



Child Resource Centre

# Educators' Manual



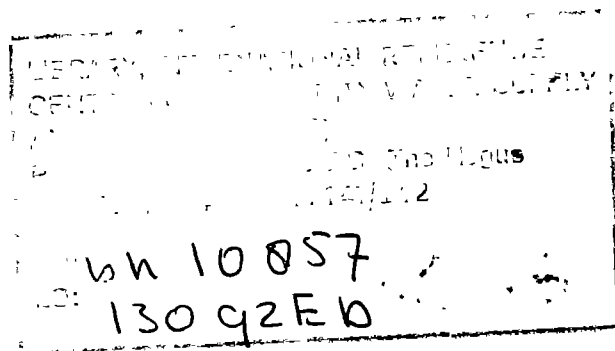
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# Child Centred Health Education Approaches

# Educators' Manual



**Child Resource Centre**

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# **PREFACE**

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This booklet represents one in a series of publications of the **Child Resource Centre (CRC)**, aimed at promoting activities and programmes which focus on child centred health education and development.

One of the aims of the **Child Resource Centre** is to assist in improving the effectiveness and capabilities of those working in the area of health education. Our strategy for achieving this is to document successful learning approaches, as is being done through these booklets.

Increasingly, traditional teaching techniques are being replaced by more participatory activities and methodologies. Many teachers and educators are searching for new ideas. The ideas and methodology presented in this series of booklets are designed to be used by those interested in trying innovative, **ALTERNATIVE APPROACHES** in their work with children. The strategies are a step forward from static classroom teaching to a more relevant, hands-on and dynamic educational process.

The lesson plans and activities in this manual are specifically aimed at the children through educators'. It is important to keep in mind that activities in itself will not serve the purpose of providing health education, unless debriefed properly.

The preparation of this manual has been a collective effort and large number of people including doctors, health workers, educators, teachers, trainers, communication experts, scientists and children themselves have given their valuable suggestions during individual consultations, field-testing sessions and during a teachers' workshop organized especially for pre-testing the manual.

We are hopeful that this Manual will provide the necessary guidelines for imparting health education to children, and that it will help achieve CRC's ultimate goal of enhancing children's health and development.

We welcome your comments and suggestions and would be happy to answer any questions regarding this Manual.

**CRC Team**

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# INTRODUCTION

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Health is a central component of a child's development. Schools are an effective medium through which health education can be provided to children. However, it has become increasingly well recognized that formal, didactic teaching is not an effective method for imparting health education. The textbook approach taken assigns children the role of passive recipients and fails to link the subject matter with the practical day-to-day experiences of children. Lessons are quickly forgotten and are not perceived by the children as having any relevance to real life situations.

For health education to be more effective and meaningful, it is necessary to move away from the didactic approach towards more practical educational methodologies. **CHETNA's Child-Centred Health Education** strategy is based on the understanding that in order for learning to take place, education must be experiential, interesting, enjoyable and stimulating. Its interactive, participatory and activity-based approach places children at the centre of the learning experience. In this way, it involves them in the process of building their own knowledge base and encourages them to put into practice what they learn. At the same time, the children's education has an outreach effect on the community since children will naturally initiate healthy practices in their home and neighbourhood.

## **THE CHILD CENTRED HEALTH EDUCATION**

Approach benefits in three ways :

1. The activities enhance the child's own acquisition of concepts so that the **CHILD ACTIVELY** participates in the construction of his/her own knowledge-base rather than passively accepting it in ready made format from the educator.
2. Throughout this innovative process of imparting health education, the community is continuously involved at various levels and is educated indirectly.
3. The activities may also benefit the people among whom the child lives as the child is in much better position to initiate appropriate health related action in the family and community.

The **Educators' Manual** has been developed to assist educators in implementing the child-centred approach. It consists of several lesson plans that contain useful and practical information on health. It emphasizes the important health messages that need to be communicated to children. To reinforce the health message, each lesson plan is followed by an activity sheet which includes games, songs and other activities that are enjoyable and stimulating for children.

The final section of the manual contains useful suggestions for educators interested in designing their own activities. This will enable facilitators to structure their own health programmes to suit different needs and circumstances.

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# NUTRITION

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• **Module One : Balanced Diet**

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• **Module Two : Anaemia**

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• **Module Three : Night-Blindness**

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# MODULE ONE: BALANCED DIET

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## LESSON PLAN

Food is essential to satisfy hunger, to grow healthy and fight diseases. For survival, every living organism needs food. We need adequate food for the growth and development of the body, to repair body tissues and protect ourselves from diseases. Food also provides heat and energy to the body for carrying out various daily functions and activities.

## NUTRIENTS AND FOOD GROUPS

We eat many different types of food every day, such as chapatis, rice, pulses, vegetables, fruits, milk, etc. The nutrients present in these foods, such as carbohydrates, vitamins and proteins all serve a special function. Foods are divided into three main food groups based on the prominent nutrients present in them and their functions.

### 1. Energy-Giving Foods

Foods such as wheat, rice, barley, maize, jaggery, sugar, root vegetables like potato, sweet potato, and fatty foods such as oil, butter, ghee and margarine, are all energy-giving foods. They provide the energy required by the body to carry out functions and activities.

### 2. Growth and Body Building Foods

Foods such as milk, milk products, pulses, legumes, groundnuts, eggs, meat, fish, etc. contain nutrients for body growth and development. They also help in the repair and building of body tissues.

### 3. Protective Foods

These foods provide protection against various diseases and help the body remain healthy. All types of green leafy vegetables like spinach, fenugreek, radish leaves, coriander, cabbage, citrus and yellow fruits like orange, amla, tomato, mango and papaya. Protective nutrients are also found in animal foods like eggs, meat, fish and milk.

## NEED FOR A BALANCED DIET

A balanced diet is an appropriate mix of food items, in the right quantity and proportion for normal growth and development. It must provide sufficient energy for daily activities as well as for protecting the body from diseases.

It is necessary to include items from each food group in our daily diet. For example, chapati,

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# ACTIVITY SHEET: BALANCED DIET

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## 1. LET US PLAY!

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### Objective

To familiarize children with the functions of different foods.

### Activity

Draw 3 large circles on the ground/floor. Each circle will represent one food group, i.e. energy giving foods, growth and body building foods and protective foods. Make a sign to identify each circle according to the food group it represents.

Have all the children stand in between the three circles.

The educator calls out the name of one food item from any of the 3 food groups.

The children are expected to run to the appropriate food group circle to which the food item belongs.

Those children who fail to reach the appropriate circle in time are disqualified as well as those who run to the wrong circle.

Those children who run to the appropriate circle continue playing, until there is only one winner.

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## 2. MAKE ME WHOLE

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### Objective

To help children understand the classification of food groups.

### Activity

Four players can play this game at a time, others can cheer them.

Prepare a pack of 52 cards by cutting cardboard into pieces approximately 6" X 4".

Draw or write different food items on every card e.g. carrots, chapati, milk, chana, etc. See that all food groups are represented equally in the drawings.

Four players are given ten cards each. The remainder of the cards are spread out face down on the table.

The players look at their cards and attempt to make a balanced meal with them.

The player who completes a balanced meal first is the winner.

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## MODULE TWO: ANAEMIA

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### LESSON PLAN

Anaemia is a condition which develops in people as a result of a substantial decrease in the hemoglobin concentration of the blood, which is caused by a deficiency of iron. The symptoms of anaemia are so common that people take them lightly. However, they can lead to severe complications. Regular intake of iron rich foods can prevent anaemia and its ill effects.

Our blood is made of 2 types of cells: red blood cells and white blood cells. It is the hemoglobin pigment in red blood cells which gives the red colour to our blood. These red cells possess a compound called hemoglobin which transport oxygen from lungs to different parts of our body. This hemoglobin is composed of protein and iron. If we do not eat enough protein and iron in our diet, hemoglobin will not be produced in sufficient amounts. This results in anaemia. Anaemia, then, is a condition where the oxygen-carrying capacity of our blood is reduced. Anaemia reduces the body's capacity for work as well as its resistance level, which makes an anaemic person much more susceptible to other illnesses.

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### CAUSES

- 1. Deficiency of iron-rich foods:** If green leafy vegetables, jaggery, meat, fish, liver, eggs, etc, are not included in sufficient amounts in our daily diet, it can lead to iron deficiency and anaemia.
- 2. Deficiency of vitamin B-12 and folic acid:** Vitamin B-12 and folic acid are required for the multiplication and maturation of red cells. When there is deficiency of vitamin B-12 or folic acid in the diet, hemoglobin is not synthesized in the blood. This leads to anaemia.
- 3. Malaria and hookworm Infestation:** Malarial parasites get their nutrition from our blood cells. In the process, they destroy some of the blood cells present in the body and reduce the level of hemoglobin in the blood. Likewise, hookworms suck the blood from the body. Repeated attacks of malaria and recurrence of hookworm infestation can therefore result in anaemia.
- 4. Severe blood loss:** Severe blood loss due to injury or menstruation, etc. can also lead to anaemia.
- 5. Deficiency of protein-rich foods and vitamin C:** If we do not get sufficient protein



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# ACTIVITY SHEET: ANAEMIA

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## 1. RHYME TIME

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### Objective

To help children recognize the symptoms of anaemia through a rhyme.

### Activity

Jack and Jill went up the hill  
To fetch a pail of water.  
Jack felt tired and sat to cry,  
But Jill could run up faster.  
Jack was pale and felt so weak.  
In running and playing,  
He could never beat.  
He felt giddy and nails turned flat  
Jack was weak but it was all because he didn't  
eat well,  
While Jill was jumping, running up the hill.  
Jack sat brooding as to when will he reach?  
What could he do to get back his health?  
His treasure of joyous temper and good health?  
At the end of the activity a questions and  
answer session can follow to help children  
revise the learned material.

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## 2. CATCH ME IF YOU CAN

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### Objective

To make children aware about the importance of iron rich foods to prevent anaemia.

### Activity

The popular story of "The Hare and the Tortoise" can be adapted to reflect the symptoms of anaemia. The story can be presented before the class or the community in the form of a puppet show or a role play.

One child wears the mask of "mother hare", the second child wears the mask of "baby hare", and the third child wears the mask of "baby tortoise".

### Scene One

Mother Hare is very worried about her son, who is fussy about food. He does not eat any leafy vegetables or fruits, but likes potatoes and non-nutritious food. He is also very proud and quarrelsome, picking up fights with playmates at school and usually ends up crying.

### Scene Two

One day, the school organizes a race where baby hare and a baby tortoise participate. Baby

utensils, washing clothes and bathing gets collected.

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**AFTER ALL THESE ACTIVITIES  
THE CHILDREN SHOULD KNOW...**

- The causes of anaemia**
  - The symptoms of anaemia**
  - How to prevent anaemia**
  - How to identify anaemic patients**
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**FOLLOW-UP**

To ensure that the children remember and put into practice the lessons learned, it would be useful to follow up on them.

For example:

Follow up on the implementation of the kitchen garden.

Ask them questions regarding their diet.

Check their lunch boxes occasionally.

Quiz them on some of the items learned.

Organize presentations using slides and educational material for children.

**EDUCATOR'S NOTE**

Dotted lines for writing notes.

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# ACTIVITY SHEET: NIGHTBLINDNESS

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## 1. RECOGNIZE ME

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### Objective

To help children understand the importance of eyesight.

### Activity

Ask the children to sit in a circle.

Ask one child to sit blindfolded in the centre of the circle.

Ask the child to hold hand open.

Let the children in the circle get up one by one to clap on the hand of the blindfolded child.

Ask the blindfolded child to identify the child who clapped.

If the blindfolded child can identify the child who clapped, then the blindfold will be removed and the identified child will be blindfolded in turn.

At the end of the activity, the facilitator can discuss how difficult life would be without eyesight. Also emphasize the importance of eating proper foods.

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## 2. ROLE PLAY

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### Objective

To help children understand the importance of eating foods that are rich in vitamin A.

### Activity

This exercise can be play-acted by the children.

Mother : Neela, oh Neela, why can't you just come and eat? Why do I always have to shout after you?

Neela : Here mother, I have come.

[Mother gives Neela her food.]

Neela : Oh mother, you know I don't like these vegetables. The green leaves taste like grass. Give me only potatoes and chapaties, otherwise I will not eat.

Mother : Neela, you must eat everything. It is necessary for your health.

[Neela refuses to eat. Later that evening she goes out to play hide and seek with her friend, Sunil.]

Neela : Sunil, Sunil where are you? I can't see clearly, please come back.

Add salt, chillies, coriander, turmeric etc. to taste. Any other green leafy vegetable can be used.

Make small balls, roll them and then fry them in oil.

Chapatis can also be made and roasted from the dough.

This recipe contains approximately 1173 micro gms of vitamin A. Children can write the recipe and try it out at home for the family.

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### **AFTER ALL THESE ACTIVITIES THE CHILDREN SHOULD KNOW...**

**The importance of eyesight**

**The causes, symptoms, treatment and prevention of night-blindness**

**The importance of vitamin A**

**Food sources of vitamin A**

**How to prepare simple recipes**

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### **FOLLOW UP**

To ensure proper follow up, check with children after a month or two, and ask:

Whether the children have played the game "Recognize Me" with their friends.

If they have prepared the above recipe at home.

Whether they are eating foods rich in vitamin A.

If any of their friends have had nightblindness.

Whether any children have collected more information on the topic.

A positive response to any of these questions is a good indication of material well learned.

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### **REMEMBER!**

**WASH EYES WITH CLEAN WATER  
REGULARLY**

**IF THE CHILD CANNOT SEE PROPERLY IN  
THE DIM LIGHT CONTACT A DOCTOR  
IMMEDIATELY**

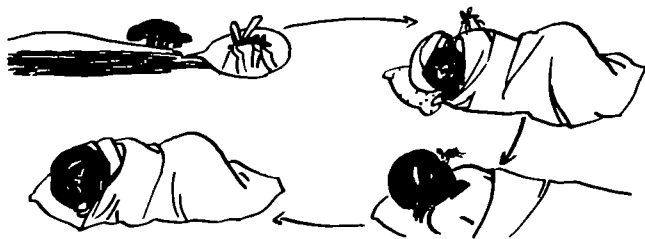
**EAT FOODS RICH IN VITAMIN A ON A DAILY  
BASIS**

**ONCE THE CORNEA IS DAMAGED, IT  
CANNOT BE CURED**

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### **EDUCATOR'S NOTE**

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• **Module Four : Malaria**

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• **Module Five : Diarrhoea**

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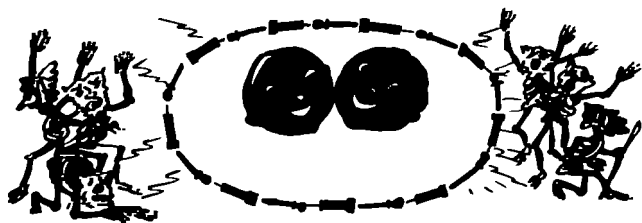
• **Module Six : Worms**

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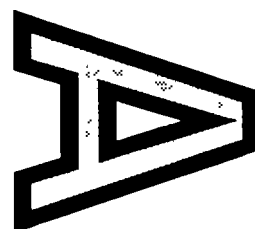
• **Module Seven : Scabies and Boils**

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• **Module Eight : Immunization**

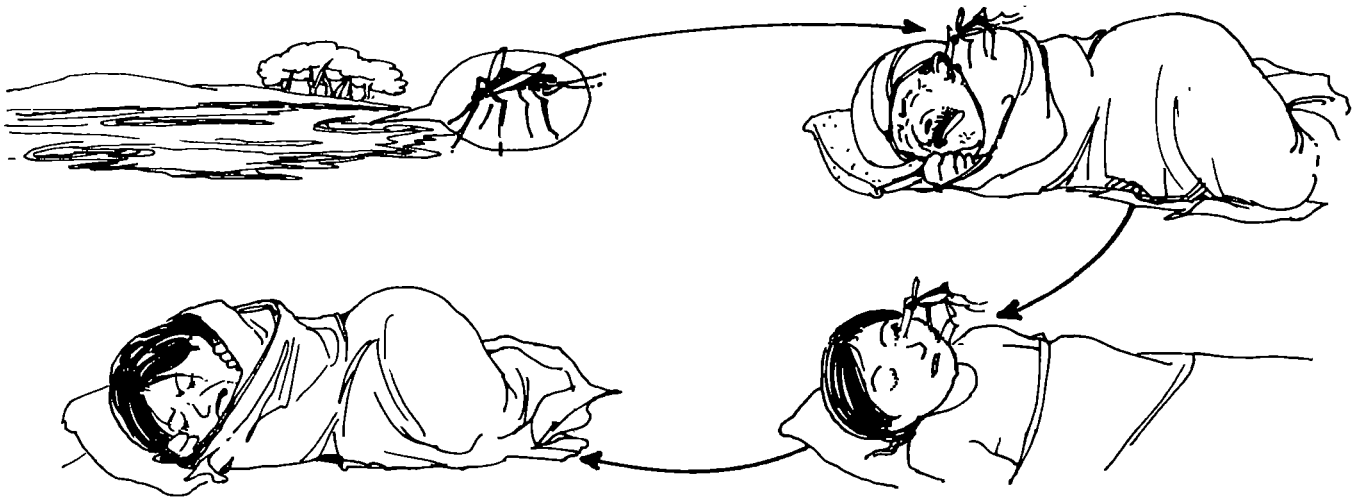
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## MODULE FOUR: MALARIA

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### LESSON PLAN

Malaria is a parasitic disease which is spread by anopheles mosquitoes. The mosquitoes breed only in water. They pick up malaria germs from infected people and then pass it on to others when they bite. Malaria causes fever with chills, headache and bodyache. In some cases it also produces vomiting and diarrhoea, and can be fatal to young children.

### SPREAD

Whenever the female anopheles mosquito bites a person suffering from malaria, the malarial parasite enters the mosquito's body through the blood. It takes about 10 to 20 days for the malarial parasites to develop inside the body of the mosquito. After this period, the mosquito can pass on the parasite to a healthy person by simply biting them. This is how malaria spreads from one person to another.

### SYMPTOMS

Recurring and periodic fever.  
Severe chills and headache, followed by fever.  
Fever drops with perspiration.  
Weakness and skin flushes.  
Sweating develops, which leads to a loss of

body water and minerals.

Fever may cause fits and the patient may become unconscious.

Could lead to serious complications, such as cerebral malaria, and may cause death.

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**MALARIA IS A KILLER DISEASE SPREAD BY MOSQUITOES. AVOID GETTING BITTEN AND AVOID GETTING SICK. BE HEALTHY!**

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### TREATMENT

Consult a doctor.

Follow the recommended doses of chloroquine as advised by doctor.

Fever may be controlled by sponging body with a cool, wet cloth.

Patient should be given plenty of fluids to replace the loss of body water and minerals.

After the malarial attack, patient should be given plenty of green, leafy vegetables, milk, pulse, and legumes.

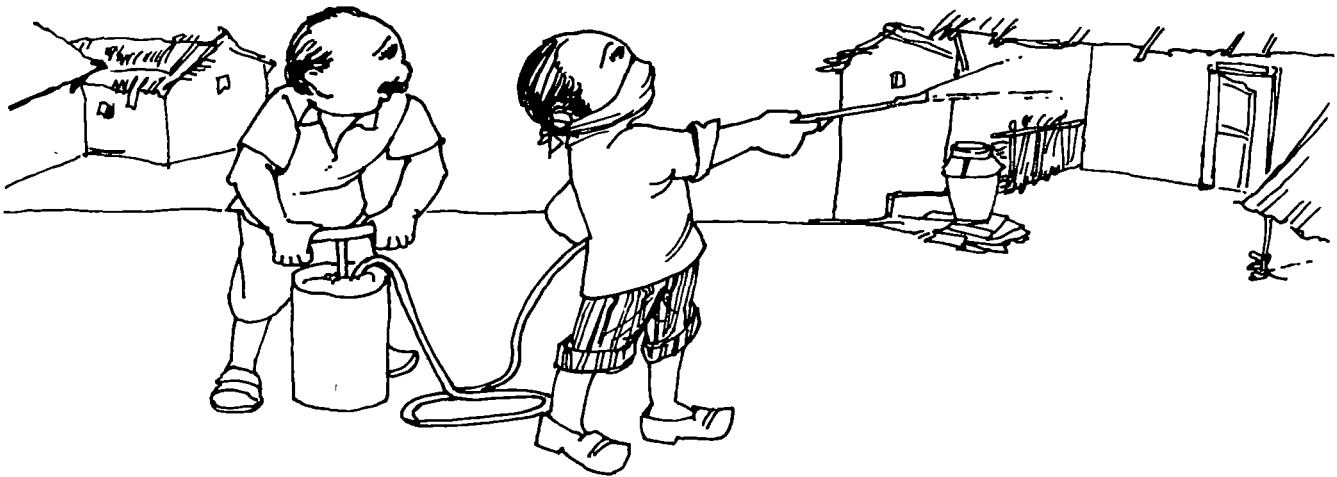
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**CHLOROQUINE TABLETS SHOULD NOT BE TAKEN ON AN EMPTY STOMACH AS IT MAY LEAD TO VOMITING AND CAUSE ACIDITY.**

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# ACTIVITY SHEET: MALARIA



## 1. RAJU'S MALARIA

### Objective

This rhyme will help to familiarize children with the general symptoms of malaria.

### Activity

I had a headache, oh then,  
I had a headache, oh then!  
I had a headache and pain,  
I wished I was healthy again.

When I had fever, oh then,  
When I had fever, oh then!  
When I had fever, I had a shiver,  
I wished I was healthy again.

I was sweating, oh then,  
I was sweating, oh then!  
I was sweating and my fever just left,  
I wished I was healthy again.

My doctor was called, oh then,  
My doctor was called, oh then!  
My doctor was called and treat me he did,  
With tablets of chloroquine.

So I was healthy again,  
So I was healthy again!  
So I was healthy and happy,  
And very joyful again!!!

After the rhyme is sung several times, discuss the content with the children.

## 2. SET ME RIGHT

### Objective

To familiarize children with terms related to symptoms and prevention of malaria

### Activity

Words related to malarial symptoms and prevention are listed below in jumbled form. Ask the children to re-arrange the letters to form the correct words.

#### JUMBLED

1. ALMIARA
2. QSOMIUTSOE
3. EOMSK
4. LILSHC
5. OCINQLROEHU
6. KSENASEW

#### ANSWERS

1. MALARIA
2. MOSQUITOES
3. SMOKE
4. CHILLS
5. CHLOROQUINE
6. WEAKNESS

## MODULE FIVE: DIARRHOEA



### LESSON PLAN

Diarrhoea refers to the passing of watery stools. It is a common but serious illness especially in young children. It is caused by germs which thrive in dirty water and human stool. These germs can pass from one person to another through hands, food, drinks and flies. Diarrhoea leads to a loss of essential water and minerals from the body, and causes dehydration as a result. Getting rid of stools in a safe way, washing hands after defecation and covering food helps to prevent the spread of diarrhoea. If the community is made aware of the primary symptoms of dehydration, its prevention and treatment, millions of young children can be prevented from dying.

### SPREAD

The major cause of diarrhoea is contaminated water and food. If hands are not washed properly after defecating, germs can stick to the nails. Such germs are then passed to food and water while eating, cooking or removing water from the pot, and then enter the body when these are consumed. The germs then cause diarrhoea and sometimes dehydration.

Flies also spread the germs which cause diarrhoea. They tend to sit on stools which are passed in the open. The germs from the stool

stick to their legs and are later passed on to uncovered food or water, thus leaving the germs behind on the food and water that is later consumed by people.

Children often defecate near the house where dogs, hens and other stray animals roam about. These animals touch the stools and may later come into contact also with uncovered food or water, thus passing on the germs from the stool to the food. When consumed by people, the germs in the water and food will enter the body and cause diarrhoea.

### SYMPTOMS OF DIARRHOEA

Watery stools, sometimes accompanied by vomit and/or fever.

Watery stool with pus, mucus and/or blood.

In some cases, frothy and foul odoured stool.

### SYMPTOMS OF DEHYDRATION

The child's mouth, lips and tongue dry up and they become excessively thirsty.

The child becomes weak and irritable.

Skin loses its elasticity. If pinched, the skin does not retract to normal position immediately.

Eyes are tearless/waterless and sunken.

In infants, the fontanelle (top part of the head above forehead) sinks in.





## ACTIVITY SHEET: DIARRHOEA



### 1. MAKING ORS

#### Objective

To help children learn the method for preparing ORS.

#### Activity

Keep salt, sugar/jaggery and pure drinking water available, depending on the number of children.

Round the children and have them observe the preparation of ORS

Take two glasses of drinking water (500 ml).

Add a pinch of salt and taste it. It should not be saltier than tears.

Add a scoop or matchbox full of sugar.

If available, add a few drops of lemon juice for taste.

Have the children taste it.

Review the preparation and ask the children to prepare it themselves

Discuss again the treatment.

### 2. STORY-TELLING

#### Objective

To familiarize children with the ORS solution.

#### Activity

Samir is a clever boy who is studying in the 7th grade. He has a younger sister named Minu. Every morning, Samir's parents go to work and his mother returns at noon just in time to see Samir and his friends off to school. She does not worry about Minu because Samir takes good care of her.

One day while his mother was at work, Minu started crying. Samir rushed to her and saw that she had passed a watery stool again. "Oh!", said Samir, "you have done it again. Mummy just cleaned you up half an hour ago". Samir washed Minu, changed the sheet and put her back on the bed. Then he carefully washed his hands. Samir had just finished washing the dirty sheet when he heard Minu crying again. The poor child had again passed a watery stool. Samir got worried and after cleaning Minu, he quickly ran to call Kavita -their neighbour and mother's friend.

2. Number of family members
3. Age of children in the family
4. Occurrence of diarrhoea in the family in the past three months
5. What were the symptoms?
6. What was the treatment taken?
7. Water handling practices in the family, food storage and availability of latrine.
8. Observation of the level of cleanliness in the house, flies, etc.

At the end of the survey, children can demonstrate the preparation of ORS in every house visited.

**AFTER ALL THESE ACTIVITIES THE CHILDREN SHOULD KNOW...**

- \* The causes, symptoms, treatment and prevention of diarrhoea.
- \* How to prepare the oral rehydration solution.
- \* How to prepare rice-kangl.

**FOLLOW UP**

Children could be motivated to maintain a healthy level of hygiene by having either the teacher monitor their cleaning habits or by selecting one student every week to monitor the rest of the class.

Here are some suggestions for a checklist:

1. short and clean nails
2. clean hands
3. washing hands after defecating
4. washing hands before eating
5. washing fruits and vegetables before eating
6. keep all water and food covered

Children could also be encouraged to check and monitor the level of hygiene in their own community and school.

Follow up on the survey conducted in their community.

**EDUCATOR'S NOTE**

A large rectangular box with a solid border, containing 25 horizontal dashed lines for writing notes.

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## **PREVENTION**

Use latrine or pit latrine for passing stools.

Always wash hands with soap or ash after defecating and before eating or cooking.

Keep nails short and clean.

Always use a laddle to remove water from pot.

Wash vegetables well before eating them.

Prevent children from eating mud.

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## **REMEMBER !**

**Keep hands clean, especially before eating and after defecating.**

**Cover drinking water and food.**

**Wear shoes, especially in areas where others defecate.**

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## **2. HOOKWORM**

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Hookworms are 1 cm long and red in colour, although they cannot usually be seen in the feces. Once they enter the body, they travel through the blood stream until they reach the intestines, where they attach themselves and suck blood. Hookworm infestation can lead to serious complications. Among children, it may cause anaemia. Any child who is anaemic, very pale or eats mud may have hookworms.

### **SPREAD**

The eggs of the hookworms come out in the stools of infested persons and hatch on moist soil. From here, the baby hookworms can enter a person's body through bare feet.

### **SYMPTOMS**

When the hookworms enter the body through the feet, they may cause itching.

Within a few days after entering the body, the hookworms reach the lungs through the blood-stream, and may cause a dry cough.

The person coughs up the young worms and swallows them again.

A few days later the person may have diarrhoea or stomach-ache.

Hookworms suck blood and often produce weakness and in severe cases anaemia.

### **TREATMENT**

Complete the course of deworming tablets as per the advice of a doctor or health worker.

A complete course of iron tablets is also advisable.

### **PREVENTION**

Always use latrine or dry pit latrine for defecation.

Use footwear outside of the house.

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## **3. THREADWORM**

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These worms are very thin, thread like, and white in colour. They lay thousands of tiny eggs just outside the anus, or near the vaginal opening among girls.

### **SPREAD**

When a person scratches the infected area, the eggs of the threadworm stick to the nails and spread when the same unwashed hands are used to eat, cook food or serve water that will later be consumed by others. Thus, the cycle of infection continues.

### **SYMPTOMS**

Itching and scratching around the anus, or near vaginal opening among girls, particularly at night, which disturbs sleep, causes irritation and weakness.

### **TREATMENT**

Complete course of deworming medicine as per the advice of a doctor or health worker.

Children who have thread worms should wear pants while sleeping to keep them from scratching.

Wash the child's hands and buttocks with soap and water.

### **PREVENTION**

Wash hands well with soap or ash and water after defecating and before eating or serving food.

Keep nails clean and short.

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One was fat and plump, another crooked, and the third was very thin. The children were puzzled, so they hid behind a tree to hear them talk. From their conversation the children found that the funny looking creatures were none other than the nasty worms.

First of all the **Roundworm** said "My eggs are so small that people cannot see them. I lay my eggs and when they come out in stools they can remain for a long time in the soil. I stick to the nails of people and enter their body if they don't wash their hands. Also, some children eat mud and some women clean their utensils with mud. This makes it easier to enter their body. As soon as I enter, I eat up everything the person eats, so their body becomes weak from lack of food. Then I lay thousands of eggs and come out through their feces. This way I continue my cycle. Ha! Ha! What a life!!!".

Upon hearing this, the **Hookworm** boasted, "Huh, what a life? You don't know me! I am very dangerous. I stick to the intestines of the person and suck their blood, but I cannot be seen. People then become anaemic from lack of blood. I leave my eggs on the moist soil through feces and when another person walks barefoot over it, I enter their body. This is how I spread. So, you see my might? You only live on a person's food, but I am a superhero because I feast on precious blood!".

The **Threadworm**, who had so quietly listened to the two, said, "I am thin and thread-like and lay my eggs outside the anus, which leads to itching at night. I also travel from faeces to the mouth. I too like persons who are dirty, those who do not wash their hands properly, especially after defecating. But I can trouble a person the most because I cause itching, irritation and weakness and give sleepless nights. Wow, what fun!".

All the three worms were happy with their victory, and quickly started to dance and sing - "We shall overcome..."

The children were struck with disbelief on hearing all these stories. Chotu, the youngest of all started crying because he had been eating mud even though everyone had told him not to.

Now, he knew the consequences. The children did not know how to prevent worm infestations, so they all ran to Lata, an elderly friend of the children. They told her all they had heard and seen. They also told her that since Chotu was eating mud, he may have a lot of worms in his body. Lata said, "Oh no, that is not good. You must see a doctor and take deworming tablets. Also ask your parents to give the same medicine to everyone in the family. Aside from the tablets, you have to take other precautions to prevent another worm infestation because repeated infestations can cause serious complications".

The children were relieved to get help, and asked Lata about preventive measures. Lata told them about personal hygiene, regularly cutting nails, using latrines, washing hands before eating and using footwear.

Chotu listened carefully, then asked, "But Lata, what about that proud hookworm? He said that he was causing paleness and weakness in us by sucking our blood". Lata explained that hookworms can cause anaemia, but can be removed by first completing the course of deworming tablets and eating iron-rich food such as green leafy vegetables. She also warned that deworming tablets are not enough. Personal and environmental hygiene are just as important for the whole family. The children were now happy and making fun of the worms. They started dancing and singing - "We shall overcome..."

The story could be followed with discussions and a review of the lesson plan.

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### 3. PUZZLE

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#### Objective

To familiarize children with the treatment and preventive measures against worm infestations.

#### Activity

Mix words in a jumble of letters and ask the children to find them. The words should relate to the lesson plan just learned. For example:

## MODULE SEVEN : SCABIES AND BOILS



### LESSON PLAN

Scabies and boils are bacterial skin diseases which spread by contact. They develop from a lack of personal hygiene, and are most common among children.

### 1. SCABIES

Scabies are caused by a mite (sarcoptes scabies), similar to tiny ticks which make tunnels (burrows) under the skin. There, they cause a persistent itch. Scratching can cause infections which produce boils or sores with pus and sometimes swollen lymph nodes/glands or fever.

#### SPREAD

Scabies can spread from one person to another in crowded areas, by sharing clothing and bedding and by keeping poor hygiene. It is prevalent in residential and school areas where children come into close contact with one another. The spread of scabies is greater during winter season because it is when children tend to sleep together more often.

#### SYMPTOMS

Common sites of infection are around finger

webs, inner surfaces of elbows, wrists, belt-line, thighs, external genitalia, nipples, abdomen and lower portion of buttocks.

In children it is common to find scabies around the neck, head, palms and soles of the feet.

Itching is intense, particularly at night.

Scratch marks can produce boils and eczema.

#### TREATMENT

Obtain benzyl benzoate from nearest primary health centre, free of charge.

Clean body and affected areas with soap and water.

Rub well with clean towel.

Apply benzyl Benzoate solution on the whole body except the face.

Let it dry on the body.

Continue application for three days.

Treat all members of the family at the same time, even if they are not infected.

Wear clean clothes after treatment.

Wash all clothes, bedsheets, pillow-covers, etc. with water and soap and dry them under the sun.

#### Home Remedies

Boil some neem leaves and grind them with

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# ACTIVITY SHEET : SCABIES AND BOILS

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## 1. ROLE PLAY

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### Objective

This role play will help children understand the spread of scabies and boils and its treatment.

### Activity

Raju and Ramesh are good friends. Both are studying in the same class. They are always together, while studying, playing, sharing each other's toys, etc.

One day...

**Raju:** Ramesh what happened? Why are you scratching your hands all the time?

**Ramesh:** I don't know. I can't even sleep properly because this itching persists throughout the night.

**Raju:** Show me your hands. [Looking at the hands], Oh! I think you are infected with scabies. Last year my sister Manju also had scabies and at that time my mother was using a white liquid to treat it. But first, you must cut your nails and stop scratching or it will be more painful. Let's go to

Meenaunty, the health worker. She will guide you properly.

[They both go to the health worker]

**Meena:** Welcome children. Is there any problem?

**Raju:** Yes, my friend Ramesh is itchy around his hands and elbows. I think he is infected with scabies.

[Examining Ramesh's finger webs and elbows]

**Meena:** You are right Raju. Ramesh has scabies. But he will soon be alright. I will give him the medicine. Ramesh, here it is. First take a bath with soap and hot water, scrubbing well. Then apply this on your entire body except your face, and keep it on until the next bath. Apply it for 3 days, but be careful not to apply it on your face. Also tell your mother to boil your clothes, towels and bed sheets, and to dry them under the sun. Tell me, who is sleeping very near you at night?

**Ramesh:** My brother, Suresh.

**Meena:** Since scabies is an infectious disease, it spreads through close

## **4. QUIZ TIME**

### **Objective**

To enable children to recall messages on scabies and boils.

### **Activity**

Keep a list of quizzes on scabies and boils ready. Divide the children into two teams.

The quiz master asks each team in turn a question on scabies or boils.

Each correct answer gets 2 points.

The team able to answer the most questions, and therefore to gain the most points, wins the game.

### **example**

1. Name one of the causes of scabies/boils.
2. Name one way in which boils/scabies is spread.
3. Name a common site of scabies/boils.
4. What is the treatment for scabies/boils?
5. How do you prevent boils/scabies?

## **AFTER ALL THESE ACTIVITIES THE CHILDREN SHOULD KNOW...**

**The causes and spread of boils and scabies.**  
**The symptoms and treatment of scabies and boils.**

**The preventive measures.**

## **FOLLOW UP**

The outreach effect of the lesson can be gauged by noting the level of personal hygiene in the children. For example, checking nails, hair, hands, clothes.

Pairs of children can be formed so that they can check each other.

Impromptu quizzes on scabies and boils can be organized. This will indicate how well children have retained information. The results can also serve as a guide for future lesson plans.

Parents' behaviour when children are infected can also be monitored, looking at whether or not the children are being sent to school when infected, whether their clothes are being disinfected, etc. This will reflect the outreach effect of the lesson plan.

### **EDUCATOR'S NOTE**

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## 2. Diphtheria

Diphtheria is a bacterial disease which commonly affects the respiratory passage (nose and throat). It can be deadly, particularly among children.

This bacterial disease produces a greyish/white membrane around the tonsils and pharynx, and causes high fever, sore throat, swelling of the neck, difficulty in breathing, and a hoarse sound when breathing. It may spread to the windpipe, in which case it may prevent breathing all together. Medical help should be sought immediately.

A patient with diphtheria should be kept in a separate room and treated by a doctor. Such children should not be allowed to play with others unless cured completely. All their friends and close contacts should be observed carefully for symptoms. If they have not been vaccinated before, they should be given a vaccine immediately. To prevent diphtheria, it is necessary to follow a full course of tripple vaccine. **Three doses of DPT should be given during the first four months after birth at intervals of one month between each dose. A DPT booster dose is also necessary between the ages of 16 to 24 months.**

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**DPT IS A VACCINE WHICH PROTECTS THE CHILD AGAINST DIPHTHERIA, PERTUSIS AND TETANUS**

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## 3. Pertusis (whooping cough)

Whooping cough is a bacterial infection that produces inflammation of the lining in the nose pharynx, larynx and trachea. Severe consequences of whooping cough lead to malnutrition, pneumonia, T.B. and sometimes death.

At first, it causes a cold with runny nose and fever; then, cough develops with a thick mucous. The coughs are rapid, without breathing in between, and are sometimes associated with vomiting. Nails and lips may turn blue from lack of air. When the air finally

rushes back into the patient's lungs, it produces a loud whoop.

A doctor should be consulted as soon as the whooping cough is detected. Patient should be given plenty of liquids and food after each vomit to avoid malnutrition. **To prevent this disease, It is necessary to take three doses of DPT during the first four months after birth with one month intervals in between. A booster dose should be given between 16 to 24 months.**

## 4. Tetanus

Tetanus is one of the most dangerous diseases leading to death. The tetanus germs are present in the environment, particularly in dirt and excreta.

These germs enter the body through open cuts and wounds. It can also occur among children with ear discharge, including wounds and punctures made with unsterilized syringes, needles, scissors and knives.

Tetanus produces stiffening of the jaw and neck muscles, making it difficult for the child to eat. It causes difficulty in breathing and swallowing. Generalised tetanus causes spasms and convulsions of the whole body, making it rigid and arched like a bow.

In most cases tetanus leads to death, but it may also be prevented through immediate treatment.

**Prevention of tetanus is possible with the three doses of DPT vacclne given during the first four months after birth. Pregnant women should be given two injections of tetanus at the interval of one month as soon as the pregnancy is confirmed.**

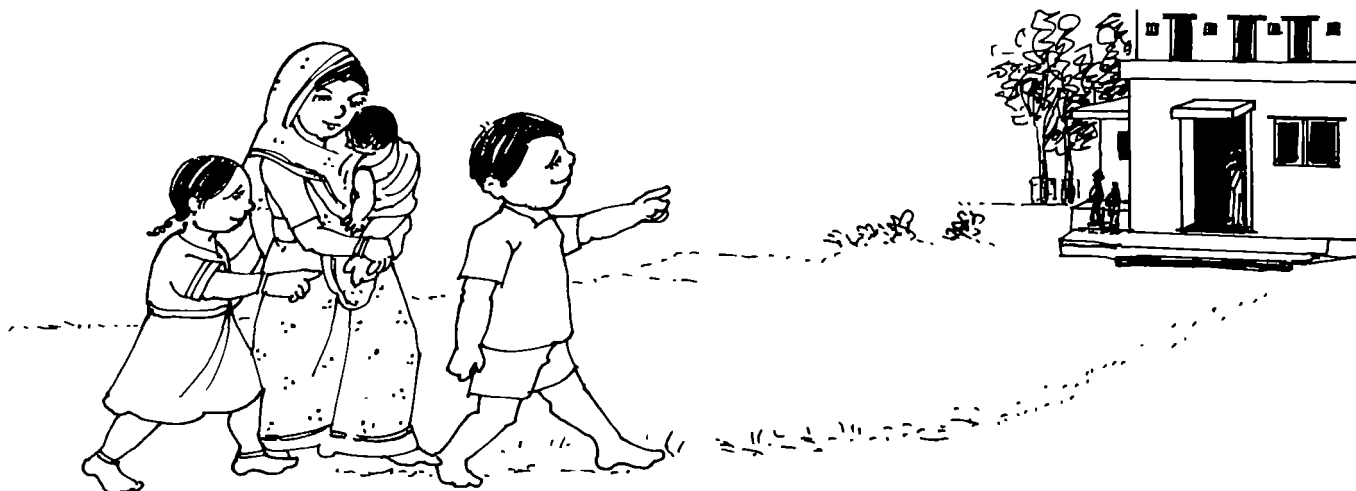
## 5. Poliomyelitis

Polio is a viral infection most common in children under the age of three years. It is the greatest disabling disease among children, as it causes irreversible damage in the body, particularly the limbs.

The virus is spread through human excreta, water and air (due to coughing, sneezing etc).



# NATIONAL IMMUNIZATION SCHEDULE



VACCINE	NAME OF DISEASE S	AGE OF CHILD	LOCATION OF THE VACCINE ON THE BODY
B.C.G.	T.B.	BIRTH TO 12 MONTHS	INJECTION ON LEFT SHOLDER
DPT (TRIPLE)	DIPHTHERIA PERTUSIS TETANUS	1.1/2, 2.1/2, 3.1/2 MONTHS	INJECTION ON BUTTOCKS
POLIO	POLIO	1.1/2, 2.1/2, 3.1/2 MONTHS	ORAL DROPS
MEASLES	MEASLES	9 TO 12 MONTHS	INJECTION ON BUTTOCKS
DPT (TRIPLE)	DIPHTHERIA PERTUSIS TETANUS	1.1/2 YEARS BOOSTER DOSE	INJECTION ON BUTTOCKS
POLIO	POLIO	1.1/2 YEARS BOOSTER DOSE	ORAL DROPS
DT	DIPHTHERIA TETANUS	5 TO 6 YEARS BOOSTER DOSE	INJECTION ON BUTTOCKS
TT	TETANUS	10 YEARS	INJECTION ON BUTTOCKS
TT	TETANUS	16 YEARS	INJECTION ON BUTTOCKS

together. Mr. Measles has a cold, fever and rashes all over. His eyes are sore, red and watery. Mr. Tetanus is weird-looking. His jaw is crooked and his body bow-shaped. He has very frightening looks and keeps jerking. There is a lot of noise around, coughing, sneezing, groaning, even shouting.

Mr. Tetanus calls everyone to order, and they all sit quietly. He asks each of the diseases to give an account of children they have killed.

Mr. T.B. says that "I am getting old. It seems that no one gets affected by me and the BCG vaccine is my worst enemy. It is trying to defeat me".

Mr. Polio speaks up saying, "I too have a similar problem. I can't seem to affect many children these days. My enemy is the polio vaccine."

Ms. Diphtheria and Mrs. Pertussis have similar stories to tell, saying that the DPT vaccine is a real menace for them. Mrs. Pertussis says, "But we are still better than all the others. Just now I visited a village and harassed so many children. Ha, Ha!"

Mr. Measles then spoke, "Though the measles vaccine is strong, I hope that I can strike anytime, more so if parents have been careless about their children's health."

The head of the killer diseases' committee spoke, "I too am unhappy. The mothers of the newborn babies are being immunized and so the babies cannot get tetanus."

Mr. Polio then added, "Never mind, wait for 6 to 8 weeks. Perhaps the parents will forget to immunize their babies with the second booster. You can try to kill again when they are two months old." Mr. Tetanus agreed that it was a good idea to wait.

Mr. Measles looks at everyone with an angry face and says, "Two years ago we could each kill more than 100 children. What's wrong? Are we ill with our own diseases?"

All of them said, "We are weak because of those vaccines. That immunization schedule is a big disadvantage. It is our major enemy. Those clever children go with their mothers to the clinic and even help their mothers carry

their newborn babies there."

All six diseases then decided to work still harder to fight against their biggest enemy, immunization.

**This story can be used in different ways:**

1. Select six children to read the story, assigning each one a specific role (Mr. Polio, Ms. Diphtheria, etc).
2. The story can also be used for a play. Children can enact the story using costumes according to the role they play.
3. The story could also become a puppet show.

### **3. IDENTIFY THE KILLER**

#### **Objective**

To help children understand the symptoms of the six killer diseases.

#### **Activity**

Describe the symptoms of any one of the six diseases, and ask the children to identify the disease. Some examples of descriptions:

1. Measles= Rita has a high fever, red eyes, a runny nose, a cough, noisy breathing, and rashes all over the body.
2. Diphtheria= Pradeep has a sore throat, his neck is swollen, and his breathing is noisy and difficult.
3. Tuberculosis= Manish has lost a lot of weight. He coughs all the time and is very weak.
4. Tetanus= Laxmi cut her foot in a dirty field. A week later all her muscles became so tight that she could hardly breathe. They took her to the hospital but do not know if they can save her.
5. Pertussis= Four year old Yousuf was coughing badly. His lips became blue, the coughing was persistent and there was a loud whooping noise.
6. Polio= Ravha was first restless and cold with fever. Later she developed a severe headache, sore muscles and her neck became stiff. Eventually her right leg became paralyzed.

# DO IT YOURSELF

## EDUCATOR'S NOTE

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# DESIGNING YOUR OWN ACTIVITY SHEET

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After implementors of health education programmes use ready made activity sheets with children, new ideas, topics and activities will naturally emerge. A time will come when the use of existing sheets or even those already modified will no longer satisfy increasing demands, and a need will be felt to develop new activity sheets for continued learning.

Past experiences have shown that creating one's own activity sheet can be very effective as it is likely to involve everyone in the educational process and will undoubtedly be sensitive to local needs and resources.

Some important guidelines are offered here for those who desire to develop their own activity sheets. It is anticipated that this guideline will assist in maintaining a structured format while at the same time providing ample scope for the exercise of individual initiative and creativity.

Before embarking on the design of activity sheets, it will be useful to review some key components of Child-Centredness.

## CHILD-CENTREDNESS

Child-Centred health education is based on the understanding that in order for learning to take place, education must be interesting, experiential, challenging and enjoyable. This is the principal reason for designing activity sheets.

To achieve the Child-Centred goal, the activity sheets need to emphasize participation. This participatory strategy places children at the centre of the learning experience, where they are active participants and not passive recipients of knowledge. There, they are likely to take real interest in the educational process.

Another important component is the activity-based approach. Involving children actively in educational games transforms learning into an experiential, learning-by-doing experience.

In this way, there is direct link built between the subject matter and the practical, day-to-day experiences of children. At the same time, children find the process enjoyable, creative and challenging.

With this strategy, the Child-Centred approach ensures that children retain the knowledge gained. It also encourages them to put into practice what they learn.

## THE ACTIVITY SHEET

An activity sheet is a teaching guide for teachers, facilitators, youth and social workers, organisers of non-formal education, as well as individuals interested in working with children.

Based as it is on the Child-Centred approach, an activity sheet offers participatory, activity-based suggestions for teaching a health topic or theme to children.

## THE LESSON PLAN

Before designing an activity sheet which introduces a new health topic, it is important to begin with a lesson plan. For this, it is necessary to keep the following in mind:

1. The topic must be a real health priority for the children and their community.
2. Ensure that the topic relates to those covered in the school syllabus. New topics can also be selected and at some point be introduced into the formal syllabus.
3. The content of the lesson plan must be absolutely medically correct and reflect up-to-date medical information.

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1. Is the idea and focus of the sheet clearly stated?
  2. Does the activity fulfill the criterion of Child-Centredness?
  3. Does the activity sheet contain all the necessary and essential information for those who will be using it?
  4. Is it clear from the sheet as to what educators are expected to do and what the children are expected to do?
  5. Does the sheet suggest different activities for the younger and older groups of children?
  6. Is there sufficient mention of what children need to find out as a basis for the action they take? This is important for developing a sense of enquiry and awareness in children.
  7. Can the activities be made more interesting, challenging and fun?
  8. Is the language clear and non-academic? Is the style economical? Are the main points always highlighted?

These guidelines should be sufficient for designing a complete activity sheet using the Child-Centred approach.

**So now call, ready, steady, stop and go...**

Chetna's Child Resource Centre (CRC) has published a series of booklets in English, Hindi and Gujarati focusing on Child-centred Health Education.

CRC's booklets can serve as practical guidelines for bringing health education messages to children using a participatory and activity-oriented approach. The learning-by-doing strategy transforms learning into an experiential process and places children at the centre of the learning experience. This way, there is a direct link built between the subject matter and the day-to-day experiences of children. At the same time, children find the process interesting, challenging and enjoyable.

The booklets are written in a simple, clear and concise manner and are attractively illustrated. They will be useful additions to libraries and are practical guides for individuals and organizations involved in child-centred activities. A list of the booklets available is given below.

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**Health Education Can Be Fun**

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**Khel-Khel Mein: Learning Whilst Playing**

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**Growing up Healthy**

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**Balmela (Children's Fair)**

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**Gramyatra (Village Rally)**

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**Child-Centred Health Education :  
An Educator's Manual**

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