS packet including some containers like those that mother will have at home
- 6 cups
- 6 spoons
- 2 droppers (may be easier to use than spoons for small infants)
- cards or pamphlets (such as a Child's Card) that remind mothers how to care for a child with *diarrhoea*. A card is given to each mother to take home.
- Soap (for hand washing)
- Wastebasket
- Food available (so that children may be offered food or eat at regular meal times)

The ORT corner is a good place to display informative posters. Since mothers sit in the ORT corner for a long time, they will have a good opportunity to learn about health prevention from the posters. Mothers are interested in posters about the treatment and prevention of *diarrhoea* and dehydration. The posters should contain information about ORT, use of clean water, breastfeeding, weaning foods, hand washing, the use of latrines and when to take the child to the clinic. Other health messages should include information on immunizations. Posters alone are not adequate for informing mothers. Health workers should also counsel mothers in person, using a Mother's Card if there is one available.

Annex C-1: If You Can Give Intravenous (IV) Treatment

If you can give IV treatment and you have acceptable solutions such as Ringer's Lactate or Normal Saline at your clinic, give the solution intravenously to the severely dehydrated child.[10] The sections of Plan C below describe the steps to rehydrate a child intravenously. It includes the amounts of IV fluid that should be given according to the age and weight of the child. Study the sections carefully.



Some of the terms in this part of Plan C may be new to you. Read the following to understand how the terms are used in Plan C.

- The drip refers to the IV equipment and solution

  The "rate of the drip" refers to the number of drops per minute that the IV fluid is given

  "While the drip is set up" means during the time you are preparing the IV equipment, IV fluid and you are putting the IV needle into the child's vein

- Hydration status refers to whether the child is normally hydrated or dehydrated and the extent of dehydration. A child classified with **NO DEHYDRATION** has not lost enough fluid to show signs of dehydration. A child classified with **SOME DEHYDRATION** or **SEVERE DEHYDRATION** has less than a normal amount of fluid in the body.

  To assess a child's hydration status, refer to the signs on the *ASSESS & CLASSIFY* chart.

[10] This annex will not teach how to give intravenous treatment. Annex D includes a brief review of how to give IV fluids, solutions to use and the rate at which IV fluids should be given.

▪ The radial pulse refers to the pulse felt over the radial artery. The radial artery is the main blood vessel at the wrist on the side of the thumb.

Provide IV treatment for SEVERE DEHYDRATION

When you provide IV therapy for **SEVERE DEHYDRATION**, you give the child a large quantity of fluids quickly. The fluids replace the body's very large fluid loss.

Begin IV treatment quickly in the amount specified in Plan C. If the child can drink, give ORS by mouth until the drip is running. Then give the first portion of the IV fluid (30 ml/kg) very rapidly (within 60 minutes for infants, within 30 minutes for children). This will restore the blood volume and prevent death from shock. Then give 70 ml/kg more slowly to complete rehydration.

During the IV treatment, assess the child every 1 - 2 hours. Determine if the child is receiving an adequate amount of IV fluid.

EXAMPLE

The following example describes how to treat a child with **SEVERE DEHYDRATION** if you can give IV treatment.

A 6-month-old (9 kg) girl, Runu, was classified with **SEVERE DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. She was not able to drink but had no other disease classifications. IV treatment was available in the clinic. Therefore, the health worker decided to treat the infant with IV fluid according to Plan C.

The health worker gave Runu 270 ml (30 ml 9 kg) of Cholera saline by IV during the first hour. Over the following five hours, he gave her 630 ml of IV fluid (70 ml x 9 kg), approximately 125 ml per hour. The health worker assessed the infant's hydration status every 1-2 hours (that is, he assessed for dehydration). Her hydration status was improving, so the health worker continued giving Runu the fluid at a steady rate.

After 4 hours of IV treatment, Runu was able to drink. The health worker continued giving her IV fluid and began giving her approximately 45 ml of ORS solution to drink per hour.

After Runu had been on IV fluid for 6 hours, the health worker reassessed her dehydration. She had improved and was reclassified with **SOME DEHYDRATION**. The health worker chose Plan B to continue treatment. The health worker stopped the IV fluid. He began giving Runu ORS solution as indicated on Plan B.

Monitor amount of IV fluid and the child's hydration status

When rehydrating a child who has **SEVERE DEHYDRATION**, you have to monitor the amount of IV fluid that you give. You may use a form, similar to the following sample form.

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume (ml) Received
				

* For each new bottle/pack, initial or added

The form has 4 columns to record the amount of fluids given to a patient over a period of time.

1. Time: Record the times that you will check the IV fluid.

For an Infant: (under 12 months)	For a Child: (12 months up to 5 years)
* After the first hour	* After the first half-hour (30 minutes)
* After the first half-hour	* Every hour over the next 5 hours

2. Volume Set-up: As you start the IV fluid, record the amount of fluid in the bottle or pack. The amount should be listed on the container. Each time you replace the IV fluid with another container, be sure to record the amount on the appropriate line on the form at the time of replacement.

3. Estimated Volume Remaining: Check the IV fluid remaining in the container at the times listed. The remaining volume cannot be read precisely. Estimate it to the nearest 10 ml (for example - 220 ml, 230 ml, 240 ml, etc). Record the estimated amount on the form.

4. Volume Received: Calculate the amount of IV fluid received by the child at the times listed. To calculate, subtract the "Volume remaining" amount from the "Volume set-up" amount. The answer is the amount of IV fluid the child has received up to the time you are checking. Record that amount on the form.

It is helpful to mark the IV fluid container with a pen or tape to show the level that should be reached at a certain time. For example, mark the desired level to reach after the first 30 or 60 minutes, each hour, or at the end of 3 or 6 hours. This will help you adjust the rate of the drip correctly. Regulate the number of drops per minute to give the correct amount of fluid per hour.

The sample form below shows the amounts of IV fluid given to a 16-month-old (10 kg) the child who is classified with **SEVERE DEHYDRATION**. The health

worker followed Plan C. He gave the child 300 ml (30 ml ×10 kg) in the first 30 minutes. He gave 700 ml (70 ml × 10 kg) over the next 2.5 hours (about 300 ml per hour).

Sample Fluid Form

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume Received
12:00 pm	1000 ml			
12:30 pm	_____		700 ml	300 ml
1:30 pm	_____		400 ml	600 ml
2:30 pm	_____		100 ml	900 ml
3:00 pm	_____		0 ml	1000 ml
_____	_____		_____	_____
_____			_____	_____

* For each new bottle/pack, initial or added

Make sure the IV fluid is given correctly and in adequate amounts. To monitor whether the fluid rate is adequate, reassess the child's dehydration every 1-2 hours. If the signs of dehydration and the *diarrhoea* are worse or not improved, increase both the rate you give the fluid and the amount of fluid that you give. Also increase the fluid rate if the child is vomiting. If the signs are improving, continue giving IV fluid at the same rate. While giving IV fluid, remember to also give small sips of ORS solution to the child as soon as he can drink. Give the child approximately 5 ml of ORS solution per kilogram of body weight per hour.

Reassess Dehydration and Choose the Appropriate Treatment Plan

Assess the signs of dehydration in an infant after 6 hours and a child after 3 hours. Classify dehydration. Select the appropriate treatment plan (Plan A, B or C) to continue treatment.

After a child has been fully rehydrated and is classified with **NO DEHYDRATION**, keep the child at the clinic for 6 more hours if possible. During this time, the mother should give extra fluid according to Plan A. Watch to be sure that the mother can give enough fluid to fully replace all fluid lost while the *diarrhoea* continues. The child should also be fed. Check the child periodically to make sure that signs of dehydration do not return.

Your facilitator will lead a drill
to give you practice determining amounts of IV fluid for children on Plan C

EXERCISE: ANNEX C-1

1. Malek is 3 years old and weighs 15 kg. His mother told the health worker that his *diarrhoea* started yesterday. The health worker assessed Malek and found that he is not able to drink and a skin pinch goes back very slowly. Malek is classified with *diarrhoea* with **SEVERE DEHYDRATION** and **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The health worker can give IV treatment.

   a. How should the health worker treat Malek's dehydration?

   b. What amount of fluid should Malek be given?

   c. The health worker monitors the IV fluid each half hour to be sure it is given at the rate he calculated. He also assesses Malek's dehydration each hour. After about 2 hours, Malek is more alert and can drink. What should be done now?

   c. After Malek has completed 3 hours of IV treatment, what should the health worker do?

2. Abu is 2 years old, weighs 8 kg. He has *diarrhoea*. A health worker determines that Abu is lethargic but able to drink. His eyes are sunken, and a skin pinch goes back very slowly. The health worker classifies Abu with *diarrhoea* with **SEVERE DEHYDRATION**. He has a *fever* of 38.5°C and a runny nose. His risk of **MALARIA** is high. The health worker also classifies him with **VERY SEVERE FEBRILE DISEASE**. He has **ANAEMIA** and **MODERATE ACUTE MALNUTRITION**

The health worker can give IV fluid for Plan C. Should Abu be **URGENTLY referred** to a hospital? Why or why not?

3. Helal is 8 months old and weighs 6 kg. He is no longer breastfed. His mother brings him to a clinic because he has had *diarrhoea* for a week. The mother tells the health worker that there has been no blood in Helal's stools. The health worker sees that Helal's eyes are sunken. When encouraged, Helal is able to take a sip of water, but drinks poorly. A skin pinch goes back very slowly. The health worker, who can give IV treatment, finds Helal has *diarrhoea* with **SEVERE DEHYDRATION** and **NO ACUTE MALNUTRITION** and **NO ANAEMIA**.

   a. How much IV fluid should be given to Helal in the first hour? How much over the next 5 hours?

   b. Should the health worker give Helal ORS solution? If so, how much?

c. Helal started receiving IV treatment at 1:00 pm from a 1000 ml bottle of IV fluid. The health worker checked Helal every hour. She recorded the amounts remaining in the bottle. See the fluid form. Calculate the amounts of IV fluid that Helal received and record them on the form.

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume Received
1:00 pm	1000 ml			
2:00 pm	_____		820 ml	_____
3:00 pm	_____		730 ml	_____
4:00 pm	_____		640 ml	_____
5:00 pm	_____		550 ml	_____
6:00 pm	_____		470 ml	_____
7:00 pm			400 ml	_____

* For each new bottle/pack, initial or added

d. At 7:00 pm, the health worker reassesses Helal for dehydration. He had slept some. He is now awake, alert and drinking well though he does not seem thirsty. His eyes are sunken. The health worker pinched his skin and the pinch goes back immediately. How should the health worker classify Helal's dehydration?

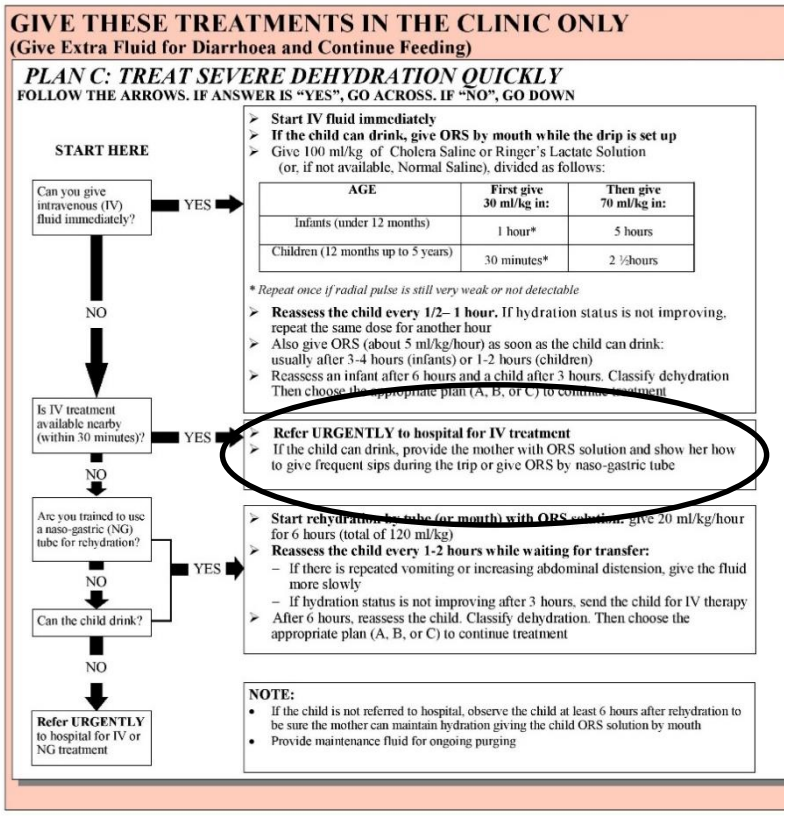
What plan should be followed to continue treating Helal?

Is Helal ready to go home? Why or why not?

Ask a facilitator to check your answers. Then turn back to section 6.4 - Treat **PERSISTENT DIARRHOEA** and continue reading

Your facilitator will lead a drill to practice determining amounts and rates of IV fluid to give children on Plan C

Annex C-2: If Iv Treatment is Available Nearby



You are not able to provide IV treatment at your clinic. However, IV treatment is available at a clinic or hospital nearby (within 30 minutes).
Read the Plan C section below that describes this situation.

- **Refer URGENTLY** to hospital for IV treatment
- If the child can drink, provide the mother with ORS solution and show her how to give frequent sips during the trip

Refer the severely dehydrated child immediately to the nearby facility. If the child can drink, show the mother how to give sips of ORS solution to the child. She should encourage her child to drink on the way to the facility.

EXERCISE: ANNEX C-2

1. Belal is 1 year old and weighs 10 kg. His mother brings him to a clinic because he has *diarrhoea*. The health worker determines that Belal has none of the general danger signs. She then finds that Belal is able to take small sips of ORS when encouraged, but is too tired and weak to drink well. Belal's eyes are sunken and a skin pinch goes back very slowly. The health worker finds Belal has **SEVERE DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The health worker decides that Belal needs Plan C. The clinic does not have IV equipment. There is a hospital 15 minutes away where IV treatment is available.

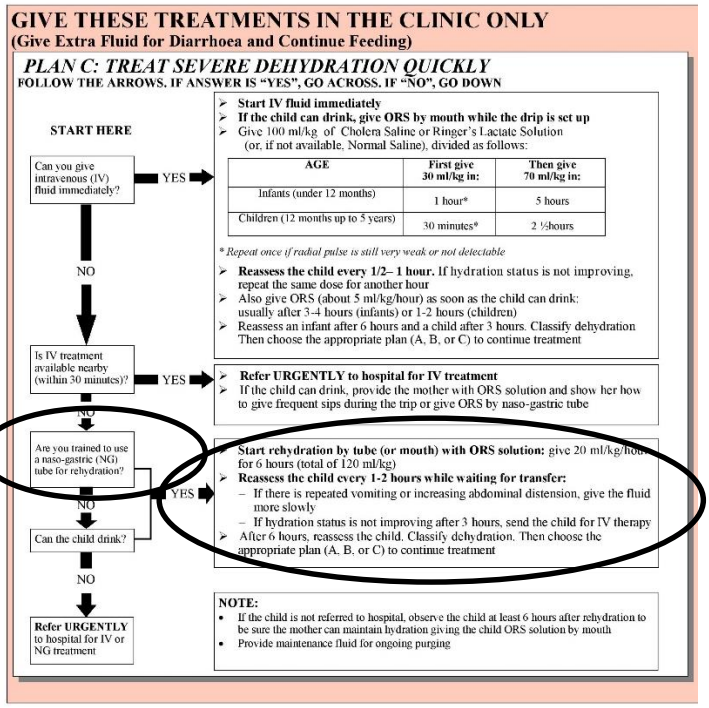
a. How should the health worker treat Belal?

b. What advice should the health worker give to his mother?

3. Kalam, a 9-month-old child, comes to the clinic with cough and *diarrhoea*. He is not able to drink. He is breathing 50 breaths per minute, but has no chest indrawing. His arterial oxygen saturation is 89%. Because of the general danger sign, he is classified with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**. His eyes are sunken and a skin pinch goes back very slowly. He is also classified with **SEVERE DEHYDRATION**. He has no other disease classifications and **NO ACUTE MALNUTRITION** AND **NO ANAEMIA**. IV treatment is not available. How should Kalam be treated?

Ask a facilitator to check your answers. Then turn back
to section 6.4 - Treat **PERSISTENT DIARRHOEA** and continue reading

Annex C-3: If You are Trained to Use a Nasogastric (Ng) Tube



You cannot give IV treatment at your clinic and there is no nearby clinic or hospital offering IV treatment. If you are trained to use an NG tube[11], rehydrate the child by giving ORS solution with an NG tube. Read the sections of Plan C below. They describe the steps to rehydrate a child by NG tube. [12]

Some of the terms in this part of Plan C may be new to you. The following explanations will help you understand them.

- Abdominal distension means the abdomen has increased in size. The skin is stretched
- Hydration status refers to whether the child is normally hydrated or dehydrated and the extent of dehydration. A child classified with **NO DEHYDRATION** has not lost enough fluid to show signs of dehydration. A child classified with **SOME DEHYDRATION** or **SEVERE DEHYDRATION** has less than a normal amount of fluid in the body. To assess a child's hydration status, refer to the signs on the *ASSESS & CLASSIFY* chart.

EXAMPLE

The following example describes how to treat a severely dehydrated child if you can give ORS solution by NG tube. A 4-year-old (10 kg) boy, Nuru, was brought to a clinic with *diarrhoea*. The clinic did not offer IV treatment and no clinic nearby had IV treatment. NG treatment was available. Nuru was not able to drink. He had no other signs of disease. He was classified with *diarrhoea* with **SEVERE DEHYDRATION, NO ACUTE MALNUTRITION** and **NO ANAEMIA**. Following Plan C, the health

[11] This annex will not teach you now to use an NG tube to give fluids. Annex A includes a brief review of nasogastric tube placement and rehydration for those who have previously been trained.

[12] According to Plan C, the same steps are followed to rehydrate a child by NG tube as by mouth.

worker decided to give ORS solution to Nuru by NG tube. The health worker gave him 200 ml (20 ml × 10 kg) over the next hour. The health worker checked Nuru every hour to make sure that he received 200 ml of ORS per hour. She also checked to make sure that the boy was not vomiting and that he did not have abdominal distension. After 6 hours, Nuru had received 1200 ml of ORS solution by NG tube. Monitor the amount of NG fluid and the child's hydration status. When rehydrating a child who has **SEVERE DEHYDRATION**, you have to monitor the amount of NG fluid that you give over the 6-hour period. You may use a form, similar to the following sample fluid form.

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume (ml) Received
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____
_____	_____		_____	_____

* For each new bottle/pack, initial or added

The form has 4 columns to record the amount of NG fluid given.

1. Time: Record the times that you will check the NG fluid. You will want to monitor the fluid every hour for 6 hours.
2. Volume set-up: When you begin to give NG fluids, record the amount of fluid in the container. Each time you replace the NG fluid container, record the amount on the appropriate line on the form at the time of replacement.
3. Estimated Volume Remaining: Check the IV fluid remaining in the container at the times listed. The remaining volume cannot be read precisely. Estimate it to the nearest 10 ml (for example - 220 ml, 230 ml, 240 ml, etc). Record the estimated amount on the form.
4. The volume received: Calculate the amount of NG fluid received by the child at the times listed. To calculate, subtract the "Volume remaining" amount from the "Volume set-up" amount. The answer is the amount of NG fluid the child has received up to the time you are checking. Record that amount on the form.

It is helpful to mark the container with a pen or tape to show the level that should be reached at a certain time. For example, mark the desired level to reach after the first 30 or 60 minutes, each hour, or at the end of 3 or 6 hours. This will help you adjust the rate of the drip correctly. Regulate the number of drops per minute to give the correct amount of fluid per hour.

EXAMPLE

The sample form below shows the amounts of NG fluid that Nuru received during the 6 hours he was treated at the clinic. The health worker gave him 200 ml of ORS solution by NG tube (that is, 20 ml ×10 kg) beginning at 11:00 am.

Sample Fluid Form

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume Received
11:00 am	1000 ml			
12:00 pm	---		800 ml	200 ml
1:00 pm	---		600 ml	400 ml
2:00 pm	---		400 ml	600 ml
3:00 pm	---		200 ml	800 ml
4:00 pm	1000 ml		0 ml	1000 ml
5:00 pm			800 ml	1200 ml

* For each new bottle/pack, initial or added

Reassess the child every 1-2 hours:

- If the child is vomiting repeatedly or has increased abdominal distension, give the NG fluid more slowly
- If the child's dehydration is not improving after 3 hours, **refer** the child for IV treatment
- If the child is improving, continue to give the NG fluid for a total of 6 hours

Reassess dehydration and choose the appropriate treatment plan

After 6 hours of NG fluid, reassess the child for dehydration. Classify dehydration. Select the appropriate treatment plan (Plan A, B or C) to continue treatment.

After a child has been fully rehydrated and is classified with **NO DEHYDRATION**, keep the child at the clinic for 6 more hours if possible. During this time, the mother should give extra fluid according to Plan A. Watch to be sure that the mother can give enough fluid to fully replace all fluid lost while the *diarrhoea* continues. The child should also be fed. Check the child periodically to make sure that signs of dehydration do not return.

EXERCISE: ANNEX C-3

1. Ripon, an 18-month-old (8 kg) boy, is brought to the clinic with *diarrhoea*. The health worker does a complete assessment of the boy. Ripon is alert and the health worker finds that he can drink, but very poorly. A skin pinch goes back very slowly. The health worker classifies the child with *diarrhoea* with **SEVERE DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. The child needs fluid for **SEVERE DEHYDRATION** given according to Plan C. The nearest hospital offering IV treatment is 2 hours away. The health worker is trained to give nasogastric therapy.

a. How should Ripon be rehydrated?

b. How much ORS solution should Ripon be given per hour?

c. After 1 hour, Ripon is vomiting repeatedly. What should the health worker do?

d. After 3 hours, Ripon's signs of dehydration have not improved. Now what should the health worker do?

2. Asha is 9 months old and weighs 7 kg. Her mother brings her to the clinic because she has had *diarrhoea* for a week.

The mother tells the health worker that Asha is no longer breastfed, and is too tired to drink from a cup. The health worker assesses Asha. He finds that she is lethargic, has sunken eyes, and a skin pinch goes back very slowly. The health worker classifies Asha with *diarrhoea* with **SEVERE DEHYDRATION**, **NO ACUTE MALNUTRITION** and **NO ANAEMIA**.

The health worker decides to rehydrate Asha by NG tube according to Plan C. At 9:00 am, the health worker sets up 1000 ml of the ORS solution.

a. How much NG fluid per hour should the health worker give Asha?

b. For how long should the health worker give Asha NG therapy?

e. Fill out the sample form below as if you were setting up the NG fluid for Asha.

Time (hr)	Volume (ml) Set-up*		Estimated Volume (ml) Remaining	Volume Received
				

* For each new bottle/pack, initial or added

d. At 10:00, the health worker checks the fluid pack. There are 860 ml of fluid remaining. Record it on the form and calculate the volume received.

e. Every 1-2 hours the health worker monitors Asha. What should the health worker look for?

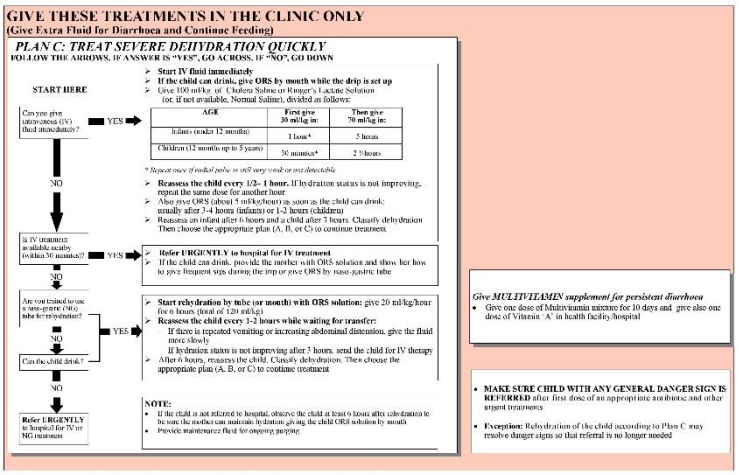
f. After 3 hours on NG fluid, Asha is improving. The health worker continues NG treatment. After 6 hours, the health worker reassesses Asha and finds her alert, her eyes are no longer sunken and a skin pinch goes back immediately. When given a cup of clean water, Asha drinks it. How should Asha be classified now?

g. What should the health worker do next?

3. Jalil, a 9-month-old child, comes to the clinic with cough and *diarrhoea*. He is not able to drink. He is breathing more than 50 breaths per minute but has no chest indrawing. His arterial oxygen saturation is 88%. Because of the general danger sign, he is classified with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE SEVERE**. His eyes are sunken and a skin pinch goes back very slowly. He is also classified with *diarrhoea* with **SEVERE DEHYDRATION**. He has no other disease classifications, and **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. How should Jalil be treated?

Ask a facilitator to check your answers. Then turn back to section 6.4 - Treat **PERSISTENT DIARRHOEA** and continue reading

Annex C-4: If You Can Only Give Plan C Treatment by Mouth


GIVE THESE TREATMENTS IN THE CLINIC ONLY
(Give Extra Fluid for Diarrhoea and Continue Feeding)

PLAN C: TREAT SEVERE DEHYDRATION QUICKLY
FOLLOW THE ARROWS. IF ANSWER IS "YES", GO ACROSS. IF "NO", GO DOWN

START HERE

Can you give intravenous (IV) fluid immediately? YES

- Start IV fluid immediately
- If the child can drink, give ORS by mouth while the drip is set up
- Give 100 ml/kg of Cholera Saline or Ringer's Lactate Solution (or, if not available, Normal Saline), divided as follows:

AGE	First give 30 ml/kg in:	Then give 70 ml/kg in:
Infants (under 12 months)	1 hour*	5 hours
Children (12 months up to 5 years)	30 minutes*	2 ½ hours

* Repeat once if radial pulse is still very weak or not detectable

- Reassess the child every 1/2– 1 hour. If hydration status is not improving, repeat the same dose for another hour
- Also give ORS (about 5 ml/kg/hour) as soon as the child can drink; usually after 3-4 hours (infants) or 1-2 hours (children)
- Reassess an infant after 6 hours and a child after 3 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment

NO

Is IV treatment available nearby (within 30 minutes)? YES

- Refer URGENTLY to hospital for IV treatment
- If the child can drink, provide the mother with ORS solution and show her how to give frequent sips during the trip or give ORS by naso-gastric tube

NO

Are you trained to use a naso-gastric (NG) tube for rehydration? YES

- Start rehydration by tube (or mouth) with ORS solution: give 20 ml/kg/hour for 6 hours (total of 120 ml/kg)
- Reassess the child every 1-2 hours while waiting for transfer:
  - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly
  - If hydration status is not improving after 3 hours, send the child for IV therapy
- After 6 hours, reassess the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment

NO

Can the child drink?

NO

Refer URGENTLY to hospital for IV or NG treatment

NOTE:
- If the child is not referred to hospital, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth
- Provide maintenance fluid for ongoing purging

Give MULTIVITAMIN supplement for persistent diarrhoea
- Give one dose of Multivitamin tablets for 10 days and give also one dose of Vitamin 'A' in health facility/hospital

- MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments
- Exception: Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed

You cannot give IV fluids at your clinic. There is no clinic or hospital nearby that can give IV treatment. You are not able to use an NG tube for rehydration. To learn how to give Plan C treatment by mouth, read the sections of Plan C below. Study the sections carefully.

- Start rehydration by tube (or mouth) with ORS solution: give 20 ml/kg/hour for 6 hours (total of 120 ml/kg)
- Reassess the child every 1-2 hours:
  - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly
  - If hydration status is not improving after 3 hours, send the child for IV therapy
- After 6 hours, reassess the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment

NOTE:

- If possible, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth

If a child with **SEVERE DEHYDRATION** comes to your clinic and you cannot give IV or NG treatment, find out if the child is able to drink.

- If he is able to drink, you can try to rehydrate the child orally
- If the child is not able to drink, you must **refer** him **URGENTLY** to the nearest clinic or hospital where IV or NG treatment is available. If this child does not receive fluids, he will die

Some of the terms in this part of Plan C may be new to you. The following will help you understand them.

- Abdominal distension means the abdomen has increased in size. The skin is stretched
- Hydration status refers to whether the child is normally hydrated or dehydrated and the extent of dehydration. A child classified with **NO DEHYDRATION** has not lost enough fluid to show signs of dehydration. A child classified with **SOME**

DEHYDRATION or **SEVERE DEHYDRATION** has less than a normal amount of fluid in the body. To assess a child's hydration status, refer to the signs on the *ASSESS & CLASSIFY* chart

Monitor the amount of ORS

If you will rehydrate the child orally, you will have to monitor the amount of ORS solution you give him. Give 20 ml per kilogram of body weight per hour for a 6-hour period. After 6 hours, you will have given the child a total of 120 ml of ORS solution per kilogram of the child's weight.

Reassess the child's hydration status every 1-2 hours.

If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly

If the child's hydration status is ***not*** improving after 3 hours, **refer** the child for IV treatment.

EXAMPLE

Gazipur Community Clinic does not give IV or NG therapy. The nearest hospital that can give IV or NG treatment is more than 2 hours away.

A 15-month-old (7 kg) girl, Lata, was brought to Gazipur Clinic by her mother. Lata appeared to be sleeping but was able to take small sips of a drink when aroused. The health worker found that she had sunken eyes. A skin pinch went back very slowly. She was classified with *diarrhoea* with **SEVERE DEHYDRATION**, **NO ACUTE MALNUTRITION,** and **NO ANAEMIA**.

The health worker decided to rehydrate Lata by mouth according to Plan C. Since Lata weighed 7 kg, the health worker calculated that she needed 140 ml of ORS solution per hour. The health worker showed Lata's mother how much ORS to give in one hour.

Each hour during the next 6 hours, the health worker checked Lata to make sure she was not vomiting and that her abdomen was not distended. The health worker also checked her hydration status. As Lata began to improve, the health worker encouraged the mother to continue rehydrating Lata.

Reassess dehydration and choose the appropriate treatment plan

After 6 hours of taking ORS solution by mouth, reassess the child for dehydration. Classify dehydration. Select the appropriate treatment plan (Plan A, B or C), and continue treatment.

After the child is rehydrated and classified with **NO DEHYDRATION**, keep the child at the clinic for 6 more hours if possible. During this time, encourage the mother to give extra fluid according to Plan A. Watch to be sure that the mother can give enough fluid to fully replace all fluid lost while the *diarrhoea* continues. Check the child periodically to make sure that signs of dehydration do not return.

Remember: If the child cannot drink, **refer** the child **URGENTLY** to the nearest clinic or hospital for IV or NG treatment.

If this child does not receive fluids, he will die.

EXERCISE: ANNEX C-4

1. Jalil, a 2-year-old (12 kg) child, has *diarrhoea* with **SEVERE DEHYDRATION** and **NO ACUTE MALNUTRITION** and **NO ANAEMIA**. He needs IV treatment, but your clinic does not have IV or NG therapy available. The nearest hospital is 1 hour away. You are able to give Jalil some sips of the ORS solution.

a. Should you **refer** Jalil **URGENTLY** or try to rehydrate him by mouth?

b. How much ORS solution should you give?

c. Jalil vomits frequently. What should you do?

d. After 3 hours you find Jalil is lethargic, has trouble drinking as he is very tired, has sunken eyes, and a skin pinch goes back very slowly. What should you do now?

2. Abu, a 15 kg boy, has *diarrhoea*. His father brings him to a neighborhood clinic. The health worker finds Abu to be lethargic, a general danger sign. He also finds that Abu has sunken eyes and a skin pinch goes back very slowly. The health worker classifies him with having *diarrhoea* with **SEVERE DEHYDRATION** and **NO ACUTE MALNUTRITION** AND **NO ANAEMIA**. There is no IV or NG equipment at the clinic. The nearest hospital is over 2 hours away. The health worker encourages Abu to take some sips of ORS solution. The child drinks slowly.

a. How much ORS should the father encourage Abu to drink during the next hour?

After 3 hours, the health worker assesses Abu and finds him more alert and his hydration status improving. He continues to give Abu ORS solution for 3 more hours. Then the health worker reassesses Abu and reclassifies him with **SOME DEHYDRATION**.

b. What should the health worker do now?

c. For how long should the health worker encourage Abu and his father to remain at the clinic? Why?

3. A grandmother brings her grandson, Belal, to the clinic because she thinks Belal is dying. She tells the health worker that Belal has had *diarrhoea* for several days. The health worker cannot wake Belal up. He determines that the child is unconscious. Belal has sunken eyes and a skin pinch goes back very slowly. Belal is classified with *diarrhoea* with **SEVERE DEHYDRATION** and **NO ACUTE MALNUTRITION** AND **NO ANAEMIA**. The clinic has no IV or NG equipment.
The health worker explains to the grandmother that Belal needs fluids to stay alive. He tells her that the clinic cannot give Belal the fluids that he needs. He explains that at the hospital there are doctors who can help Belal, but the hospital is 2 hours away. What should the health worker do?

4. Jalil, a 9-month-old child, comes to the clinic with cough and *diarrhoea*. He is not able to drink. He is breathing more than 55 breaths per minute, but no chest indrawing. His arterial oxygen saturation is 88%. Because of the general danger sign, he is classified with SEVERE **PNEUMONIA** OR VERY SEVERE DISEASE. His eyes are sunken and a skin pinch goes back very slowly. He is also classified with *diarrhoea* with **SEVERE DEHYDRATION**. He has no other disease classifications, and **NO ACUTE MALNUTRITION** AND **NO ANAEMIA**.
How should Jalil be treated?

Ask a facilitator to check your answers. Then turn back to section 6.4 - treat **PERSISTENT DIARRHOEA** and continue reading

Annex D: Intravenous Treatment for Severe Dehydration

Technique of administration

The technique of administration of intravenous (IV) fluids can only be taught through practical demonstration by someone with experience. Only trained persons should give IV treatment. Several general points are:

- The needles, tubing, bottles and fluid used for IV treatment must be sterile
- IV treatment can be given into any convenient vein. The most accessible veins are generally those in front of the elbow or on the back of the hand. In infants, the most accessible veins are on the side of the scalp
- Use of neck veins or incision to locate a vein are usually not necessary and should be avoided if possible.
- In cases requiring rapid resuscitation, a needle may be introduced into the femoral vein[13]. The needle must be held firmly in place and removed as soon as possible.
- In some cases of **SEVERE DEHYDRATION**, particularly in adults, infusion into two veins may be necessary. One infusion can be removed when the patient is becoming rehydrated.
- It is useful to mark IV bottles at various levels to show the times at which the fluid should fall to those levels. Regulate the number of drops per minute to give the correct amount of fluid per hour.

Solutions for Intravenous Infusion

Although a number of IV solutions are available, they all lack some of the electrolytes in the concentration needed by severely dehydrated patients.

To ensure adequate electrolyte replacement, some ORS solution should be given as soon as the patient is able to drink, even while IV treatment is being given. The following is a brief discussion of the relative suitability of several IV solutions.

Preferred Solution

- Ringer's Lactate Solution also called Hartmann's Solution for Injection, is the best commercially available solution. It supplies an adequate concentration of sodium and sufficient lactate, which is metabolized to bicarbonate, for the correction of acidosis. Ringer's Lactate Solution can be used in all age groups for dehydration due to acute *diarrhoea* of all causes. Early provision of ORS solution and early resumption of feeding will provide the required amounts of potassium and glucose.
- Cholera Saline Solution is also available in Bangladesh. Its composition is very similar to Ringer's Lactate Solution.

Acceptable Solutions

The following acceptable solutions may not provide adequate potassium, bicarbonate, and sodium to the patient. Therefore, give ORS solution by mouth as soon as the patient can drink.

- Normal Saline, also called Isotonic or Physiological Saline, is often readily available. It will not correct the acidosis. It will not replace potassium losses. Sodium bicarbonate or sodium lactate and potassium chloride can be given at the same time. This requires careful calculations of amounts and monitoring is difficult.

[13] The femoral vein is the main vein from the leg. It is located just medial (towards the middle of the body) of the femoral artery. The femoral artery is the main artery to the leg. Its pulsation can be felt in the groin.

- Half-strength Darrow's Solution, also called Lactated Potassic Saline, contains less sodium chloride than is needed to efficiently correct the sodium deficit from **SEVERE DEHYDRATION**.
- Half Strength Normal Saline in 5% Dextrose contains less sodium chloride than is needed for efficient correction of dehydration. Like Normal Saline, this will not correct acidosis nor replace potassium losses.

Unsuitable Solution

- Plain Glucose and Dextrose Solutions should not be used. They provide only water and sugar. They do not contain electrolytes. They do not correct the electrolyte losses or acidosis.

Annex E: Where Referral is Not Possible

The best possible treatment for a child with a very severe illness is usually at a hospital.
Sometimes a **referral** is not feasible or not advisable. Distances to a hospital might be too far; the hospital might not have adequate equipment or staff to care for the child; transportation might not be available. Sometimes parents refuse to take a child to a hospital, in spite of the health worker's effort to explain the need for it.
If **referral** is not possible, you should do whatever you can to help the family care for the child. To help reduce deaths in severely ill children who cannot be **referred**, you may need to arrange to have the child stay in or near the clinic where he may be seen several times a day. If not possible, arrange for visits at home.
This annex describes the treatment to be given for specific severe disease classifications when the very sick child cannot be **refer**red. It is divided into 2 parts: "Essential Care" and "Treatment Instructions: Recommendations on How to Give Specific Treatment for Severely Ill Children Who Cannot Be **Referred".**
To use the annex, first, find the child's classifications and note the essential care required. Then refer to the boxes on the *TREAT THE CHILD* chart and the instructions in second half of the annex. Because it may be difficult to treat a child at specific times during the day in clinic or at home, the treatment Instructions include 6-hour, 8-hour and 12-hour dosing schedules for giving various drugs.
Remember that you must also give treatment for the non-severe classifications that you identified. These treatments should be marked on the Sick Child Register. For example, if the child has SEVERE **PNEUMONIA** and **MALARIA**, you must treat the **MALARIA** and follow the guidelines below to treat the **SEVERE PNEUMONIA**.
Although only a well-equipped hospital with trained staff can provide optimal care for a child with a very severe illness, following these guidelines may reduce mortality in high-risk children where **referral** is not possible.

SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

Essential Care for SEVERE PNEUMONIA or VERY SEVERE DISEASE

1. Give antibiotic treatment

It is essential that children with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE** receive antibiotic treatment.

- If the child does not appear to have any danger sign, oxygen saturation less than 90% and in respiratory distress, give oral amoxicillin.

See the child each day. Make sure the child is getting better. If the child does not

get better, give intramuscular Gentamicin in addition to oral amoxicillin. If the child still does not get better or deteriorates, then send him **URGENTLY** to hospital.

- If the child has 'a general danger sign' and oxygen saturation less than 90% but does not have the classification **VERY SEVERE FEBRILE DISEASE**, give IM Gentamicin and oral Amoxicillin

If IM antibiotic is not available, give the oral antibiotic for **PNEUMONIA**, as specified on the *TREAT THE CHILD* chart. If the child vomits, repeat the dose.

Treat with IM Gentamicin for 2 days. If the child improves stop IM injection and continues oral Amoxicillin. Treat the child for 10 days total.

- If the child also has the classification **VERY SEVERE FEBRILE DISEASE**, follow the essential care instructions for this classification below. Start IM antibiotic and oral Paracetamol.

2. Give a bronchodilator

If the child is wheezing and you have a bronchodilator, give it.[14]

3. Treat *fever*

If the child has an axillary temperature of 101.5°F / 38.5°C or above, give Paracetamol every 6 hours. This is especially important for children with **PNEUMONIA**, because *fever* increases consumption of oxygen.

4. Manage fluids carefully

Children with **PNEUMONIA** or VERY SEVERE DISEASE can become overloaded with fluids. If they can drink, give fluids by mouth. However, children with **PNEUMONIA** or VERY SEVERE DISEASE, often lose water during a respiratory infection, especially if there is *fever*. Therefore, give fluids, but give them cautiously.

Encourage the mother to continue breastfeeding, if the child is not in respiratory distress. If the child is too ill to breastfeed but can swallow, have the mother express milk into a cup and slowly feed the child the breast milk with a spoon.

Encourage the child to drink. If the child is not able to drink, either use a dropper to give the child fluid very slowly or drip fluid from a cup or a syringe without a needle. Avoid using a NG tube if the child is in respiratory distress. Wait until the next day if there is no other option.

Fluids in severe pneumonia or very severe disease

AGE	Approximate amount of milk or formula to give:	Total amount in 24 hours:
Less than 12 months:	5 ml/kg/hour	120 ml/kg
12 months up to 5 years:	3 - 4 ml/kg/hour	72 - 96 ml/kg

Avoid giving fluids intravenously unless the child is in shock. A child in shock has cold extremities, a weak and rapid pulse and is lethargic.

[14] Instructions are provided in *Acute Respiratory Infection in Children: Case Management in Small Hospitals in Developing Countries, A manual for doctors and other senior health workers* (1990) WHO/ARI/90.5.

5. Manage the airway

Clear a blocked nose. A blocked nose can interfere with feeding. Use a plastic syringe (without needle) to gently suck any secretions from the nose. Dry or thick, sticky mucous can be loosened by wiping with a soft cloth moistened with salt water. Help the child to cough up secretions.

6. Keep the infant warm

Small infants lose heat rapidly, especially when wet. Feel the infant's hands and feet. They should be warm. To maintain the body temperature, keep the sick infant dry and well wrapped. If possible, have the mother keep her infant next to her body, ideally between her breasts. A hat or bonnet will prevent heat loss from the head. If possible, keep the room warm.

Essential Care for SEVERE PERSISTENT DIARRHOEA

1. Treat dehydration using the appropriate fluid plan
2. Advise mother how to feed child with **PERSISTENT DIARRHOEA**

See the box on the *COUNSEL THE MOTHER* chart. For infants less than 6 months, exclusive breastfeeding is very important. If the mother has stopped breastfeeding, help her relactate (or get help from someone who knows how to counsel on relactation).

3. Give Vitamin and mineral

Give a multivitamins and mineral supplement every day for 2 weeks. Use a mixture containing a broad range of vitamins and minerals, including at least twice the recommended daily allowance of Folate, vitamin A, zinc, magnesium and copper.

If the child has **COMPLICATED SEVERE ACUTE MALNUTRITION**, delay starting the multivitamin/ mineral supplement until the child's appetite returns if the supplement contains Iron. If a child has **COMPLICATED SEVERE ACUTE MALNUTRITION** and **PERSISTENT DIARRHOEA**, the treatment of **COMPLICATED SEVERE ACUTE MALNUTRITION** takes precedence over the treatment of **PERSISTENT DIARRHOEA**.

4. Identify and treat infection

Some children with **PERSISTENT DIARRHOEA** have infections such as **PNEUMONIA**, sepsis, urinary tract infection, ear infection, **DYSENTERY** and amoebiasis. These require specific antibiotic treatment. If no specific infection is identified, do ***not*** give antibiotic treatment because routine treatment with antibiotics is not effective.

5. Monitor the child

See the mother and the child each day. Monitor the child's feeding and treatments and the child's response. Ask what food the child eats and how much. Ask about the number of *diarrhoea*l stools. Check for signs of dehydration and *fever*.

Once the child is feeding well and has no signs of dehydration, see the child again in 2 to 3 days. If there are any signs of dehydration or problems with the changes in feeding, continue to see the child every day. Help the mother as much as possible.

Essential Care for VERY SEVERE FEBRILE DISEASE

1. Give antibiotic and antimalarial treatment

A child with **VERY SEVERE FEBRILE DISEASE** needs treatment for both meningitis and severe **MALARIA** (high/low risk **MALARIA** areas). Do not try to decide whether the child has meningitis or **MALARIA**. Treat for both possibilities.

- For meningitis, give IM Gentamicin and oral Amoxicillin

Give IM Gentamicin once daily and oral Amoxicillin twice daily.

Give antibiotic by injection for at least 2 days. If the child has improved by this time, stop the IM antibiotic and continue oral Amoxicillin. The total treatment duration should be 10 days.

- For MALARIA, start oral antimalarial

2. Manage fluids carefully

The fluid plan depends on the child's signs.

- If the child also has *diarrhoea* with **SEVERE DEHYDRATION** but has no stiff neck and no **COMPLICATED SEVERE ACUTE MALNUTRITION** OR **SEVERE ANAEMIA**, give fluids according to Plan C

The general danger sign which resulted in the classification **VERY SEVERE FEBRILE DISEASE** may have been due only to dehydration. Rehydrate, and then completely reassess and reclassify the child. The reassessment and reclassification of the child after rehydration may lead to a change in the treatment plan if the child no longer is classified with **VERY SEVERE FEBRILE DISEASE**.

- If the child has **VERY SEVERE FEBRILE DISEASE** with a stiff neck or bulging fontanelle, restrict fluids. The child may have meningitis. Be careful to restrict the amount of fluid as follows:

Fluids if meningitis suspected (stiff neck or bulging fontanelle)

AGE	Approximate amount of milk or formula to give:	Total amount in 24 hours:
Less than 12 months:	3.3 ml/kg/hour	80 ml/kg/day
12 months up to 5 years:	2.5 ml/kg/hour	60 ml/kg/day

Avoid giving intravenous fluids.

If the child is vomiting everything or not able to drink or breastfeed, give fluid by NG tube.

If you do not know how to use an NG tube and the child is able to swallow, use a dropper to give the child fluid very slowly, or drip fluid from a cup or a syringe (without needle).

- If the child has **COMPLICATED SEVERE ACUTE MALNUTRITION**, give fluids as described under Essential Care for **COMPLICATED SEVERE ACUTE MALNUTRITION**

3. Treat the child to prevent low blood sugar

See Treatment Instructions.

Essential Care for SEVERE COMPLICATED MEASLES

1. Manage **MEASLES** complications

Management depends on which complications are present:

- If the child has mouth ulcers, apply nystatin and give riboflavin. Help the mother feed her child. If the child cannot swallow, feed the child by NG tube
- If the child has corneal clouding, be very gentle in examining the child's eye. Treat the eye with tetracycline eye ointment carefully. Only pull down on the lower lid and do not apply pressure to the globe of the eye. Keep the eye-patched gently with clean gauze
- Also treat other complications of **MEASLES**, such as **PNEUMONIA**, *diarrhoea* or

ear infection

2. Give Vitamin A

Give 3 doses of vitamin A if the corneal clouding and 2 doses if the classification is **MEASLES**. If you give 3 doses, give the first dose on the first day and the second dose on day 2. Give the third dose in 2 weeks. If you give 2 doses, give first dose on the first day and second dose on the second day.

3. Feed the child to prevent malnutrition

Essential Care for MASTOIDITIS

Give oral Amoxicillin as first-line of treatment; if not available, give co-trimoxazole as second-line and continue for 5 days.

Essential Care for COMPLICATED SEVERE ACUTE MALNUTRITION

Children with **COMPLICATED SEVERE ACUTE MALNUTRITION** need specially prepared food with mineral supplements that are usually only available at a hospital or nutrition rehabilitation centre. Try to **refer** the child to one of these locations.

While you are waiting to **refer** the child:

1. Give antibiotic treatment

Give antibiotics even if the child does not have signs of infection. In **COMPLICATED SEVERE ACUTE MALNUTRITION**, the usual signs of infection are often absent. For example, *fever* may not be present. The severely malnourished child with **PNEUMONIA** may not breathe as fast as a well-nourished child and may not show lower chest wall indrawing. Therefore, it is important to treat all severely malnourished children with antibiotics when you first start to give special feeding.

- If the child has no specific signs of infection, give oral amoxicillin for 5 days
- If the child has a low temperature (less than 35.5°C or 95.5°F) or an elevated temperature (more than 37.5°C or 99.5°F), ear or skin infection, general danger signs, **PNEUMONIA, SEVERE PNEUMONIA OR VERY SEVERE DISEASE or VERY SEVERE FEBRILE DISEASE**, give IM Gentamicin and oral Amoxicillin. Also treat for **MALARIA** in high/low-risk **MALARIA** areas

2. Continue breastfeeding frequently, day and night

3. Feed the child

This child must be fed frequently, if necessary by NG tube. The choices of food depend on what is available.

First choice: Give a modified milk diet made of dried skim milk (DSM), sugar and oil. Start with modified milk containing 25 grams (g) dried skim milk, 100 g sugar, 30 g vegetable oil and enough water to make up to 1000 ml. Mix the milk, sugar and oil to a paste. Slowly add warm boiled water to make a total volume of 1000 ml.[15]

These modified milk feeds have reduced lactose. They can be given to a child with **COMPLICATED SEVERE ACUTE MALNUTRITION** who also has **PERSISTENT DIARRHOEA**.

The severely malnourished child is very fragile and needs small frequent feeds.

[15] Other alternative modified milk diets are unsweetened evaporated full-fat milk (120 ml and 100 g of sugar and 20 ml oil), fresh cow's milk (300 ml and 100 g sugar and 20 ml oil) or skimmed, unsweetened evaporated milk (120 ml and 100 g sugar and 30 ml oil). For all recipes, add warm, boiled water to make 1000 ml.

Gradually increase the volume of the feed and gradually decrease the feeding frequency. Help the mother feed the child as often as possible. It is important that the child continues to receive as many feeds as possible at night (at least twice during the night). Many severely malnourished children die during the night when they are not fed and kept warm.

The ideal feeding schedule is as follows:

DAYS	FREQUENCY	VOLUME/KG/FEED	VOLUME/KG/DAY
1 - 2	every 2 hours	11 ml	130 ml
3 - 5	every 3 hours	16 ml	130 ml
6 - 7+	every 4 hours	22 ml	130 ml

If the child has a good appetite and no oedema, you may only need to feed him for one day at each level.

Second choice: Give good complementary foods such as thick porridge with added oil. Avoid foods that contain too much lactose (that is, more than 40 ml whole milk/kg/day) or added salt. Do not add salt to the food.

Use the same feeding schedule as above.

4. Replace essential minerals

   Add 0.5 ml/kg of potassium chloride solution to each feed.[16] Give 2 ml of 50% magnesium sulfate solution[17] once by IM injection.

5. Give Iron when child's appetite returns

   If the child has **ANAEMIA**, do not start Iron treatment until the child's appetite returns. Before this, Iron can make an infection worse.

6. Manage *diarrhoea* with dehydration carefully

   Children with **COMPLICATED SEVERE ACUTE MALNUTRITION** and *diarrhoea* with **SOME** or **SEVERE DEHYDRATION** may not be as dehydrated as the signs indicate. The slow skin pinch, sunken eyes, lethargy or irritability may be due to **COMPLICATED SEVERE ACUTE MALNUTRITION**.

   ORS solution contains too much salt and too little potassium for children with **COMPLICATED SEVERE ACUTE MALNUTRITION**. Mix an ORS packet with 1 litres of water (instead of ½ litre of water). Then add 50 g of sugar (or 10 level teaspoons) and 45 ml of potassium chloride solution. Mix carefully.

   Rehydrate more slowly than normal. Monitor the child carefully. If the child's breathing rate and heart rate increase when he is being rehydrated, this may mean that too much fluid has been given too quickly. Stop giving the fluid. Resume giving fluid when the rates have slowed.

7. Monitor the child's temperature

   Keep the child warm. Make sure the child is covered at all times, especially at night.

   If the rectal temperature is below 35.5°C, place the infant on the mother's bare abdomen. Cover a child with a blanket or place a heater nearby. Make sure the child is

[16] From stock solution containing 100 g KCl per litre.

[17] 50% magnesium sulfate solution has 4 mEq Mg^{++} per ml.

clothed and wearing a hat or bonnet. It is especially important to feed this child every 2 hours until he is stable. Give IM antibiotics for possible sepsis.

Essential Care for SEVERE ANAEMIA

A child with **SEVERE ANAEMIA** is in danger of heart failure.

1. Give Iron by Mouth
2. Give antimalarial, if high/low **MALARIA** risk

   Treat with an effective antimalarial. In areas with some resistance to the first-line oral antimalarial, give the second-line oral antimalarial.

   Also give Tablet Mebendazole/ Albendazole, if hookworm and roundworm is a problem in your area.
3. Feed the Child

   Give good complementary foods.
4. Give Paracetamol if *fever* is present

   Give Paracetamol every 6 hours.
5. Give fluids carefully

   Let the child drink according to his thirst. Do not give IV or NG fluids.

Essential Care for Cough More than 30 Days

1. Give antibiotic for PNEUMONIA

If the child has not been treated recently with an effective antibiotic for **PNEUMONIA**, give an antibiotic for 5 days.

2. Give Salbutamol

   If the child is wheezing or coughing at night, or there is a family history of asthma, give Salbutamol for 14 days.
3. Weigh the child and inquire about tuberculosis (tb) in the family
4. See the child in follow-up in 2 weeks

   If there is no response to the antibiotic (with or without Salbutamol) or if the child is losing weight, try again to **refer** to the hospital. If **referral** is still not possible, begin TB treatment. Refer to the national TB guidelines.

Essential Care for Convulsions (current convulsions, not by history during this illness)

1. Manage the airway

   Turn the child on his side to reduce the risk of aspiration. Do ***not*** try to insert an oral airway or keep the mouth open with a spoon or spatula. Make sure that the child is able to breathe. If secretions are interfering with breathing, insert a catheter through the nose into the pharynx and clear the secretions with suction.
2. Give Diazepam[18]

   See Treatment Instructions.
3. If high *fever* present, lower the *fever*

   Give Paracetamol and sponge the child with tepid water.
4. Treat the child to prevent low blood sugar

   See Treatment Instructions.

[18] A common brand name of Diazepam is *valium*.

Essential Care for VERY SEVERE DISEASES

This young infant may have **PNEUMONIA**, sepsis or meningitis.

1. Give IM Gentamicin and oral Amoxicillin

   If meningitis is suspected (based on a bulging fontanelle, lethargic or unconscious, or convulsions), give IM Gentamicin if it is available. Treat for 2 days total. Give oral amoxicillin 2 times daily along with IM Gentamicin. Continue for 14days.

   If meningitis is not suspected, treat for at least 7 days. Continue the treatment until the infant has been well for at least 3 days.

   If there is no response to the treatment after 48 hours, or if the infant's condition deteriorates, then **refer** the child immediately to the hospital.

2. Keep the young infant warm
3. Manage fluids carefully

   The mother should breastfeed the infant frequently. If the infant has difficulty breathing or is too sick to suckle, help the mother express breast milk. Feed the expressed breast milk to the infant by dropper (if able to swallow) or by NG tube 6 times per day. Give20 ml of breast milk per kilogram of body weight at each feed.

   If the mother is not able to express breast milk, prepare a breast milk substitute or give diluted cow's milk with added sugar, as described in section 3.1 of the module *Counsel the Mother*.

4. Treat the child to prevent low blood sugar

   See Treatment Instructions.

TREATMENT INSTRUCTIONS

Recommendations on How to Give Specific Treatments for Severely Ill Children Who Cannot be Referred

The only dosing schedule for IM Gentamicin is once per day.

Ideally, the treatment doses should be evenly spaced. Often this is not possible due to difficulty giving a dose during the night. Compromise as needed, spreading the doses as widely as possible.

Some treatments described below are impractical for a mother to give her child at home without frequent assistance from a health care provider, for example, giving injections or giving frequent feedings as needed by a severely malnourished child. In some cases, a health care provider may be willing to care for the child at or near his home or in the clinic to permit the frequent care necessary. In other cases, it is simply not practical to give the child the treatments that he needs.

Gentamicin

Give IM Gentamicin every 24 hours. This should be continued for 2 days.

Give oral antibiotics to complete 10 days of antibiotic treatment.

If you are not able to give IM antibiotic treatment, but oral amoxicillin is available, give oral amoxicillin by mouth or NG tube. Give every 12 hours, if possible.

Treat the Child to Prevent Low Blood Sugar -

If the child is conscious, follow the instructions on the *TREAT THE CHILD* chart. Feed the child frequently, every 2 hours, if possible.

If the child is unconscious and you have dextrose solution and facilities for an

intravenous (IV) infusion, start the IV infusion. Once you are sure that the IV is running well, give 5 ml/kg of 10 % dextrose solution (D10) over a few minutes, or give 10 ml/kg of 5% dextrose solution (D5) by very slow push. Then insert an NG tube and begin feeding every 2 hours.

Diazepam (anticonvulsants)-

Give by rectum.

Use a plastic syringe (the smallest available) without a needle. Put the Diazepam in the syringe. Gently insert the syringe into the rectum. Squirt the Diazepam. Keep the buttocks squeezed tight to prevent loss of the drug.

If Diazepam is available, use the following schedule:

1. Give Diazepam
2. In 10 minutes, if convulsions continue, give Diazepam again
3. In 10 more minutes (that is, 20 minutes after the first dose), if convulsions continue and the child is breathing well, give Diazepam again. Watch closely for respiratory depression

EXAMPLE

Hena is 18 months old. She became sick a week ago. She developed *fever*, lost her appetite and began to *cough*. This is the rainy season, and the risk of **MALARIA** is high.Hena's mother bought some co-artemether 3 days ago and has given Hena a whole tablet each day. Still Hena has a *fever* and now is very sleepy. When her mother makes her eat, Hena cries weakly. For the last few days, the mother has been afraid to feed Hena because she is so sleepy and seems to have trouble swallowing. The mother is afraid the child will choke on the food. Hena stopped breastfeeding 4 months ago when her mother became pregnant.

Hena's assessment shows the following:

Her axillary temperature is 39°C. She weighs 8 kg. She is very lethargic, waking only for a few seconds before falling asleep again. She has not had convulsions. She is not able to drink now because she is so lethargic. Her breathing rate is 52 beats per minute. She has intercostal indrawing but no lower chest wall indrawing and no stridor. Her arterial oxygen saturation is 89%. She does not have *diarrhoea*.

The health worker does not think Hena's neck is stiff. She has no runny nose and no rash. Hena does not have an *ear problem*.

Hena is thin but does not have visible wasting. She has some palmar pallor. When you press on her feet, there is no edema. Hena is up to date on her immunizations.

The health worker classifies Hena with **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**, **VERY SEVERE FEBRILE DISEASE** and **ANAEMIA**.

The nearest hospital is a day's journey away and the mother cannot go there. Her husband is away and she must care for her other children. She also does not think that there are drugs at the hospital and she has no money to pay for her food there.

Hena cannot be **referred**. She can stay with her mother at the house of an aunt who lives near the clinic. The mother will bring the child for injections. One of the nurses in the clinic is willing to come to the aunt's house to help care for Hena in the evening.

It is now 9 am and the clinic is open until lunch. The health worker will conduct a special session for follow-up and nutrition counseling from 3 pm to 4 pm today. The clinic is open during the same hours tomorrow.

The health care provider decides that it will be possible to give injections approximately every 24 hours. He will give the first injection now (9 am). The second injection will be given to

Hena the next day when the nurse visits Hena at the aunt's house.
The health care provider immediately gives the following treatments:

1.Amoxicillin: The health care provider gives Hena 2 tablets of Amoxicillin twice daily. He decided to crush the tablets and mix with milk so that he can give it by NG tube. As soon as Hena will be able to eat he will advise the mother to give the tablets by mouth.

2.Gentamicin: The health care provider gives 1 dose of IM Gentamicin. He decides to continue giving Gentamicin for 2 days once daily.

3. Sugar Water: The health care provider gives Hena 50 ml of sugar water by NG tube, since he knows how to insert an NG tube.

The health worker sends for the whole, undiluted cow's milk. He crushes $1/4^{th}$ of a 500 mg Paracetamol tablet to mix with the milk. He gives Hena 30 ml of the milk by NG tube every hour during the rest of clinic stay. To the first 30 ml, he adds the Paracetamol. He repeats the dose in 6 hours.
The health care provider asks the mother to hold Hena to keep her warm. The mother also adjusts Hena's hat and blanket so she is covered.
When the nurse visits Hena at her aunt's home in the evening, she slowly gives her 100 ml of the milk by NG tube. The nurse does not give more than 100 ml because she is worried that Hena may vomit if given more. The same amount is given when the clinic opens the next morning. At that time, Hena is more alert and able to swallow the fluids that are dripped into her mouth. The health care provider gives the mother a 10 ml syringe so that she can feed her child this way. The health care provider tells the mother to try to give Hena 3 syringes-full of milk every hour. Because Hena is so sick and cannot swallow, the non-urgent treatments, Iron and Mebendazole or Albendazole, are not given now.
After 2 days of treatment, Hena is alert and her *fever* is gone. She is able to take sips from a cup. Because she was already treated with co-artemether, the health care provider decides to give co-artemether (1 tablet, crushed). He also gives crushed 5 tablets of Mebendazole (100 mg). Because the health care provider is uncertain whether the **VERY SEVERE FEBRILE DISEASE** was meningitis or severe **MALARIA**, he wants to be sure that all possibilities are adequately treated but needs to stop giving these frequent injections. Therefore, he stops the IM Gentamicin and gives oral amoxicillin (2 tablets every 12 hours). He gives this for 8 more days to complete 10 days of treatment.
The health care provider continues to see Hena every day for a few more days. He wants to make sure that she continues to improve and begins eating, and that the mother is able to give the amoxicillin 2 times per day. The health care provider now reviews with the mother how Hena was fed before this illness. He advises the mother that the child should receive good complementary foods or family foods at least 5 times per day. Because he does not want to confuse the mother with too many pills, the health worker decides not to start the Iron treatment until Hena finishes the full 10 days of antibiotic treatment.
When Hena and her mother return, the health worker gives the mother a bottle of Iron syrup and shows her how to measure < ½ teaspoon. He also shows her how to give it to Hena. He tells the mother to give < ½ teaspoon to Hena every morning. He also tells the mother to make sure the syrup is kept out of reach of Hena and her siblings. Then he arranges to see Hena again in 2 weeks when he will check on her pallor and give the mother more Iron syrup.

MODULE-5

COUNSEL THE MOTHER

COUNSEL THE MOTHER

INTRODUCTION

You have learned how to treat the sick child and how to teach the mother to continue treatment at home. For many sick children, you will also need to assess feeding and counsel the mother about feeding. For all sick children going home, you will also advise the mother when to return for follow-up visits and teach her signs that mean to return immediately for further care. Recommendations on food, fluid and when to return-are given on the Mother's card as well as chart titled *COUNSEL THE MOTHER.*

Learning Objectives

This module will describe and allow you to practice the following tasks:

- Assessing the child's feeding
- Identifying feeding problems
- Counseling the mother about feeding problems
- Advising the mother to increase fluid during illness
- Advising the mother:
  - When to return for follow-up visits
  - When to return immediately for further care
  - When to return for immunizations

In practicing these tasks, you will focus on:

- Giving relevant advice to each mother
- Using good communication skills
- Using a Mother's Card as a communication tool

Even though you may feel hurried, it is important to take time to counsel the mother carefully and completely. You have been learning communication skills throughout this course. When counselling a mother, you will use some of the same communication skills that you have already practiced when assessing and treating the child. For example, you will ask the mother questions to determine how she is feeding her child. You will then listen carefully to the mother's answers so that you can make your advice relevant to her. You will praise the mother for appropriate practices and advise her about any practices that need to be changed. You will use simple local language that the mother can understand. Finally, you will ask checking questions to ensure that the mother knows how to care for her child at home.

FEEDING RECOMMENDATIONS

This section of the module will explain the feeding recommendations on the *COUNSEL THE MOTHER* chart and any local adaptations. The recommendations are listed in columns for 6 age groups. You need to understand all of the feeding recommendations, but you will not need to explain them all to any one mother. You will first ask questions to find out how her child is already being fed. Then you will give only the advice that is needed for the child's age and situation. These feeding recommendations are appropriate both when the child is sick and when the child is healthy. During illness, children may not want to eat much. However, they should be offered the types of food recommended for their age, as often as recommended, even though they may not take much at each feeding. After illness, good feeding helps make up for weight loss and helps prevent *malnutrition*. When the child is well, good feeding helps prevent future illness. Sick child visits are a good opportunity to counsel the mother on how to feed the child both during illness and when the child is well.

Recommendations for Ages Up to 6 Months

The best way to feed a child from birth to at least 6 months of age is to breastfeed exclusively. Exclusive breastfeeding means that the child takes only breastmilk and no additional food, water or other fluids (with the exception of medicines and vitamins if needed).

Note: If other fluids and foods are already being given, counseling is needed as described in section 3.1 of this module. Breastfeed children at this age as often as they want, day and night. This will be at least 8 times in 24 hours. The advantages of breastfeeding are described below:

- Breastmilk contains all the nutrients needed by an infant for optimum growth and development. It contains:
  - Protein
  - Fat
  - Lactose (a special milk sugar)
  - Vitamins A and C
  - Iron

  These nutrients are more easily absorbed from breastmilk than from other milk. Breastmilk also contains essential fatty acids needed for the infant's growing brain, eyes etc. These fatty acids are not available in other kinds of milk.
- Breastmilk provides all the water an infant needs, even in a hot, dry climate
- Breastmilk protects an infant against infection. An infant gets antibodies from the mother through breastmilk. Exclusively breastfed infants are less likely to get *diarrhoea* and less likely to die from *diarrhoe*a or other infections like **PNEUMONIA**, meningitis and ear infections than non-breastfed infants
- Breastfeeding helps a mother and baby to develop a close, loving relationship
- Breastfeeding protects a mother's health. After delivery, breastfeeding helps the uterus return to its previous size. This helps reduce bleeding and prevent **ANAEMIA**. Breastfeeding also reduces the mother's risk of ovarian cancer and breast cancer
- It is best not to give an infant below the age of 6 months any milk or food other than breastmilk. For example, cow's milk, goat's milk, formula milk, cereal or extra liquid such as tea, juice or water should not be given. Because:
  - Giving other food or fluid reduces the amount of breastmilk taken
  - Other food or fluid may contain germs from water or on feeding bottles or utensils
  - Other food or fluid may be too dilute so that the infant becomes malnourished

- Other food or fluid may not contain enough Vitamin A
- Iron is poorly absorbed from cow's and goat's milk
- The infant may develop allergies
- The infant may have difficulty in digesting animal milk, so that the milk causes *diarrhoea*, rashes or other symptoms. **DIARRHOEA** may become **PERSISTENT**

▪ Exclusive breastfeeding will give an infant the best chance to grow and stay healthy

Recommendations for Ages 6 Months up to 12 Months

The mother should continue to breastfeed as often as the child wants. However, after 6 months of age, breastmilk cannot meet all of the child's energy needs. From age 6 months up to 12 months, gradually increase the amount of complementary food given. Food that are appropriate in our country are listed on the *COUNSEL THE MOTHER* chart. By the age of 12 months, complementary food are the main source of energy. If the child is breastfed, give complementary food 3 times daily after breastfeeding. If the child is not breastfed, give complementary food 5 times daily. (If possible, include feedings of milk by cup. However, cow's milk and other breastmilk substitutes are not as good for babies as breastmilk). It is important to actively feed the child. Active feeding means encouraging the child to eat. The child should not have to compete with older brothers and sisters for food from a common plate. He should have his own serving. Until the child can feed himself, the mother or another caretaker (such as an older sibling, father or grandmother) should sit with the child during meals and help get the spoon into his mouth.

6 months up to 9 months	9 months up to 12 months
	
Breastfeed as often as your child wants. Also give thick porridge or well- mashed foods, including animal source foods and vitamin A-rich fruits and vegetables. Start by giving 2 to3 tablespoons of food. Gradually increase to 1/2 cups (1 cup = 250 ml). Give 2 to 3 meals each day. Offer 1 or 2 snacks each day between meals when the child seems hungry.	Breastfeed as often as your child wants. Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables. Give 1/2 cup at each meal(1 cup = 250 ml). Give 3 to 4 meals each day. Offer 1 or 2 snacks between meals. The child will eat if hungry. For snacks, give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.

* A good daily diet should be adequate in quantity and include an energy-rich food (for example, thick cereal with added oil); meat, fish, eggs, or pulses; and fruits and vegetables.

An adequate serving means that the child does not want any more food after active feeding.

Good Complementary Food

Good complementary food are energy-rich, nutrient-rich, locally available and affordable. Examples in some areas are thick cereal with added oil or milk, fruits, vegetables, pulses, meat, eggs, fish and milk products. If the child receives cow's milk or any other breastmilk substitute,

these and any other drinks should be given by cup, not by bottle. Food that are appropriate in our area are listed in the feeding recommendations on the *COUNSEL THE MOTHER* chart and are described here: rice with dal, halua, khichuri, egg, fish, green leafy vegetables, yellow fruits such as mango and banana. Primary food for infant up to 1 year is breastmilk, after that the child gets his main energy from other family food.

12 months up to 2 years

Breastfeed as often as your child wants.

Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables.

Give 3/4 cup at each meal (1 cup = 250 ml).

Give 3 to 4 meals each day.

Offer 1 to 2 snacks between meals.

Continue to feed your child slowly, patiently. Encourage —but do not force— your child to eat.

Recommendations for Ages 12 Months up to 2 Years

During this period the mother should continue to breastfeed as often as the child wants and also give nutritious complementary food. The variety and quantity of food should be increased. Family food should become an important part of the child's diet. Family food should be chopped so that they are easy for the child to eat. Give nutritious complementary food or family food 5 times a day before breastfeeding. Rice with dal, halua, khichuri, egg, fish, green leafy vegetables and yellow fruits such as mango and banana are good complementary food for children 12 months up to 2 yrs.

It is important to continue adequate servings and active feeding (encouraging the child to eat).

Recommendations for Ages 2 Years and Older

2 years and older

Give a variety of family foods to your child, including animal source foods and vitamin A-rich fruits and vegetables.

Give at least 1 full cup (250 ml) at each meal.

Give 3 to 4 meals each day.

Offer 1 or 2 snacks between meals.

If your child refuses a new food, offer "tastes" several times. Show that you like the food. Be patient.

Talk with your child during a meal, and keep eye contact.

At this age the child should be taking a variety of family food in 3 meals per day. The child should also be given 2 extra feedings per day. These may be family food or other nutritious food which are convenient to give between meals. Examples are listed on the *COUNSEL THE MOTHER* chart. These include puffed rice with oil, roti, papaya, banana, mango and biscuits.

Stopping Breastfeeding

Gradual transition from exclusive breastfeeding to formula or other milk needs planning in advance. The mother should get proper help from the family members. At first, she needs to start expressing her breastmilk and feed her child by cup, cleaning properly the used utensils. She has to find a regular supply of formula or other source of milk (such as, full cream cow's milk) and finally to stop breastfeeding completely she has to express and discard enough breastmilk so that she can be comfortable until lactation stops.

Stopping Breastfeeding

Stop Breastfeeding means changing from all breast milk to no breast milk.
This should happen gradually over one month. Plan in advance for a safe transition.

1. Help Mother Prepare

- Mother should discuss and plan in advance with her family, if possible
- Express milk and give by cup
- Find a regular supply or formula or other milk (e.g. full cream cow's milk)
- Learn how to prepare a store milk safely at home

2. Help Mother Make Transition

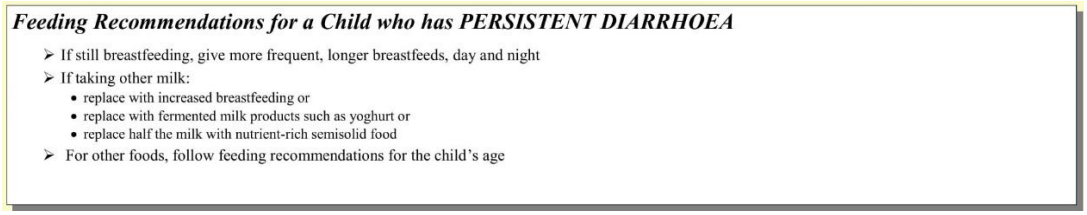
- Teach mother to cup feed (See chart booklet Counsel part in Assess, classify and treat the sick young infant aged up to 2 months)
- Clean all utensils with soap and water
- Start giving only formula or cow's milk once baby takes all feeds by cup

3. Help Stop Breastfeeding Completely

- Express and discard enough breast milk to keep comfortable until lactation stops

Special Recommendations for Children with PERSISTENT DIARRHOEA

Children with **PERSISTENT DIARRHOEA** may have difficulty digesting milk other than breastmilk. They need to temporarily reduce the amount of other milk in their diet. They must take more breastmilk or other foods to make up for this reduction.



Continue other foods appropriate for the child's age.

The child with persistent diarrhoea should be seen again in 5 days for follow-up. Further feeding instructions will be described in the module *Follow-Up.*

EXERCISE A

In this exercise, you will answer questions about the feeding recommendations.

1. Write a "T" by the statements that are True. Write an "F" by the statements that are False.

   a. ____ Children should be given fewer feedings during illness

   b. _____ A 3-month-old child should be exclusively breastfed

   c. ____ A very thin dal is a nutritious complementary food

   d. _____ A 3-year-old child needs 5 feedings each day of family foods or other nutritious foods

   e. _____ A 5-month-old child should be breastfed as often as he wants, day and night

2. When should complementary foods be added to the child's diet?

3. List 2 locally available, nutritious complementary foods:

4. Nazma is 9 months old. She is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. She is still breastfed. Her diet also includes fruit juice, water and khichuri or mashed banana. How many times per day should Nazma be given these foods?

5. Nuru is 15 months old. He has **PERSISTENT DIARRHOEA** and **NO DEHYDRATION**. He is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. He stopped breastfeeding 3 months ago and has been taking cow's milk since then. He also eats a variety

of family foods about 5 times a day. What recommendations should the health worker make for feeding Nuru during **PERSISTENT DIARRHOEA**?

When should Nuru return for a follow-up visit?

When you have completed this exercise, please discuss your answers with a facilitator

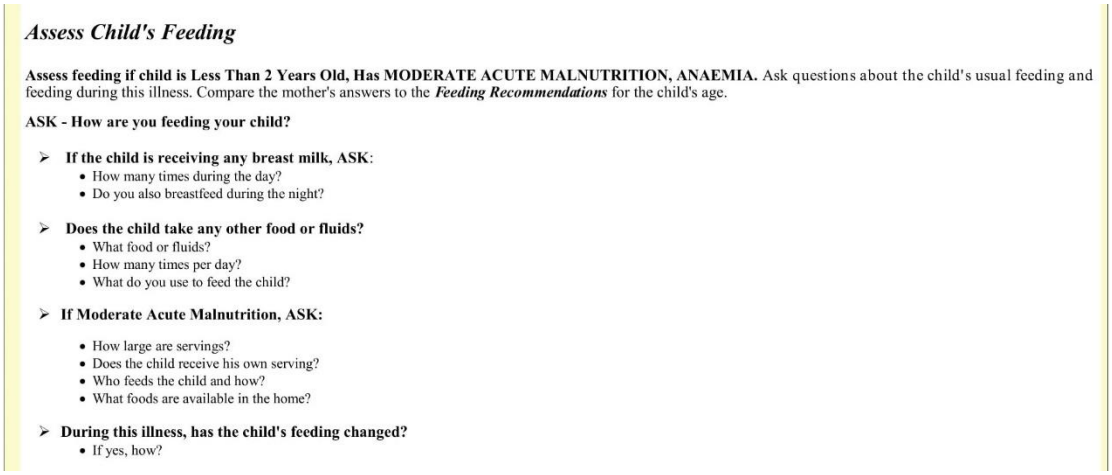
Your facilitator will lead a drill on the feeding recommendations

1.0 ASSESS THE CHILD'S APPETITE AND FEEDING

You will assess feeding of children who:

- are classified with **ANAEMIA** or **MODERATE ACUTE MALNUTRITION**, or
- are less than 2 years old.

However, if the mother has already received many treatment instructions and is overwhelmed, you may delay assessing feeding and counselling the mother about feeding until a later visit. To assess feeding, ask the mother the following questions. These questions are at the top of the *COUNSEL THE MOTHER* chart. These questions will help you find out about the child's usual feeding and feeding during this illness:



Assess Child's Feeding

Assess feeding if child is Less Than 2 Years Old, Has MODERATE ACUTE MALNUTRITION, ANAEMIA. Ask questions about the child's usual feeding and feeding during this illness. Compare the mother's answers to the ***Feeding Recommendations*** for the child's age.

ASK - How are you feeding your child?

- **If the child is receiving any breast milk, ASK**:
  - How many times during the day?
  - Do you also breastfeed during the night?
- **Does the child take any other food or fluids?**
  - What food or fluids?
  - How many times per day?
  - What do you use to feed the child?
- **If Moderate Acute Malnutrition, ASK:**
  - How large are servings?
  - Does the child receive his own serving?
  - Who feeds the child and how?
  - What foods are available in the home?
- **During this illness, has the child's feeding changed?**
  - If yes, how?

Note that certain questions are asked only if the child has **MODERATE ACUTE MALNUTRITION**. For these children, it is important to take the extra time to ask about serving size and active feeding.

Listen to correct feeding practices as well as those that need to be changed. You may look at the feeding recommendations for the child's age on the *COUNSEL THE MOTHER* chart as you listen to the mother. If an answer is unclear, ask another question. For example, if the mother of a malnourished child says that servings are "large enough", you could ask, "When the child has eaten, does he still want more?"

SHORT ANSWER EXERCISE

1. Which sick children need a feeding assessment?

2. Which of the questions in the box titled ‘Assess the Child’s Feeding’ are intended to find out about active feeding?

3. Which of the questions is intended to find out whether a feeding bottle is being used?

Check your own answers to this exercise
by comparing them to the answers given at the end of this module

2.0 IDENTIFY FEEDING PROBLEMS

It is important to complete the assessment of feeding and identify all the feeding problems before giving advice. Based on the mother's answers to the feeding questions, identify any differences between the child's actual feeding and the recommendations. These differences are problems. Some examples of feeding problems are listed below.

Insert examples of local feeding problems and corresponding recommendations in blank spaces.

Examples of Feeding Problems

Child's actual feeding	Recommended feeding
A 3-month-old is given sugar water as well as breastmilk.	A 3-month-old should be given only breastmilk and no other food or fluid.
A 2-year-old is fed only 3 times each day.	A 2-year-old should receive 2 extra feedings between meals, as well as 3 meals a day.
An 8-month-old is still exclusively breastfed.	A breastfed 8-month-old should also be given adequate servings of a nutritious complementary food 3 times a day.

In addition to differences from the feeding recommendations, some other problems may become apparent from the mother's answers. Examples of such problems are:

- Difficulty in breastfeeding

  The mother may mention that breastfeeding is uncomfortable for her or her child is not feeding comfortably. In that case, you have to assess feeding from the chart for young infant. Find out whether the infant's positioning and attachment could be improved or not.

- Use of feeding bottle

  Feeding bottles should not be used. Feeding bottles are often dirty, and germs easily grow in them. Sometimes, fluid remains in the bottle and it decomposes or becomes sour very fast. If the child drinks this fluid he might become sick. Also, sucking on a bottle may interfere with the child's desire to breastfeed. It may cause nipple confusion.

- Lack of active feeding

  Young children often need to be encouraged and assist to eat. This is especially true if a child has **ACUTE MALNUTRION**. If the child has to eat alone or if he/she has to compete with his siblings for food then he/she may not eat enough. "Who feeds the child and how is he/she fed?" this question will let you assess, whether the child is actively feeding or not.
- Not feeding well during illness

  The child may eat very less or eat different types of food during illness. Children often lose their appetite during illness. However, they should still be encouraged to eat the types of food recommended for their age, as often as recommended, even if they do not eat much.
- Giving other foods or fluid to a child less than 6 months old

  The mother may be giving other food and fluid to her child of less than 6 months old. You should help build the mother's confidence that she can produce all the breast milk that the child needs. You should also advise that, if the mother breastfeeds her child frequently then it will help to increase the amount of her breastmilk.

3.0 COUNSEL THE MOTHER ABOUT FEEDING PROBLEMS

This section of the module covers the third section of the *COUNSEL THE MOTHER* chart. Since you have identified feeding problems, you will be able to limit your advice which is most relevant to the mother.

3.1 Give Relevant Advice

If the feeding recommendations are being followed and there are no problems, praise the mother for her good feeding practices. Encourage her to keep feeding the child the same way during illness and health: If the child is about to enter a new age group with different feeding recommendations, explain these new recommendations to her. For example, if the child is almost 6 months old, explain what good complementary foods are and when to start them. If the feeding recommendations for the child's age are not being followed, explain those recommendations. In addition, if you have found any of the problems listed on the chart in the section "Counsel the Mother About Feeding Problems" give the mother the recommended advice:

If the mother reports difficulty with breastfeeding, assess breastfeeding. (See YOUNG INFANT chart).

Show the mother correct positioning and attachment for breastfeeding as needed

You will learn to check and improve positioning and attachment in the module *Management of the Sick Young Infant.* If the mother has a breast problem, such as engorgement, sore nipples or a breast infection, then she may need referral to a specially trained breastfeeding counsellor

(such as, a health worker who has completed a training course on breastfeeding counselling) or to someone experienced in managing breastfeeding problems, such as a midwife.

If the child is less than 6 months old and is taking other milk or foods:

- Build mother's confidence that she can produce all the breastmilk that the child needs
- Suggest giving more frequent, longer breastfeeds day or night, and gradually reducing other milk or foods

If other milk needs to be continued, counsel the mother to:

Breastfeed as much as possible, including at night.

- Make sure that other milk is a locally appropriate breastmilk substitute
- Make sure other milk is correctly and hygienically prepared and given in adequate amounts
- Finish prepared milk within an hour

If a child under 6 months old is receiving food or fluids other than breastmilk, the goal is to gradually change back to more or exclusive breastfeeding. Suggest giving more frequent, longer breastfeeds, day and night. As breastfeeding increases, the mother should gradually reduce other milk or food. Since this is an important change in the child's feeding, be sure to ask the mother to return for follow-up in 5 days. In some cases, changing to more or exclusive breastfeeding may be impossible (for example, if the mother never breastfed, if she must be away from her child for long periods, or if she will not breastfeed for personal reasons). In such cases, the mother should be sure to correctly prepare cow's milk or other breastmilk substitutes and use them within an hour to avoid spoilage. It is important to use the correct amount of clean, boiled water for dilution.

To prepare cow's milk for infants less than 3 months of age, mix ½ cup boiled whole cow's milk with ¼ cup boiled water and 2 level teaspoons[19] of sugar.

If the mother is using a bottle to feed the child:

- Recommend substituting a cup for bottle
- Show the mother how to feed the child with a cup

A cup is better than a bottle. A cup is easier to keep clean and does not interfere with breastfeeding. To feed a baby by the cup:

[19] Each level teaspoon of sugar should equal 5 grams. A cup contains 200 ml. Adjust the recipe if you have different size cups or teaspoons.

- Hold the baby sitting upright or semi-upright on your lap
- Hold a small cup to the baby's lips. Tilt the cup so the liquid just reaches the baby's lips
- The baby becomes alert and opens his mouth and eyes
- A low-birthweight baby takes the milk into his mouth with the tongue
- A full-term or older baby sucks the milk, spilling some of it
- Do not pour the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself
- When the baby has had enough, he closes his mouth and will not take more

If the child is not being fed actively, counsel the mother:

- Sit with the child and encourage eating
- Give the child an adequate serving in a separate plate or bowl

This mother is actively feeding her child.

This child must compete with siblings and may not get enough to eat.

If the child is not feeding well during illness, counsel the mother to:

- Breastfeed more frequently and for longer if possible
- Use soft, varied, appetizing, favorite foods to encourage the child to eat as much as possible and offer frequent small feeding
- Clear a blocked nose if it interferes with feeding
- Expect that appetite will improve as the child gets better

Even though children often lose their appetites during illness,

they should be encouraged to eat the types of food recommended for their age, as often as recommended. Offer the child's favourite nutritious foods to encourage eating. Offer small feedings frequently. After illness, good feeding helps make up for any weight loss and prevent *malnutrition*.

EXERCISE B

In this exercise, you will identify feeding problems and relevant advice for written cases. None of these cases needs referral. The health worker has asked the questions to assess feeding. Read the information about feeding. Then describe the correct feeding practices, feeding problem(s) and relevant feeding advice.

1. An 11-month-old is classified as **NO ANAEMIA** and **NO ACUTE MALNUTRITION.** He is primarily breastfed but normally also takes other fluids and a thin rice gruel twice a day. He does not use a feeding bottle. During the illness, his mother has stopped giving rice gruel and given more breastmilk. His mother believes that, before 1 year of age, children do not really need foods in addition to breastmilk. Foods available to the family are cow's milk, roti, rice, cooking oil, vegetables, fruits, and occasionally fish and eggs. Write down his feeding problem(s) and relevant advice.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 325/10 Date: 5.7.19 Child's name: Monowar Date of birth: Age: 11mo Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's name: Rumana Father's name: Kamrul Address: House	Weight (kg): 7 Height(Inch): Temperature (°C/ °F): 37.5° Breaths/ minute: 48 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 97% Date of starting symptoms: 3.7.19 ☑ Palm examination ☑ Eye examination ☑ Examination to diagnose Early Childhood Development (ECD) ☑ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☑ Ear pain ☑ Pus or water draining from the ear (<14 days)	☑ **Acute ear infection**		☑ 1st dose of Amoxicillin ☑ 1st dose of Cotrimoxazole ☑ Paracetamol ☑ Advise to keep ear clean and restrict entry of water ☑ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone cardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☑ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☑ Malaria Risk ☐ Travel to Malaria risk areas ☑ RDT/ Other Malaria test positive ☐ No cause of fever	☑ **Malaria**	☐ If fever is present every day for more than 7 days, refer to hospital	☑ Treat the child by oral Artesunate ☑ Give Paracetamol for high fever ☑ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, refer to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahallat: Charpur

Union: Matiranga

Upazila: Matiranga

District: Khagrachori

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☑ IYCF ☑ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	✓Penta-2 ✓OPV-2 ✓PCV-2	✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV	✓MR-1	MR-2	Vitamin A Anthelminthic

Return for next immunization on:

_____

(Date)

3.2 Use Good Communication Skills

When counselling mothers, it is important to use the following skills:

Ask and listen:	You have already learned the importance of asking questions to assess the child's feeding. Listen carefully to find out what the mother is already doing for her child. Then you will know what she is doing well, and what practices need to be changed
Praise:	It is likely that the mother is doing something helpful for the child, for example, breastfeeding. Praise the mother for something helpful she has done. Be sure that the praise is genuine, and only praise actions that are indeed helpful to the child
Advise:	Limit your advice to what is relevant to the mother at this time. Use language that the mother will understand. If possible, use pictures or real objects to help explain. For example, show amounts of fluid in a cup or container Advise against any harmful practices that the mother may have used. When correcting a harmful practice, be clear, but also be careful not to make the mother feel guilty or incompetent. Explain why the practice is harmful
Check understanding:	Ask questions to find out what the mother understands and what needs further explanation. Avoid asking leading questions (that is, questions which suggest the right answer) and questions that can be answered with a simple yes or no Examples of good checking questions are: "What foods will you give your child?" "How often will you give them?" If you get an unclear response, ask another checking question. Praise the mother for correct understanding or clarify your advice as necessary

SHORT ANSWER EXERCISE

1. How could you restate the following advice in simpler words?

   Give foods that are high in energy and nutrient content in relation to volume.

2. Mother of an 8-month-old girl says, her child takes formula milk 5 times a day with a cup and eats rice thrice a day. The mother had to go back to work 1 month back, so she has stopped breastfeeding her child. She has to stay away from child for 10 hours per day. The child used to eat same amount of food during her illness. Which comments you think are appropriate to counsel this mother? (Tick (✓) appropriate comments).

_____a. You should still breastfeed this child

_____b. It is good that, you are giving normal amount of food during the child's sickness

_____c. You have done well to use cup instead of bottle

_____d. Your child needs more frequent feeding. Try to increase the frequency of taking rice up to 5 times a day

_____e. Rice is good for your child. Add some oil and meat, cereal or vegetables with rice. These foods will help your child even more

3. You are talking with the mother of a 15-month-old child who is no longer breastfed. The child has **PERSISTENT DIARRHOEA**. He normally takes 2 feedings of cow's milk and 1 meal of family foods each day. His diet has not changed during the *diarrhoea*. Which of the following are appropriate to say when counselling this mother? (Tick (✓) appropriate comments.)

_____a. You were right to keep feeding your child during the diarrhoea. He needs food to stay strong

_____b. Your child needs more food each day. Try to give him 3 family meals plus 2 feedings between meals.

_____c. Cow's milk is very bad for your child.

_____d. Your child may be having trouble digesting the cow's milk, and that may be the reason that the diarrhoea has lasted so long.

_____e. Give your child yoghurt instead of milk (until follow-up visit in 5 days). Or give only half the usual milk and increase the amount of family foods to make up for this.

4. A health worker has just counselled the mother of a 6-month-old about starting complementary foods. The first and second columns below show the health worker's first checking questions and the mother's responses. In the third column, write another checking question to clarify that the mother knows how to feed the child correctly.

First Checking Question	Mother's Response	Second Checking Question
What are some good foods to give to your baby?	Thick, nutritious foods	
When will you begin giving these foods?	When he is ready	

3.3 Use a Mother's Card

A Mother's Card can be given to each mother to help her remember appropriate food and fluids and when to return to the health worker. The Mother's Card has words and pictures that illustrate the main points of advice. An example of a Mother's Card was given to you with your course materials. This card is reprinted in the Annex of this module. Take a moment to study the Mother's Card given in this course. The card shows advice about foods, fluid and signs to return immediately to the health worker. There is also a place to tick appropriate fluids for *diarrhoea* and record when to return for the next immunization.

There are many reasons a Mother's Card can be helpful:

Check your own answers to this exercise
by comparing them to the answers given at the end of the module

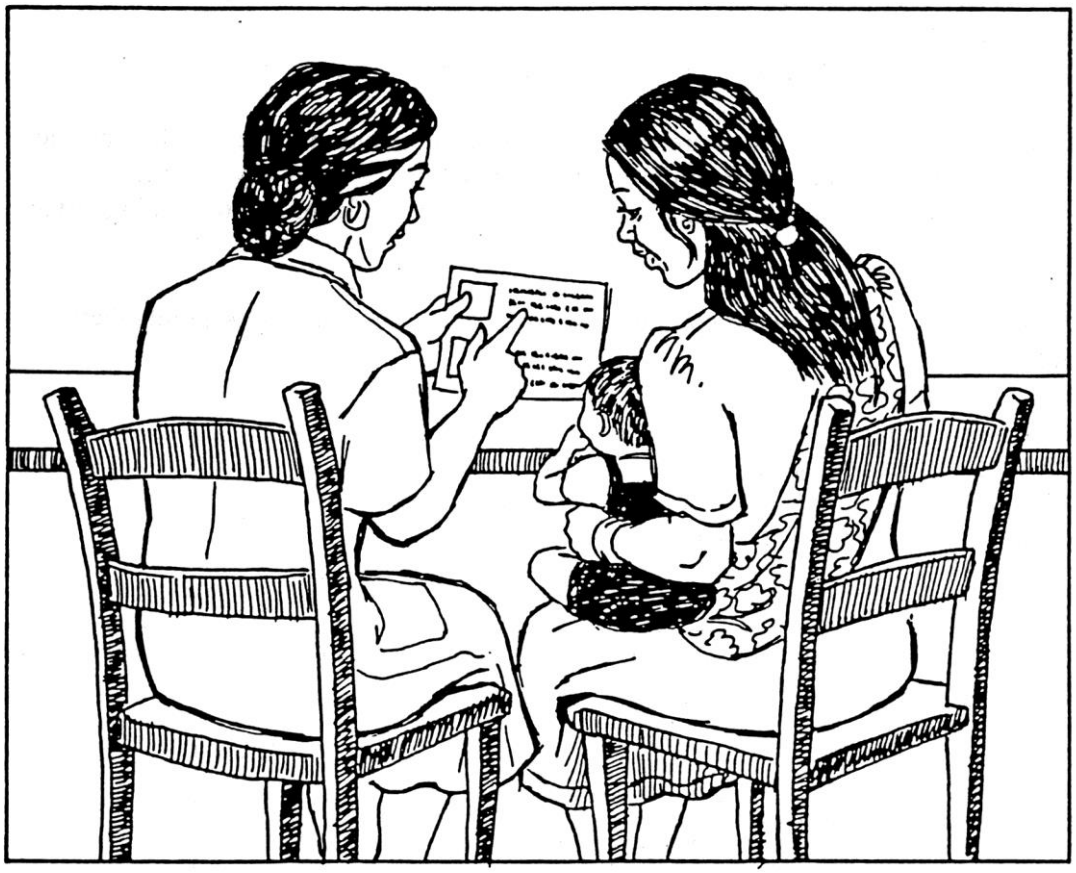
- It will remind you or your staff of important points to cover when counselling mothers about foods, fluid and when to return
- It will remind the mother what to do when she gets home
- The mother may show the card to other family members or neighbours, so more people will learn the messages it contains
- The mother will appreciate being given something during the visit
- Multi-visit cards can be used as a record of treatments and immunizations given

When reviewing a Mother's Card with a mother:

- Hold the card so the mother can easily see the pictures, or allow her to hold it herself
- Explain each picture. Point to the pictures as you talk. This will help the mother remember what the pictures represent
- Circle or record information that is relevant to the mother. For example, circle the feeding advice for the child's age. Circle the signs to return immediately. If the child has *diarrhoea*, tick the appropriate fluid(s) to give. Record the date of the next immunization needed
- Watch to see if the mother seems worried or puzzled. If so, assess her and encourage to talk
- Ask the mother to tell you in her own words what she should do at home. Encourage her to use the card to help her remember

- Give her the card to take home. Suggest that she show it to others in her family

If you cannot obtain a large enough supply of cards to give to every mother, keep several in the clinic to show to mothers.



EXERCISE C

In this exercise, there will be two role plays of feeding assessment and counselling.

Health worker: Ask questions to assess feeding. Identify and record feeding problems. Record the feeding advice to be given. Then counsel the mother about feeding, using good communication skills. Use the food section of the Mother's Card. Feel free to refer to the *COUNSEL THE MOTHER* chart as necessary.

Mother: Try to behave as a real mother might behave. For example, you may be confused, timid, worried or anxious to leave the clinic. You will be given a card with details about your child's feeding and age and suggestions about your attitude.

Observers: Watch the role play and record information on the form given. Be prepared to answer the questions in the module.

Role Play 1

Jalil is a 5-month-old boy with no general danger signs, *diarrhoea* with **NO DEHYDRATION, PERSISTENT DIARRHOEA**, and **NO ACUTE MALNUTRITION** (no pallor). Jalil has no other classifications. His mother has been taught how to give fluids on Plan A for *diarrhoea*. In the role play the health worker will assess feeding and counsel the mother about feeding.

ASK:	**LOOK AND FEEL:**
• Is the infant breastfed? If yes, how many times in 24 hours? • Does the infant usually receive any other food or drink? - If yes, how often? - What do you use to feed the infant?	• Determine weight for age. - weight less than 2 kg - weight for age less than -2 Z score • Look for ulcers or white patches in mouth (Thrush)

After the role play you will discuss the following questions:

a. Did the health worker ask all the necessary questions to assess Jalil's feeding? Did the health worker finish the feeding assessment before identifying the feeding problems and giving advice?

b. What feeding problems did the health worker find?

c. Did the health worker give appropriate praise for something the mother had done?

d. Did the health worker give advice relevant to this child's situation?

Was any advice given that was not relevant? If so, what?

e. Was the advice correct and complete for the child's age and any problems identified?

f. Did the health worker use clear, simple language?

g. What checking questions were asked? Were they good checking questions? If they were answered incompletely or incorrectly, did the health worker clarify the advice?

4.0 ADVISE THE MOTHER TO INCREASE FLUID DURING ILLNESS

During illness a child loses fluid due to *fever*, fast breathing or *diarrhoea*. The child will feel better and stay stronger if he drinks extra fluid to prevent dehydration. Extra fluid is especially important for children with *diarrhoea*; these children should be given fluid according to Plan A or B as described on the *TREAT THE CHILD* chart. Mothers of breastfeeding children should offer the breast frequently. Advice about fluid is summarized in the chart section below. Give this advice to every mother who is taking her child home unless she has already received many instructions and may be overwhelmed by more advice, or has already been taught Plan A.

Advise the Mother to Increase Fluid During Illness

For Any Sick Child:

- Breastfeed more frequently and for longer at each feed. If child is taking breast-milk substitutes, increase the amount of milk given
- Increase other fluids. For example, give soup, rice water, yoghurt drinks or clean water. Give frequently energy-given food; but small in quantity

For Child with Diarrhoea:

- Giving extra fluid can be lifesaving. Give fluid according to Plan 'A' or Plan 'B' on *TREAT THE CHILD* chart

5.0 ADVISE THE MOTHER WHEN TO RETURN TO A HEALTH WORKER

Every mother who is taking her child home needs to be advised when to return to the health worker. She may need to return:

- For a follow-up visit in a specific number of days (for example, when it is necessary to check progress on an antibiotic)
- Immediately, if signs appear that suggest the illness is worsening, or
- For the child's next immunization (the next well-child visit)

It is especially important to teach the mother the signs to return immediately. You learned these signs in the module *Identify Treatment,* and they are repeated in this section of this module. These signs mean that additional care is needed for serious illness.

Follow-Up Visits

In the module *Identify Treatment,* you learned that certain problems require follow-up in a specific number of days. For example, **PNEUMONIA, DYSENTERY** and **ACUTE EAR INFECTION** require follow-up to ensure that an antibiotic is working. **PERSISTENT DIARRHOEA** requires follow-up to ensure that feeding changes are working. Some other problems, such as *fever* or pus draining from the eye, require follow-up only if the problem persists. At the end of the sick child visit, tell the mother when to return for follow-up. Sometimes a child may need follow-up for more than one problem. In such cases, tell the mother the earliest definite time to return. Also tell her about any earlier follow-up that may be needed if a problem such as *fever* persists. The *COUNSEL THE MOTHER* chart has a summary of follow-up times for different problems.

If the child has	Return for follow-up in
• PNEUMONIA • DYSENTERY • MALARIA, if fever persists • FEVER- NO MALARIA, if fever persists • MEASLES WITH EYE OR MOUTH COMPLICATIONS • MOUTH OR GUM ULCERS OR THRUSH	3 days
• PERSISTENT DIARRHOEA • ACUTE EAR INFECTION • CHRONIC EAR INFECTION • COUGH OR COLD, if not improving	5 days
• UNCOMPLICATED SEVERE ACUTE MALNUTRITION • FEEDING PROBLEM	14 days
• ANAEMIA	14 days
• MODERATE ACUTE MALNUTRITION	30 days

Notice that there are several different follow-up times related to nutrition:

- If a child has a feeding problem and you have recommended changes in feeding, follow-up in 7 days to see if the mother has made the changes. You will give more counselling if needed
- If a child has pallor, follow-up in 14 days to give more iron
- If the child has **MODERATE ACUTE MALNUTRITION** additional follow-up is needed in 30 days. This follow-up would involve weighing the child, re-assessing feeding practices and giving any further advice needed from the *COUNSEL THE MOTHER* chart.

If your clinic has a regular session reserved for counselling about feeding, schedule follow-up visits for that time. If such sessions are not offered, schedule an individual visit for feeding counselling at a time when a health worker will be available to discuss feeding with the mother. This health worker will need to know about the child's feeding problems, changes recommended and the child's weight. This information can be recorded in the patient chart or in a special follow-up note.

When to Return Immediately

Remember that this is an extremely important section of when to return.

WHEN TO RETURN IMMEDIATELY

Advise mother to return immediately if the child has any of these signs:	
Any sick child	• Not able to drink or breastfeed • Becomes sicker • Develops fever
If child has COUGH OR COLD, also return if:	• Fast breathing • Difficult breathing
If child has Diarrhoea, also return if:	• Blood in stool • Drinking poorly

Use the Mother's Card when teaching the signs to return immediately. Use local terms that the mother can understand. The Mother's Card presents the signs in both words and drawings. Circle the signs that the mother must remember. Be sure to check the mother's understanding.

Next Well-Child Visit

Remind the mother of the next visit her child needs for immunization unless the mother already has a lot to remember and will return soon anyway. For example, if a mother must remember a schedule for giving an antibiotic, home care instruction for another problem, and a follow-up visit in 2 days, do not describe a well-child visit needed one month from now. However, do record the date of the next immunization on the Mother's Card.

SHORT ANSWER EXERCISE

1. A 3-year-old is being treated with an antibiotic for **PNEUMONIA**. The child has no other problems that require follow-up. She has no *fever*.
When should you ask the mother to return for follow-up?

What are the signs that this child should return immediately?

2. A 6-month-old child is being treated for **DYSENTERY** and an **ACUTE EAR INFECTION**. He has a *fever*.
When should you ask the mother to return for follow-up?

What are the signs that this child should return immediately?

After the first follow-up visit, what additional follow-up will be needed?

3. A 6-month-old child is classified with *diarrhoea* with **NO DEHYDRATION, ANAEMIA** and **MODERATE ACUTE MALNUTRITION**. She has no *fever*. She has some palmar pallor. You have found a feeding problem. The child's main food is a breastmilk substitute which is made with too much water and given in a feeding bottle. You have counselled the mother on how to prepare breastmilk substitute correctly and give it with a cup. You have also counselled the mother about complementary feeding.

When should you ask the mother to return for follow-up?

What are the signs that this child should return immediately?

After the first follow-up visit, what additional follow-up will be needed?

Check your own answers to this exercise
by comparing them to the answers given at the end of this module

EXAMPLE

In this example, your facilitator will continue the demonstration of communication skills begun earlier in this module. He or she will continue to advise the mother of Abu, the 8-month-old child who has:

COUGH OR COLD
MALARIA
NO ANAEMIA
NO ACUTE MALNUTRITION

The health worker has already counseled the mother about feeding. This demonstration will include advice on increasing fluid and when to return.

Tell the facilitator when you are ready for the demonstration to begin.

EXERCISE D

In this exercise, there will be a role play of the entire process covered by the *COUNSEL THE MOTHER* chart: assessing feeding, identifying feeding problems, counselling about feeding, advising about fluid and advising about when to return.

Health worker: Assess feeding, identify feeding problems and counsel the mother on feeding, fluid and when to return. Use good communication skills. Use the Mother's Card.

Mother: Try to behave as a real mother might behave. For example, you may be worried, timid, confused or anxious to leave the clinic. You will be given a card with details about your child's illness, age, and diet and other information.

Observers: Listen and watch carefully. Write the answers to the feeding questions and any feeding problems. Notice whether the feeding questions from *COUNSEL THE MOTHER* chart are used, the advice is correct and complete, and good communication skills are used. Be prepared to discuss the questions given on the next page.

Role Play:

Banu is 2 years and 2 months old. She has **NO ACUTE MALNUTRITION** (no palmar pallor) and an **ACUTE EAR INFECTION.**

The health worker has already given the mother instructions on wicking the ear and giving an antibiotic for the ear infection. Now the health worker will assess feeding and counsel the mother about Food, fluid and when to return.

Questions for Discussion after Role Play:

1. Were all the necessary questions asked about the child's feeding? Did the health worker finish the feeding assessment before identifying the feeding problems and giving advice?

2. What feeding problems were identified, if any?

3. Was the mother praised for something she has been doing correctly?

4. Was counselling about food complete and correct for the child's age and feeding problems?

5. Was advice on fluid complete and correct?

6. Was advice on when to return complete and correct? Did it include signs to return immediately?

7. Did the health worker ask appropriate checking questions?

8. If no to any of the above, what could have been done better? Be prepared to make suggestions.

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 529/6 Date: 8·8·19 Child's name: Banu Date of birth: Age: 26days Sex: ☐ Male ☑ Female Visit: ☑ Initial ☐ Follow up Mother's name: Shamsun Father's name: Jalil Address: House	Weight (kg): 8 Height(Inch): Temperature (°C/ °F): 37° Breaths/ minute: 35 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 99% Date of starting symptoms: 7·8·19 ☑ Palm examination ☑ Eye examination ☑ Examination to diagnose Early Childhood Development (ECD) ☑ Examination to diagnose other problems	☐ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☐ Lethargic or unconscious ☐ Stridor in calm child	☐ **Severe pneumonia or very severe disease**	☐ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☐ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☐ **Refer URGENTLY**	
		☐ Chest in-drawing ☐ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, **refer** to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another severe classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more: ☐ Dehydration present ☐ No dehydration	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea**	**Severe persistent diarrhoea:** ☐ If any other severe classification- **refer** ☐ If no other severe classification- treat dehydration and **refer**	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, **refer** to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, **refer** to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address: House Name/ Holding Number:

Village / Mahallat: Nandalalpur

Union: Nandalalpur

Upazilat: Kumarkhali

District: Kushtia

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☑ WFH/L z-scores: between -3 and -2 z-scores ☑ MUAC between 115 and 125 mm	☑ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

✓BCG ✓OPV-0	✓Penta-1 ✓OPV-1 ✓PCV-1 ✓IPV	✓Penta-2 ✓OPV-2 ✓PCV-2	✓Penta-3 ✓OPV-3 ✓PCV-3 ✓IPV	✓MR-1	✓MR-2	✓Vitamin A Antihelminthic

Return for next immunization on:

_____

(Date)

6.0 COUNSEL THE MOTHER ABOUT HER OWN HEALTH

During a sick child visit, listen for any problems that the mother herself may be having. The mother may need treatment or referral for her own health problems.

Counsel the Mother about her Own Health

- If the mother is sick, provide care for her, or refer her for help
- If she has a breast problem (such as engorgement, sore nipples, breast infection), provide care for her or **refer** her for help
- Advise her to eat well to keep up her own strength and health
- Check the mother's immunization status and give her tetanus toxoid if needed
- Make sure she has access to:
  - Family planning
  - Counselling on STD and AIDS prevention

ANNEX: MOTHER'S CARD

FEEDING COUNSELLING

Feeding Recommendations

Feeding recommendations FOR ALL CHILDREN during sickness and healthy

Newborn, birth up to 1 week	1 week up to 6 months	6 months up to 9 months	9 months up to 12 months	12 months up to 2 years	2 years and older
					
Immediately after birth, put your baby in skin to skin contact with you. Allow your baby to take the breast within the first hour. Give your baby colostrum, the first yellowish, thick milk. It protects the baby from many Illnesses. Breastfeed day and night, as often as your baby wants, at least 8 times In 24 hours. Frequent feeding produces more milk. If your baby is small (low birth weight), feed at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if baby does not wake self. DO NOT give other foods or fluids. Breast milk is all your baby needs.	Breastfeed as often as your child wants. Look for signs of hunger, such as beginning to fuss, sucking fingers, or moving lips. Breastfeed day and night whenever your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk. Do not give other foods or fluids. Breast milk is all your baby needs.	Breastfeed as often as your child wants. Also give thick porridge or well- mashed foods, including animal source foods and vitamin A-rich fruits and vegetables. Start by giving 2 to3 tablespoons of food. Gradually increase to 1/2 cups (1 cup = 250 ml). Give 2 to 3 meals each day. Offer 1 or 2 snacks each day between meals when the child seems hungry.	Breastfeed as often as your child wants. Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables. Give 1/2 cup at each meal(1 cup = 250 ml). Give 3 to 4 meals each day. Offer 1 or 2 snacks between meals. The child will eat if hungry. For snacks, give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.	Breastfeed as often as your child wants. Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables. Give 3/4 cup at each meal (1 cup = 250 ml). Give 3 to 4 meals each day. Offer 1 to 2 snacks between meals. Continue to feed your child slowly, patiently. Encourage —but do not force— your child to eat.	Give a variety of family foods to your child, including animal source foods and vitamin A-rich fruits and vegetables. Give at least 1 full cup (250 ml) at each meal. Give 3 to 4 meals each day. Offer 1 or 2 snacks between meals. If your child refuses a new food, offer "tastes" several times. Show that you like the food. Be patient. Talk with your child during a meal, and keep eye contact.

** A good quality food should be adequate in quantity and include an energy-rich food (for example, thick cereal with added oil); meat, fish, eggs or pulses, and fruits and vegetables*

ANSWERS TO SHORT ANSWER EXERCISES: COUNSEL THE MOTHER

Answers to Short Answer Exercise, Page 305

1. These children need a feeding assessment:
   - Children who have **ANAEMIA** or **MODERATE ACUTE MALNUTRITION**
   - Children who are less than 2 years old
2. Does the child receive his own serving?
   Who feeds the child and how?
3. What do you use to feed the child?

Answers to Short Answer Exercise, Page 315

1. Possible answer:
   Give foods that will make your child strong and healthy, not just fill him up. Instead of giving just plain rice or gruel, mix it with some oil for energy and some foods like mashed vegetables, meat, eggs, or fish.
   (You may have included examples of good complementary foods in your local area.)
2. a. ✓
   b. ✓
   c. No tick. This comment may make the mother feel guilty. It is better to state this as in 'd' below.
   d. ✓
   e. ✓

3. 1st row: What kinds of thick, nutritious foods will you give? What are some examples of foods you will give?
   2nd row: When he is ready?

4.

Second Checking Question
How will you give complementary food to your child?
How many times will you breastfeed your child?

Answers to Short Answer Questions, Page 323

1. F/up: 3 days
   Return immediately if:
   - Not able to drink (since child is 3 years old, there is no need to say 'or breastfeed')
   - Becomes sicker
   - Develops a *fever*
   - Fast breathing
   - Difficult breathing

2. F/up: 3 days for **DYSENTERY**
   Return immediately if:
   -Not able to drink or breastfeed
   -Becomes sicker
   -Drinking poorly

Since the child already has a *fever* and blood in the stool, these signs are not listed. You may have combined the signs, 'not able to drink or breastfeed' and 'drinking poorly'.

Additional follow-up: 5 days for ear infection

3. F/up: 7 days for feeding problem
   Return immediately if:
   -Not able to drink or breastfeed
   -Becomes sicker
   -Develops a *fever*
   -Blood in stool
   -Drinking poorly

You may have combined the signs, ‘not able to drink or breastfeed’ and ‘drinking poorly’. Additional follow-up: 14 days for pallor, 30 days for **MODERATE ACUTE MALNUTRITION**.

MODULE-6

MANAGEMENT OF SICK YOUNG INFANT AGE UP TO 2 MONTHS

MANAGEMENT OF SICK YOUNG INFANT AGE UP TO 2 MONTHS

INTRODUCTION

In this module, you will learn to manage a sick young infant age 0 day up to 2 months (59 days). The process is very similar to the one you have learned for managing the sick child age 2 months up to 5 years. All the steps are on one chart:

- **ASSESS**
- **CLASSIFY**
- **TREAT**
- **COUNSEL THE MOTHER**
- **FOLLOW-UP**

Young infants have special characteristics that must be considered when classifying their illness. They can become sick and die very quickly from serious bacterial infections. So early assessment and classification for **URGENT referral** are necessary to prevent mortality and morbidity. They frequently have only general signs such as fewer movements, fever, or low body temperature. Mild chest indrawing is normal in young infants because their chest wall is soft. For these reasons, you will assess, classify and treat the young infant somewhat differently than an older infant or young child. The *YOUNG INFANT* chart lists the special signs of assessment, classifications and treatments for young infants. There is a special Register for young infants. It is similar to the Register for older children. It lists signs to assess a young infant. (A copy of this is in the Annex.). You have already learned how to manage sick children age 2 months up to 5 years is useful for young infants. This module will focus on new information and skills that you need to manage young infants.

Learning Objectives

This module will describe the following tasks and allow you to practice some of them (some will be practiced in the clinic):

- Assessing and classifying a young infant for *very severe diseases*
- Assessing and classifying a young infant for *jaundice*
- Assessing and classifying a young infant with *diarrhoea*
- Checking for a *feeding problem or low weight*, assessing breastfeeding and classifying feeding
- Treating a young infant with oral or intramuscular antibiotics
- Giving fluid for treatment of *diarrhoea*
- Teaching the mother to treat local infections at home
- Teaching correct positioning and attachment for breastfeeding
- Advising the mother how to give home care for the young infant

1.0 ASSESS AND CLASSIFY THE SICK YOUNG INFANT

Ask the mother what the young infant's problems are. Determine if this is an initial or follow-up visit for these problems. If this is a follow-up visit, you should manage the infant according to the special instructions for a follow-up visit. These special instructions are in the follow-up boxes at the bottom of the *YOUNG INFANT* chart (chart booklet page 41-43). They are taught in the module *Follow-Up*.

ASK WHAT THE CHILD'S PROBLEMS ARE

➢ **Determine if this is an initial or follow-up visit for this problem**
- if a follow-up visit, use the follow-up instructions
- if an initial visit, assess the child as follows:

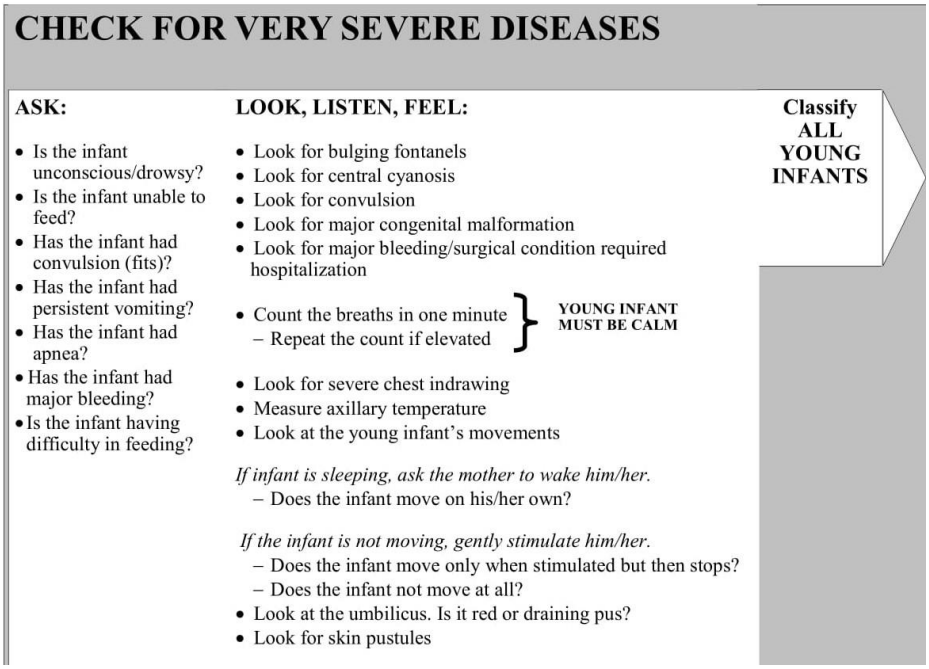
If it is an initial visit, follow the sequence of steps on the chart. This section teaches the steps to assess and classify a sick young infant at an initial visit:

- Check for signs and symptoms of **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CRITICAL ILLNESS (VSD-CI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-FAST BREATHING PNEUMONIA (0-6 DAYS), FAST BREATHING PNEUMONIA (7-59 DAYS), LOCAL BACTERIAL INFECTION** and **INFECTION UNLIKELY**. Then classify the young infant based on the signs found
- Then check for **JAUNDICE** and classify the young infant based on the signs found
- Ask about *diarrhoea*. If the infant has *diarrhoea*, assess the related signs. Classify the young infant for dehydration
- Check for *feeding problem or low weight*. This may include assessing breastfeeding. Then classify feeding
- Check the young infant's immunization status
- Assess any other problems

If you find a reason that a young infant needs an **URGENT referral**, you should continue the assessment. However, skip the breastfeeding assessment because it can take some time.

1.1 CHECK THE YOUNG INFANT FOR VERY SEVERE DISEASES

This assessment step is done for every sick young infant. In this step, you are looking for signs of bacterial infection, especially a serious infection. A young infant can become sick and die very quickly from serious bacterial infections such as pneumonia, sepsis and meningitis.
It is important to assess the signs in the order on the chart and to keep the young infant calm. The young infant must be calm and may be asleep while you assess, count breathing and look for chest indrawing



To assess the next few signs, you will pick up the infant and then undress him, look at the skin all over his body and measure his temperature. By this time, he will probably be awake. Then you can see whether he is unconscious and observe his movements.

How to assess each sign is described below.

Ask: Is the infant unconscious/drowsy?

Is the child in coma? Check the level of consciousness on the 'AVPU' scale:

A= Alert

V= responds to Voice

P= responds to Pain

U= Unconscious

If the child is not awake and alert, try to arouse the child by talking or shaking the arm. If the child is not alert but responds to voice, he or she is lethargic. If there is no response, ask the mother whether the child has been abnormally sleepy or difficult to wake. Determine whether the child responds to pain or unresponsive to a painful stimulus. If this is the case, the child is in coma (Unconscious), needs emergency treatment and **URGENT referral** to hospital.

Ask: Is the infant unable to feed?

If a mother says that the infant is not able to feed, assess breastfeeding or watch her try to feed the infant with a cup to see what she means by this. An infant who is not able to feed may have a serious infection or other life-threatening problem and should be **referred URGENTLY** to hospital.

Ask: Has the infant had convulsions?

During a convulsion, the child's arms and legs stiffen because the muscles are contracting. Blinking of the eyelids, upward rotation of the eyeball or twitching of lips are the usual manifestation of convulsion in young infant. The child may lose consciousness or not be able to respond to spoken directions.

Ask the mother if the child has had convulsions during this current illness. Use words the mother understands. For example, the mother may know convulsions as "fits" or "spasms".

Ask**:** Has the infant had persistent vomiting?

Persistent vomiting is known as a symptom of a large variety of systemic disorders. It can be defined as vomiting for 3 or more times in 1 hour. It is widely used as a warning sign of severe illness. Ask mother if the infant had this type of vomiting.

Ask: Has the infant had apnea?

Apnoea is defined by the cessation of breathing for 20 seconds or longer. Ask mother, if the infant had such episode of breathing cessation for 20 seconds or more. Use the commonly used word "suffocation".

Ask**:** Has the infant had major bleeding?

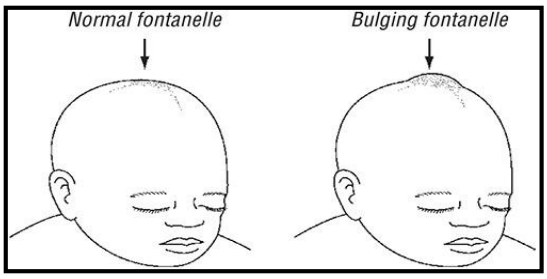
Ask the mother if the infant has had major bleeding (bleeding from mouth, nose, throat and rectum, etc.) during this current illness. Use words the mother understands. For example, mother may know if there was any bleeding from mouth or nose or mixed with stool or urine.

Ask: Has the infant having difficulty in feeding?

Any difficulty mentioned by the mother is important. This mother may need counseling or specific help with difficulty.[20] An infant who is not able to feed may have a serious infection or other life-threatening problem and should be **referred URGENTLY** to hospital.

Look for bulging fontanelles

If you run your fingers gently over your newborn's head, you may feel a couple of soft spots instead of bone. These soft spots, where your baby's skull bones haven't fused together, are called fontanelles. Fontanelles should feel firm and very slightly curved inward to the touch. A bulging fontanelle is an outward curving of an infant's soft spot (fontanelle). A tense or bulging fontanelle occurs when fluid builds up in the brain or the brain swells, causing increased pressure inside the skull. Bulging fontanelle is sign of meningitis in young infants with an open fontanelle. Hold the young infant upright. The young infant should not cry. Now look and feel the fontanelle. If the fontanelle is bulged instead of being flat, the young infant might have meningitis.



Look for central cyanosis

Determine whether there is bluish or purplish discoloration of the tongue in the inside of the mouth and tip of the nose. Central cyanosis is a sign of hypoxia (Diminished O_2 saturation in blood < 90%).

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[20] Breastfeeding difficulties mentioned by a mother may include: her infant feeds too frequently, or not frequently enough; she does not have enough milk; her nipples are sore; she has flat or inverted nipples or the infant does not want to take the breast.

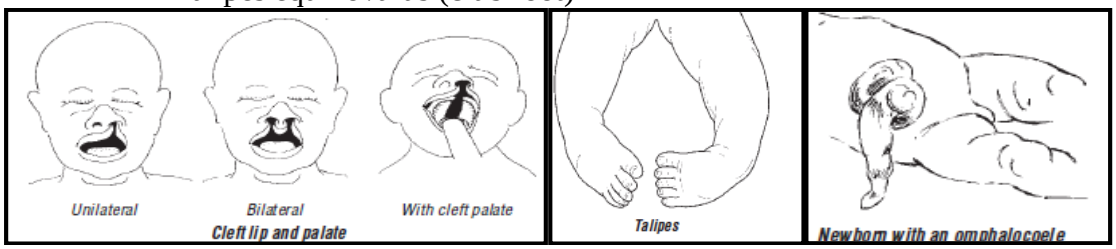
Look for convulsion

Is the child convulsing? Are there spasmodic repeated movements in an unresponsive child? During a convulsion, the child's arms and legs stiffen because the muscles are contracting. Blinking of the eyelids, upward rotation of the eyeball, or twitching of lips are the usual manifestation of convulsion in young infant. The child may lose consciousness or not be able to respond to spoken directions.

Look for major congenital malformation

There are many types of congenital anomaly, but only a few are common. Early recognition results in better outcomes and allows the parents to inform themselves about treatment options. Look, if the child has any following physical malformations:

- Cleft lip and palate
- Bowel obstruction
- Abdominal wall defects
- Myelomeningocoele
- Congenital dislocation of the hip
- Talipes equinovarus (club foot)



Look: For major bleeding/ surgical condition required hospitalization

If major bleeding occurs, it is usually in the gastrointestinal tract, respiratory tract and intracranial hemorrhage, particularly in infants with very severe or prolonged shock. Internal bleeding may not become apparent for many hours, until the first black stool is passed. Look for major bleeding (bleeding from mouth, nose, throat and rectum etc.) or such condition which require hospitalization.

Look: Count the breaths in one minute. Repeat the count if elevated

Count the breathing rate as you would in an older infant or young child. Young infants usually breathe faster than older infants and young children. The breathing rate of a healthy young infant is commonly more than 50 breaths per minute. Therefore, 60 breaths per minute or more is the cutoff used to identify fast breathing in a young infant. If the first count is 60 breaths or more, repeat the count. This is important because the breathing rate of a young infant is often irregular. The young infant will occasionally stop breathing for a few seconds, followed by a period of faster breathing. If the second count is also 60 breaths or more, the young infant has fast breathing. Young infant must be calm.

Look for severe chest indrawing

Look for chest indrawing as you would look for chest indrawing in an older infant or young child. However, mild chest indrawing is normal in a young infant because the chest wall is soft. Severe chest indrawing is very deep and easy to see. Severe chest indrawing is a sign of **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI)** and is serious in a young infant.

Feel: Measure temperature for at least 2 minutes (or feel for *fever* or low body temperature)

Fever (axillary temperature more than 99.5°F or 37.5°C or rectal temperature more than 100.5°F/38°C) is uncommon in the first two months of life. If a young infant has *fever*, this may mean the infant has a serious bacterial infection. In addition, *fever* may be the only sign of a serious bacterial infection. Young infants can also respond to infection by dropping their body temperature to below 95.9°F or 35.5°C (97°F/ 36°C rectal temperature). Low body temperature is called hypothermia. In young infant hypothermia is more common than *fever*.

If you do not have a thermometer, feel the infant's abdomen or axilla (underarm) and determine if it feels hot or unusually cool.

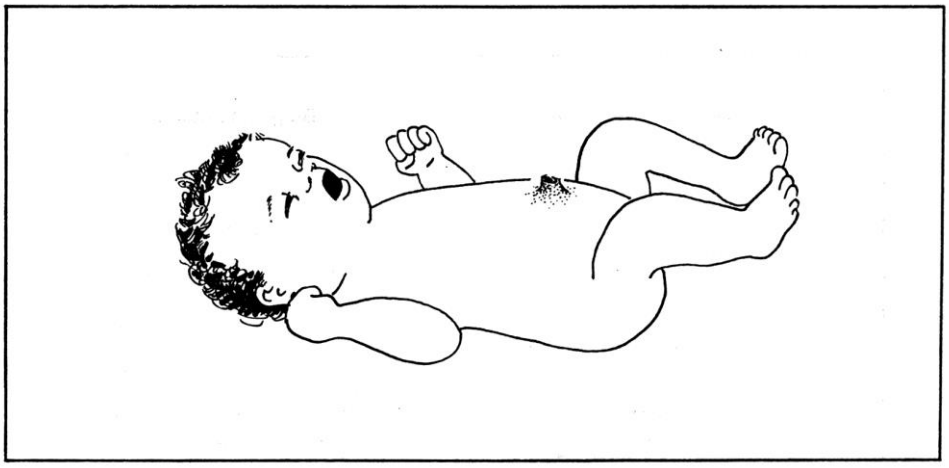
Look for the young infant's movements

Look at the young infant's movements. Are they less than normal?

Awaken young infant will normally move his arms or legs or turn his head several times in a minute if you watch him closely. Observe the infant's movements while you do the assessment. If the infant is sleeping, ask the mother to wake him/her. If the infant is not moving, gently stimulate him/her.

Look at the umbilicus - is it red or draining pus? Does the redness extend to the skin?

There may be some redness of the end of the umbilicus or the umbilicus may be draining pus. (The cord usually drops from the umbilicus by one week of age.) How far down the umbilicus the redness extends determines the severity of the infection. If the redness extends to the skin of the abdominal wall (as shown in this drawing), it is a severe infection.



Look for skin pustules

Examine the skin or the entire body. Skin pustules are red spots or blisters which contain pus. The skin pustules may be some or many. A severe pustule is large or has redness extending beyond the pustules. Many or severe pustules is a sign of severe infection.

Look, listen and measure arterial oxygen saturation (SpO_2)

Measure arterial oxygen saturation (SpO_2) with a pulse oximeter. If pulse oximeter is not available, determine by only **ASK**, **LOOK** and **LISTEN**.

(Detail in the pulse oximeter user manual)

Your facilitator will lead a drill to review the cut-offs for fast breathing

1.2 CLASSIFY SICK YOUNG INFANTS FOR VERY SEVERE DISEASES

Classify sick young infants for *very severe diseases*. Compare the infant's signs to signs listed and choose the appropriate classification. If the infant has any sign in the top three rows, select **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE - CRITICAL ILLNESS (VSD-CI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE - FAST BREATHING PNEUMONIA (0-6 DAYS)** accordingly. If the infant is of 7-59 age group and has the sign listed in the fourth row, then select **FAST BREATHING PNEUMONIA (7-59 DAYS)**. If the infant has redness of umbilicus or pus draining from umbilicus; or has skin pustules and no other signs from top five rows, then select **LOCAL BACTERIAL INFECTION**. An infant who has none of the signs of Very Severe Disease, select **INFECTION UNLIKELY** classification in this table. Select only one classification from the table.

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Any one or more of the following signs: • Unconsciousness/drowsy • Convulsion or H/O Convulsion • Unable to feed • Persistent Vomiting • Bulging fontanels • Apnoea • Central Cyanosis • Major Bleeding • Weight < 1500 gm • Major congenital malformation • Surgical condition requiring hospitalization	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CRITICAL ILLNESS (VSD-CI)**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital**
Any one or more of the following signs • Severe chest indrawing • Fever (37.5°C* or above) or low body temperature (less than 35.5°C*) • Not feeding well • Movement only when stimulated/ no movement at all	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE–CLINICAL SEVERE INFECTION (VSD-CSI)**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital** ➢ **If referral is REFUSED or NOT FEASIBLE, continue intramuscular Gentamicin for 2 days and oral Amoxicillin for 7 days** ➢ **Follow up in 4 days**
• Fast breathing (60 breaths per minute or more) for age 0-6 days	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE- FAST BREATHING PNEUMONIA (0-6 DAYS)**	➢ **Give first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital** ➢ **If referral is REFUSED or NOT FEASIBLE, continue oral Amoxicillin for 7 days** ➢ **Follow up in 4 days**
• Fast breathing (60 breaths per minute or more) for age 7-59 days	*Yellow:* **FAST BREATHING PNEUMONIA (7-59 DAYS)**	➢ Give oral Amoxicillin for 7 days ➢ Treat to prevent low blood sugar ➢ Follow up in 3 days
• Umbilicus red or draining pus • Skin pustules	*Yellow:* **LOCAL BACTERIAL INFECTION**	➢ Give oral Amoxicillin for 5 days ➢ Teach mother to treat local skin infections at home ➢ Advise mother to give home care ➢ Follow up in 2 days
• None of the signs of very severe	*Green:* **INFECTION UNLIKELY**	➢ Advise mother to give home care for the young infant

POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE - CRITICAL ILLNESS (VSD-CI)

A young infant with signs in this classification may have *very severe disease* and be at high risk of dying. The infant may have pneumonia, sepsis or meningitis. It is difficult

to distinguish between these infections in a young infant. Fortunately, it is not necessary to make this distinction.

A young infant with any sign of **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE - CRITICAL ILLNESS (VSD-CI)** will be immediately **referred** to the hospital for management. The sick newborn and infant will be administered 1st dose of intramuscular Gentamicin & oral Amoxicillin (where possible), advised about the importance of hospitalization and **refer URGENTLY** to Hospital with **referral** slip containing **referral** notes including the symptoms. The mother will be advised on frequent breastfeeding/expressed breast-milk in needful circumstances e,g. when breastfeeding is not possible on the way to prevent low blood sugar. She will also be properly advised to keep the baby warm especially during transportation. The mobile phone contact number will be kept to follow-up referral compliance.

POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI)

The sick newborn and infants presented with the symptoms of VSD-CSI will be **referred** to the hospital for management. There will be 2 approaches based on the **referral** compliance:

In case of **referral** compliance: The infant will be administered 1st dose of injection Gentamicin & oral Amoxicillin and **referred URGENTLY** to hospital with **referral** slip containing **referral** notes. The mother and the family member must be taught and advised on frequent breastfeeding on way to prevent low blood sugar. They must also be advised on keeping the baby warm.

In case of **referral** non-compliance: The infant will be managed by using standard treatment protocol:

Injection Gentamicin I/M once daily for 2 days and oral Amoxicillin twice daily for 7 days. The family will be counseled and advised to come to the same facility with the baby to receive 2nd (last) dose of injectable antibiotic and continue oral medicine two times daily for total 7 days.

POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE - FAST BREATHING PNEUMONIA (0-6 DAYS)

Young infants with this classification having fast breathing 60 breath/ minute or more for age 0-6 days.

Treat the infants presenting with isolated fast breathing with Oral Amoxicillin dispersible tablet twice daily for 7 days as per the following schedule.

WEIGHT (kg)	AMOXICILLIN		
	Dispersible tablet 250 mg	Dispersible tablet 125 mg	Syrup (125 mg in 5 ml) per dose (ml)
1.5– 2.4	1/2	1	5
2.5– 3.9	1/2	1	5
4.0– 5.9	1	2	10

In case of **referral** compliance: The infant will be administered 1st dose of oral Amoxicillin and **referred URGENTLY** to hospital with **referral** slip containing

referral notes. The mother and the family member must be taught and advised on frequent breastfeeding on way to prevent low blood sugar. They must also be advised on keeping the baby warm.

In case of **referral** non-compliance: The infant will be managed by using standard treatment protocol:

Oral Amoxicillin twice daily for 7 days

FAST BREATHING PNEUMONIA (7-59 DAYS)

Young infants with this classification have fast breathing (60 breaths/ minute or more for age 7-59 days). Give the first dose of oral Amoxicillin dispersible tablet twice daily for 7 days and ask the family to continue this oral antibiotic treatment for 7 days twice daily. The mother and the family member must be taught and advised on frequent breastfeeding to prevent low blood sugar.

LOCAL BACTERIAL INFECTION

Young infants with this classification have a skin infection, such as, umbilical redness or draining pus and skin pustules. Treatment includes giving oral Amoxicillin at home for 5 days. The mother will also treat the local infection at home and give home care. She should return for follow-up in 2 days to be sure the infection is improving. Bacterial infections can progress rapidly in young infants.

INFECTION UNLIKELY

Young infants with this classification have none of the signs of local infection.

Advise the mother to give home care for the young infant at home.

1.3 CHECK FOR JAUNDICE:

This assessment for *jaundice* is done for every sick young infant. A young infant can have *jaundice* within first 24 hours of life or later. How to assess *jaundice* is described below.

ASK:	LOOK:
• When did jaundice first appear?	• Look for jaundice (yellow eyes or skin) • Look at the young infant's palms and soles. Are they yellow?

Look for *janudice*:

Look at the young infant eyes or skin for *jaundice***.** *jaundice* is a yellow coloration.

Ask the mother when the *jaundice* started (if present):

Ask the mother from when the *jaundice* started. Use words mother understands.

If the infant has yellow palms and soles at any age or the *jaundice* appeared on any part of the body in the first 24 hours of life or it persisted beyond 21 days of age, it is a serious sign which needs **URGENT referral**.

Look at the palms and soles:

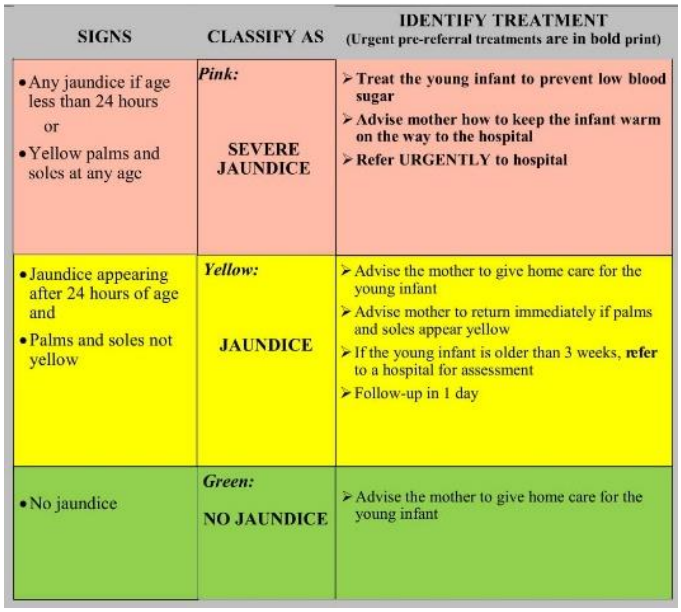
Look if the palms and soles are *jaundiced*.

1.4 CLASSIFY THE YOUNG INFANT FOR JAUNDICE

Compare the infant's signs listed and choose the appropriate classification. An infant who has no signs of jaundice will classify as NO JAUNDICE.

SEVERE JAUNDICE

A young infant with this classification may have a serious disease and be at high risk



SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any jaundice if age less than 24 hours or • Yellow palms and soles at any age	*Pink:* **SEVERE JAUNDICE**	➢ **Treat the young infant to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital**
• Jaundice appearing after 24 hours of age and • Palms and soles not yellow	*Yellow:* **JAUNDICE**	➢ Advise the mother to give home care for the young infant ➢ Advise mother to return immediately if palms and soles appear yellow ➢ If the young infant is older than 3 weeks, **refer** to a hospital for assessment ➢ Follow-up in 1 day
• No jaundice	*Green:* **NO JAUNDICE**	➢ Advise the mother to give home care for the young infant

of dying.

A young infant with **SEVERE JAUNDICE** needs a **URGENT referral** to hospital to provide treatment with light from a special lamp (phototherapy).

Some young infants need to be **referred to** even if the *jaundice* has not yet involved the palms and soles. These are:

- Infants whose *jaundice* already appeared in the first 24 hours of life
  or
- Infant whose *jaundice* persists for more than 21 days of life.

Advice the mother to continue breastfeeding. If the infant is breastfeeding poorly, provide extra milk or expressed breast milk by cup and spoon. The infant must be kept warm on the way to the hospital.

JAUNDICE

If the infant has **JAUNDICE**, but the *jaundice* does not involve the hands and feet; and if he does not have the other conditions of *jaundice* requiring **referral**, advise the mother to

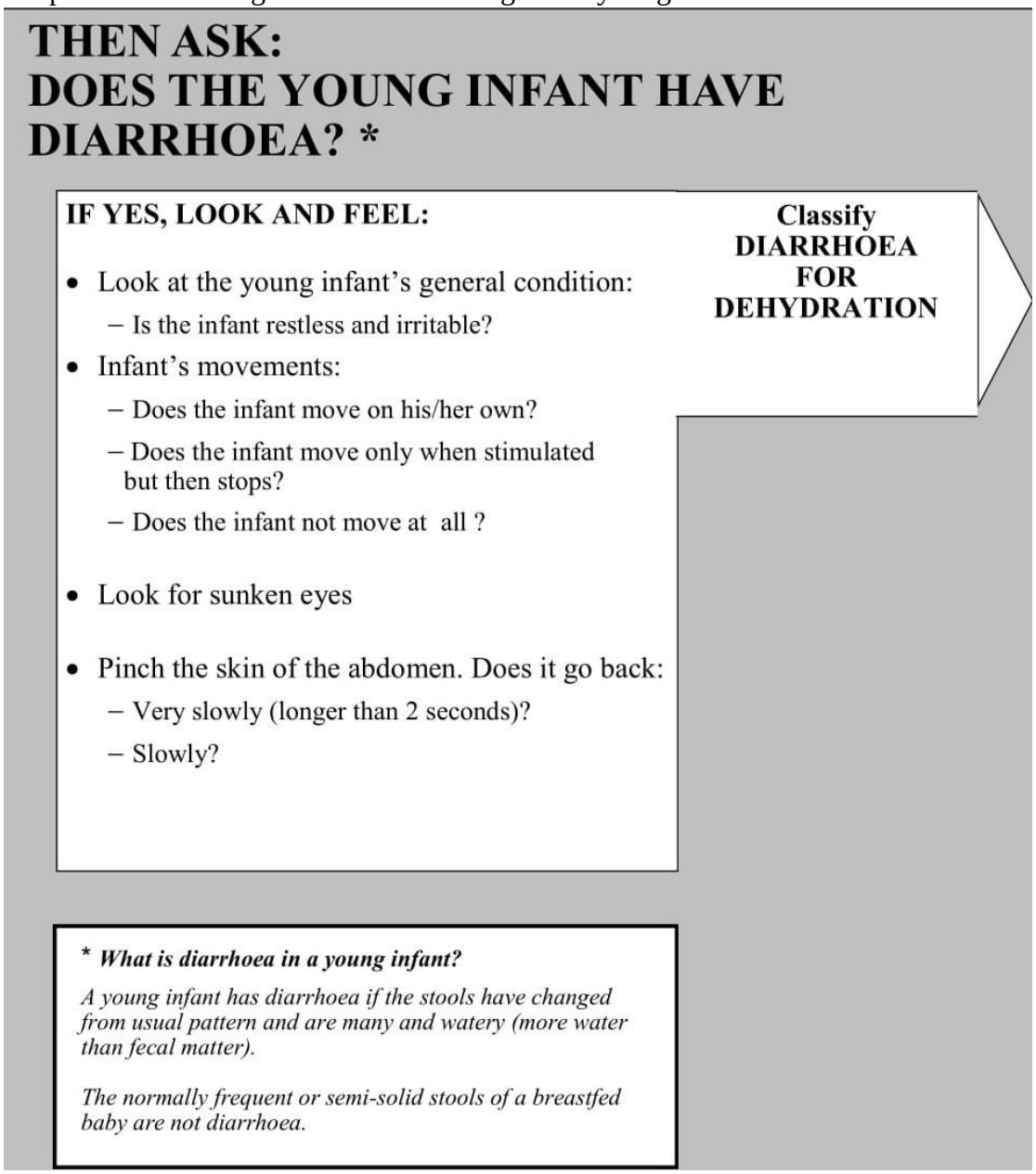
- Give home care for the young infant
  - Breast feed more often and longer
  - Expose the infant to the sun and
- Come in one day for follow up and to return immediately if palms and soles appear yellow

NO JAUNDICE

If the infant has **NO JAUNDICE**, advise the mother to give home care.

1.5 ASSESS *DIARRHOEA*

If the mother says that the young infant has *diarrhoea*, assess and classify for *diarrhoea*. The normally frequent or loose stools of a breastfed baby are not *diarrhoea*. The mother of a breastfed baby can recognize *diarrhoea* because the consistency or frequency of the stools is different than normal. If urination is less than 6 times within 24 hours, the mother should be alert about dehydration. The assessment is similar to the assessment of *diarrhoea* for an older infant or young child, but fewer signs are checked. Thirst is not assessed. This is because it is not possible to distinguish thirst from hunger in a young infant.



1.6 CLASSIFY *DIARRHOEA*

Diarrhoea in a young infant is classified in the same way as in an older infant or young child. Compare the infant's signs to the signs listed and choose one classification for dehydration. Choose an additional classification if the infant has *diarrhoea* for 14 days or more, or blood in the stool.

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Movement only when stimulated or no movement at all • Sunken eyes • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If infant do not have other severe classification:** – **Give fluid for severe dehydration (Plan C)** **or** ➢ **If infant also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** – **Advise mother how to keep the infant warm on the way to the hospital** – **Advise mother to continue breastfeeding**
Two of the following signs: • Restless, irritable • Sunken eyes • Skin pinch goes back slowly	***Yellow:*** **SOME DEHYDRATION**	➢ **Give fluid and food for some dehydration (Plan B)** **or** ➢ **If infant also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way and advise mother how to keep the infant warm on the way to the hospital** – **Advise mother to continue breastfeeding** ➢ Advice mother when to return immediately ➢ Follow-up in 2 days if not improving
• Not enough signs to classify as some or severe dehydration	***Green:*** **NO DEHYDRATION**	➢ Give fluids to treat diarrhoea at home (Plan A) ➢ Advice mother when to return immediately ➢ Follow-up in 2 days if not improving

Using the Young Infant Register

Below are 2 Young Infant Registers. The next sections are for assessing and classifying *Very Severe Diseases, Jaundice* and *Diarrhoea*. Study the examples below, these have been completed to the assessment results and classifications for the infants Mukta and Osman.

IMCI Register (age upto 2 months)

Patient Identification	Physical Examination	ASSESS	CLASSIFY	Treatment	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. No: 301/7 Date: 11·3·19 Child's name: Mukta Date of Birth: 21·2·19 Age: 20days Sex: ☐ Male ☑ Female Visit: ☑ Initial ☐ Follow up Mother's Name: Rabeya Father's Name: Shahid Address: House Name/ Holding Number:	Weight (kg): 3kg Length (Inch): Temperature: (°C/ °F): 38·5° Breaths/ minute: 58 Measure oxygen saturation (SpO_2) by pulse oxymetre (%): 83% Date of starting symptoms: 10·3·19	☑ Unconscious/drowsy ☑ Convulsion/history of convulsion ☑ Unable to feed ☐ Persistent vomiting ☑ Bulging fontanels ☐ Apnoea ☐ Central cyanosis ☐ Major bleeding ☐ Weight <1500 gram ☐ Major congenital malformation ☐ Surgical condition required hospitalization	☑ **Possible Serious Bacterial Infection or Very Severe Disease –Critical Illness (VSD-CI)**	**1st dose given and refer** ☑ Inj. Gentamicin; Dose: 0.5mL ☑ Amoxicillin Syrup; Dose: 5mL	[redacted]
		☐ Severe chest indrawing ☐ Low body temperature (below 95.5 °F or 35.5 °C or feels cool) ☐ Fever (99.5 °F or 37.5 °C or above or feels hot ☐ Move only when stimulated or no movement at all ☐ Difficulty in feeding	☐ **Possible Serious Bacterial Infection or Very Severe Disease - Clinical Severe Infection (VSD-CSI)**	**1st dose given and refer** ☐ Injection Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	☐ Inj. Gentamicin - Once a day for 2 days; Dose: ☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (0-6 days)	☐ **Possible Serious Bacterial Infection or Very Severe Disease – Fast Breathing Pneumonia (0-6 days)**	**1st dose given and refer** ☐ Amoxicillin Syrup; Dose:	☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (7-59 days)	☐ **Fast Breathing Pneumonia (7-59 days)**	[redacted]	☐ Amoxicillin Syrup -Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Umbilicus is red or draining pus ☐ Skin pustules	☐ **Local Bacterial Infection**	[redacted]	☐ Amoxicillin Syrup - Twice a day for 5 days; Dose: ☐ **2nd day FU**
		Check for jaundice: ☐ Yellow Palms and soles ☐ Jaundice within 24 hours of birth	☐ **Severe Jaundice** ☐ **Jaundice**	**Severe jaundice:** ☐ Treat the young infant to prevent low blood sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	**Jaundice:** ☐ Advise for home care ☐ Advise for FU after one day ☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis

Address: House Name/ Holding Number:	symptoms: 10·3·19			sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis
Village/Moholla: Rampur	☐ Palm examinaiton ☐ Eye examination	**Check for Dehydration:** ☐ Move only when stimulated ☐ No movement at all ☐ Restless, irritable ☐ Sunken eyes ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another servere classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** In case of **Some and** ☐ **No dehydration:** ☐ Follow-up in 2 days if not improving
Union: Sarail Upazila: Sarail District: B·baria Mobile Number:	☐ Examination to diagnose other problems	☐ Weight < 2 kg in infants less than 7 days ☐ Not well attached to breast ☑ Not sucking effectively ☐ Less than 8 breastfeeds in 24 hours ☐ Receives other foods or drinks ☐ Low weight for age ☐ Thrush (ulcers or white patches in mouth)	☐ **Very Low weight for Age** ☑ **Feeding Problem or low Weight** ☐ **No Feeding Problem**	☐ **Refer** to hospital for kangaroo mother care ☐ Treat to prevent low blood sugar ☐ Advice the mother to keep the young infant warm on the way to hospital	☑ For feeding problem, advise mother as per IMCI protocol and FU in 2days ☐ If not breastfeeding at all: Refer for breastfeeding counselling and possible relactation ☐ If thrush, teach the mother to treat thrush at home- give Nystatin drop four times a day for 7 days after washing hands everytime and FU in 2 days ☐ If low weight for age, advise for follow up visit after 14 days
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**		
		[redacted]	☐ **Born before 32 weeks /prematurity** ☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Others)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Structural deformity**	**In case of any eye problem:** ☐ **Refer URGENTLY**	[redacted]
		[redacted]	☐ **Drowning** ☐ **Illness due to injuries / accidents**		
		[redacted]	☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		(BCG) OPV-0	Penta-1 OPV-1 PCV-1 IPV	Return for next immunization on: _____ (Date)	

IMCI Register (age upto 2 months)

Patient Identification	Physical Examination	ASSESS	CLASSIFY	Treatment	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. No: 577/3 Date: 18.7.19 Child's name: Osman Date of Birth: Age: 1month Sex: ☑ Male ☐ Female Visit: ☑ Initial ☐ Follow up Mother's Name: Beauty Father's Name: Tanim Address: House Name/ Holding Number:	Weight (kg): 2.8 Length (Inch): Temperature: (°C/ °F): 37° Breaths/ minute: 55 Measure oxygen saturation (SpO_2) by pulse oxymetre (%): 97% Date of starting symptoms: 15.7.19	☐ Unconscious/drowsy ☐ Convulsion/history of convulsion ☐ Unable to feed ☐ Persistent vomiting ☐ Bulging fontanels ☐ Apnoea ☐ Central cyanosis ☐ Major bleeding ☐ Weight <1500 gram ☐ Major congenital malformation ☐ Surgical condition required hospitalization	☐ **Possible Serious Bacterial Infection or Very Severe Disease –Critical Illness (VSD-CI)**	**1st dose given and refer** ☐ Inj. Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	[redacted]
		☐ Severe chest indrawing ☐ Low body temperature (below 95.5 °F or 35.5 °C or feels cool) ☐ Fever (99.5 °F or 37.5 °C or above or feels hot ☐ Move only when stimulated or no movement at all ☐ Difficulty in feeding	☐ **Possible Serious Bacterial Infection or Very Severe Disease - Clinical Severe Infection (VSD-CSI)**	**1st dose given and refer** ☐ Injection Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	☐ Inj. Gentamicin - Once a day for 2 days; Dose: ☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (0-6 days)	☐ **Possible Serious Bacterial Infection or Very Severe Disease – Fast Breathing Pneumonia (0-6 days)**	**1st dose given and refer** ☐ Amoxicillin Syrup; Dose:	☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (7-59 days)	☐ **Fast Breathing Pneumonia (7-59 days)**	[redacted]	☐ Amoxicillin Syrup -Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Umbilicus is red or draining pus ☑ Skin pustules	☑ **Local Bacterial Infection**	[redacted]	☑ Amoxicillin Syrup - Twice a day for 5 days; Dose: 5mL ☑ **2nd day FU**
		Check for jaundice: ☐ Yellow Palms and soles ☐ Jaundice within 24 hours of birth	☐ **Severe Jaundice** ☐ **Jaundice**	**Severe jaundice:** ☐ Treat the young infant to prevent low blood sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	**Jaundice:** ☐ Advise for home care ☐ Advise for FU after one day ☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis

Address: House Name/ Holding Number: Village/Moholla: Union: Matlab Upazila: Matlab District: Chandpur Mobile Number:	symptoms: 15.7.19 ☐ Palm examinaiton ☐ Eye examination ☐ Examination to diagnose other problems			sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis
		Check for Dehydration: ☐ Move only when stimulated ☐ No movement at all ☐ Restless, irritable ☐ Sunken eyes ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another servere classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** In case of **Some and** ☐ **No dehydration:** ☐ Follow-up in 2 days if not improving
		☐ Weight < 2 kg in infants less than 7 days ☐ Not well attached to breast ☐ Not sucking effectively ☐ Less than 8 breastfeeds in 24 hours ☐ Receives other foods or drinks ☐ Low weight for age ☐ Thrush (ulcers or white patches in mouth)	☐ **Very Low weight for Age** ☐ **Feeding Problem or low Weight** ☐ **No Feeding Problem**	☐ **Refer** to hospital for kangaroo mother care ☐ Treat to prevent low blood sugar ☐ Advice the mother to keep the young infant warm on the way to hospital	☐ For feeding problem, advise mother as per IMCI protocol and FU in 2days ☐ If not breastfeeding at all: Refer for breastfeeding counselling and possible relactation ☐ If thrush, teach the mother to treat thrush at home- give Nystatin drop four times a day for 7 days after washing hands everytime and FU in 2 days ☐ If low weight for age, advise for follow up visit after 14 days
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**		
		[redacted]	☐ **Born before 32 weeks /prematurity** ☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Others)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Structural deformity**	**In case of any eye problem:** ☐ **Refer URGENTLY**	[redacted]
		[redacted]	☐ **Drowning** ☐ **Illness due to injuries / accidents**		
		[redacted]	☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Return for next immunization on: _____ (Date)	

EXERCISE A

Part 1 -- Video

You will watch a video of young infants. This will demonstrate how to assess a young infant for *Very Severe Diseases* and show examples of the signs.

Part 2 -- Photographs

Study the photographs numbered 60 - 62 in the booklet. Read the explanation below for each photo.

Photograph 60: Normal umbilicus in a newborn

Photograph 61: An umbilicus with redness extending to the skin of the abdomen

Photograph 62: Many skin pustules

Study the photographs numbered 63 - 65. Tick your assessment of the umbilicus of each of these young infants.

Umbilicus	Normal	Redness or draining pus	Redness extending to the skin of the abdomen
Photograph 63			
Photograph 64			
Photograph 65			

The group will discuss the video and photographs

EXERCISE B

In this exercise you will practice recording assessment results on a Young Infant Register. You will classify the infants for *Very Severe Diseases* and *diarrhoea*.

Get 8 blank Young Infant Registers from a facilitator. Also, turn to the YOUNG INFANT chart in your chart booklet.

To do each case:

1. Label a register with the young infant's name.
2. Read the case information. Write the infant's age, weight, temperature, breaths per minute, oxygen saturation and starting date of the symptoms. Check 'Initial Visit'. (All the infants in this exercise are coming for an initial visit.)
3. Record the assessment results on the Register.
4. Classify the child for **POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE - CRITICAL ILLNESS (VSD-CI), POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE- CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE - FAST BREATHING PNEUMONIA (0-6 DAYS), FAST BREATHING PNEUMONIA (7-59 DAYS)** and **LOCAL BACTERIAL INFECTION**. Also, classify for Jaundice and *Diarrhoea*.
5. Then go to the next case

Case 1: Ali

Ali is a 3-week-old infant. His weight is 3.6 kg. His axillary temperature is 36.5° C. He is brought to the clinic because he is having difficulty breathing. The health worker first checks the young infant for signs of *very Severe Diseases*. His mother says that Ali has not had convulsions and is feeding well. The health worker counts 74 breaths per minute. He repeats the count. The second count is 70 breaths per minute. His oxygen saturation level was 94%. He finds that Ali has mild chest indrawing. He does not have bulging fontanelles. Ali is calm and awake and his movements are normal. He does not have *diarrhoea*.

Case 2:Banu

Banu is 1 week old. Her weight is 3 kg. Her axillary temperature is 37°C. Her mother brought her to the clinic because she has a rash. The health worker assesses for sign of *very Severe Diseases*. Banu's mother said that there was no convulsion or feeding problem. Banu's breathing is 55 per minutes. Her oxygen saturation (SpO_2) was found 98%. She has no chest indrawing. She does not have bulging fontanelles. She is awake and her movements are normal Her umbilicus is normal. The health worker examines the entire body and finds just a few skin pustules on her buttocks. The health worker examines the hands and feet. They are not jaundiced. She does not have *diarrhoea*.

Case 3:Jalil

Jalil is a tiny baby who was born exactly one and a half weeks ago. His weight is 2.5 kg. His axillary temperature is 36.5° C. His mother says that he was born prematurely, at home, and was born much smaller than her other babies. She is worried because his umbilicus is infected. She says he has had no convulsions or feeding problem. The health worker counts his breathing and finds he is breathing 55 breaths per minute. His oxygen saturation level was 99%. He has no chest indrawing. He does not have bulging fontanelles. He is awake and content. He is moving normally. His umbilicus has some pus on the tip and a little redness at the tip only. The health worker looks over his entire body and finds no skin pustules. He does not have *diarrhoea*.

Case 4:Hena

Hena is 7 weeks old. Her weight is 3 kg. Her axillary temperature is 36.4^{o}C. Her mother has brought her because she has *diarrhoea*. The health worker first assesses her for signs of *very severe diseases.* Her mother says that she has not had convulsions or feeding problem. Her breathing rate is 58 per minute. Her oxygen saturation level was 93%. She was sleeping in her mother's arms but awoke when her mother unwraps her. She has slight chest indrawing. She does not have bulging fontanelles She is crying and moving her arms and legs.

When the health worker asks the mother about Hena's *diarrhoea*, the mother replies that it began 3 days ago and there is no blood in the stool. Hena is still crying. She stopped once when her mother put her to the breast. She began crying again when she stopped breastfeeding. Her eyes look normal, not sunken. When the skin of her abdomen is pinched, it goes back slowly.

Case 5: Meena

Meena is 6 weeks old. Her weight is 4.2 kg. Her axillary temperature measures 36.5° C. Her mother brought her to the clinic because she has *diarrhoea* and seems very sick. When the health worker asks the mother if Meena has had convulsions, she says no. The mother said that Meena has stopped breastfeeding well.

The health worker counts 50 breaths per minute. Meena has severe chest indrawing. Her oxygen saturation level was found at 79%. Then the health worker checks for central cyanosis and founds that there is no bluish discoloration of tip of the nose, tongue and ear lobules and other body parts. She does not have bulging fontanelles. Undressing Meena, speaking to her, shaking her arms and legs and picking her up do not wake her. Meena is unconscious.

In response to the health worker's questions, the mother says that Meena has had *diarrhoea* for 1 week and she there is no blood in the stool. The health worker finds that her eyes are sunken. When the skin on her abdomen is pinched, it goes back very slowly.

Case 6: Mita

Mita is a 4-weeks old infant. Her weight is 2.7 kg. Her axillary temperature is 37^{o}C. She is brought to the clinic because she has *diarrhoea*, is crying a lot and is breastfeeding less than normal. The health worker first checks the young infant for signs

of *very severe diseases*. Her mother says that Mita has not had convulsions. The health worker counts 52 breaths per minute and her oxygen saturation level was 99%. She has no chest indrawing. She does not have bulging fontanelles. She awoke and cried when her mother unwrapped her.

When the health worker asks the mother about Mita's *diarrhoea*, the mother says that it began 2 days ago. The mother says she is worried because there is blood in the stool. Mita is crying. She is moving actively. Her eyes are not sunken. When the health worker pinches the skin of her abdomen, it goes back quickly.

Case 7: Hasim

Hasim is a 6-day old infant. His weight is 4 kg. His axillary temperature is 36.5ºC. He is brought to the clinic because he is not feeding well and looks weak. The health worker first checks the young infant for signs of *very severe diseases*. His mother says that Hasim has not had convulsion and he is not feeding well. The health worker counts 55 breaths per minute. His oxygen saturation level was 95%. He has no chest indrawing. He does not have bulging fontanelles. He has a normal umbilicus and no skin rash. He is awake but his movements are less than normal. The health worker then checked his hands and feet for *jaundice*. Both his hands and feet are jaundiced.

The mother said that Hasim has no *diarrhoea*.

Case 8: Nila

Nila is 3 weeks old. Her weight is 3.2 kg. Her axillary temperature measures 36.5° C. Her mother brought her to the clinic because she has less movement than normal. When the health worker asks the mother if Nila has had persisted vomiting, she says no. The mother said that Nila is not feeding well. The health worker counts 50 breaths per minute. Her oxygen saturation level was 94%. Nila has severe chest indrawing. She does not have bulging fontanelles. Undressing Nila, speaking to her, shaking her arms and legs and found that Nila is responsive only when stimulated.

When you have completed this exercise, please discuss your answers with a facilitator

Note:

Keep the Registers for these 8 young infants. You will continue to assess, classify and identify treatment for them later in this module.

1.7 THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT

Adequate feeding is essential for growth and development. Poor feeding during infancy can have lifelong effects. Growth is assessed by determining the weight for age. It is important to assess a young infant's feeding and weight so that feeding can be improved if necessary.

The best way to feed a young infant is to breastfeed exclusively. Exclusive breastfeeding means that the infant takes only breastmilk, and no additional food, water or other fluids. (Medicines and vitamins are exceptions.)

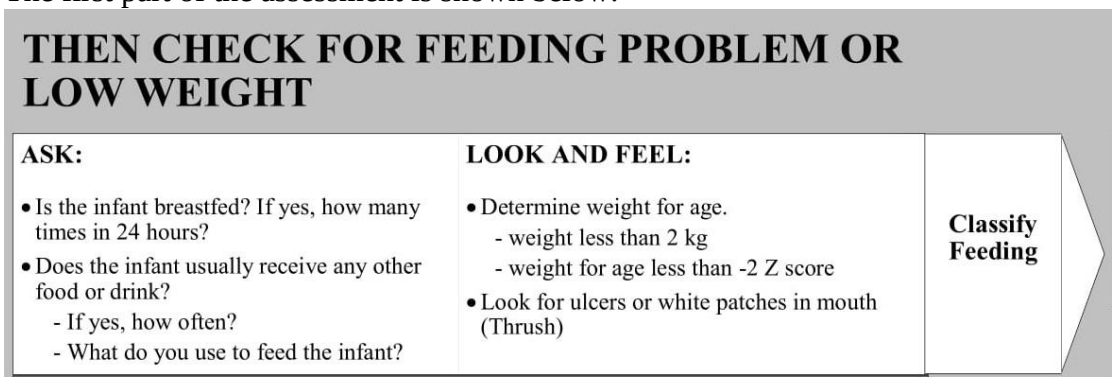
Exclusive breastfeeding gives a young infant the best nutrition and protection from possible disease. If mothers understand that exclusive breastfeeding gives the best chances of good growth and development, they may be more willing to breastfeed. They may be motivated to breastfeed to give their infants a good start in spite of social or personal reasons that make exclusive breastfeeding difficult or undesirable.

The assessment has two parts. In the first part, you ask the mother questions. You determine if she is having difficulty in feeding the infant, what the young infant is fed and how often. You also determine the weight for length.

In the second part, if the infant has any problems with breastfeeding or is low weight for length, you assess how the infant breastfeeds.

1.7.1 Ask About Feeding and Determine Weight for Age

The first part of the assessment is shown below:



Ask: Is the infant breastfed? If yes, how many times in 24 hours?

The recommendation is that the young infant be breastfed as often and for as long as the infant wants, day and night. This should be 8 or more times in 24 hours.

Ask: Does the infant usually receive any other foods or drinks? If yes, how often?

A young infant should be exclusively breastfed. Find out if the young infant is receiving any other foods or drinks such as other milk, juice, tea, thin porridge, dilute cereal, or even water. Ask how often he receives it and the amount. You need to know if the infant is mostly breastfed, or mostly fed on other foods.

Ask: What do you use to feed the infant?

If an infant takes other foods or drinks, find out if the mother uses a feeding bottle or cup.

Look: Determine weight for age

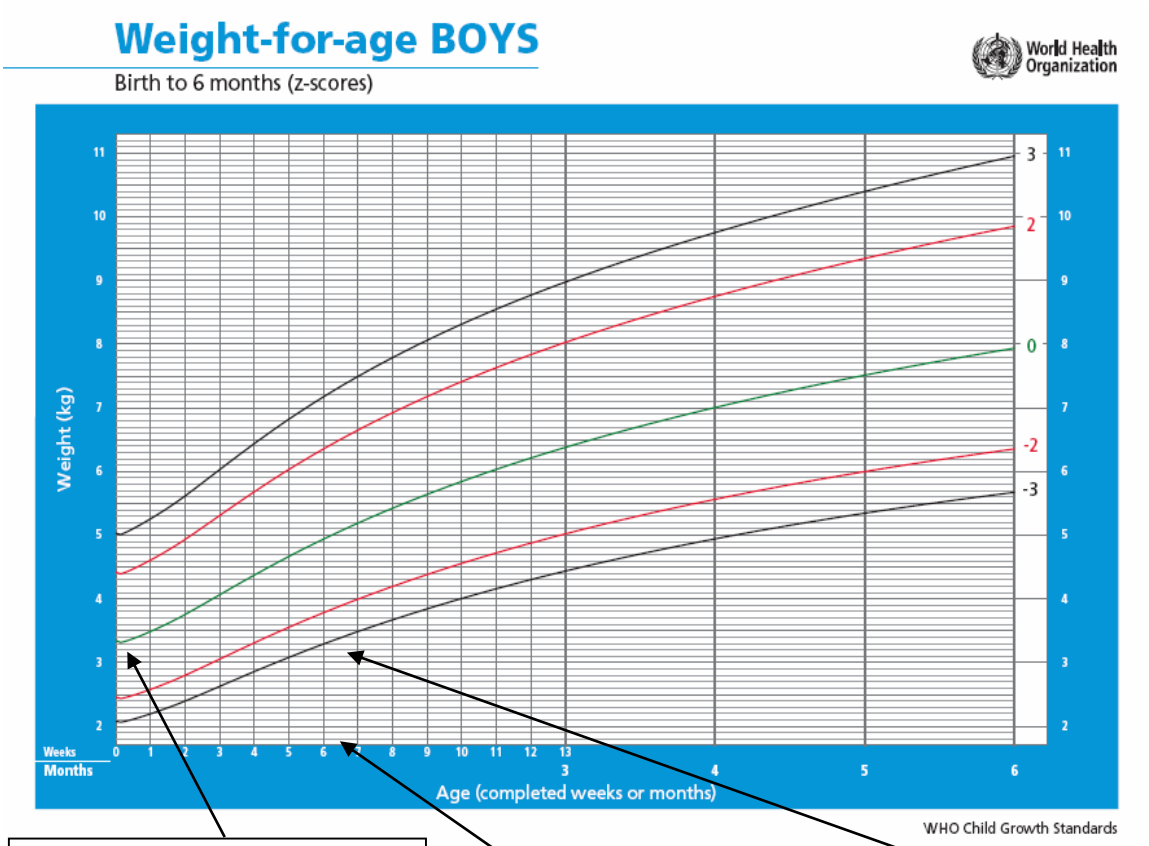
Weight for age differs between boys and girls for all ages & rate of growth also rapid in first 6 months of life. You will identify young infant whose weight for age either by their weight being below 2 kg or below -2 Z-score of a weight for age chart. These are infants who are low weight for age. Infants on or above the -2 Z-score of the chart can still be malnourished. But infants who are below these cut off values need special attention.

Look now at the WHO weight for age charts. There are 2 weight for age charts. Blue coloured one for the boys & pink coloured are for the girls. For children up to 6 months of age take the weight for age chart "Births to 6 months". All the time you have to choose the sex specific chart.

Use the Weight for age chart to determine whether the infant is low for weight. Use the weight for age chart - Birth to 6months instead of weight for length (birth to 2years) or height (2months to 5years) for older children charts

Some young infants who are low for weight now, were low birth weight babies in the first place. Some infants don't gain expected weight even after a few days of birth.

EXAMPLE:
A young infant (boy) is 6 weeks old and weighs 3 kilograms. Here is how the health provider determined the infant's weight for age.



1. This line shows the infant's weight: **3.0 kg**

2. This line shows the infant's age: **6 months**

3. This is the point where the lines for age and weight meet. Because the point is **below** the **bottom curve**, the infant is low weight for age.

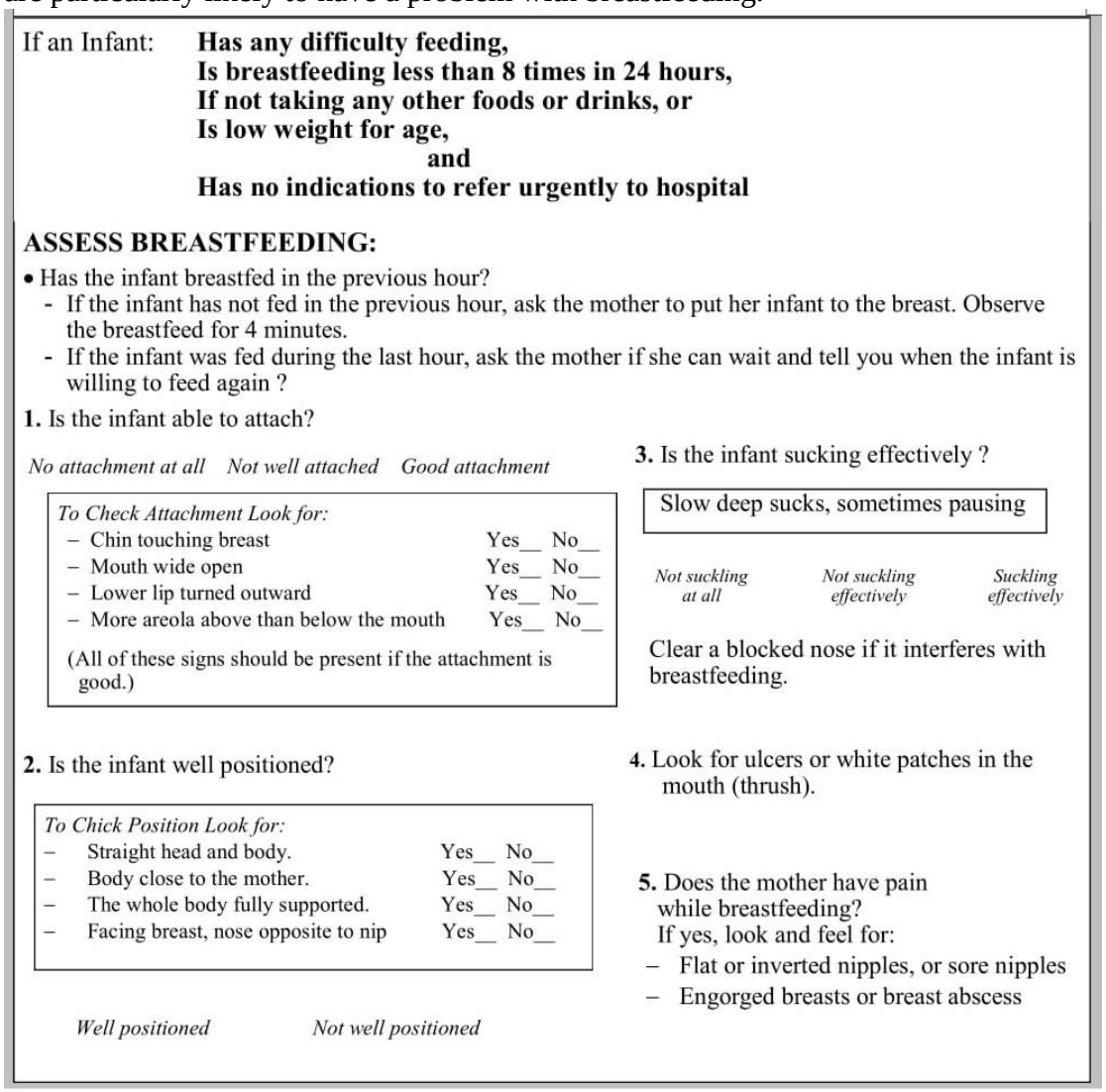
1.7.2 Assess Breastfeeding

First, decide whether to assess the infant's breastfeeding:

- If the infant is exclusively breastfed without difficulty and is not low weight for age, there is no need to assess breastfeeding
- If the infant is not breastfed at all, do not assess breastfeeding
- If the infant has a serious problem requiring **URGENT referral** to a hospital, do not assess breastfeeding

In these situations, classify the feeding based on the information that you have already.

If the mother's answers or the infant's weight indicates a difficulty, observe a breastfeed as described below. Low weight for age is often due to low birth weight. Low birth weight infants are particularly likely to have a problem with breastfeeding.



If an Infant: **Has any difficulty feeding, Is breastfeeding less than 8 times in 24 hours, If not taking any other foods or drinks, or Is low weight for age, and Has no indications to refer urgently to hospital**

ASSESS BREASTFEEDING:

• Has the infant breastfed in the previous hour?
- If the infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.
- If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again ?

1. Is the infant able to attach?

No attachment at all *Not well attached* *Good attachment*

To Check Attachment Look for:
- Chin touching breast Yes__ No__
- Mouth wide open Yes__ No__
- Lower lip turned outward Yes__ No__
- More areola above than below the mouth Yes__ No__

(All of these signs should be present if the attachment is good.)

2. Is the infant well positioned?

To Chick Position Look for:
- Straight head and body. Yes__ No__
- Body close to the mother. Yes__ No__
- The whole body fully supported. Yes__ No__
- Facing breast, nose opposite to nip Yes__ No__

Well positioned *Not well positioned*

3. Is the infant sucking effectively ?

Slow deep sucks, sometimes pausing

Not suckling at all *Not suckling effectively* *Suckling effectively*

Clear a blocked nose if it interferes with breastfeeding.

4. Look for ulcers or white patches in the mouth (thrush).

5. Does the mother have pain while breastfeeding?
If yes, look and feel for:
- Flat or inverted nipples, or sore nipples
- Engorged breasts or breast abscess

Assessing breastfeeding requires careful observation.

Ask: Has the infant breastfed in the previous hour?

If so, ask the mother to wait and tell you when the infant is willing to feed again. In the meantime, complete the assessment by assessing the infant's immunization status. You may also decide to begin any treatment that the infant needs, such as giving an antibiotic for *very severe diseases* or ORS solution for **SOME DEHYDRATION**.

If the infant has not fed in the previous hour, he may be willing to breastfeed. Ask the mother to put her infant to the breast.

Observe a whole breastfeed if possible, or observe for at least 4 minutes. Sit quietly and watch the infant breastfeed.

Look: Is the infant able to attach?

The four signs of good attachment are:

- Chin touching breast (or very close)
- Mouth wide open
- Lower lip turned outward
- More areola visible above than below the mouth

If all of these four signs are present, the infant has good attachment.

If attachment is not good, you may see:

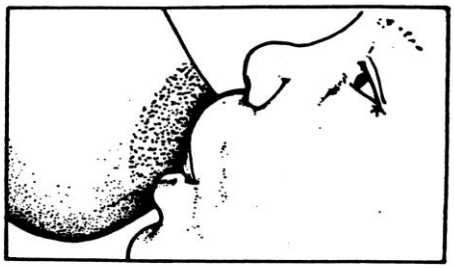
- Chin not touching breast
- Mouth not wide open, lips pushed forward
- Lower lip turned in, or
- More areola (or equal amount) visible below the infant's mouth than above it

If you see any of these signs of poor attachment, the infant is not well attached.

If a very sick infant cannot take the nipple into his mouth and keep it there to suck, he has no attachment at all. He is not able to breastfeed at all.

If an infant is not well attached, the results may be pain and damage to the nipples. Or the infant may not remove breastmilk effectively which may cause engorgement of the breast. The infant may be unsatisfied after breastfeeds and want to feed very often or for a very long time. The infant may get too little milk and not gain weight, or the breastmilk may dry up. All these problems may improve if an attachment can be improved.

A baby well attached to his mother's breast



A baby poorly attached to his mother's breast

Look: Is the child well positioned?

One reason for poor attachment may be poor positioning.

Check the following for good positioning:

- Infant's head and body straight
- Infant facing the breast, with the infant's nose opposite the nipple
- Infant's body close to the mother
- Mother supporting infant's whole body, not just neck, and shoulders

All these signs should be present if the positioning is good.

Look: Is the infant sucking effectively? (that is, slow deep sucks, sometimes pausing)

The infant is sucking effectively if he suckles with slow deep sucks and sometimes pauses. You may see or hear the infant swallowing. If you can observe how the breastfeed finishes, look for signs that the infant is satisfied. If satisfied, the infant releases the breast spontaneously (that is, the mother does not cause the infant to stop breastfeeding in any way). The infant appears relaxed, sleepy, and loses interest in the breast.

An infant is not sucking effectively if he is taking only rapid, shallow sucks. You may also see the indrawing of the cheeks. You do not see or hear swallowing. The infant is not satisfied at the end of the feed, and maybe restless. He may cry or try to suck again or continue to breastfeed for a long time.

An infant who is not sucking at all is not able to suck breastmilk into his mouth and swallow. Therefore, he is not able to breastfeed at all.

If a blocked nose seems to interfere with breastfeeding, clear the infant's nose. Then check whether the infant can suck more effectively.

Look for thrush (ulcers or white patches in the mouth):

Look inside the mouth at the tongue and inside of the cheek. Thrush looks like milk curds on the inside of the cheek or a thick white coating of the tongue. Try to wipe the white off. The white patches of thrush will remain.

EXERCISE C

This exercise is a video case study of a young infant. You will practice assessing and classifying the young infant for **very severe disease** and *diarrhoea*. Record your assessment results on the Register on the next page. Then record the infant's classifications.

IMCI Register (age upto 2 months)

Patient Identification	Physical Examination	ASSESS	CLASSIFY	Treatment	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. No: Date: Child's name: Date of Birth: Age: Sex: ☐ Male ☐ Female Visit: ☐ Initial ☐ Follow up Mother's Name: Father's Name: Address: House Name/ Holding Number: Village/Moholla: Union: Upazila: District: Mobile Number:	Weight (kg): …… Length (Inch): …… Temperature: (°C/ °F): …… Breaths/ Minute: …… Measure oxygen saturation (SpO_2) by pulse oxymetre (%): …… Date of starting symptoms: …… ☐ Palm examinaiton ☐ Eye examination ☐ Examination to diagnose other problems	☐ Unconscious/drowsy ☐ Convulsion/history of convulsion ☐ Unable to feed ☐ Persistent vomiting ☐ Bulging fontanels ☐ Apnoea ☐ Central cyanosis ☐ Major bleeding ☐ Weight <1500 gram ☐ Major congenital malformation ☐ Surgical condition required hospitalization	☐ **Possible Serious Bacterial Infection or Very Severe Disease –Critical Illness (VSD-CI)**	**1st dose given and refer** ☐ Inj. Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	
		☐ Severe chest indrawing ☐ Low body temperature (below 95.5 °F or 35.5 °C or feels cool) ☐ Fever (99.5 °F or 37.5 °C or above or feels hot ☐ Move only when stimulated or no movement at all ☐ Difficulty in feeding	☐ **Possible Serious Bacterial Infection or Very Severe Disease - Clinical Severe Infection (VSD-CSI)**	**1st dose given and refer** ☐ Injection Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	☐ Inj. Gentamicin - Once a day for 2 days; Dose: ☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (0-6 days)	☐ **Possible Serious Bacterial Infection or Very Severe Disease – Fast Breathing Pneumonia (0-6 days)**	**1st dose given and refer** ☐ Amoxicillin Syrup; Dose:	☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (7-59 days)	☐ **Fast Breathing Pneumonia (7-59 days)**		☐ Amoxicillin Syrup -Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Umbilicus is red or draining pus ☐ Skin pustules	☐ **Local Bacterial Infection**		☐ Amoxicillin Syrup - Twice a day for 5 days; Dose: ☐ **2nd day FU**
		Check for jaundice: ☐ Yellow Palms and soles ☐ Jaundice within 24 hours of birth	☐ **Severe Jaundice** ☐ **Jaundice**	**Severe jaundice:** ☐ Treat the young infant to prevent low blood sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	**Jaundice:** ☐ Advise for home care ☐ Advise for FU after one day ☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis
		Check for Dehydration: ☐ Move only when stimulated ☐ No movement at all ☐ Restless, irritable ☐ Sunken eyes ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another servere classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** In case of **Some and** ☐ **No dehydration:** ☐ Follow-up in 2 days if not improving
		☐ Weight < 2 kg in infants less than 7 days ☐ Not well attached to breast ☐ Not sucking effectively ☐ Less than 8 breastfeeds in 24 hours ☐ Receives other foods or drinks ☐ Low weight for age ☐ Thrush (ulcers or white patches in mouth)	☐ **Very Low weight for Age** ☐ **Feeding Problem or low Weight** ☐ **No Feeding Problem**	☐ **Refer** to hospital for kangaroo mother care ☐ Treat to prevent low blood sugar ☐ Advice the mother to keep the young infant warm on the way to hospital	☐ For feeding problem, advise mother as per IMCI protocol and FU in 2days ☐ If not breastfeeding at all: Refer for breastfeeding counselling and possible relactation ☐ If thrush, teach the mother to treat thrush at home- give Nystatin drop four times a day for 7 days after washing hands everytime and FU in 2 days ☐ If low weight for age, advise for follow up visit after 14 days
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**		
			☐ **Born before 32 weeks /prematurity** ☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Others)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Structural deformity**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries / accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG Penta-1 OPV-0 OPV-1 PCV-1 IPV		Return for next immunization on: _____ (Date)	

EXERCISE D

In this exercise you will practice recognizing signs of good and poor attachment during breastfeeding as shown on video and in photographs.

Part 1 - Video

This video will show how to check for a feeding problem and assess breastfeeding. It will show the signs of good and poor attachment and effective and ineffective suckling.

Part 2 - Photographs

1. Study photographs numbered 66 through 70 of young infants at the breast. Look for each of the signs of good attachment. Compare your observations about each photograph with the answers in the chart below to help you learn what each sign looks like. Notice the overall assessment of attachment.

2. Now study photographs 71 through 74. In each photograph, look for each of the signs of good attachment and mark on the chart whether each is present. Also write your overall assessment of attachment.

Photo	Signs of Good Attachment				Assessment	Comments
	Chin Touching Breast	Mouth Wide Open	Lower Lip Turned Outward	More Areola Showing Above		
66	yes (almost)	yes	yes	yes	Good attachment	
67	no	no	yes	no (equal above and below)	Not well attached	
68	yes	no	no	yes	Not well attached	Lower lip turned in
69	no	no	no	no	Not well attached	Cheeks pulled in
70	yes	yes	yes	cannot see	Good attachment	
71						
72						
73						
74						

3. Study photographs 75 and 76. These photographs show white patches (thrush) in the mouth of an infant.

When you have finished assessing the photographs, discuss your answers with a facilitator

1.8 CLASSIFY FEEDING

Compare the young infant's signs to the signs listed in each row and choose the appropriate classification.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Weight < 2 kg in infants less than 7 days	***Pink:*** **VERY LOW WEIGHT FOR AGE**	➢ **REFER to hospital for kangaroo mother care** ➢ **Treat to prevent low blood sugar** ➢ **Advice the mother to keep the young infant warm on the way to hospital**
➢ Not well attached to breast ➢ Not suckling effectively ➢ Less than 8 breastfeeds in 24 hours ➢ Receives other foods or drinks ➢ Low weight for age ➢ Thrush (ulcers or white patches in mouth)	***Yellow:*** **FEEDING PROBLEM or LOW WEIGHT**	➢ If not well attached or not suckling effectively, teach correct positioning and attachment ➢ If not able to attach well immediately, teach the mother to express breast milk and feed by a cup ➢ If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding. Advise her to breastfeed as often and for as long as the infant wants, day and night ➢ If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup ➢ If not breastfeeding at all: - **Refer** for breastfeeding counselling and possible relactation - Advise about correctly preparing breastmilk substitutes and using a cup ➢ Advise the mother how to feed and keep the low weight infant warm at home ➢ If thrush, teach the mother to treat thrush at home ➢ Advise mother to give home care for the young infant ➢ Follow-up any feeding problem or thrush in 2 days ➢ Follow-up low weight for age in 14 days
• Not low weight for age and no other signs of inadequate feeding	***Green:*** **NO FEEDING PROBLEM**	➢ Advise mother to give home care for the young infant ➢ Praise the mother for feeding the infant well

FEEDING PROBLEM OR LOW WEIGHT

This classification includes infants who are low weight for age or infants who have some signs that their feeding needs improvement. They are likely to have more than one of these signs.

Advise the mother of any young infant in this classification to breastfeed as often and for as long as the infant wants, day and night. Short breastfeeds are an important reason why an infant may not get enough breastmilk. The infant should breastfeed as long as the baby wants. Teach each mother about any specific help her infant needs, such as better positioning and attachment for breastfeeding, or treating thrush. Also, advise the mother on how to give home care for the young infant.

An infant in this classification needs to return to the health worker for follow-up. The health worker will check that the feeding is improving and give additional advice as needed.

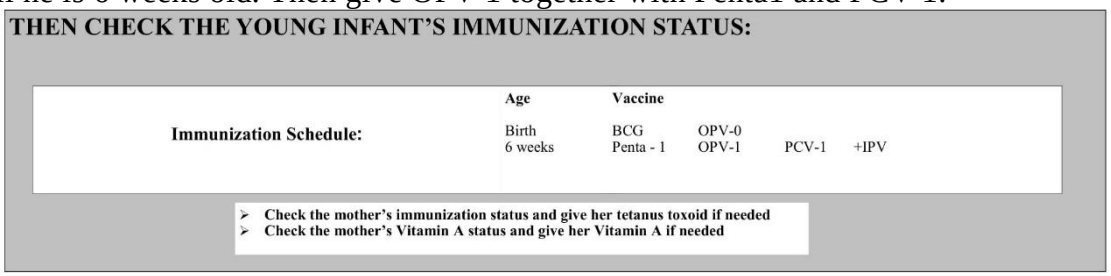
NO FEEDING PROBLEM

A young infant in this classification is exclusively and frequently breastfed.

"Not low weight" for age means that the infant's weight for age is not below the line for "Low Weight for Age". It is not necessarily normal or good weight for age, but the infant is not in the high-risk category that we are most concerned with.

1.9 CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS

Check immunization status just as you would for an older infant or young child. Remember that you should not give OPV 0 to an infant who is more than 14 days old. Therefore, if an infant has not received OPV 0 by the time he is 15 days old, you should wait to give OPV until he is 6 weeks old. Then give OPV 1 together with Penta1 and PCV 1.



1.10 ASSESS OTHER PROBLEMS

Assess any other problems mentioned by the mother or observed by you. **Refer** to any guidelines on treatment of the problems. If you think the infant has a serious problem, or you do not know how to help the infant, **refer** the infant to a hospital.

EXERCISE E

This exercise will continue the 8 cases begun in Exercise B. Get out the 8 Young Infant Registers that you used in Exercise B. **Refer** to the *YOUNG INFANT* chart and the Weight for Age chart as needed.

For each case:

1. Read the description of the rest of the assessment of the infant. Record the additional assessment results on the infant's Register.
2. Use the Weight for Age chart to determine if the infant is low weight for age.
3. Classify feeding.
4. Check the infant's immunizations status. Record immunizations needed today and when the infant should return for the next immunization.

Case 1: Ali

Ali's mother says that she has no difficulty feeding him. She breastfeeds about 8 times in 24 hours. She gives him no other foods or drinks. The health worker uses the Weight for Age chart and determines that Ali's weight (3.6 kg) is not low for his age (3 weeks). The health provider decides not to assess breastfeeding. When asked about immunizations, Ali's mother says that he was born at home and had no immunizations. There are no other problems.

Case 2: Banu

When asked if she has any difficulty feeding Banu, the mother says no. She says that Banu breastfeeds 9 or 10 times in 24 hours and drinks no other fluids. Then the health worker **refer**s to Banu's weight and age recorded at the top of the Register. He uses the Weight for Age chart to check Banu's weight for age. The health worker decides that there is no need to assess breastfeeding. Banu's mother has an immunization card. It shows that she received BCG and OPV 0 at birth in the hospital. When the health worker asks the mother if Banu has any other problems, she says no.

Case 3: Jalil

Jalil's mother says that she has had no problem breastfeeding him and that she breastfeeds Jalil 6 or 7 times in 24 hours. She has not given him any other milk or drinks. The health worker checks his weight for age.

Since Jalil is a low weight for age, the health provider decides to assess breastfeeding. is mother says that he is probably hungry now, and puts him to the breast? The health worker observes that Jalil's chin touches the breast, his mouth is wide open and his lower lip is turned outward. More areola is visible above than below the mouth. The health provider also checked Jalil for positioning and noted that he is well-positioned. He is suckling with slow deep sucks, sometimes pausing. His mother continues feeding him until he is finished. The health provider sees no ulcers or white patches in his mouth. Jalil has had no immunizations.

Case 4: Hena

When asked, Hena's mother says that Hena usually feeds well. She breastfeeds 3 times a day. She also takes a bottle of breastmilk substitute 3 times a day. The health provider checks her weight for age. Since Hena is taking other foods and is low weight for age,

the health worker decides to assess breastfeeding. Hena has not fed in the previous hour. Her mother agrees to try to breastfeed now. The health worker observes that Hena's chin is not touching the breast. Her mouth is not very wide open and her lips are pushed forward. The same amount of areola is visible above and below the mouth. The health worker also noted that Hena's body is turned away from the mother, & the mother supported only the neck. Hena's head and body were not straight. She faces the breast. Her body was not close to her mother. Her sucks are quick and are not deep. When Hena stops breastfeeding, the health provider looks in her mouth. He sees no ulcers or white patches in her mouth. Hena's mother has an immunization card. It shows that Henna received BCG and OPV 0 in the hospital. Her mother says that she has no other problems.

Case 5: Meena

The health provider asks Meena's mother if she has difficulty feeding her. The mother says that there was no difficulty until Meena got sick, but now she is not feeding. She breastfed a little last night. This morning her mother repeatedly tried to breastfeed her, but Meena cannot feed, she just sleeps. She usually breastfeeds 8 times in 24 hours and takes no other drinks. The health worker checks her weight for age. Since Meena is not able to feed and should be **referred URGENTLY**, the health worker does not assess breastfeeding. Meena's mother says that she was born at home and has received no immunizations.

Case 6: Mita

Mita's mother says that she had no problem breastfeeding her until 2 days ago. She still breastfeeds about 8 times in 24 hours but does not nurse for as long each time. She drinks no other fluid. Because Mita should be **referred URGENTLY** for blood in the stool, the health worker does not asses breastfeeding. Mita's mother has an immunization card which shows she received BCG and OPV-0 in the hospital. Her mother says she has no other problems.

Case 7: Hasim

The health worker asks Hasim's mother if she has difficulty feeding him. The mother says that there was no difficulty until Hasim got sick 3 days back. Now he is not feeding well. He takes very little. She usually breastfeeds him 8-10 times in 24 hours and gives him no other drinks. The health provider checks his weight for age. Because Hasim should be **referred URGENTLY** for **SEVERE JAUNDICE**, the health provider does not assess breastfeeding. Hasim's mother says that he was born at home and has received no immunization.

Case 8: Nila

The health provider asks Nila's mother if she has difficulty feeding her. The mother says that there was no difficulty until Nila got sick, but now she is not feeding well. She usually breastfeeds 8 times in 24 hours and takes no other drinks. The health worker checks her weight for age. As Nila should be **referred** for **POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE- CLINICAL SEVERE INFECTION (VSD-CSI)** the health worker does not assess breastfeeding. Nila's mother has an immunization card which shows that she received BCG and OPV-0 in the hospital

When you have completed this exercise, please discuss your answers with a facilitator

2.0 IDENTIFY APPROPRIATE TREATMENT

For each of the young infant's classifications, find the treatments recommended on the *YOUNG INFANT* chart. List them on the Register.

2.1 DETERMINE IF THE YOUNG INFANT NEEDS URGENT REFERRAL

If the infant has **POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE -CRITICAL ILLNESS (VSD-CI), POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE- CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE - FAST BREATHING PNEUMONIA (0-6 DAYS)** or **SEVER JAUNDICE**, needs **URGENT referral**.

If the young infant has **SEVERE DEHYDRATION** (and does not have other severe classification), the infant needs rehydration with IV fluids according to Plan C. If you can give IV therapy, you can treat the infant in the clinic. Otherwise, **URGENTLY refer** the infant for IV therapy. If a young infant has both **SEVERE DEHYDRATION** and any condition requiring **URGENT referral**, **refer** the infant **URGENTLY** to hospital. The mother should give frequent sips of ORS on the way and continue breastfeeding.

2.2 IDENTIFY TREATMENTS FOR A YOUNG INFANT WHO DOES NOT NEED URGENT REFERRAL

Identify treatments for each classification by reading the chart. Record treatments, advise mother and tell her when to return for a follow-up visit. Follow-up visits are especially important for a young infant. If you find at the follow-up visit that the infant is worse, you will **refer** the infant to the hospital. In case of a young infant, suffering from **POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE -CRITICAL ILLNESS (VSD-CI), POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE - FAST BREATHING PNEUMONIA (0-6 DAYS) or FAST BREATHING PNEUMONIA (7-59 DAYS)** when referral is either refused or not feasible, the infant should come for follow up in 4 days. The infant receiving antibiotics for **LOCAL BACTERIAL INFECTION** has to come back in 2 days for follow-up visit. If an infant has *diarrhea, feeding problem* or thrush he should return in 2 days for a follow-up visit. While infant with **JAUNDICE** has to return in 1 day. Infants who are breastfed and who are not, with *low weight for age,* have two separate recommendations on follow-up date. Infants on breastfeed should visit the health worker for reassessment in 14 days while who are not breastfed infant has to come back in 7days for follow-up.

2.3 IDENTIFY URGENT PRE-REFERRAL TREATMENT NEEDED

Before **URGENTLY refer**ring a young infant to the hospital, give all appropriate pre-referral treatments. Urgent pre-referra**l** treatments are in **bold** print on the chart. Some treatments should not be given before **referral** because they are not **URGENTLY** needed and would delay **referral**. For example, do not teach a mother how to treat a local infection before **referral**. Do not give immunizations before **referral**.

2.4 GIVE URGENT PRE-REFERRAL TREATMENTS

Below are the urgent pre-referral treatments for a young infant:

- Give the first dose of intramuscular Gentamicin and oral Amoxicillin. (How to give them is described in section 3.2.)
- Advise the mother how to keep the infant warm on the way to the hospital

  If the mother is familiar with wrapping her infant next to her body, this is a good way to keep him warm on the way to the hospital. Keeping a sick young infant warm is very important.
- Treat to prevent low blood sugar

  This treatment is described in the box on the *TREAT THE CHILD* chart and in the Treat the Child module (see section 5.4)
- **Refer URGENTLY** to hospital with the mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding

2.5 REFER THE YOUNG INFANT

Use the same procedures for **referring** a young infant to hospital as for **referring** an older infant or young child. Prepare a **referral** note and explain to the mother the reason you are **referring** the infant. Teach her anything she needs to do on the way, such as keeping the young infant warm, breastfeeding, and giving sips of ORS. In addition, explain that young infants are particularly vulnerable. When they are seriously ill, they need hospital care and need to receive it promptly. Many cultures have reasons NOT to take a young infant to the hospital. If this is the case, you will have to address these reasons and explain that the infant's illness can best be treated at the hospital. If the mother is not going to take the infant to the hospital, follow the guidelines in Annex E: When **Referral** Is Not Possible, in the module Treat the Child.

3.0 TREAT THE SICK YOUNG INFANT AND COUNSEL THE MOTHER

The treatment instructions for a young infant are on the *YOUNG INFANT* chart. These are all appropriate for young infants and should be used instead of those on the *TREAT THE CHILD* chart. For example, the antibiotics and dosages on the *YOUNG INFANT* chart are appropriate for young infants.

3.1 GIVE ORAL AMOXICILLIN

Refer to the box on the *YOUNG INFANT* chart to determine the dose based on the young infant's weight. Follow the steps on the *YOUNG INFANT* chart for teaching a mother how to give oral Amoxicillin at home. That is, teach her how to measure a single dose. Show her how to crush a tablet and mix it with breast milk. Guide her as needed to give the first dose and teach her the schedule. Watch the mother and ask checking questions to be sure she knows how to give the antibiotic.

3.2 GIVE THE FIRST DOSE OF AND ORAL ANTIBIOTICS

Young infants get both intramuscular Gentamicin and oral Amoxicillin. Young infants with **POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE - CRITICAL ILLNESS (VSD-CI)** and **POSSIBLE SEVERE BACTERIAL INFECTION or VERY SEVERE DISEASE- CLINICAL SEVERE INFECTION (VSD-CSI)** are often infected with a broader range of bacteria than older infants. The combination of Gentamicin and Amoxicillin is effective against this broader range of bacteria.

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

Give First Dose of Antibiotics

- *For **Possible Serious Bacterial Infection- Very Severe Disease - Critical illness***
  - Give first dose of both intramuscular Gentamicin and oral Amoxicillin. **Refer URGENTLY** to hospital
- *For **Possible Serious Bacterial Infection- Very Severe Disease- Clinical Severe Infection***
  - Give first dose of both intramuscular Gentamicin and oral Amoxicillin. **Refer URGENTLY** to hospital
  - If **REFUSED** or **NOT FEASIBLE**, continue intramuscular antibiotic once daily for 2 days along with oral antibiotic twice daily for 7 days
- *For **Possible Serious Bacterial Infection- Very Severe Disease- Fast Breathing Pneumonia (0-6 days)***
  - Give first dose of oral Amoxicillin. **Refer URGENTLY** to hospital
  - If referral is **REFUSED** or **NOT FEASIBLE**, continue twice daily for 7 days
- *For **Fast Breathing Pneumonia (7-59 days)***
  - Give first dose of oral Amoxicillin, continue twice daily for 7 days
- *For **Local Bacterial Infection***
  - Give first dose of oral Amoxicillin, continue twice daily for 5 days

WEIGHT (kg)	GENTAMICIN	GENTAMICIN
	Injection 80 mg/2 ml	Injection 20 mg/2ml
	Volume per dose (ml)	Volume per dose (ml)
1.5– 2.4	0.2	0.8
2.5– 3.9	0.4	1.6
4.0– 5.9	0.6	2.4

WEIGHT (kg)	AMOXICILLIN		
	Dispersible tablet 250 mg	Dispersible tablet 125 mg	Syrup (125 mg in 5 ml) per dose (ml)
1.5– 2.4	1/2	1	5 ml
2.5– 3.9	1/2	1	5 ml
4.0– 5.9	1	2	10 ml

Using Gentamicin

Read the vial of Gentamicin to determine its strength. Check whether it should be used undiluted or should be diluted with sterile water. When ready to use, the strength should be 80 mg/2ml.

Choose the dose from the row of the table which is closest to the infant's weight.

Using Amoxicillin

Read the bottle of Amoxicillin to determine its strength. When ready to use, the strength should be 125 mg/5ml.

Choose the dose from the row of the table which is closest to the infant's weight.

If an infant with *very severe* who cannot go to a hospital, it is possible to continue treatment using these intramuscular and oral antibiotics. Instructions are in Annex E: Where **Referral** is Not Possible, in the module *Treat the Child*.

EXERCISE F

In this exercise, you will identify all the treatments needed, and specify the appropriate antibiotics and doses for infants. **Refer** to the *YOUNG INFANT* chart as needed.

Take out the Young Infant Registers.

For each case:

1. Review the infant's assessment results and classifications which you have written on the Register, to remind you of the infant's condition. Note that one of the young infants is unconscious and may not be able to take oral medication and cannot breastfeed. Also, note that one of the young infants is premature.
2. Determine whether or not the young infant should be **URGENTLY referred**. If so, just mark the urgent treatments needed. If the infant does not need an **URGENT referral**, mark all recommended treatments on the Register.
3. If the infant needs an antibiotic, also mark the name of the antibiotic and schedule that should be given and write down the dose.

When you have completed this exercise, please discuss your answers with a facilitator

3.3 TREAT DIARRHOEA

Plan A: Treat *Diarrhoea* at Home

All infants and children who have *diarrhoea* need extra fluid and continued feeding to prevent dehydration and give nourishment. The best way to give a young infant extra fluid and continue feeding is to breastfeed more often and for longer at each breastfeed. Additional fluids that may be given to a young infant are ORS solution and clean water. If an infant is exclusively breastfed, it is important not to introduce a food-based fluid. If a young infant will be given ORS solution at home, you will show the mother how much ORS to give the infant after each loose stool. She should first offer a breastfeed, then give the ORS solution. Remind the mother to stop giving ORS solution after the *diarrhoea* has stopped.

PLAN 'A': TREAT DIARRHOEA AT HOME

Counsel the mother on home treatment for the young infant with diarrheoa:

1. **Give Extra Fluid**
2. **Continue exclusive breastfeeding**
3. **Know when to return to hospital**

1. GIVE EXTRA FLUID (as much as the child will take)

- **Tel the mother to:**
  - Breastfeed frequently and for longer at each feed
  - Give ORS or clean water in addition to breastmilk

It is especially important to give ORS at home when the young infant:

- has been treated according to Plan B or Plan C during this visit
- cannot return to a clinic if the diarrhoea gets worse
  - Teach the mother how to mix and give ORS. Give the mother 2 packets of ORS to use at home
  - Show the mother how much fluid to give in addition to the usual fluid intake:
    - Up to 2 years, 50–100 ml after each loose stool

- **Tell the mother to:**
  - Give frequent small sips from a cup
  - If the infant vomits, wait 10 minutes. Then continue, but more slowly
  - Continue giving extra fluid until the diarrhoea stop

2. CONTINUE EXCLUSIVE BREASTFEEDING

3. KNOW WHEN TO RETURN

Plan B: Treat **SOME DEHYDRATION** with Oral Rehydration Salt (ORS)

A young infant who has **SOME DEHYDRATION** needs ORS solution as described in Plan B. During the first 4 hours of rehydration, encourage the mother to pause to breastfeed the infant whenever the infant wants, then resume giving ORS. Give a young infant who does not breastfeed an additional 100-200 ml clean water during this period.

PLAN 'B': TREAT SOME DEHYDRATION WITH ORAL REHYDRATION SALT (ORS)

At the clinic, give the recommended amount of ORS over 4-hours

DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

WEIGHT	< 6 kg
AGE	**Up to 4 months**
ORS	200 - 450 mL
Note: The approximate amount of ORS required (in mL) is calculated by multiplying the young infant's weight (in kg) by 75	

- If the young infant wants more ORS than shown, give more

➢ **SHOW THE MOTHER HOW TO GIVE ORS SOLUTION**

- Give frequent small sips from a cup
- If the young infant vomits, wait 10 minutes. Then continue, but more slowly
- Continue breastfeeding whenever young infant wants

➢ **AFTER 4 HOURS**

- Reassess young infant, and classify him or her for dehydration
- Select the appropriate plan to continue treatment
- Begin feeding the child in clinic

➢ **IF THE MOTHER HAS TO LEAVE BEFORE COMPLETING TREATMENT**

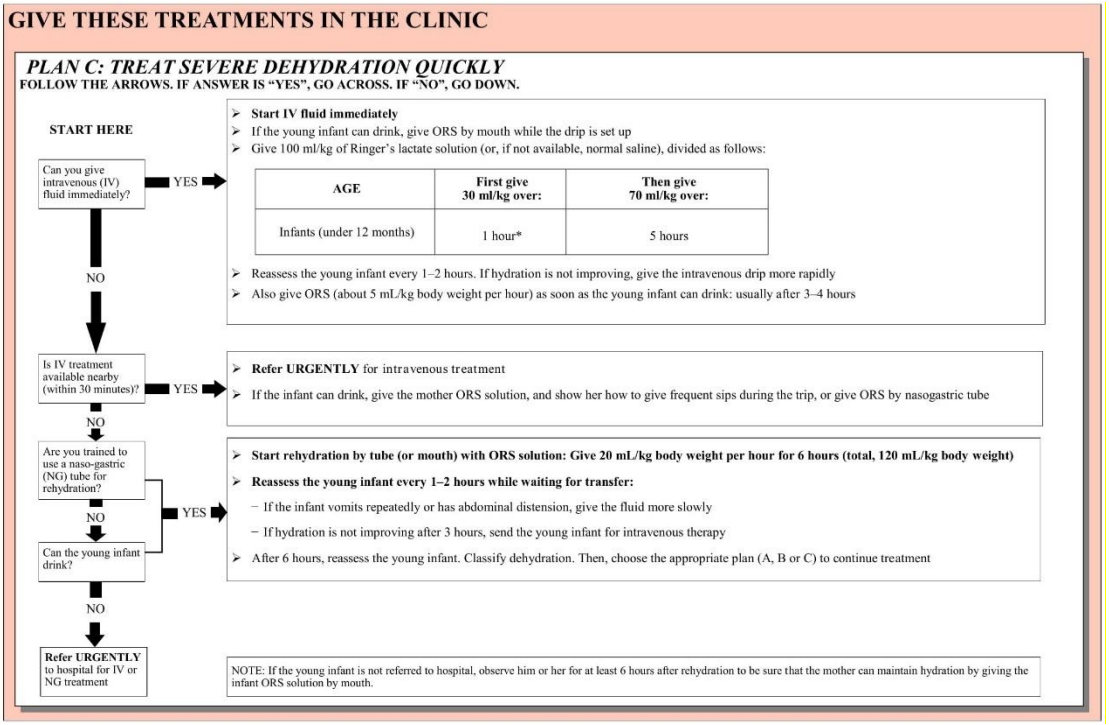
- Show her how to prepare ORS solution at home
- Show her how much ORS to give to finish 4- hour treatment at home
- Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in Plan A

Explain the rules of home treatment for the young infant:

1. **GIVE EXTRA FLUIDS**
2. **CONTINUE EXCLUSIVE BREASTFEEDING**
3. **WHEN TO RETURN**

Plan C: Treat **SEVERE DEHYDRATION** Quickly

A young infant who has **SEVERE DEHYDRATION** should be treated in the clinic. If you are trained to give IV saline then start rehydrating the infant quickly. If you cannot give IV therapy then try to rehydrate the infant by NG tube and if you are not trained to use NG tube then try to give ORS by mouth, if the infant can drink, otherwise **refer URGENTLY.**



3.4 IMMUNIZE EVERY SICK YOUNG INFANT, AS NEEDED

Administer any immunizations that the young infant needs today. Tell the mother when to bring the infant for the next immunizations.

3.5 TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

There are three types of local infection in a young infant that a mother can treat at home: an umbilicus which is red or draining pus, skin pustules or thrush. These local infections are treated in the same way that mouth ulcers are treated in an older infant or young child. Twice each day, the mother cleans the infected area and then applies gentian violet. Nystatin ointment should be used in the mouth.

Teach the Mother to Treat Local Infections at Home

- Explain how the treatment is given
- Watch her as she does the first treatment in the clinic
- Tell her to do the treatment twice daily. She should return to the clinic if the infection worsens

To Treat Skin Pustules or Umbilical Infection

The mother should do the treatment twice daily for 5 days:

- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint the skin or umbilicus/cord with full strength gentian violet (0.5%)
- Wash hands again

To Treat Thrush (ulcers or white patches in mouth)

The mother should do the treatment four times daily for 7 days:

- Wash hands
- Paint the mouth with Nystatin
- Wash hands again

Explain and demonstrate the treatment to the mother. Then watch her and guide her as needed while she gives the treatment. She should return for follow-up in 2 days, or sooner if the infection worsens. She should stop using gentian violet after 5 days. She should continue the treatment with Nystatin up to 7 days. Ask her checking questions to be sure that she knows to give Gentian violet twice daily and Nystatin ointment 4 times a day and also when to return.
If the mother will treat skin pustules or umbilical infection, give her a bottle of full strength (0.5%) gentian violet. If the mother will treat thrush, advise her a Nystatin ointment. Ask for checking questions to make sure that she has got the message right.

3.6 TEACH CORRECT POSITIONING AND ATTACHMENT FOR BREASTFEEDING

Reasons for Poor Attachment and Ineffective Suckling:

There are several reasons that an infant may be poorly attached or not able to suckle effectively. He may have had bottle feeds, especially in the first few days after delivery. His mother may be inexperienced. She may have had some difficulty and nobody to help or advise her. For example, perhaps the infant was small and weak, the mother's nipples were flat or there was a delay starting to breastfeed. The infant may be poorly positioned at the breast. Positioning is important because poor positioning often results in poor attachment, especially in younger infants. If the infant is positioned well, the attachment is likely to be good.

Good positioning is recognized by the following signs:

- Infant's head and body straight
- Infant facing the breast, with infant's nose opposite the nipple
- Infant's body close to the mother
- Mother supporting infant's whole body, not just neck and shoulders

Poor positioning is recognized by any of the following signs:

- Infant's neck is twisted or bent forward
- Infant's body is turned away from mother
- Infant's body is not close to mother, or
- Only the infant's head and neck are supported

Baby's body close, facing breast

Baby's body away from mother, neck twisted

Improving Positioning and Attachment

If in your assessment of breastfeeding you found any difficulty with attachment or sucking, help the mother position and attach her infant better. Make sure that the mother

is comfortable and relaxed, for example, sitting on a low seat with her back straight. Then follow the steps in the box below.

Teach Correct Positioning and Attachment for Breastfeeding

- Show the mother how to hold her infant:
  - with the infant's head and body straight
  - facing her breast, with infant's nose opposite her nipple
  - with infant's body close to her body
  - supporting infant's whole body, not just neck and shoulders
- Show her how to help the infant to attach. She should:
  - touch her infant's lips with her nipple
  - wait until her infant's mouth is opening wide
  - move her infant quickly on to her breast, aiming the infant's lower lip well below the nipple
- Look for signs of good attachment and effective suckling. If the attachment or suckling is not good, try again

Always observe a mother breastfeeding before you help her so that you understand her situation clearly. Do not rush to make her do something different. If you see that the mother needs help, first say something encouraging, like:

"She really wants your breast milk, doesn't she?"

Then explain what might help and ask if she would like you to show her. For example, say something like,

"Breastfeeding might be more comfortable for you if your baby took a larger mouthful of breast. Would you like me to show you how?"

If she agrees, you can start to help her.

Infant ready to attach. Nose is opposite nipple, mouth is open wide.

As you show the mother how to position and attach the infant, be careful not to take over from her. Explain and demonstrate what you want her to do. Then let the mother position and attach the infant herself. Then look for signs of good attachment and effective suckling again. If the attachment or suckling is not good, ask the mother to remove the infant from her breast and to try again. When the infant is suckling well, explain to the mother that it is important to breastfeed long enough at each feed. She should not stop the breastfeeding before the infant wants to. Counselling about Other Feeding Problems

- If a mother is breastfeeding her infant less than 8 times in 24 hours, advise her to increase the frequency of breastfeeding. Breastfeed as often and for as long as the infant wants, day and night
- If the infant receives other foods or drinks, counsel the mother about breastfeeding more, reducing the amount of the other foods or drinks, and if possible, stopping altogether. Advise her to feed the infant any other drinks from a cup, and not from a feeding bottle
- If the mother does not breastfeed at all, consider **refer**ring her for breastfeeding counselling and possible relactation. If the mother is interested, a breastfeeding counsellor may be able to help her to overcome difficulties and begin breastfeeding again
- If the mother is a working mother or some reason does not breastfeed her child, teach

the mother how to express breast milk

Teach the Mother How to Express Breast Milk

Ask the mother to:

- Wash her hands thoroughly
- Make herself comfortable
- Hold a wide necked container under her nipple and areola
- Place her thumb on top of the breast and the first finger on the under side of the breast so they are opposite each other (at least 4 cm from the tip of the nipple)
- Compress and release the breast tissue between her finger and thumb a few times
- If the milk does not appear she should re-position her thumb and finger closer to the nipple and compress and release the breast as before
- Compress and release all the way around the breast, keeping her fingers the same distance from the nipple. Be careful not to squeeze the nipple or to rub the skin or move her thumb or finger on the skin
- Express one breast until the milk just drips, then express the other breast until the milk just drips
- Alternate between breasts 5 or 6 times, for at least 20 to 30 minutes
- Stop expressing when the milk no longer flows but drips from the start

- Advise a mother who does not breastfeed, about choosing and correctly preparing an appropriate breastmilk substitute (see section 3.1 of Counsel the Mother module). Also advise her to feed the young infant with a cup, and not from a feeding bottle

Teach the Mother to Treat Breast or Nipple Problems

- If the nipple is flat or inverted, evert the nipple several times with fingers before each feed and put the baby to the breast
- If nipple is sore, apply breast milk for soothing effect and ensure correct positioning and attachment of the baby. If mother continues to have discomfort, feed expressed breast milk with cup and spoon
- If breasts are engorged, let the baby continue to suck if possible. If the baby cannot suckle effectively, help the mother to express milk and then put the young infant to the breast. Putting a warm compress on the breast may help
- If breast abscess, advise mother to feed from the other breast and refer to a surgeon. If the young infant wants more milk, feed diluted cow/goat milk with added sugar by cup and spoon

Follow-up any young infant with a feeding problem in 2 days. This is especially important if you are recommending a significant change in the way the infant is fed.

EXERCISE G

Part 1: Video
You will watch a video demonstration of the steps to help a mother improve her baby's positioning and attachment for breastfeeding.

Part 2: Photographs
In this exercise you will study photographs to practice recognizing signs of good or poor positioning and attachment for breastfeeding. When everyone is ready, there will be a group discussion of each of the photographs. You will discuss what the health worker could do to help the mother improve the positioning and attachment for breastfeeding.

1. Study photographs numbered 77 through 79 of young infants at the breast. Look for each of the signs of good positioning. Compare your observations about each photograph with the answers in the chart below to help you learn what good or poor positioning looks like.

2. Now study photographs 80 through 82. In these photographs, look for each of the signs of good positioning and mark on the chart whether each is present. Also decide if the attachment is good.

Photo	Signs of Good Positioning				Comments on Attachment
	Infant's Head and Body Straight	Head and Body Facing Breast	Infant's Body Close to Mother's	Supporting Infant's Whole Body	
77	yes	Yes	yes	yes	
78	yes	Yes	yes	yes	
79	no - neck turned so not straight with body	No	no - turned away from mother's body	no	Positioning is not good: the infant's neck is turned, not straight with the body, the body is turned away from mother's body, the whole body is not supported and head and body not facing the breast
80					
81					
82					

Tell a facilitator when you have completed this exercise
When everyone is ready, there will be a group discussion

3.7 ADVISE MOTHER TO GIVE HOME CARE FOR THE YOUNG INFANT

These are basic home care steps for all sick young infants. Teach each mother these steps.

COUNSEL THE MOTHER

ADVISE THE MOTHER TO GIVE HOME CARE FOR THE YOUNG INFANT

1. Exclusively Breastfeed the Young Infant
- Give only breastfeeds to the young infant.
- Breastfeed frequently, as often and for as long as the infant wants

2. Make Sure That the Young Infant is Kept Warm at All Time
- In cool weather cover the infant's head and feet and dress the infant with extra clothing

3. When to Return:

Follow-up Visit:

If the infant has:	Return for follow-up in:
• JAUNDICE	1 day
• DIARRHOEA • FEEDING PROBLEM • THRUSH	2 days
• PNEUMONIA • SEVERE PNEUMONIA when referral is REFUSED or NOT FEASIBLE	3 days
• LOW WEIGHT FOR AGE in an infant not receiving breastmilk	7 days
• LOW WEIGHT FOR AGE in breastfed infant	14 days

When to Return Immediately:

Advise the mother to return immediately if the young infant has any of these signs:
- Unconsciousness
- Convulsion
- Vomiting persistently
- Bulging fontanels
- Central cyanosis
- Bleeding excessively
- Severe chest indrawing
- Breastfeeding or drinking poorly
- Reduced activity
- Becomes sicker
- Develops a fever
- Feels unusually cold
- Fast breathing
- Difficult breathing
- Palms and sole appear yellow

Food and fluids:

Frequent breastfeeding will give the infant nourishment and help prevent dehydration.

Make sure the young infant stays warm at all times:

Keeping a sick young infant warm (but not too warm) is very important. Low temperature alone can kill young infants.

When to return:

Tell the mother when to return for a follow-up visit.

Also teach the mother when to return immediately. The signs mentioned above are particularly important signs to watch for. Teach the mother these signs. Use the mother's card to explain the signs and help her to remember them. Ask her checking questions to be sure she knows when to return immediately.

EXERCISE H

In this exercise, you will review the steps of some treatments for sick young infants. Get out the Young Infant Registers which you completed in Exercise E for Case 2 – Banu and Case 4 - Hena. Refer to the *YOUNG INFANT* chart as needed. For each case:

1. Review the infant's assessment findings, classifications, and treatments needed.
2. Answer the additional questions below about treating each case.

Case 2: Banu

1. In addition to treatment with antibiotics, Banu needs treatment at home for her local skin infection, that is, the pustules on her buttocks. List below the steps that her mother should take to treat the skin pustules at home.

   *
   *
   *
   *
   *

2. How often should her mother treat the skin pustules?

3. Banu also needs "home care for the young infant." What are the 3 main points to advise the mother about home care?

   *
   *

4. What would you tell Banu's mother about when to return?

Case 4:Hena

1. In addition to treatment with antibiotics, Hena needs treatment for **SOME DEHYDRATION** according to Plan B. How much ORS should Henna be given for the first 4 hours of treatment?

   Should she receive any other fluids during the 4-hour period? If so, what fluids?

2. While giving ORS, the several mothers in the ORT corner were taught how to mix ORS. After 4 hours of treatment, Hena is reassessed. She is calm. A skin pinch goes back immediately. The health worker classifies her as having **NO DEHYDRATION** and selects Plan A to continue her treatment.
   The health worker tells the mother that during *diarrhoea*, Hena will need extra fluids. She explains that the best way to give an infant extra fluid is to breastfeed frequently and for longer at each feed. The health worker also gives her mother 2 packets of ORS to give to Hena at home.
   What else should the health worker tell the mother about giving ORS at home?

3. During the 4 hours in the ORT corner, the health worker was also able to help Hena's mother to position and attach her better for breastfeeding. What other feeding advice should the health worker give?

When you have completed this exercise, please discuss your answers with a facilitator

Your facilitator will lead a drill to review points of advise for mothers of young infants

ANNEX: REGISTER: IMCI Register for Sick Young Infants from 0 Day to 2 months (59days)

IMCI Register (age upto 2 months)

Patient Identification	Physical Examination	ASSESS	CLASSIFY	Treatment	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. No: Date: Child's name: Date of Birth: Age: Sex: ☐ Male ☐ Female Visit: ☐ Initial ☐ Follow up Mother's Name: Father's Name: Address: House Name/ Holding Number: Village/Moholla: Union: Upazila: District: Mobile Number:	Weight (kg): …… Length (Inch): …… Temperature: (°C/ °F): …… Breaths/ Minute: …… Measure oxygen saturation (SpO_2) by pulse oxymetre (%): …… Date of starting symptoms: …… ☐ Palm examinaiton ☐ Eye examination ☐ Examination to diagnose other problems	☐ Unconscious/drowsy ☐ Convulsion/history of convulsion ☐ Unable to feed ☐ Persistent vomiting ☐ Bulging fontanels ☐ Apnoea ☐ Central cyanosis ☐ Major bleeding ☐ Weight <1500 gram ☐ Major congenital malformation ☐ Surgical condition required hospitalization	☐ **Possible Serious Bacterial Infection or Very Severe Disease –Critical Illness (VSD-CI)**	**1st dose given and refer** ☐ Inj. Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	
		☐ Severe chest indrawing ☐ Low body temperature (below 95.5 °F or 35.5 °C or feels cool) ☐ Fever (99.5 °F or 37.5 °C or above or feels hot ☐ Move only when stimulated or no movement at all ☐ Difficulty in feeding	☐ **Possible Serious Bacterial Infection or Very Severe Disease - Clinical Severe Infection (VSD-CSI)**	**1st dose given and refer** ☐ Injection Gentamicin; Dose: ☐ Amoxicillin Syrup; Dose:	☐ Inj. Gentamicin - Once a day for 2 days; Dose: ☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (0-6 days)	☐ **Possible Serious Bacterial Infection or Very Severe Disease – Fast Breathing Pneumonia (0-6 days)**	**1st dose given and refer** ☐ Amoxicillin Syrup; Dose:	☐ Amoxicillin Syrup - Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Fast Breathing per minutes 60 or more (7-59 days)	☐ **Fast Breathing Pneumonia (7-59 days)**		☐ Amoxicillin Syrup -Twice a day for 7 days; Dose: ☐ **4th Day FU** ☐ **8th Day FU**
		☐ Umbilicus is red or draining pus ☐ Skin pustules	☐ **Local Bacterial Infection**		☐ Amoxicillin Syrup - Twice a day for 5 days; Dose: ☐ **2nd day FU**
		Check for jaundice: ☐ Yellow Palms and soles ☐ Jaundice within 24 hours of birth	☐ **Severe Jaundice** ☐ **Jaundice**	**Severe jaundice:** ☐ Treat the young infant to prevent low blood sugar ☐ **Refer** to Hospital ☐ Advise mother how to keep the infant warm on the way to hospital	**Jaundice:** ☐ Advise for home care ☐ Advise for FU after one day ☐ If palms and sole appear yellow advise mother to return immediately ☐ If age more than 3 weeks, refer to hospital for diagnosis
		Check for Dehydration: ☐ Move only when stimulated ☐ No movement at all ☐ Restless, irritable ☐ Sunken eyes ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ If young infant also has another servere classification- **refer URGENTLY** to hospital	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** In case of **Some and** ☐ **No dehydration:** ☐ Follow-up in 2 days if not improving
		☐ Weight < 2 kg in infants less than 7 days ☐ Not well attached to breast ☐ Not sucking effectively ☐ Less than 8 breastfeeds in 24 hours ☐ Receives other foods or drinks ☐ Low weight for age ☐ Thrush (ulcers or white patches in mouth)	☐ **Very Low weight for Age** ☐ **Feeding Problem or low Weight** ☐ **No Feeding Problem**	☐ **Refer** to hospital for kangaroo mother care ☐ Treat to prevent low blood sugar ☐ Advice the mother to keep the young infant warm on the way to hospital	☐ For feeding problem, advise mother as per IMCI protocol and FU in 2days ☐ If not breastfeeding at all: Refer for breastfeeding counselling and possible relactation ☐ If thrush, teach the mother to treat thrush at home- give Nystatin drop four times a day for 7 days after washing hands everytime and FU in 2 days ☐ If low weight for age, advise for follow up visit after 14 days
		☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**		
			☐ **Born before 32 weeks /prematurity** ☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Others)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Structural deformity**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
			☐ **Drowning** ☐ **Illness due to injuries / accidents**		
			☐ **Other problem (Specify):**		
		Other Nutritional Information			
		☐ Exclusive breast feeding (0-6 months)			
		Counseling			
		☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)			
		Immunization Status (Circle immunization needed today)			
		BCG Penta-1 OPV-0 OPV-1 PCV-1 IPV		Return for next immunization on: _____ (Date)	

MODULE-7

FOLLOW-UP

FOLLOW-UP

INTRODUCTION

Some sick children need to return to the health worker for follow-up. Their mothers are told when to come for a follow-up visit (such as in 2 days or 14 days). At a follow-up visit, the health worker can see if the child is improving on the drug or other treatment that was prescribed. Some children may not respond to a particular antibiotic or antimalarial and may need to try a second drug. Children with persistent **DIARRHOEA** also need follow-up to be sure that the **DIARRHOEA** has stopped. Children with fever or eye infection need to be seen if they are not improving. Follow-up is especially important for children with a feeding problem, to be sure they are being fed adequately and are gaining weight. Because follow-up is important, your clinic should make special arrangements so that follow-up visits are convenient for mothers. If possible, mothers should not have to wait in the queue for a follow-up visit. Not charging for follow-up visits is another way to make follow-up convenient and acceptable for mothers. Some clinics use a system that makes it easy to find the records of children scheduled for follow-up. At a follow-up visit, you should do different steps than at a child's initial visit for a problem. Treatments given at the follow-up visit are often different than those given at an initial visit.

Learning Objectives

This module will describe what to do when a child returns to the clinic for a follow-up visit. This module does not address those children who have returned immediately to the clinic because they became sicker. These children should be assessed as at an initial visit. In the exercises in this module you will practice the steps for conducting a follow-up visit:

- Deciding if the child's visit is for follow-up
- If the child has been brought for follow-up, assessing the signs specified in the follow-up box for the child's previous classification
- Selecting treatment based on the child's signs
- If the child has any new problems, assessing and classifying them as you would in an initial visit

Where is Follow-up Discussed on the Case Management Charts?

In the *Identify Treatment* column of the *ASSESS & CLASSIFY* chart, some classifications have instructions to tell the mother to return for follow-up. The When to Return box on the *COUNSEL THE MOTHER* chart summarizes the schedules for follow-up visits. Specific instructions for conducting each follow-up visit are in the 'Give Follow-Up Care' section of the *TREAT THE CHILD* chart. The boxes have headings that correspond to the classifications on the *ASSESS & CLASSIFY* chart. Each box tells how to reassess and treat the child. Instructions for giving treatments, such as drug dosages for a second-line antibiotic or antimalarial, are on the *TREAT THE CHILD* chart. Follow-up instructions for young infants are on the *YOUNG INFANT* chart.

How to Manage a Child Who Comes for Follow-up:

As always, ask the mother about the child's problem. You need to know if this is a follow-up or an initial visit for this illness. How you find out depends on how your clinic registers patients and how the clinic finds out why they have come. For example, the mother may say to you or other clinic staff that she was told to return for follow-up for a specific problem. If your clinic

gives mothers follow-up slips that tell them when to return, ask to see the slip. If your clinic keeps a chart on each patient, you may see that the child came only a few days ago for the same illness. Once you know that the child has come to the clinic for follow-up of illness, ask the mother if the child has, in addition, developed any new problems. For example, if the child has come for follow-up of **PNEUMONIA**, but now he has developed **DIARRHOEA**, he has a new problem. This child requires a full assessment. Check for general danger signs and assess all the main symptoms and the child's nutritional status. Classify and treat the child for **DIARRHOEA** (the new problem) as you would at an initial visit. Reassess and treat the **PNEUMONIA** according to the follow-up box. If the child does not have a new problem, locate the follow-up box that matches the child's previous classification. Then follow the instructions in that box.

- Assess the child according to the instructions in the follow-up box. The instructions may tell you to assess a major symptom as on the *ASSESS & CLASSIFY* chart. They may also tell you to assess additional signs

Note: Do not use the classification table to classify the main symptom. Skip the *Classify* and *Identify Treatment* columns on the *ASSESS & CLASSIFY* chart. This will avoid giving the child repeated treatments that do not make sense. There is one exception: If the child has any kind of **DIARRHOEA**, classify and treat the dehydration as you would at an initial assessment.

- Use the information about the child's signs to select the appropriate treatment
- Give the treatment
- If a mother returns with her child who had a cough or cold, or **DIARRHOEA** (without dysentery or persistent **DIARRHOEA** on the previous visit), because after 5 days the child is not better, do a full assessment of the child

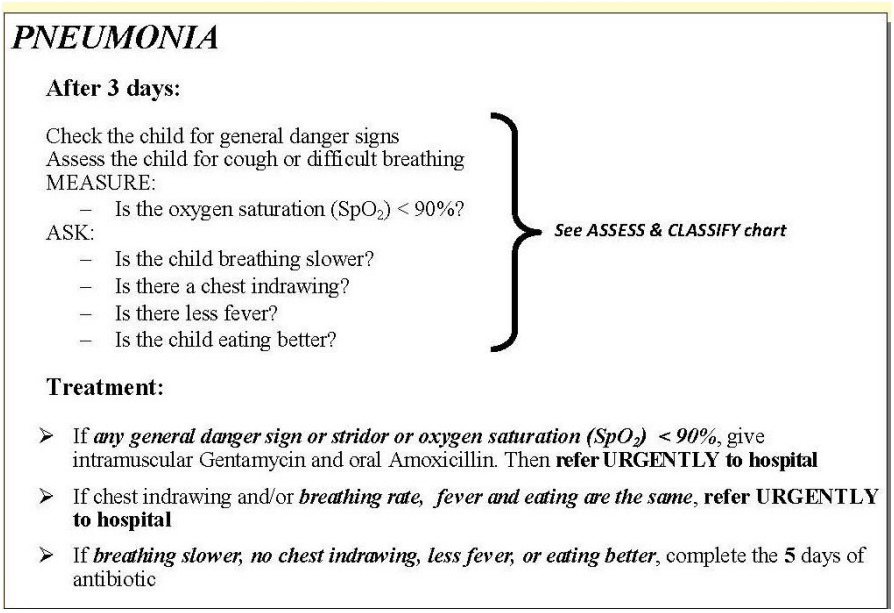
Some children will return repeatedly with chronic problems that do not respond to the treatment that you can give. For example, some children with AIDS may have **PERSISTENT DIARRHOEA** or repeated episodes of **PNEUMONIA**. Children with AIDS may respond poorly to treatment for **PNEUMONIA** and may have opportunistic infections. These children should be referred to the hospital when they do not improve. Children with HIV infection who have not developed AIDS cannot be clinically distinguished from those without HIV infection. When they develop **PNEUMONIA**, they respond well to standard treatment.

Important: If a child who comes for follow-up has several problems and is getting worse, **refer** the child to hospital. Also **refer** the child to hospital if a second-line drug is not available or if you are worried about the child or do not know what to do for the child. If a child has not improved with treatment, the child may have a different illness than suggested by the chart. He may need other treatment.

Remember:
If a child has any new problem, you
should assess the child as at an initial visit.

1.0 CONDUCT A FOLLOW-UP VISIT FOR PNEUMONIA

When a child receiving an antibiotic for **PNEUMONIA** returns to the clinic after 3 days for follow-up, follow these instructions:



The box first describes how to assess the child. It says to check the child for general danger signs and reassess the child for cough and difficult breathing. Next to these instructions, it says to see the *ASSESS & CLASSIFY* chart. This means that you should assess general danger signs and the main symptom cough exactly as described on the *ASSESS & CLASSIFY* chart. Then it lists some additional items to check:

Measure:
- Is oxygen saturation < 90%?

Ask:
- Is the child breathing slower?
- Is there a chest indrawing?
- Is there less *fever*?
- Is the child eating better?

When you have assessed the child, use the information about the child's signs to select the correct treatment.

➢ If the child has a general danger sign (not able to drink or breastfeed, vomits everything, convulsions, lethargic or unconscious or is convulsing now) or stridor or oxygen saturation (SpO_2) <90%, the child is getting worse. This child needs **URGENT referral** to a hospital. Give intramuscular Gentamicin and oral Amoxicillin before sending the child to the hospital

➢ If the child has chest indrawing and/ or breathing rate, *fever*, and eating are the same; then **refer** him **URGENTLY** to the hospital.

If a child with **PNEUMONIA** had **MEASLES** within the last 3 months, **refer** the child to the hospital.

➢ If the child does not have chest indrawing, is breathing slower, has less *fever* (that is, the *fever* is lower or is completely gone) and is eating better, the child is improving. The child may cough, but most children who are improving will no longer have fast breathing. Tell the mother that the child should finish taking the 5 days of the antibiotic. Review with her the importance of finishing the entire 5 days.

EXERCISE A

Read about each child who came for follow-up of pneumonia. Then answer the questions about how you would manage each child. Refer to any of the case management charts as needed.

At this clinic, Amoxycillin tablets/dispersible tablets and syrup are both available for pneumonia

1. Jalil's mother has brought him back for follow-up. He is one year old. 3 days ago, he was classified with **PNEUMONIA** and you gave him Amoxicillin tablet. Ask the mother, how he is doing and if he has developed any new problems. His mother says that, he is much better.

a) How would you reassess Jalil today? List all the signs you would look at and write the questions you would ask his mother.

When you assessed Jalil, you found that he has no general danger signs. He is still coughing and he has been coughing for about 10 days. He is breathing 38 breaths per minute and has no chest indrawing and no stridor. His oxygen saturation (SpO_2) is 98%. His mother said that he does not have *fever*. He is breastfeeding well and eating some food (he was refusing all food before). He was playing with his brother this morning.

b) Based on Jalil's signs today, how should he be treated?

2. Ali has been brought for a follow-up visit for **PNEUMONIA**. He is three years old and weighs 12.5 kg. His axillary temperature is 37°C. He has been taking Amoxicillin. His mother says he is still sick and has vomited twice today.

a) How would you reassess Ali today? List the signs you would look at and the questions you would ask his mother.

When you reassess Ali, you find that he is able to drink and does not always vomit after drinking. He has not had convulsions. He is not lethargic or unconscious. He is not convulsing now He is still coughing, so he has been coughing now for about 2 weeks. He is breathing 55

breaths per minute. He has chest indrawing. He does not have stridor. His oxygen saturation (SpO_2) is 97%. His mother says that sometimes he feels hot. She is very worried because he is not better. He has hardly eaten for 2 days.

b) Is Ali getting worse, the same, or better?

c) How should you treat Ali? If you would give a drug, specify the dose and schedule.

3. Two-year-old Selina has been brought by her mother to the clinic for follow-up. 3 days ago, you classified Selina with **PNEUMONIA** and gave her Amoxicillin. Selina's mother says that she has no new problems, but she is still coughing a lot.

When you reassess Selina, you find that she has no general danger signs. She is breathing 45 breaths per minute, has no chest indrawing, and no stridor. Her oxygen saturation (SpO_2) is 99%. She has no *fever*. Selina is not interested in eating.

a) Is Selina getting worse, the same, or better?

b) When you talk with Selina's mother, she tells you she has given Selina the pills mixed with some cereal in the morning and at night. You are sure that Selina has been receiving the antibiotic, but her condition is the same. What treatment would you give Selina now? If you will give a drug, specify the dose and schedule.

When you have completed this exercise, discuss your work with a facilitator

2.0 CONDUCT A FOLLOW-UP VISIT FOR PERSISTENT DIARRHOEA

When a child with **PERSISTENT DIARRHOEA** returns for a follow-up visit after 5 days, follow these instructions:

PERSISTENT DIARRHOEA

After 5 days:

ASK:

- Has the diarrhoea stopped?
- How many loose stools is the child having per day?

Treatment:

- If ***the diarrhoea has not stopped (child is still having 3 or more loose stools per day)***, do a full reassessment of the child. Give any treatment needed. Then **refer** to hospital
- If ***the diarrhoea has stopped (child having less than 3 loose stools per day)***, tell the mother to follow the usual feeding recommendations for the child's age

Ask if the *diarrhoea* has stopped and how many stools the child has per day.

- If the *diarrhoea* has not stopped (the child is still having 3 or more loose stools per day), do a full reassessment. This should include assessing the child completely as described on the *ASSESS & CLASSIFY* chart. Identify and manage any problems that require immediate attention, such as, dehydration. Then **refer** the child to hospital.
- If the *diarrhoea* has stopped (child having less than 3 loose stools per day), instruct the mother to follow the feeding recommendations for the child's age. If the child is not normally fed in this way, you will need to teach her the feeding recommendations as on the *COUNSEL* chart. Remind the mother to complete the 14 days course of multivitamin/ mineral and vitamin A supplementation.

3.0 CONDUCT A FOLLOW-UP VISIT FOR DYSENTERY

When a child classified with **DYSENTERY** returns for a follow-up visit after 3 days, follow these instructions:

DYSENTERY

After 3 days:

Assess the child for diarrhoea. > *See ASSESS & CLASSIFY chart.*

ASK:
- Are there fewer stools?
- Is there less blood in the stool?
- Is there less fever?
- Is there less abdominal pain?
- Is the child eating better?

Treatment:

- If the child is ***dehydrated***, treat for dehydration
- If ***number of stools, amount of blood in the stools, fever, abdominal pain, or eating is worse or the same:*** **Refer to hospital**
- If ***fewer stools, less blood in stools, less fever, less abdominal pain, and eating better,*** continue giving Ciprofloxacin until finished

Ensure that the mother understands the oral rehydration method fully and that she also understands the need for an extra meal each day for a week

Reassess the child for *diarrhoea* as described in the box, 'Does the Child Have *diarrhoea*?' on the *ASSESS & CLASSIFY* chart. Ask the mother the additional questions to find out if the child is improving. Then use the information about the child's signs to decide if the child is the same, worse, or better. Select the appropriate treatment:

- If the child is dehydrated at the follow-up visit, use the classification table to classify the child's dehydration. Select the appropriate fluid plan and treat the dehydration.
- If the number of stools, amount of blood in stools, *fever*, abdominal pain, or eating is the same or worse, **refer** the child to hospital.
- If the child has fewer stools, less blood in the stools, less *fever*, less abdominal pain, and is eating better, the child is improving on Ciprofloxacin. Usually all of these signs will diminish if the antibiotic is working. If only some signs have diminished, use your judgement to decide if the child is improving. Tell the mother to finish the 5 days of the antibiotic. Review with the mother the importance of finishing the antibiotic.
- Teach the mother how to give oral rehydration therapy. Advise her to give one extra meal each day for a week. If the child is breastfed, then breastfeed him more frequently and for longer at each feed. Ask checking questions to ensure that the mother understands oral rehydration method fully as well as the feeding recommendations.

EXERCISE B

Read about each child who came for follow-up of **DYSENTERY** or **PERSISTENT DIARRHOEA** and answer the questions. Refer to any of the case management charts as needed.

This clinic refers children with **SEVERE DEHYDRATION** because health workers cannot give IV or NG therapy. A hospital nearby can give IV therapy.

For **DYSENTERY**, Ciprofloxacin is the recommended antibiotic.

1. Kasim was brought for follow-up of **PERSISTENT DIARRHOEA** after 5 days. He is 9 months old and weighs 6.5 kg. His temperature is 36.5°C today. He is no longer breastfed. His mother feeds him cereal twice a day and gives him a milk formula 4 times each day. When you saw him last week, you advised his mother to give him only half his usual amount of milk. You also advised the mother to replace half the milk by giving extra servings of cereal with oil and vegetables or meat or fish added to it. You also told the mother to give him multivitamin/mineral and vitamin A supplementation.

a) What is your first step for reassessing Kasim?

b) Kasim's mother tells you that his *diarrhoea* has not stopped. What would you do next?

You do a complete reassessment of Kasim, as on the *ASSESS & CLASSIFY* chart. You find that Kasim has no general danger signs. He has no cough. When you reassess his *diarrhoea*, his mother says that now he has had *diarrhoea* for about 3 weeks. There is no blood in the stool. Kasim is restless and irritable. His eyes are not sunken. When you offer him some water, he takes a sip but does not seem thirsty. A skin pinch goes back immediately. He has no *fever*, no ear problem and is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. Kasim's mother tells you that he has no other problems.

c) Is Kasim dehydrated?

d) How will you treat Kasim?

e) If your reassessment found that Kasim had some dehydration, what would you have done before referral?

2. Rina was brought to the clinic for a follow-up visit. She is 11 months old and weighs 9 kg. 3 days ago, a health worker classified Rina with **DYSENTERY, NO DEHYDRATION, NO ANAEMIA** and **NO ACUTE MALNUTRITION**. The health worker gave Rina's mother Ciprofloxacin and ORS to use at home and asked her to bring Rina back in 3 days. The mother says that Rina has no new problems.

a) How will you assess Rina?

When you assess Rina's *diarrhoea*, her mother tells you that she still has several stools each day. There is still about the same amount of blood in the stool. She has now had *diarrhoea* for about a week. Rina is restless and irritable. Her eyes are not sunken. She drinks eagerly when her mother offers her a cup of ORS. A skin pinch goes back slowly. The mother says that Rina has not had *fever*. She thinks Rina is having abdominal pain because she is irritable and seems uncomfortable. Rina is not eating better.

b) Is Rina dehydrated? If so, what will you do?

c) What else will you do to treat Rina? If you will give a drug, specify the dose and schedule.

3. Jabbar is 18 months old and weighs 9 kg. His temperature is 36°C today. His chart shows that 3 days ago he was classified with *diarrhoea* with **NO DEHYDRATION, DYSENTERY, NO ANAEMIA** and **NO ACUTE MALNUTRITION**. Jabbar's mother has brought him back after 3 days of treatment for **DYSENTERY**. When you ask if he has any new problems, the mother says that Jabbar now has a cold and is coughing.

a) How would you assess Jabbar?

When you assess Jabbar, you find he has no general danger signs. His breathing rate is 35

breaths per minute. He has no chest indrawing and no stridor or wheezing. His oxygen saturation (SpO_2) is 98%. When you ask about the *diarrhoea*, his mother tells you that he still has some *diarrhoea*, but much less. There is less blood in the stools. You find that he has no signs of dehydration. He has no *fever*. He has less abdominal pain. He is eating better. His mother says that he feels much better, except for the cold.

b) What would you do for Jabbar's *diarrhoea*?

c) How would you classify his *cough*?

d) List the treatments for Jabbar's **COUGH OR COLD**.

4. Malek is 1 year old and weighs 8 kg. Five days ago, he was classified with **PERSISTENT DIARRHOEA**. His young mother has brought him back for follow-up. Malek is no longer breastfeeding. The mother tells you that she has replaced Malek's usual milk feeds with yoghurt. She has also been giving him rice with bits of vegetables and fish along with some family foods. The mother tells you that Malek's *diarrhoea* has stopped and he had only 1 stool yesterday. She is very relieved. There are no new problems.

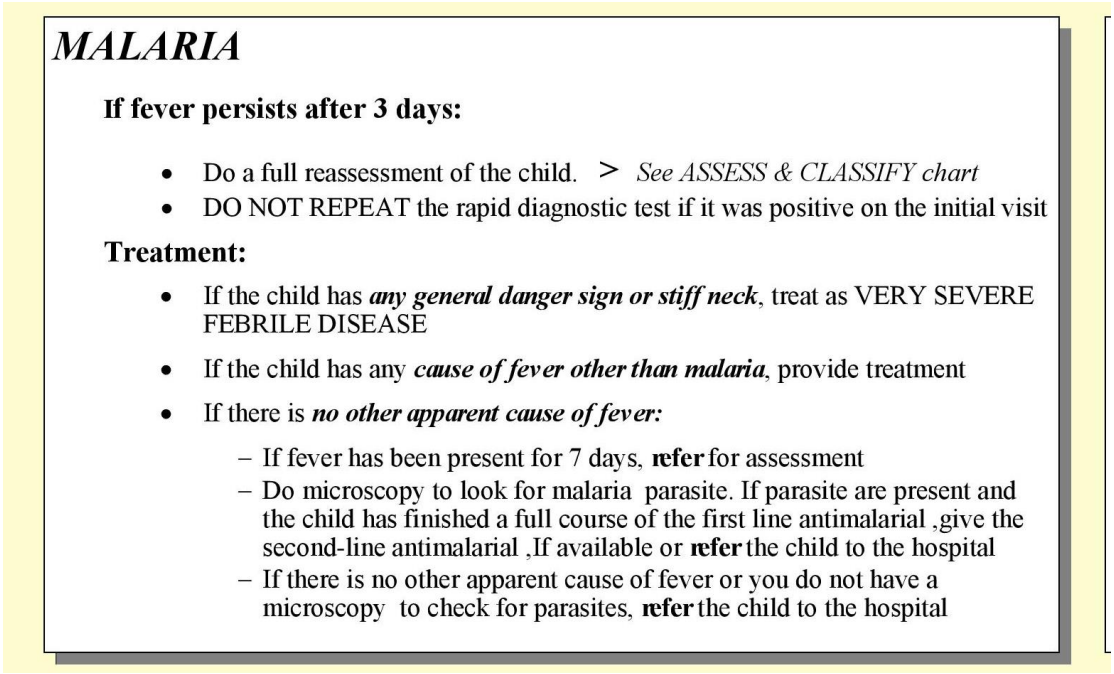
a) Do you need to assess Malek further? If so, describe what you would assess.

b) What instructions will you give the mother about feeding Malek?

When you have completed this exercise, discuss your work with a facilitator

4.0 CONDUCT A FOLLOW-UP VISIT FOR MALARIA

Any child classified with **MALARIA** (regardless of the risk of **MALARIA**) should return for a follow-up visit if the *fever* persists for 3 days. If the *fever* persists 3 days after the initial visit, this may mean that the child has a malaria parasite which is resistant to the first-line antimalarial, causing the child's *fever* to continue. If the child also had **MEASLES** at the initial visit, the *fever* may be due to **MEASLES**. It is very common for the *fever* from **MEASLES** to continue for several days. Therefore, the persistent *fever* may be due to the **MEASLES** rather than to resistant **MALARIA**. The instructions for conducting a follow-up visit for a child classified with **MALARIA** are below:



MALARIA

If fever persists after 3 days:

- Do a full reassessment of the child. > *See ASSESS & CLASSIFY chart*
- DO NOT REPEAT the rapid diagnostic test if it was positive on the initial visit

Treatment:

- If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE
- If the child has any ***cause of fever other than malaria***, provide treatment
- If there is ***no other apparent cause of fever:***
  - If fever has been present for 7 days, **refer** for assessment
  - Do microscopy to look for malaria parasite. If parasite are present and the child has finished a full course of the first line antimalarial ,give the second-line antimalarial ,If available or **refer** the child to the hospital
  - If there is no other apparent cause of fever or you do not have a microscopy to check for parasites, **refer** the child to the hospital

Do a full reassessment of the child as on the *ASSESS & CLASSIFY* chart. As you reassess the child, look for the cause of the *fever*, possibly **PNEUMONIA**, meningitis, **MEASLES**, **EAR INFECTION** or **DYSENTERY**. Also consider whether the child has any other problem that could cause the *fever*, such as tuberculosis, urinary tract infection, osteomyelitis or abscess. Do not use the classification table of the *ASSESS & CLASSIFY* chart to classify the child's *fever*. Instead, choose the appropriate treatment shown in the follow-up box. If you suspect a cause of *fever* other than **MALARIA**, assess the problem further if needed and refer to any guidelines on treatment of the problem.

- If the child has any general danger signs or stiff neck, treat as described on the *ASSESS & CLASSIFY* chart for **VERY SEVERE FEBRILE DISEASE**. This includes giving a first dose of Artesunate, an appropriate antibiotic and paracetamol. Also treat to prevent low blood sugar and refer urgently to hospital. If the child has already been on an antibiotic, worsening of the illness to **VERY SEVERE FEBRILE DISEASE** means he may have a bacterial infection which is not responsive to this antibiotic. Give a first dose of the second-line antibiotic or intramuscular Gentamicin. If the child cannot take an oral antibiotic because he has repeated vomiting, is lethargic or unconscious or is not able to drink give intramuscular antibiotic. Also give intramuscular antibiotic if he has a stiff neck
- If the child has any cause of *fever* other than **MALARIA**, provide treatment for that

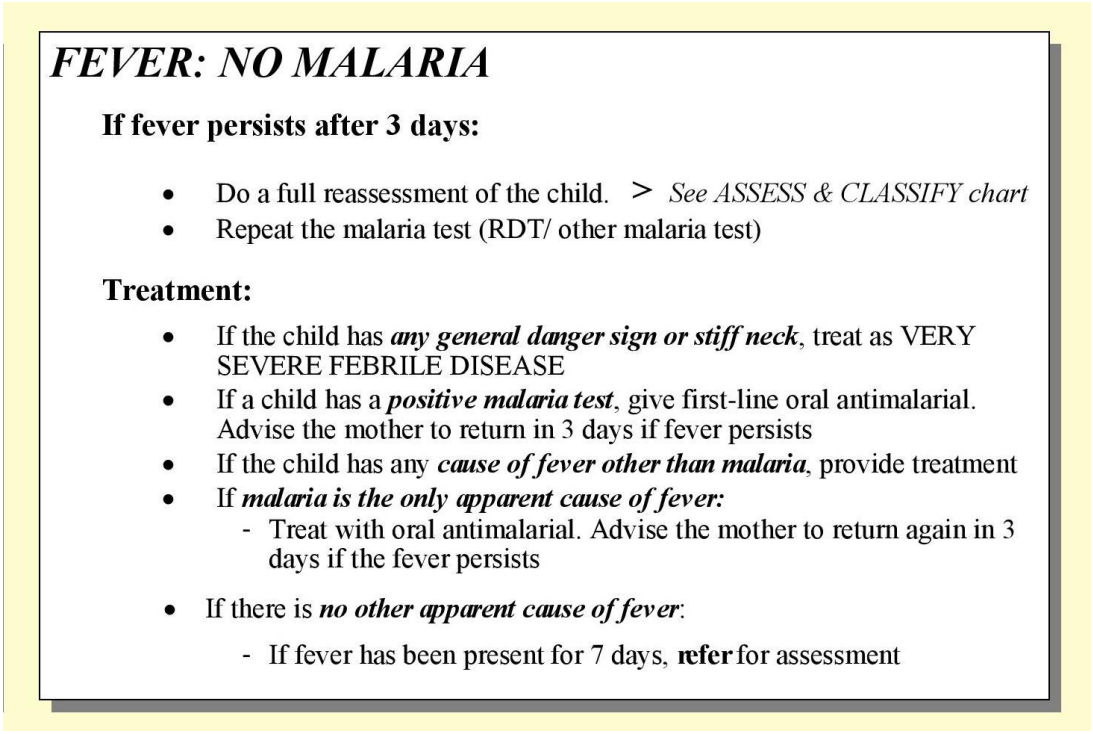
cause. For example, give treatment for the **EAR INFECTION** or **refer** for other problems such as, urinary tract infection or abscess

➢ If there is the no other apparent cause of *fever*:

- If the *fever* has been present every day for 7 days or more, **refer** the child for assessment. This child may have typhoid fever or another serious infection requiring additional diagnostic testing and special treatment
- Do microscopy to look for malaria parasite. If the parasite is detected and the child has already completed the first line antimalarial course, then treat with second-line oral antimalarial. Ask the mother to return again in 3 days if the *fever* persists. If second-line oral antimalarial is not available, **refer** the child to hospital
- If there is no other apparent cause of **MALARIA** or no scope of doing microscopy, then send the child to hospital

5.0 CONDUCT A FOLLOW-UP VISIT FOR FEVER - NO MALARIA

When a child whose *fever* was classified with **FEVER – NO MALARIA** returns for follow-up after 3 days because the *fever* persists, follow these instructions:



When *fever* persists after 3 days, there may be some cause of *fever* that was not apparent at the first visit. Do a full reassessment of the child as on the *ASSESS & CLASSIFY* chart. Look for the cause of *fever*. Repeat the malaria test (RDT/other malaria test). Also consider whether the child has any other problem that caused the *fever*, such as tuberculosis, urinary tract infection, osteomyelitis or abscess. Then select the appropriate treatment in the follow-up box.

➢ If the child has any general danger sign or stiff neck, treat as **VERY SEVERE FEBRILE DISEASE**

- If the child's malaria test is positive, give him first line oral antimalarial and ask the mother to return in 3 days if *fever* persists
- If the child has any cause of *fever* other than **MALARIA**, provide treatment or **refer** for care of that cause
- If **MALARIA** is the only apparent cause of *fever*, treat the child with the first-line oral antimalarial recommended by national policy to cover the possibility of **MALARIA**. Advise the mother to return again in 3 days if the *fever* persists

If the *fever* has been present every day for 7 days, refer the child. Further diagnostic tests are needed to determine the cause of this child's persistent *fever*

EXERCSE C

Read about each child who returns for follow-up of **MALARIA** and answer the questions. Refer to any of the case management charts as needed.

In this clinic, Co-artemether is the first-line oral antimalarial (20 mg Artemether and 120mg Lumefantrine tablets). Chloroquine is the second-line oral antimalarial. Amoxicillin is the first-line oral antibiotic for **PNEUMONIA**.

1. Abu's mother has brought him back to the clinic because he still has *fever*. The risk of **MALARIA** is high. 3 days ago, he was given Co-artemether for **MALARIA**. He was also given a dose of paracetamol. His mother says that he has no new problems, just the *fever*. He is 3 years old and weighs 14 kg. His axillary temperature is 38.5°C.

a) How would you reassess Abu?

When you reassess Abu, he has no general danger signs. He has no cough and no *diarrhoea*. He has had *fever* for 4 days. He does not have stiff neck. There is no runny nose or generalized rash. He has no ear problem. He is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. There is no other apparent cause of *fever*.

b) How would you treat Abu? If you would give a drug, specify the dose and schedule.

2. Mita's mother has come back to the clinic because Mita still has a *fever*. 3 days ago, she was given Co-artemether for **MALARIA**. Her mother says that she is sicker now, vomiting and very hot. Mita is 18 months old and weighs 11 kg. Her axillary temperature is 39°C today. When you assess Mita, her mother says that yesterday she could drink, but she vomited after eating. She has not always vomited after drinking. She has not had convulsions. She will not wake up when her mother tries to wake her. She is unconscious. Her mother says that she does not have a *cough* or *diarrhoea*. She has now had *fever* for 4 days. She does not have stiff neck, runny nose or generalized rash. She does not have an ear problem. She is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION.** How would you treat Mita? If you would give drugs, specify the dose and schedule.

3. 3 days ago Mamun's mother took him to the City Clinic because he had *fever*. There is no risk of **MALARIA.** His axillary temperature was 37.5°C. He had no general danger signs or other main symptoms. He had no stiff neck, no runny nose, and no generalized rash. The health worker classified Mamun with **FEVER – NO MALARIA.** Mamun's mother has brought him back because he still has a *fever*. The health worker asks if Mamun has developed any other illness. She says that he is just very irritable. He is 11 months old and weighs 7 kg. His axillary temperature is 38.5°C today.

a) How should the health worker assess Mamun?

When the health worker assesses Mamun, he finds no general danger signs. His mother says he has no *cough* and no *diarrhoea*. He has now had *fever* for 3 days. Mamun bends his neck easily. He has no runny nose and no generalized rash. His mother says he has no ear problem. He is classified with **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. The health worker is concerned and continues to look at Mamun and think about what could cause the *fever*. Then he notices some pus in Mamun's right ear.

b) What should the health worker do next?

The health worker assesses the child for the ear problem. The mother is not sure how long there has been pus in the ear. She says he might be irritable because his ear hurts. There is no tender swelling behind the ear.

c) How should the health worker classify the ear problem?

d) How should the health worker treat Mamun? If he should give a drug, specify the dose and schedule.

4. Ahmed is 2 years old. His mother has brought him to the health centre for *fever* of 1 day. She did not travel out of his area. There is no risk of **MALARIA** where he lives. During their last visit, the health worker classified him with **FEVER – NO MALARIA**, **NO ANAEMIA** and **NO ACUTE MALNUTRITION**. He was not given any antibiotic. The health worker advised the mother to bring him back if he has persistent *fever* for 3 days or gets sicker or is unable to drink. He also advised the mother to give Ahmed more fluid than she usually gives. His mother has brought him again today because he got sicker. The mother says Ahmed has high *fever* and he has started vomiting. Although, he can hold some fluid. He is crying loudly. His axillary temperature is 39° C.

a) How should the health worker assess Ahmed?

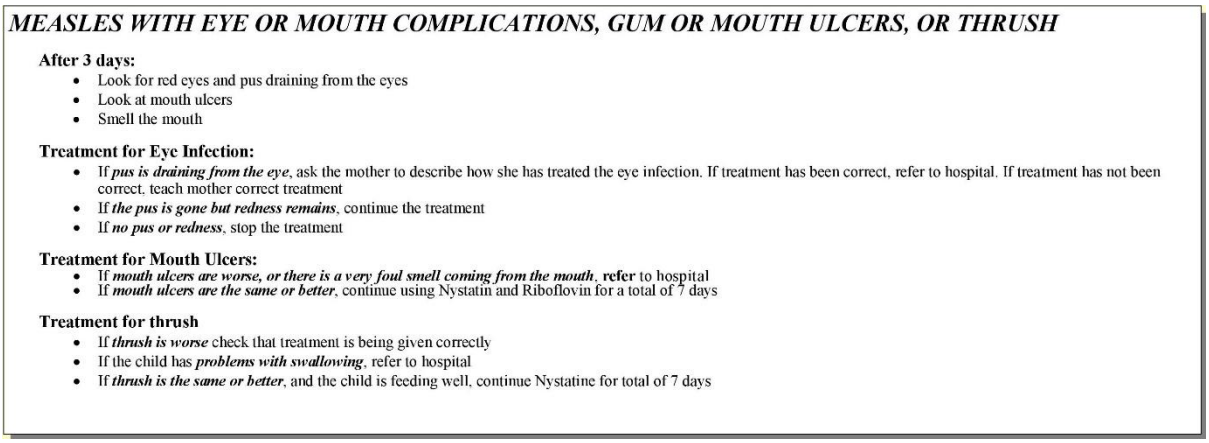
When the health worker assesses the child, he does not find any general danger sign. Ahmed does not have *cough, diarrhea* or *ear problem*. He has no runny nose. His neck is not stiff. He has no generalized rash. Ahmed has no wasting and oedema. His palm is not pale. His *fever* has no apparent cause.

b) What will the health worker do now?

When you have completed this exercise, discuss your work with a facilitator

6.0 CONDUCT A FOLLOW-UP VISIT FOR MEASLES WITH EYE OR MOUTH COMPLICATIONS

When a child who was classified with **MEASLES WITH EYE OR MOUTH COMPLICATIONS** returns for follow-up in 3 days, follow these instructions:



MEASLES WITH EYE OR MOUTH COMPLICATIONS, GUM OR MOUTH ULCERS, OR THRUSH

After 3 days:

- Look for red eyes and pus draining from the eyes
- Look at mouth ulcers
- Smell the mouth

Treatment for Eye Infection:

- If ***pus is draining from the eye***, ask the mother to describe how she has treated the eye infection. If treatment has been correct, refer to hospital. If treatment has not been correct, teach mother correct treatment
- If ***the pus is gone but redness remains***, continue the treatment
- If ***no pus or redness***, stop the treatment

Treatment for Mouth Ulcers:

- If ***mouth ulcers are worse, or there is a very foul smell coming from the mouth***, **refer** to hospital
- If ***mouth ulcers are the same or better***, continue using Nystatin and Riboflovin for a total of 7 days

Treatment for thrush

- If ***thrush is worse*** check that treatment is being given correctly
- If the child has ***problems with swallowing***, refer to hospital
- If ***thrush is the same or better***, and the child is feeding well, continue Nystatine for total of 7 days

To assess the child, check the eyes and mouth. Select treatment based on the child's signs.

Treatment for Eye Infection:

➢ If pus is still draining from the eye, ask the mother to describe or show you how she has been treating the eye infection. If she has brought the tube of ointment with her, you can see whether it has been used. There may have been problems so that the mother did not do the treatment correctly. For example, she may not have treated the eye three times a day, or she may not have cleaned the eye before applying the ointment, or the child may have struggled so that she could not put the ointment in the eye

- If the mother has correctly treated the eye infection for 3 days and there is still pus draining from the eye, **refer** the child to a hospital
- If the mother has not correctly treated the eye, ask her what problems she had in trying to give the treatment. Teach her any parts of the treatment that she does not seem to know. Discuss with her how to overcome the difficulties she is having. Finally, explain to her the importance of the treatment. Ask her to return again if the eye does not improve. However, if you still think that the mother will not be able to treat the eye correctly, arrange to treat the eye each day in clinic or refer the child to a hospital

➢ If pus is gone but redness remains, continue the treatment. Tell the mother that the treatment is helping. Encourage her to continue giving the correct treatment until the redness is gone

➢ If no pus or redness, stop the treatment. Praise the mother for treating the eye well. Tell her the infection is gone

Treat for Mouth Ulcers:

➢ If mouth ulcers are worse, or there is a very foul smell from the mouth, **refer** to hospital. The mouth problem may prevent the child from eating or drinking and may become severe. A very foul smell may mean a serious infection. Mouth problems of **MEASLES** could be complicated by thrush or herpes (the virus which causes cold sores)

➢ If mouth ulcers are same or better, ask the mother to continue treating the mouth with nystatin for a total of 5 days

She should continue to feed the child appropriately to make up for weight lost during the acute

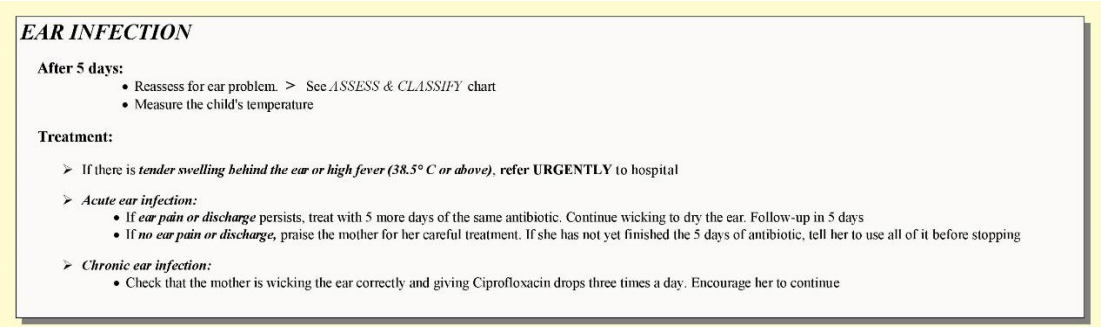
illness and to prevent *malnutrition*. Review with the mother when to seek care and how to feed her child as described on the *COUNSEL THE MOTHER* chart. Tell her that attention to feeding is especially important for children who have **MEASLES** because they are at risk of developing *malnutrition*. Because the child with **MEASLES** continues to have increased risk of illness for months, it is important that the mother know the signs to bring the child back for care. Children who have **MEASLES** are at increased risk of developing complications or a new problem, due to immune suppression which occurs during and following **MEASLES**.

Treat for Thrush:

- If thrush gets worse, then ask the mother to describe how he has administered the treatment or if she has brought the tube with her then ask her to show you practically. If she is doing it the wrong way, then teach her how to do it correctly. Enquire, whether the ointment was given 4 times a day or the mother properly cleaned the child's mouth before applying it or washed her breast after feeding. After giving all the necessary information, ask her checking questions to be sure that, this time she has understood the treatment properly
- If the child has difficulty in swallowing, **refer** him to the hospital. **MEASLES** predisposes *malnutrition* and if the child cannot eat in this condition, his condition may deteriorate fast
- If the child's thrush is same or gets better, he is feeding well, then tell the mother to continue treating with nystatin for 7days. Praise the mother for taking proper care of her child

7.0 CONDUCT A FOLLOW-UP VISIT FOR EAR INFECTION

When a child classified with **EAR INFECTION** returns for a follow-up visit after 5 days, follow the instructions below. These instructions apply to an **ACUTE** or a **CHRONIC EAR INFECTION**.



EAR INFECTION

After 5 days:

- Reassess for ear problem. > See *ASSESS & CLASSIFY* chart
- Measure the child's temperature

Treatment:

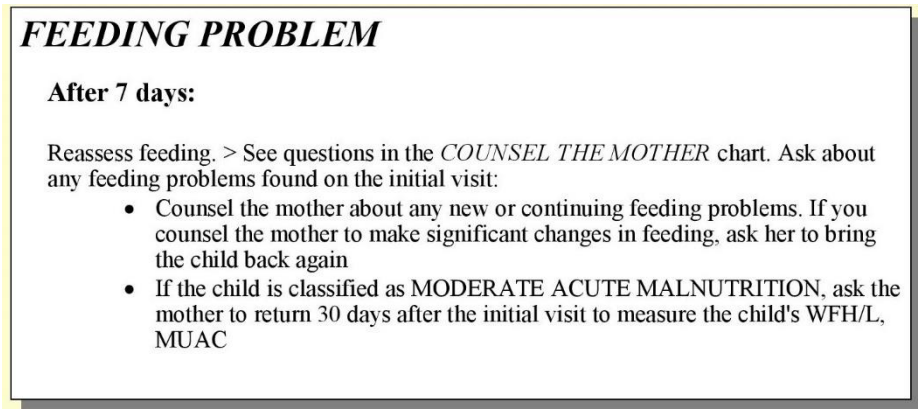
- If there is ***tender swelling behind the ear or high fever (38.5° C or above)***, **refer URGENTLY** to hospital
- ***Acute ear infection:***
  - If ***ear pain or discharge*** persists, treat with 5 more days of the same antibiotic. Continue wicking to dry the ear. Follow-up in 5 days
  - If ***no ear pain or discharge,*** praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping
- ***Chronic ear infection:***
  - Check that the mother is wicking the ear correctly and giving Ciprofloxacin drops three times a day. Encourage her to continue

Reassess the child for ear problem and measure the child's temperature (or feel the child for *fever*). Then select treatment based on the child's signs.

- If you feel a tender swelling behind the ear when compared to the other side, the child may have developed **MASTOIDITIS**. If there is a high *fever* (an axillary temperature of 38.5°C or above), the child may have a serious infection. A child with tender swelling behind the ear or high *fever* has gotten worse, he should be **referred** to hospital
- **ACUTE EAR INFECTION:** If ear pain or ear discharge persists after taking an antibiotic for 5 days, treat with 5 additional days of the same antibiotic. Ask the mother to return in 5 more days so that you can check whether the ear infection is improving. If the ear is still draining or has begun draining since the initial visit, show the mother how to wick the ear dry. Discuss with her the importance of keeping the ear dry so that it will heal
- **CHRONIC EAR INFECTION:** Check that the mother is wicking the ear correctly. To do this, ask her to describe or show you how she wicks the ear. Ask her how frequently she is able to wick the ear. Ask her what problems she has in trying to wick the ear and discuss with her how to overcome them. Encourage her to continue wicking the ear. Explain that wicking is the only effective therapy for a draining ear. Not wicking the ear could leave the child with reduced hearing
- If no ear pain or discharge, praise the mother for her careful treatment. Ask her if she has given the child the 5 days of antibiotic. If not, tell her to use all of it before stopping

8.0 CONDUCT A FOLLOW-UP VISIT FOR FEEDING PROBLEM

When a child who had a **FEEDING PROBLEM** returns for follow-up in 7 days, follow these instructions:



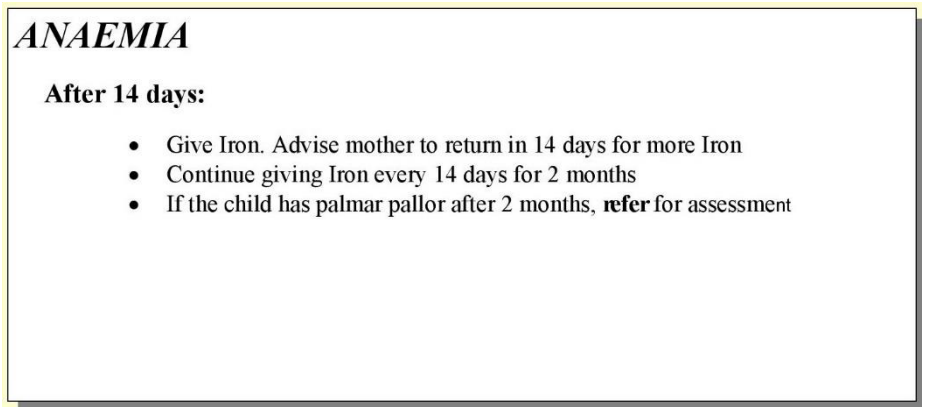
Reassess the child's feeding by asking the questions in the top box on the *COUNSEL THE MOTHER* chart. Refer to the child's chart or follow-up note for a description of any **FEEDING PROBLEMS** found at the initial visit and previous recommendations. Ask the mother how she has been carrying out the recommendations. For example, if on the last visit more active feeding was recommended, ask the mother to describe how and by whom the child is fed at each meal.

- Counsel the mother about any new or continuing **FEEDING PROBLEMS.** If she encountered problems when trying to feed the child, discuss ways to solve them. For example, if the mother is having difficulty changing to more active feeding because, it requires more time with the child, discuss some ways to reorganize the meal time
- If the child has **MODERATE ACUTE MALNUTRITION**, ask the mother to return in 30 days after the initial visit to measure the child's WHF/L, MUAC. At that visit a health worker will assess the child's weight gain to determine if the changes in feeding are helping the child

Example: On the initial visit the mother of a 2-month-old infant said that she was giving the infant 2 or 3 bottles of milk and breastfeeding several times each day. The health worker advised the mother to give more frequent, longer breastfeeds and gradually reduce other milk or foods. At the follow-up visit, the health worker asks the mother questions to find out how often she is giving the other feeds and how often and for how long she is breastfeeding. The mother says that she now gives the infant only 1 bottle of milk each day and breastfeeds 8 or more times in 24 hours. The health worker tells the mother that she is doing well. The health worker then asks the mother to completely stop the other milk and breastfeed 8 or more times in 24 hours. Since this is a significant change in feeding, the health worker also asks the mother to come back again. At that visit the health worker will check that the infant is feeding frequently enough and encourage the mother.

9.0 CONDUCT A FOLLOW-UP VISIT FOR PALLOR

When a child who had palmar pallor returns for a follow-up visit after 14 days, follow these instructions:



- Give the mother additional iron for the child and advise her to return in 14 days for more iron
- Continue to give the mother iron when she returns every 14 days for up to 2 months
- If after 2 months the child still has palmar pallor, **refer** the child for assessment

10.0 CONDUCT A FOLLOW-UP VISIT FOR UNCOMPLICATED SEVERE ACUTE MALNUTRITION

A child who was classified with **UNCOMPLICATED SEVERE ACUTE MALNUTRITION** should return for follow-up after 14 days. (The child would also return earlier if there was a feeding problem). Some clinics have specially scheduled sessions for nutritional counselling and malnourished children are asked to come for follow-up at this time. A special session allows the health worker to devote the necessary time to discuss feeding with several mothers and perhaps demonstrate some good foods for children. Follow these instructions for a follow-up visit for a child with **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**:

UNCOMPLICATED SEVERE ACUTE MALNUTRITION

After 14 days or during regular follow up:

- Do a full reassessment of the child. > See *ASSESS & CLASSIFY* chart
- Assess child with the same measurements (WFH/L, MUAC) as on the initial visit
- Check for oedema of both feet
- Check the child's appetite by offering nutrition therapy if the child is 6 months or older

Treatment:

- If the child has **COMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L less than -3 z-scores or MUAC is less than 115 mm or oedema of both feet AND has developed a medical complication or oedema, or fails the appetite test), **refer URGENTLY to hospital**
- If the child has **UNCOMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L less than -3 z-scores or MUAC is less than 115 mm or oedema of both feet but NO medical complication and passes appetite test), counsel the mother and encourage her to continue with appropriate Nutritional therapy feeding. Ask mother to return again in 14 days
- If the child has **MODERATE ACUTE MALNUTRITION** (WFH/L between -3 and -2 z-scores or MUAC between 115 and 125 mm), advise the mother to continue Nutritional therapy. Counsel her to start other foods according to the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart). Tell her to return again in 14 days .continue to see the child every 14 days until the child's WFH/L is –2-Z scores or more and/or MUAC is 125 mm or more
- If the child has **NO ACUTE MALNUTRITION** (WFH/L is -2 z-scores or more, or MUAC is 125 mm or more), praise the mother, STOP Nutritional therapy and counsel her about the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart)

To assess the child, weigh him and determine if the child is still very low weight for height or length. Also reassess feeding by asking the questions in the top box of the *COUNSEL* chart.

- If the child has **COMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L -3 z score or less or MUAC 115 mm or less or oedema of both feet and has developed a medical complication or fails the appetite test), then **refer** the child to hospital **URGENTLY**
- If the child has **UNCOMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L less than -3 z-scores or MUAC is less than 115 mm or edema of both feet but

no medical complication and passes appetite test), then advise and encourage the mother to continue giving appropriate Nutritional therapy feeding. Ask her to come for follow-up in 14days

- If the child has **MODERATE ACUTE MALNUTRITION** (WFH/L between -3 and -2 z-scores or MUAC between 115 and 125 mm), then counsel and encourage the mother to continue giving appropriate Nutritional therapy feeding. Also advise her to start other foods according to the age appropriate feeding recommendations (see *COUNSEL THE MOTHER* chart). It is important to give the child active feeding. If the mother faces any problem in feeding her child, then help her to overcome that problem. Ask her to come back in 14 days. Continue to assess the child every 14 days, until his WFH/L is -2 z-scores or more or MUAC is 125 mm or more. If the child is continuing to lose weight and no change in feeding seems likely, **refer** the child to hospital or to a feeding programme
- If the child has **NO ACUTE MALNUTRITION** (WFH/L is -2 z-scores or more or MUAC is 125 mm or more), praise the mother for taking complete care of her child, stop nutritional therapy and give other foods according to the age appropriate feeding recommendations (see *COUNSEL THE MOTHER* chart)

11.0 CONDUCT A FOLLOW-UP VISIT FOR MODERATE ACUTE MALNUTRITION

The child who has been classified with **MODERATE ACUTE MALNUTRITION**, he has to come for follow-up visit in 30 days. Some health centers arrange special feeding sessions to counsel the mother on feeding and they ask the malnourished children to come for a follow-up during such sessions. A special session allows the health worker to devote the necessary time to discuss feeding with several mothers and perhaps demonstrate some good foods for children. Follow these instructions for a follow-up visit for a child with **UNCOMPLICATED SEVERE ACUTE MALNUTRITION:**

MODERATE ACUTE MALNUTRITION

After 30 days:

Assess the child using the same measurement (WFH/L or MUAC) used on the initial visit:

- If WFH/L, weigh the child, measure height or length and determine if WFH/L
- If MUAC, measure using MUAC tape
- Check the child for oedema of both feet

Reassess feeding. See questions in the *COUNSEL THE MOTHER* chart

Treatment:

- If the child is no longer classified as **MODERATE ACUTE MALNUTRITION**, praise the mother and encourage her to continue
- If the child is still classified as **MODERATE ACUTE MALNUTRITION**, counsel the mother about any feeding problem found. Ask the mother to return again in one month. Continue to see the child monthly until the child is feeding well and gaining weight regularly or his or her WFH/L is -2 z-scores or more or MUAC is 125 mm. or more

Exception:

- If you do not think that feeding will improve, or if the child has lost weight or his or her MUAC has diminished, **refer** the child

Assess the child using the same measurement (WFH/L or MUAC) used on the initial visit:

- In the case of WFH/L measurement, weigh the child, measure height or length and determine WFH/L
- In order to measure MUAC, measure using MUAC tape
- Check the child for oedema of both feet

Reassess feeding. See questions in the *COUNSEL THE MOTHER* chart. To assess the child, weigh him and determine if the child still falls into **MODERATE ACUTE MALNUTRITION** classification according to his weight or height for age result. Reassess his feeding by asking questions from the box on the top of *COUNSEL* chart.

- If the child is no longer classified with **MODERATE ACUTE MALNUTRITION**, praise the mother. The changes in the child's feeding are helping. Encourage her to continue feeding the child according to the recommendation for his age
- If the child is still classified with **MODERATE ACUTE MALNUTRITION**, ask the mother if she has any problem in feeding her child. Take necessary steps to solve all of her problems. Ask the mother to return again in one month. Advise the mother to continue to bring her child monthly until the child is feeding well and gaining weight regularly or his or her WFH/L is -2 z-scores or more or MUAC is 125 mm. or more

Exception: If you do not think that feeding will improve, or if the child has lost weight or his or her MUAC has diminished, **refer** the child to hospital or special feeding programme

EXERCISE D

Read about each child who came for follow-up and answer the questions. Refer to the case management charts as needed.

1. Helal is an 18-month-old child. 5 days ago, he was in the clinic. You see on his chart that he had *diarrhoea*. He was classified with having **NO DEHYDRATION** and **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**. His weight was 6.8 kg. He was treated according to Plan A and his mother received counselling about feeding. The following notes were on his chart:

3 meals/day – rice, pulses, banana. Nothing between meals. No milk. Stopped breastfeeding 3 months ago.

Advised to add 2 extra feeds per day: Pulses, egg or fish if available.

Helal has been brought back to clinic for follow-up of the feeding problem. He still weighs 6.8 kg and looks unhappy but not visibly wasted.

a) Tick the items appropriate to do during this visit:

___ Ask about any new problems. If there is a new problem, assess, classify and treat as at an initial visit.

___ Ask the questions in the top box of the *COUNSEL* chart. Identify any new feeding problems.

___ Ask the mother if she has been able to give extra meals each day. Ask what she fed Helal and the number of meals.

___ Since Helal has not gained weight, immediately **refer** him to hospital.

___ Advise the mother to resume breastfeeding.

___ Give vitamin A.

___ Since Helal has had no weight gain, repeat the advice given to the mother before. Behavior change takes a long time.

___ Ask the mother questions to identify additional feeding problems.

___ Make recommendations for any feeding problems that you find.

___ Ask if Helal is still having *diarrhoea*.

You ask Helal's mother questions to find out whether she has given the extra feeds and what foods she has given. You also ask how large is each serving, whether Helal has been eating each serving and he has his own plate. You find that Helal's mother has been giving Helal rice with pulses and khichuri 2 times per day, as advised. He just eats a bite or ignores it completely. She puts it on a plate in front of him while she goes to do other work. She has not gotten any eggs or milk yet but intends to do so. She prepared halua last week for dinner on 3 nights but his siblings ate it all.

b) What advice would you give Helal's mother now?

c) Should you ask the mother to bring Helal back to see you? If so, when should she come back? Why?

2. Hena is 10 months old. Her chart shows that she was seen 6 days ago.

RECORD OF CLINIC VISITS

27/6/95 T 39℃ 5.5 kg

MALARIA; NO PNEUMONIA: COUGH OR COLD;

MODERATE ACUTE MALNUTRITION

Rx: Chloroquine, return 5 days, 30 days, 3 days if fever persists

Feeding: breastfed once in the evening; formula in morning bottle; lunch is rice with pulses, porridge; dinner – rice with pulses + boiled beans/ mashed potato with beans.

Advised to replace morning bottle with breastfeeding before the mother goes to work. Give cereal gruel with animal milk mid-morning. Mash vegetable mix with rice + spoonful oil for lunch. Dinner – rice with soup of pulses. Add spoonful oil or butter.

Hena returns today weighing 5.6 kg. She has no *fever* and no new problems.

a) Write below 3 or more questions that you could ask Hena's mother to find out whether Hena's feeding has improved.

Hena's mother answers that she is making mashed vegetables with rice and oil for lunch. She still gives rice with soup of pulses. She does not like waking Hena to breastfeed in the morning before work because it means 10-year-old Rina also has to get up before sunrise to watch the baby. But she has done so and Hena is now getting a morning and evening breastfeed. Rina is doing her work, making rice gruel with cow's milk mid-morning. At lunch Hena is eating soup of pulses with rice. Then she eats a little bit of the vegetables mashed with rice.

b) What would you advise the mother today? Also write something to praise.

When you have completed this exercise, discuss your work with a facilitator

12.0 GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

Follow-up visits are recommended for young infants who has **POSSIBLE SEVERE BACTERIAL INFECTION: VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), FAST BREATHING PNEUMONIA (7-59 DAYS), LOCAL BACTERIAL INFECTION, JAUNDICE, FEEDING PROBLEM OR LOW WEIGHT FOR AGE** or **THRUSH**. Instructions for carrying out follow-up visits for the sick young infant age 0 day up to 2 months are on the *YOUNG INFANT* chart. As with the sick child who comes for follow-up, a sick young infant is assessed differently at a follow-up visit than at an initial visit. Once you know that the young infant has been brought to the clinic for follow-up, ask whether there are any new problems. An infant who has a new problem should receive a full assessment as if it were an initial visit. If the infant does not have a new problem, locate the section of the *YOUNG INFANT* chart with the heading *GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT*. Use the box that matches the infant's previous classification. The instructions in the follow-up box (for the previous classification) tell how to assess the young infant. These instructions also tell the appropriate follow-up treatment to give. Do not use the classification tables for the young infant to classify the signs or determine treatment.

12.1 POSSIBLE SERIOUS BACTERIAL INFECTION: VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI) OR POSSIBLE SERIOUS BACTERIAL INFECTION: VERY SEVERE DISEASE-FAST BREATHING PNEUMONIA (0-6 DAYS) (VSD-FBP) OR Fast Breathing Pneumonia (7-59 Days) (IFB)

When a young infant classified with **POSSIBLE SERIOUS BACTERIAL INFECTION: VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI)** or **POSSIBLE SERIOUS BACTERIAL INFECTION: VERY SEVERE DISEASE-FAST BREATHING PNEUMONIA (0-6 DAYS) (VSD-FBP)** or **FAST BREATHING PNEUMONIA (7-59 DAYS) (IFB)** returns for follow-up in 4 days, follow these instructions:

POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-FAST BREATHING PNEUMONIA (0-6 DAYS) OR FAST BREATHING PNEUMONIA (7-59 DAYS)

After 4 days:

- Reassess the young infant for POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE or FAST BREATHING PNEUMONIA (7-59 DAYS) as described on

Treatment:

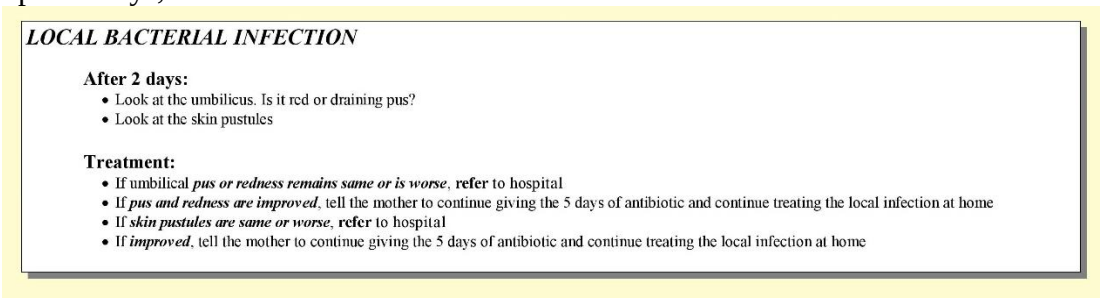
- **Refer URGENTLY** to hospital if:
  - The infant **becomes worse** or
  - Any new sign of **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE** appears while on treatment
- If the young infant is improving, ask the mother to continue giving the oral Amoxicillin twice daily until all the tablets are finished
- Ask the mother to bring the young infant back in 4 more days

Assess the young infant again according to the *CHECK FOR VERY SEVERE DISEASES* chart. Then select the appropriate treatment:

- If the infant gets worse or develops new signs of **POSSIBLE SERIOUS BACTERIAL INFECTION** or **VERY SEVERE DISEASE** while getting treatment, he needs to be **referred URGENTLY** to hospital
- If the young infant is getting better, praise the mother for taking good care of her child and giving proper treatment at home. Ask her to continue the full course, that is oral Amoxicillin twice daily for 3 more days
- Advise the mother to bring her infant back in 4 more days for follow-up

12.2 LOCAL BACTERIAL INFECTION

When a young infant classified with **LOCAL BACTERIAL INFECTION** returns for follow-up in 2 days, follow these instructions:

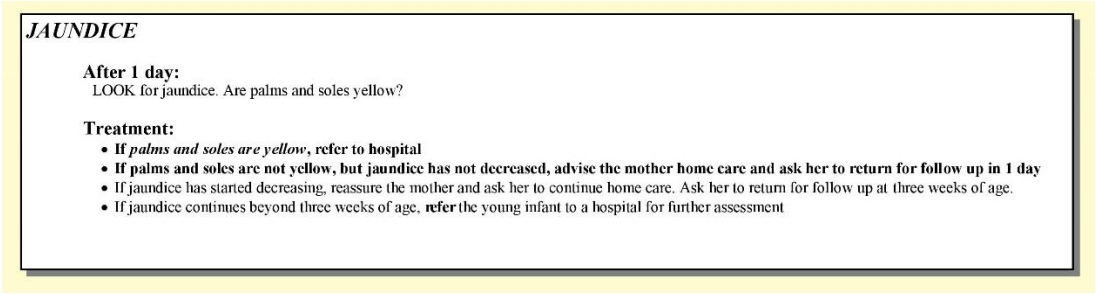


To assess the young infant, look at the umbilicus or skin pustules. Then select the appropriate treatment.

- If pus or redness remains or is worse, **refer** the infant to hospital. Also **refer** if there are more pustules than before
- If pus and redness are improved, tell the mother to complete the 5 days of antibiotic that she was given during the initial visit. Improved means there is less pus and it has dried. There is also less redness. Emphasize that it is important to continue giving the antibiotic even when the infant is improving. She should also continue treating the local infection at home for 5 days (cleaning and applying Gentian violet to the skin pustules or umbilicus)

12.3 JAUNDICE

A child classified with **JAUNDICE**, when comes back in 1 day for follow-up, then follow the instructions below:

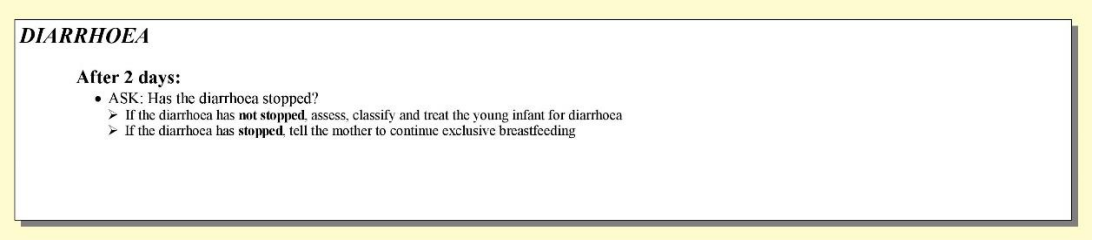


Look for **JAUNDICE** to assess the young infant. See if his palms and soles are yellow. Then select the appropriate treatment.

- If palms and soles are yellow, **refer**
- If palms and soles are no longer yellow, but **JAUNDICE** has not decreased yet, then ask the mother to take care of her child at home and come again for follow-up in 1 day
- If **JAUNDICE** has started to decrease, then ask the mother to take care of her child at home. Tell her to come back for follow-up at 2 weeks of age. If **JAUNDICE** persists for more than 3 weeks, then send to hospital for reassessment

12.4 DIARRHOEA

When a young infant classified with *diarrhoea* returns for follow-up in 2 days, follow these instructions:

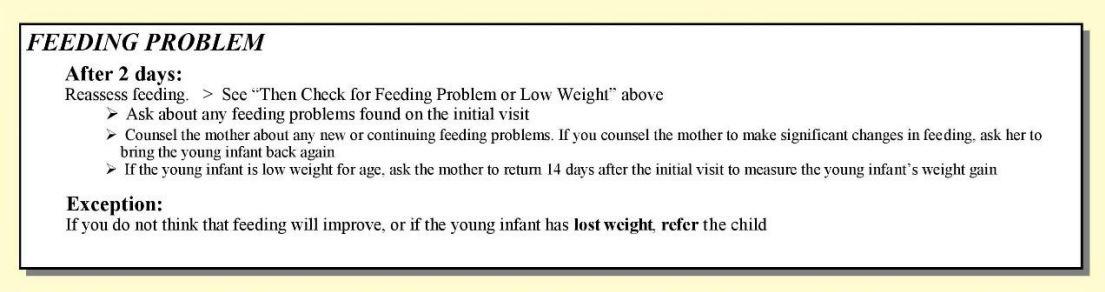


Ask the mother whether the diarrhea has stopped. Treat according her answer:

- If the *diarrhoea* has not stopped yet, assess and classify again and treat the him accordingly
- If the *diarrhoea* has stopped, tell the mother that she has done well and advise her to continue exclusive breastfeeding

12.5 FEEDING PROBLEM

When a young infant who had a **FEEDING PROBLEM** returns for follow-up in 2 days, follow these instructions:



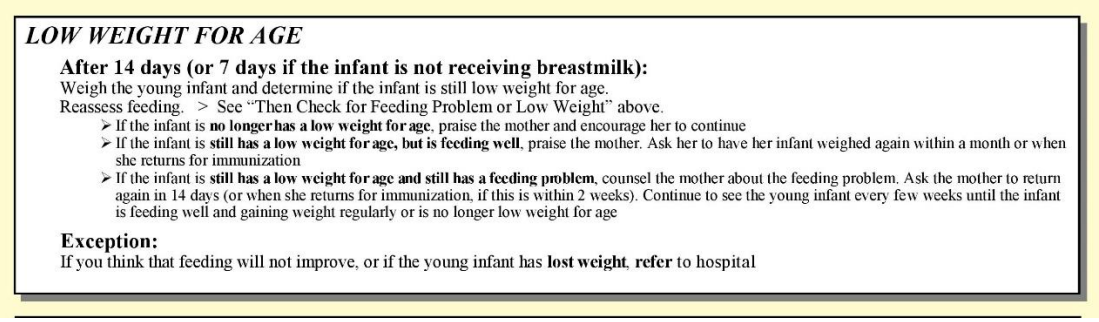
Reassess the feeding by asking the questions in the young infant assessment box, 'Then Check for Feeding Problem or Low Weight.' Assess breastfeeding if the infant is breastfed. Refer to the young infant's chart or follow-up note for a description of the feeding problem found at the initial visit and previous recommendations. Ask the mother how successful she has been carrying out these recommendations and ask about any problems she encountered in doing so.

- Counsel the mother about new or continuing feeding problems. Refer to the recommendations in the box 'Counsel the Mother About Feeding Problems' on the *COUNSEL* chart and the box 'Teach Correct Positioning and Attachment for Breastfeeding' on the *YOUNG INFANT* chart

  For example, you may have asked a mother to stop giving the infant drinks of water or juice in a bottle and to breastfeed more frequently and for longer. You will assess how many times she is now breastfeeding in 24 hours and whether she has stopped giving the bottle. Then advise and encourage her as needed
- If the young infant is **LOW WEIGHT FOR AGE,** ask the mother to return 14 days after the initial visit. At that time, you will assess the young infant's weight again. Young infants are asked to return sooner to have their weight checked than older infants and young children. This is because they should grow faster and are at higher risk if they do not gain weight

12.6 LOW WEIGHT FOR AGE

When a young infant who was classified with **LOW WEIGHT FOR AGE** returns for follow-up in 14 days (or in 7 days, if the infant is not receiving breastmilk), follow these instructions:

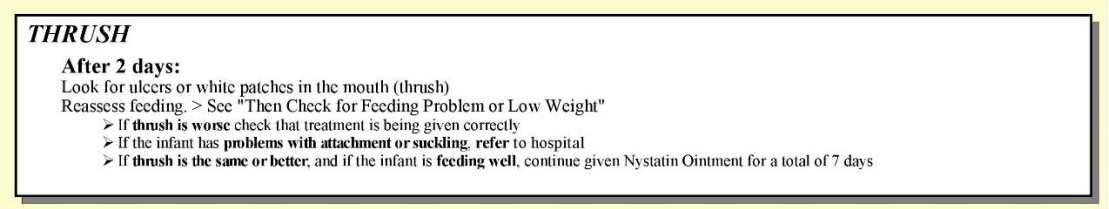


Determine if the young infant is still **LOW WEIGHT FOR AGE**. Also reassess his feeding by asking the questions in the assessment box, 'Then Check for Feeding Problem or Low Weight'. Assess breastfeeding if the young infant is breastfed.

- If the young infant is no longer **LOW WEIGHT FOR AGE**, praise the mother for feeding the infant well. Encourage her to continue feeding the infant as she has been or with any additional improvements you have suggested
- If the young infant is still **LOW WEIGHT FOR AGE**, but is feeding well, praise the mother. Ask her to have her infant weighed again within a month or when she returns for immunization. You will want to check that the infant continues to feed well and continues gaining weight. Many young infants who were low birth weight will still be **LOW WEIGHT FOR AGE**, but will be feeding and gaining weight well
- If the young infant is still **LOW WEIGHT FOR AGE** and still has a feeding problem, counsel the mother about the problem. Ask the mother to return with her infant again in 14 days. Continue to see the young infant every few weeks until you are sure he is feeding well and gaining weight regularly or is no longer **LOW WEIGHT FOR AGE**

12.7 THRUSH

When a young infant who had **THRUSH** returns for follow-up in 2 days, follow these instructions:



Check the **THRUSH** and reassess the infant's feeding.

- If the **THRUSH** is worse, then check if the treatment if given correctly. Ask the mother, how she is applying Nystatin ointment and how many times daily? If the mother is doing it incorrectly, then discuss the problems with her
- If the infant has problems with attachment or suckling, **refer** to hospital. It is very important that the infant be treated so that he can resume good feeding as soon as possible
- If the **THRUSH** is the same or better and the infant is feeding well, ask the mother to continue treatment with Nystatin ointment for 7 days

EXERCISE E

Read about each young infant who came for follow-up and answer the questions. Refer to the *YOUNG INFANT* chart as needed.

2. Bani is 10 days old. The health worker classified her with **LOCAL BACTERIAL INFECTION** because she had some skin pustules on her buttocks. Her mother got Amoxicillin DT to give at home and learned how to clean the skin and apply Gentian violet at home. She has returned for a follow-up visit after 2 days. Bani has no new problems.

a) How would you reassess Bani?

When you look at the skin of her buttocks, you see that there are fewer pustules and less redness.

b) What treatment does Bani need now?

3. Afiya, a 5-week-old infant, was brought to the clinic 2 days ago. During that visit she was classified with a **FEEDING PROBLEM** because she was not able to attach well to the breast. She weighed 3.25 kg (not **LOW weight for age**). She was breastfeeding 5 times a day. She also had white patches of thrush in her mouth. Afiya's mother was taught how to position her infant for breastfeeding and how to help her attach to the breast. She was advised to increase the frequency of feeding to at least 8 times per 24 hours and to breastfeed as often as the infant wants, day and night. She was taught to treat thrush at home. She was also asked to return for follow-up in 2 days. Today, Afiya's mother has come to see you for follow-up. She tells you that the infant has no new problems.

a) How would you reassess this infant?

Afiya's weight today is 3.35 kg. When you reassess the infant's feeding, the mother tells you that she is feeding easily. She is now breastfeeding Afiya at least 8 times a day, and sometimes more when she wants. She is not receiving other foods or drinks. You ask the mother to put Afiya to the breast. When you check the attachment, you note that the infant's chin is touching the breast. The mouth is wide open with the lower lip turned outward. There is more areola visible above than below the mouth. The infant is suckling effectively. You look in her mouth. You cannot see white patches now.

b) How will you treat this infant?

When you have completed this exercise, discuss your work with a facilitator

MODULE-8

PULSE OXIMETER TRAINER MANUAL

HYPOXIA

Red blood cells contain a substance called hemoglobin. The hemoglobin is the one that binds with oxygen and carries the oxygen. When hemoglobin is carrying oxygen it is described as "saturated with oxygen" Oxygen saturation is a term referring to the concentration of oxygen in the blood. It measures the percentage of hemoglobin binding sites in the bloodstream occupied by oxygen. The amount of oxygen carried by the hemoglobin is measured in percentage of oxygen saturation or referred as SpO2 (Peripheral hemoglobin oxygen saturation). It is an estimation of the oxygen saturation level.

Normal blood oxygen levels are considered as SpO2 of 95-100 percent. Between 90 and 95

Hypoxia- If the oxygen saturation level in blood is <90%.

percent, your blood oxygen level is considered low but it is not necessarily indicative of a health issue. If the level is below 90 percent, it is considered low resulting in hypoxia.

What level of SpO2 is important during clinical care?

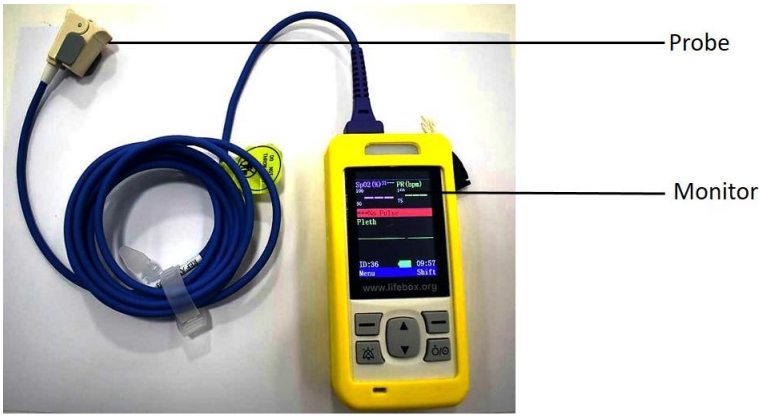
- SpO2 should always be above 90% during patient care

- When the SpO2 falls 90% or below the patient is hypoxic and needs oxygen to be administered or the patient should be referred to hospital for oxygen

A pulse oximeter is an early-warning device for Hypoxia. Its use is simple and non- invasive. A pulse oximeter consists of the monitor containing the batteries and display, and the probe that senses the pulse**.**

THE PULSE OXIMETER MONITOR

The monitor contains the microprocessor and display. The display shows the oxygen saturation, the pulse rate and the waveform detected by the sensor. The monitor is connected to the patient via the probe. During use, the monitor updates its calculations regularly to give an immediate reading of oxygen saturation and pulse rate. The pulse indicator is continuously displayed to give information about the circulation. The audible beep changes pitch with the value of oxygen saturation and is an important safety feature. The pitch drops as the saturation falls and rises as it recovers. This allows you to hear changes in the oxygen saturation immediately, without having to look at the monitor all the time.

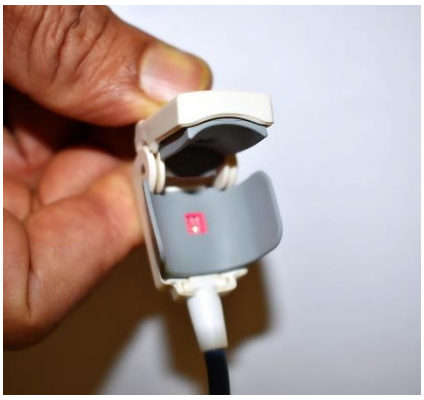


THE PULSE OXIMETER PROBE

The oximeter probe consists of two parts, the light emitting diodes (LEDs) and a light detector (called a photo-detector). Probes are designed for use on the finger, toe or ear lobe. They are of different types. Ear probes are lightweight and are useful in children or if the patient is very vasoconstricted. Small probes have been designed for children but an adult hinged probe may be used on the thumb or big toe of a child. For finger or toe probes, the manufacturer marks the correct orientation of the nail bed on the probe. The probe connects to the oximeter using a connector with a series of very fine pins.

PRACTICAL USE OF THE PULSE OXIMETER

- Step 1: Ensure the pulse oximeter is well charged. Connect the probe to the pulse oximeter.
- Step 2: Select the appropriate probe with particular attention to correct sizing and where it will go (usually finger, toe or ear). Turn the pulse oximeter on. Always make sure the alarms are on.
- Step 3: The probe emits a red light when the machine is switched on; check that you can see this light to make sure the probe is working properly.



- Step 4: Ask the mother to calm the baby. If used on a finger or toe, make sure the area is clean and well exposed.

- Step 5: Put the probe in the toe and position the probe carefully; make sure it fits easily without being too loose or too tight.

- Step 6: Allow several seconds for the pulse oximeter to detect the pulse and calculate the oxygen saturation. Once the unit has detected a good pulse, the oxygen saturation and pulse rate will be displayed. Look for the displayed pulse indicator that shows that the machine has detected a pulse. Without a pulse signal, any readings are meaningless.

- Step 7: If reading is taken from the thumb, avoid the arm being used for blood pressure monitoring as cuff inflation will interrupt the pulse oximeter signal.

If no signal is obtained on the oximeter after the probe has been placed on a finger, check the following:

- Is the probe working and correctly positioned? Try another location.
- Does the patient have poor perfusion?
- Check the temperature of the patient. If the patient or the limb is cold, gentle rubbing of the digit or ear lobe may restore a signal.

Tip: If you are uncertain that the probe is working properly, check it by testing it on your own finger.

WHAT DO THE ALARMS ON A PULSE OXIMETER TELL YOU?

The alarms are as follows:

- Low saturation emergency (hypoxia) SpO2 <90%
- No pulse detected
- Low pulse rate
- High pulse rate

CARE OF PULSE OXIMETER

1. Keep the battery fully charged
2. When the probe gets dirty, clean it gently with a damp cloth or alcohol swab
3. Position safely to avoid dropping or damage from spillages
4. Insert the plug or the lead correctly to avoid damage. Always look at the shape of the lead before inserting
5. Disconnect the probe carefully holding it firmly
6. When disconnecting the probe, grip the cable firmly and not the cable
7.When not in use, always coil the lead and position the probe where it cannot be damaged

Several factors can interfere with the correct function of a pulse oximeter including:

- **Light** – bright light (such as the operating theatre light or sunlight) directly on the probe may affect the reading. Shield the probe from direct light.
- **Shivering** – movement may make it difficult for the probe to pick up a signal.
- **Pulse volume** – the oximeter only detects pulsatile flow. When the blood pressure is low due to hypovolaemic shock or the cardiac output is low or the patient has an arrhythmia, the pulse may be very weak and the oximeter may not be able to detect a signal
- **Vasoconstriction** reduces blood flow to the peripheries. The oximeter may fail to detect a signal if the patient is very cold and peripherally vasoconstricted.
- **Carbon monoxide poisoning** may give a falsely high saturation reading. Carbon monoxide binds very well to haemoglobin and displaces oxygen to form a bright red compound called carboxy haemoglobin. This is only an issue in patients following smoke inhalation from a fire.

ASSESSMENT

Answer these questions about pulse oximetry – the answers are at the bottom of the page. More than one answer may be correct.

1. The pulse oximeter measures:

a. Haemoglobin level in blood
b. Body temparature
c. Percentage of blood saturated with oxygen
d. Pulse rate
e. Cardiac output

2. Which of the following (if any) statements is true about oximeter probes?

a. Ear probes tend to read higher than finger probes
b. Probes are expensive
c. The probe can be cleaned gently with soapy water
d. If a signal is not present, the probe is always faulty
e. Bright light does not affect probe function

3. Which of the following can cause false readings on a pulse oximeter?

a. Dark skinned patients
b. Fast pulse rates with normal blood pressures
c. If the baby is restless
d. The probe is not fixed to the finger properly
e. Oxygen treatment

4. Below which level, the oxygen saturation is identified as a danger sign?

a. <100%
b. <95%
c. <90%
d. <98%
e. <92%

5. The following may reduce the chance of a successful oximeter reading:

a. Fever
b. Pneumonia
c. Restless child
d. Diarrhoea
e. If the baby is sleeping

Answer: 1. c, d 2. b, c 3. c, d 4. c 5. c

CASE STUDY

Nasima is 8 months old. She weighs 6 kg. Her temperature is 39°C.

Her father told the health provider, "Nasima has had cough for 3 days. She is having trouble breathing. She is very weak." The health provider said, "You have done the right thing to bring your child today. I will examine her now."

The health provider checked for general danger signs. The mother said, "Nasima did not breastfeed. She did not take any other drinks I offer her." Nasima does not vomit everything and does not have convulsions. Nasima is lethargic. She did not look at the health provider or her parents when they talked.

The health provider counted 55 breaths per minute. He saw chest indrawing. Then he asked Nasima's mother to hold gently and put the pulse oximeter probe on her toe. The provider waited a few seconds and looked at the monitor. He found that Nasim's oxygen saturation level was 85%.

Now look at the classification table for cough or difficult breathing on the chart. Classify this child's illness and write your answer in the Classify column. Be prepared to explain to your facilitator how you selected the child's classification.

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child or • Oxygen saturation (SpO_2) <90%	*Pink:* **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Refer URGENTLY to hospital** ➢ **Give Diazepam if convulsing now** ➢ **Give inhaled Salbutamol if wheezing**
• Chest indrawing or • Fast breathing	*Yellow:* **PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days** ➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaler Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	*Green:* **COUGH OR COLD**	➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaled Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

IMCI register (age 2 months to 5 years)

Patient Ident.	Physical Exam.	ASSESS	CLASSIFY	TREATMENT	
				If Referral	If Not Referral
1	2	3	4	5	6
Reg. no: 325/6 Date: 3.2.19 Child's name: Nasima Date of birth: Age: 8mo Sex: ☐ Male ☑ Female Visit: ☑ Initial ☐ Follow up Mother's name: Heera Father's name: Maksud Address: House Name/	Weight (kg): 6 Height(Inch): Temperature (°C/°F): 39° Breaths/ minute: 55 Measure oxygen saturation (SpO_2) by pulse oximeter (%): 85% Date of starting symptoms: 31.1.19 ☑ Palm examination ☑ Eye examination ☑ Examination to diagnose Early Childhood Development (ECD) ☑ Examination to diagnose other problems	☑ Not able to drink or breast feed ☐ Vomits everything ☐ Had convulsion or convulsing now ☑ Lethargic or unconscious ☐ Stridor in calm child	☑ **Severe pneumonia or very severe disease**	☑ Amoxicillin DT 1st dose; if Amoxicillin DT is not available- ☐ Amoxicillin syrup 1st dose ☑ IM Gentamicin 1st dose ☐ Per rectal Diazepam if convulsing ☐ Inhaled Salbutamol if wheezing ☑ **Refer URGENTLY**	
		☑ Chest in-drawing ☑ Fast breathing-50 breaths per minute or more (2 months–11 months) ☐ Fast breathing-40 breaths per minute or more (12 months- 5 years)	☐ **Pneumonia**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ Amoxicillin DT 1st dose; If DT is not available- ☐ Amoxicillin syrup 1st dose ☐ If wheezing give Salbutamol for 5 days ☐ Advise to relieve cough ☐ For any general danger sign or stridor advise to come urgently
		☐ No signs of pneumonia or very severe disease	☐ **Cough or cold**	☐ If cough persists for >14 days or recurrent wheezing, refer to hospital for diagnosis	☐ If wheezing give Salbutamol for 5 days ☐ Advise to soothe the throat and relieve the cough ☐ Advise to come urgently if fast breathing or breathing difficulties ☐ If not improving, advise to FU in 5 days
		Dehydration Verification: ☐ Lethargic or unconscious ☐ Sunken eyes ☐ Not able to drink or drinking poorly ☐ Restless, irritable ☐ Drinks eagerly, thirsty ☐ Skin pinch goes back slowly ☐ Skin pinch goes back very slowly	**Dehydration** ☐ **Severe Dehydration** ☐ **Some Dehydration** ☐ **No Dehydration**	☐ **If young infant also has another severe classification- refer URGENTLY to hospital**	Treatment according to category ☐ **Severe dehydration** ☐ **Some dehydration** ☐ **No dehydration** **In case of Some and No dehydration:** ☐ FU in 5 days if not improving
		Diarrhoea for 14 days or more ☐ Dehydration present ☐ No dehydration		**Severe persistent diarrhoea:** ☐ If any other severe classification- refer ☐ If no other severe classification- treat dehydration and refer	**Persistent diarrhoea:** ☐ Recommend food supplementation as per age ☐ Give Vitamin A, Multivitamins and Minerals ☐ Advise to FU in 5 days
		☐ Blood in the stool	☐ **Severe Persistent Diarrhoea** ☐ **Persistent Diarrhoea** ☐ **Dysentery**		**Dysentery:** ☐ Give oral Ciprofloxacin for 3 days ☐ Advise to FU in 3 days
		☐ Tender swelling behind the ear	☐ **Mastoiditis**	☐ 1st dose of Amoxicillin ☐ Paracetamol ☐ **Refer URGENTLY**	
		☐ Ear pain ☐ Pus or water draining from the ear (<14 days)	☐ **Acute ear infection**		☐ 1st dose of Amoxicillin ☐ 1st dose of Cotrimoxazole ☐ Paracetamol ☐ Advise to keep ear clean and restrict entry of water ☐ Advise to FU in 5 days
		☐ Pus or water draining from the ear (>14 days)	☐ **Chronic ear infection:**		☐ Advise to keep ear clean and restrict entry of water ☐ Quinolone eardrops ☐ Advise to FU in 5 days
		☐ History of fever/feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Any general danger sign ☐ Stiff neck	☐ **Very severe febrile disease**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ Single dose of Paracetamol ☐ Artesunate (High malaria risk area) ☐ **Refer URGENTLY**	
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Malaria Risk ☐ Travel to Malaria risk areas ☐ RDT/ Other Malaria test positive ☐ No cause of fever	☐ **Malaria**	☐ If fever is present every day for more than 7 days, refer to hospital	☐ Treat the child by oral Artesunate ☐ Give Paracetamol for high fever ☐ FU in 3 days if fever persists
		☐ History of fever /feels hot/temperature (99.5°F/ 37.5°C or above) ☐ Other causes of fever present	☐ **Fever- No Malaria**	☐ If fever persists every day for > 7 days, refer to hospital	☐ Give Paracetamol for high fever ☐ Treat for other specific causes of fever ☐ FU in 3 days if fever persists
		☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	

Address:
House
Name/
Holding
Number:

Village /
Mahallat:
Babupara

Union:
Matiranga

Upazilat:
Matiranga

District:
Khagrachori

Mobile No:

☐ Any general danger sign ☐ Clouding of cornea ☐ Deep or extensive mouth ulcers	☐ **Severe Complicated Measles**	☐ Give Vitamin A ☐ 1st dose of Amoxicillin ☐ Treat clouding of cornea by Tetracycline ointment ☐ **Refer URGENTLY**	
☐ Pus draining from the eye ☐ Mouth ulcers	☐ **Measles with eye or mouth complications**		☐ Vitamin A ☐ If pus draining from eye-treat with Tetracycline ointment ☐ Oral ulcer-give Nystatin ointment and Riboflavin ☐ FU in 3 days
☐ Measles now or within the last 3 months	☐ **Measles**		☐ Give Vitamin A
☐ Oedema of both feet ☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm ☐ Medical complication present ☐ Not able to finish Nutritional therapy ☐ Breastfeeding problem	☐ **Complicated severe acute malnutrition**	☐ 1st dose of Amoxicillin ☐ Treat to prevent low blood sugar ☐ **Refer URGENTLY**	
☐ WFH/L z-score: less than -3 z-scores ☐ MUAC: less than 115 mm	☐ **Uncomplicated severe acute malnutrition**		☐ Amoxicillin for 5 days ☐ Give nutritional therapy ☐ FU in 7 days
☐ WFH/L z-scores: between -3 and -2 z-scores ☐ MUAC between 115 and 125 mm	☐ **Moderate acute malnutrition**		☐ Treatment according to the category ☐ FU in day 30
☐ Severe palmar pallor ☐ Some palmar pallor	☐ **Severe Anaemia** ☐ **Anaemia**	**Severe Anaemia:** ☐ **Refer URGENTLY**	**Anaemia:** ☐ Give Iron or Multiple Micro-nutrient ☐ Give Mebendazole/Albendazole if age 1 year or more and hasn't had a dose in the last 6 months ☐ FU in 14 days
	☐ **Low birth weight (within 72 hours)** ☐ **Less weight than age (Underweight) (6-59 months)** ☐ **Less height than age (Stunting) (6-59 months)** ☐ **Less weight than height (Wasting) (6-59 months)**		
	☐ **Whitish pupillary reflex (Cataract/Retinoblastoma/Other)** ☐ **Watering from eye or accumulation of discharge** ☐ **Redness of eye (Corneal ulcer/Conjunctivitis)** ☐ **Injury of Eye ball and Adnexa** ☐ **Squint** ☐ **Structural deformity** ☐ **Dimness of vision** ☐ **Visual Inattention**	**In case of any eye problem:** ☐ **Refer URGENTLY**	
	☐ **Early childhood development (ECD) problem**	**If defective mental development diagnosed:** ☐ **Refer URGENTLY**	
	☐ **Drowning** ☐ **Illness due to injuries/accidents**		
	☐ **Other problem (Specify):**		

Other Nutritional Information

☐ Exclusive breast feeding (0-6 months)

☐ Nutritional therapy (6-23 months)

Counseling

☐ IYCF ☐ Vitamin A ☐ IDD ☐ Anaemia ☐ Micro-nutrient Program (MNP)

Immunization Status (Circle immunization needed today)

BCG OPV-0	Penta-1 OPV-1 PCV-1 IPV	Penta-2 OPV-2 PCV-2	Penta-3 OPV-3 PCV-3 IPV	MR-1	MR-2	Vitamin A Antihelminthic	Return for next immunization on: _____ (Date)