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CHAPTER

14

SERIOUS ILLNESSES THAT NEED SPECIAL MEDICAL ATTENTION

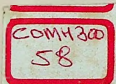
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SERIOUS ILLNESSES THAT NEED SPECIAL MEDICAL ATTENTION

The diseases covered in this chapter are often difficult or impossible to cure without medical help. Many need special medicines that are difficult to get in rural areas. Home remedies will not cure them. If a person has one of these illnesses, **THE SOONER HE GETS MEDICAL HELP, THE BETTER HIS CHANCE OF GETTING WELL.**

CAUTION: Many of the illnesses covered in other chapters may also be serious and require medical assistance. See the **Signs of dangerous illness**, p. 52.

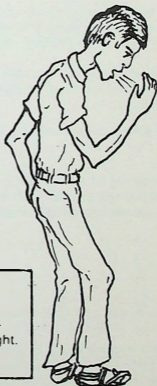
TUBERCULOSIS (TB, CONSUMPTION)

Tuberculosis of the lungs is a **chronic** (long-lasting), **contagious** (easily spread) disease that anyone can get. But it most often strikes persons who are weak, are poorly nourished, or live with someone who has the disease.

Tuberculosis is curable. Yet lakhs die needlessly from this disease every year. Both for prevention and cure, it is very important to **treat tuberculosis early**. Therefore, you should **know the signs of tuberculosis and be on the lookout for them**.

Most frequent signs of TB:

- Chronic weight loss and increasing weakness.
- Chronic cough, especially just after waking up.
- Mild fever in the afternoon and sweating at night.
- There may be pain in the chest or upper back



In serious or advanced cases:

- Coughing up blood (usually a little, but in some cases a lot).
- Pale, waxy skin.
- Voice grows hoarse (very serious).

Signs of TB in children:

Children with TB often do not cough or have a mild fever in the afternoon. The most important sign in children is **loss of weight even if they are**

eating well. They may also have difficulty in breathing. **If a child who eats well does not gain weight for two successive (one after the other) months, always suspect TB.** In a small child, TB is very dangerous and can quickly kill the child.

Tuberculosis is usually only in the lungs. But it can affect any part of the body. In young children it may cause meningitis (see p.225). For skin problems from TB, see p. 253.

If you think you might have tuberculosis:

Seek medical help. At the first sign of tuberculosis, go to a health center where the workers can give you a skin test, take an X-ray, and examine the stuff you cough up (*phlegm* or *sputum*) to see if you have TB or not. You can get medicines for TB free from the Primary Health Centre. You will probably be given 2 or 3 of the following:

- Streptomycin injections (p. 403)
- Isoniazid (I.N.H.) pills (p. 404)
- P.A.S. (aminosalicylic acid) pills (p. 404)
- Thiacetazone (p. 404)

It is very important to take the medicines as directed. At least 2 must be taken at the same time. (For the risks and precautions in the use of these medicines, see p. 402 to 404)

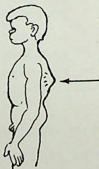
TB germs do not die easily. They will be killed only with continued treatment for a long time.

Continue taking the medicines until the health worker tells you that you are cured. Do not stop taking the medicines just because you feel better. **To cure tuberculosis completely usually takes from 1 to 2 years.**

Eat as well as possible: plenty of foods rich in proteins and vitamins, as well as energy foods (p. 128 to 130).

Rest is important. If possible, stop doing heavy and tiring work and take it easy until you begin to get better. From then on try not to work so hard that you become tired or breathe with difficulty. Try to get enough rest and sleep.

Tuberculosis in any other part of the body is treated the same as TB of the lungs. For children with severe tuberculosis of the backbone, surgery may be needed to prevent paralysis.



TB of the backbone

Tuberculosis is very contagious. Persons who live in the same house with someone who has TB, especially children, run a great risk of catching the disease.

If someone in the house has TB: (see pages. 163-165)

- If possible, see that the whole family is tested for TB.
- Have the children vaccinated against TB.
- Everyone, especially the children, should eat plenty of nutritious food (see p.128).
- The person who has TB should eat and sleep separately from the children, if possible in a different room, as long as he has any cough at all.
- The person with TB should eat from dishes kept separately for him. No one else should use these dishes.
- A person with TB should be careful to cover his mouth when coughing and should never spit on the floor. He should spit into a covered container, and burn the phlegm at night.
- Take a child to a health center at the first suspicion of TB or if he gets a cough that lasts more than 2 weeks or if he starts losing weight suddenly, or if he has difficulty in breathing.
- Treat TB at once. A person who no longer has TB will not spread it.

Early and full treatment is a key part of prevention.

RABIES

Rabies comes from the bite of a rabid or 'mad' animal, usually a rabid dog, cat, fox, wolf, skunk, or jackal. Bats and other animals may also spread rabies.

Signs of rabies:

In the animal:

- Acts strangely—sometimes sad, restless, or irritable.
- Foaming at the mouth, cannot eat or drink.
- Sometimes the animal goes wild (mad) and may bite anyone or anything nearby.
- The animal dies within 10 days.

Signs in people:

- Pain and tingling in the area of the bite.
- Pain and difficulty swallowing. A lot of thick, sticky saliva.
- Fits of anger between periods of calm.
- As death nears, fits (convulsions) and paralysis.



If you have any reason to believe an animal that has bitten someone has rabies:

- Tie or cage the animal for 10 days
- Clean the bite well with soap, water, and hydrogen peroxide. Do not close the wound; leave it open.
- If the animal dies before the week is up (or if it was killed or cannot be caught), take the bitten person at once to a health center where he can be given a series of anti-rabies injections.

The first symptoms of rabies appear from 10 days up to 2 years after the bite (usually within 3 to 7 weeks). Treatment must begin before the first signs of the sickness appear. Once the sickness begins, no treatment known to medical science can save the person's life.

Prevention:

- Kill and bury (or cage for 10 days) any animal, suspected of having rabies.
- If possible, kill all stray dogs.
- Cooperate with programs to vaccinate pet dogs.
- Keep children far away from any animal that seems sick or acts strangely.

**Take great care in handling any animal that seems sick or acts strangely.
Even if it does not bite anyone, its saliva can cause rabies
if it gets into a cut or scratch.**

TETANUS (LOCKJAW)

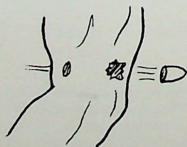
Tetanus results when a germ that lives in the feces of animals or people enters the body through a wound. Deep or dirty wounds are especially dangerous.

Wounds very likely to cause tetanus:

animal bites, especially those of dogs and pigs



gunshot and knife wounds



holes made with dirty needles



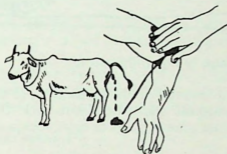
injuries caused
by barbed wire



puncture wounds from
thorns, splinters,
or nails or a piece of glass



putting cowdung on vaccination or wounds

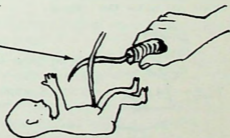


Causes of tetanus in the newborn child:

Tetanus germs enter through the *umbilical cord* of a newborn baby because of lack of cleanliness or failure to take other simple precautions. The chance of tetanus is greater . . .

- when the cord has been cut with an instrument that has not been boiled and kept completely clean or
- when the newly cut cord is tightly covered or is not kept dry.
- when the cord is smeared with cowdung or ash.

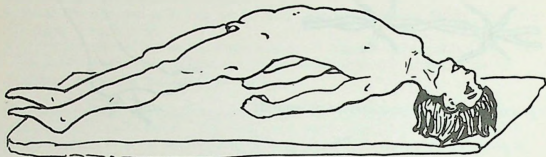
WHEN THE CORD IS CUT WITH A SICKLE OR KNIFE THAT IS NOT STERILIZED (COMPLETELY FREE FROM GERMS) THE CHANCE OF TETANUS IS GREATER.



Signs of tetanus:

- An infected wound (sometimes no wound can be found).
- Discomfort and difficulty in swallowing.
- The jaw gets stiff (lockjaw), then the muscles of the neck and other parts of the body.

Painful *convulsions* (sudden tightening) of the jaw and finally of the whole body. Moving or touching the person may trigger sudden *spasms* like this:



Sudden noise or bright light may also bring on these spasms.

In the newborn, the first signs of tetanus generally appear 3 to 10 days after birth. The child begins to cry continuously and is unable to suck. Often the umbilical area is dirty or infected. After several hours or days, lockjaw and the other signs of tetanus begin.

It is very important to start treating tetanus at the first sign. If you suspect tetanus (or if a newborn child cries continuously or stops nursing), make this test:

TEST OF KNEE REFLEXES

With the leg hanging freely, tap the knee with a knuckle just below the kneecap.



If the leg jumps just a little bit, the reaction is normal.



If the leg jumps high, this indicates a serious illness like tetanus (or perhaps meningitis or poisoning with certain medicines or rat poison).



This test is especially useful when you suspect tetanus in a newborn baby.

What to do when there are signs of tetanus:

Tetanus is a deadly disease. Seek medical help at the first sign. If there is any delay in getting help, do the following things:

- ♦ Examine the whole body for infected wounds or sores. Often the wound will contain pus. Open the wound and wash it with soap and boiled water;

completely remove all dirt, pus, thorns, splinters, etc.; flood the wound with hydrogen peroxide if you have any.

- Inject 10 lakh units of procaine penicillin (p.399) at once and repeat every 12 hours (For newborn babies crystalline penicillin is better.) If there is no penicillin, use another antibiotic like tetracycline.
- If you can get it, inject 40,000 to 50,000 units of **Tetanus Antitoxin** or 5,000 units of **Human Immune Globulin**. Be sure to follow all the precautions (see p.83). Human Immune Globulin has less risk of severe allergic reaction, but is very expensive and harder to obtain.
- As long as the person can swallow, give nutritious liquids in frequent, small sips.
- To control convulsions, inject phenobarbital (for the dose, see p.422) or diazepam (*Valium*, p.423), adults: 10 to 20 mg. to start with, and more as necessary.
- Touch and move the person as little as possible. Avoid noise and bright light.
- If necessary, use a *catheter* (rubber tube) connected to a syringe to suck the mucus from the nose and throat. This helps clear the airway.

How to prevent tetanus:

Even in the best hospitals, half of the people with tetanus die. It is much easier to prevent tetanus than to treat it.

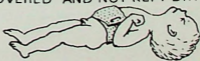
- **Vaccination:** This is the surest protection against tetanus. Both children and adults should be vaccinated. Vaccinate your whole family at the nearest health center (see p.175). **Vaccinating pregnant women against tetanus will prevent tetanus in newborn infants** (see p.296).
- When you have a wound, especially a dirty or deep wound, clean and take care of it in the manner described on page 102.
- If the wound is very big, deep, or dirty, seek medical help. If you have not been vaccinated against tetanus, take penicillin. Also consider getting an injection of tetanus antitoxin.
- In newborn babies, cleanliness is very important to prevent tetanus. The instrument used to cut the umbilical cord should be sterilized (see p.308); the cord should be cut short, and the umbilical area kept clean and dry.

THIS BABY'S CORD WAS
KEPT DRY, AND LEFT
TO OPEN AIR.



HE STAYED HEALTHY.

THIS BABY'S CORD WAS COVERED
WITH COWDUNG, KEPT TIGHTLY
COVERED AND NOT KEPT DRY.



HE DIED OF TETANUS.

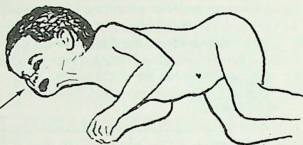
MENINGITIS

This is a very serious infection of the brain, more common in children. It may begin as a *complication* of another illness, such as measles, mumps, whooping

cough, or an ear infection. Children of mothers who have tuberculosis sometimes get tubercular meningitis in the first few months of life.

Signs:

- Fever.
- Severe headache.
- Stiff neck. The child looks very ill, and lies with his head and neck bent back, like this.
- The back is too stiff to put the head between the knees.
- In babies under a year old: the fontanel (soft spot on top of the head) bulges upward.
- Vomiting is common.
- The child is very sleepy, or may be irritable.
- The child refuses to eat.
- Sometimes there are fits (convulsions) or strange movements.
- The child often gets worse and worse until he loses consciousness.
- Tubercular meningitis develops slowly, over days or weeks. Other forms of meningitis come on more quickly, in hours or days.



Treatment:

Get medical help fast—every minute counts! If possible take the person to a hospital. Meanwhile:

- Inject ampicillin (see p 399). or crystalline penicillin (see p 398)
- If there is high fever (more than 40°), lower it with wet cloths and aspirin or acetaminophen (see p. 414)
- If the mother has tuberculosis or if you have any other reason to suspect that the child has tubercular meningitis, inject him with 0.2 ml. of streptomycin for each 5 kilos he weighs and get medical help at once. Also, use ampicillin or penicillin in case the meningitis is not from TB.

Prevention:

For prevention of tubercular meningitis, newborn babies of mothers with tuberculosis should be vaccinated with B.C.G. at birth. For other suggestions on prevention of TB, see pages 219 to 220

MALARIA

Malaria is an infection of the blood that causes chills and high fever. Malaria is spread by mosquitos. The mosquito sucks up the malaria parasites in the blood of an infected person and injects them into the next person it bites (see p. 166).

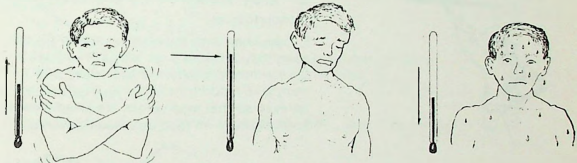
Signs of malaria:

- The typical attack strikes every 2 or 3 days and lasts several hours. It has 3 stages:

1. It begins with chills—and often headache. The person shivers or shakes for 15 minutes to an hour.

2. Chills are followed by fever, often 40° or more. The person is weak, flushed (red skin), and at times delirious (not in his right mind). The fever lasts several hours.

3. Finally the person begins to sweat, and his temperature goes down. After an attack, the person feels weak, but more or less OK.



- Usually malaria causes fevers every 2 or 3 days (depending on the kind of malaria), but in the beginning it may cause fever daily. Also, in small children and persons who have had malaria before, the fever pattern may not be regular or typical. For this reason anyone who suffers from unexplained fevers especially in the rainy season, should have his blood tested for malaria.

- Chronic malaria often causes a large *spleen* and anemia.

Analysis and treatment:

- If you suspect malaria or suffer from repeated fevers, go to a health center for a blood test.

- If there is no health center nearby, take chloroquine or whatever medicine is known to work best in your area. Using chloroquine tablets with 150 mg. of base, adults should take 4 tablets once a day for 3 days. For the children's dosage, see p. 406.

- If you get better with chloroquine, but after several days the fevers start again, you may need a different medicine, like primaquine. Get advice from the nearest health center.

- If a person who possibly has malaria begins to have fits or other signs of meningitis (p. 225) he may have *cerebral* malaria. **Seek medical help at once.** This is dangerous.

HOW TO AVOID MALARIA:

Malaria is a problem in many of the hot or tropical parts of the world. If everyone cooperates, it can be controlled. All these control measures should be practiced at once.

1. Avoid mosquitos. Sleep where there are no mosquitos or underneath a sheet.

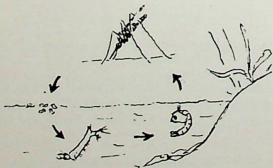
Cover the baby's cradle with a mosquito netting or a thin cloth.



2. Apply mustard oil on your body to prevent mosquito bites.

3. Cooperate with the malaria control workers when they come to your village. Tell them if anyone in the family has had fevers and let them take blood for testing. Also get your house sprayed so that mosquitoes are killed (When spraying keep all food and water covered.)

4. If you suspect malaria, get treatment quickly. After you have been treated, mosquitos that bite you will not pass malaria on to others.



5. Destroy mosquitos and their *larvae* (young). Mosquitos breed in standing water. Clear the neighborhood of ponds, pits, old cans, or broken pots that collect water. Drain or put a little oil on pools or marshes where mosquitos breed. Organize children to fill the cut off tops of bamboo poles (of fences, etc.) with sand.

6. Malaria can also be prevented, or its effects greatly reduced, by taking different doses of anti-malaria medicines on a regular schedule. For more information about this, see pages 405 to 407

ELEPHANTIASIS

This infection is caused by a kind of worm that affects the lymphatic system of the body. It is spread by a certain type of mosquito. The mosquito sucks the worms along with the blood of an infected person and injects them into the next person it bites.

Signs:

- Fever with chills and rigor.
- Raised painful areas on the skin, especially on the arms and legs.
- Swelling of the lower limbs.
- Enlargement of the lymph nodes, lymph vessels become swollen, twisted and painful.
- Permanent enlargement of the affected parts like legs, scrotum, penis.



Treatment:

- Tablet **Hetrazan** (see p. 413 for dosage).
- Aspirin tablets help relieve pain and fever.
- Tie elastic bandages on the legs to decrease the swelling. This will also help prevent permanent swelling of the legs. Be sure to take off the bandage at night.

Prevention:

Take all the precautions against mosquito bite as for malaria (p. 228).

TYPHOID FEVER

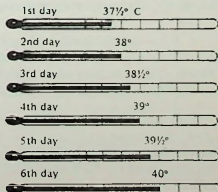
Typhoid is an infection of the gut that affects the whole body. It is spread from *feces-to-mouth* by contaminated food and water and often comes as an *epidemic* (many people sick at once).

Of the different infections sometimes called 'the fever' (see p. 32), typhoid is one of the most dangerous.

Signs:

First week:

- It begins like a cold or flu.
- Headache and sore throat.
- The fever rises a little more each day until it reaches 40° or more.
- Pulse is often relatively slow for the amount of fever present. Take the pulse and temperature every half hour. **If the pulse gets slower when the fever goes up, the person probably has typhoid** (see p. 32).
- Sometimes there is vomiting, diarrhea, or constipation.



Second week:

- High fever, pulse relatively slow.
- A few pink spots may appear on the body.
- Trembling.
- Delirium (person does not think clearly or make sense).
- Weakness, weight loss, dehydration.

Third week:

- If there are no complications, the fever and other symptoms slowly go away.

Treatment:

- Seek medical help.
- Give chloramphenicol (see p.400). If there is no chloramphenicol, use ampicillin. If there is no ampicillin either, use trimethoprim.
- Lower the fever with cool wet cloths (see p.88).
- Give plenty of liquids: soups, juices, and Rehydration Drink to avoid dehydration (see p. 182).
- Give nutritious foods, in liquid form if necessary.
- The person should stay in bed until the fever is completely gone.
- If the person shits blood or develops signs of peritonitis (p.108) or pneumonia (p.208), **seek medical help at once.**

Prevention of typhoid:

• To prevent typhoid, care must be taken to avoid contamination of water and food by human feces. Follow the guidelines of personal and public hygiene in Chapter 12. Make and use latrines. Be sure latrines are a safe distance from where people get drinking water.

• Cases of typhoid often appear after a flood or other disaster, and special care must be taken with cleanliness at these times. Be sure drinking water is clean. If there are cases of typhoid in your village, boil all drinking water. Look for the cause of contaminated water or food.

• To avoid the spread of typhoid, a person who has the disease should stay in a separate room. No one else should eat or drink from the dishes he uses. His stools should be burned or buried in deep holes. Persons who care for him should wash their hands right afterwards.

• After recovering from typhoid, some persons still carry the germs of the disease and can spread it to others. For this reason anyone who has had typhoid should be extra careful with personal cleanliness and should not work in restaurants or where food is handled. Sometimes ampicillin is effective in treating typhoid carriers.

• Take vaccination against typhoid once in 6 months, especially during summer (see p.175)

CHOLERA

This is a very infectious and dangerous disease, and often comes as an epidemic, especially after a big fair or festival where uncovered food is sold. It is spread from *feces-to-mouth* mainly by flies (p 156)

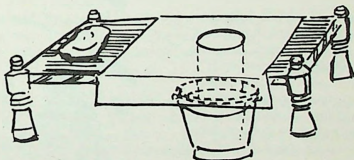
Signs.

- The patient continuously passes watery stools, which look like rice water (p.189)
The grains in the stools are bits of the inner intestinal wall.
- This results in dehydration and the patient may die.
- He may also have a slight fever.

Treatment:

Cholera is highly dangerous. **The patient may die without medical help.** Deaths in cholera are due to dehydration. To prevent dehydration, and treat the disease.

- give him tetracycline (see p 400)
- give him Rehydration Drink (p. 182) many times a day.
- give him nutritious foods, may be in liquid form
- Make him a cholera bed to lie on.



Make a hole in a charpoy or bed just at the place where his buttocks lie. Keep a bucket under this hole and fit a wide rubber tube into the hole. The tube should also fit the bucket. The patient passes his stools directly into the bucket.

Dig a pit far from the house, or source of drinking water. When the bucket gets full, empty it into this pit. Pour any water used to wash the bucket into the pit. Then immediately cover the pit **before** any flies can sit on it.

Seek medical help.

Prevention:

Cholera spreads very easily (p. 158). Great care must be taken not to eat or drink contaminated food and water. Follow the guidelines for personal and public hygiene given in Chapter 12.

- If there is a case of cholera in your house, your village or community, **inform the health authorities at once** so that they can check its spread.
- Get your family, your village or your community vaccinated against cholera once in 6 months, especially if there is an epidemic.

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57A (First Floor) ~~...~~
Bangalore

- Isolate the cholera patient in a room where there are no flies.
- Wash hands thoroughly after caring for the patient, or carrying the bucket.
- Keep the dishes, utensils used by the sick person separate. Do not let any one else use them.
- **Boil all drinking water**, especially if there is a case of cholera in your village.
- **Keep all food and drinking water covered** so that flies do not sit on it.
- Take care not to eat food that is sold openly on the roadsides and in the shops. These foods are not usually covered, and can cause cholera.

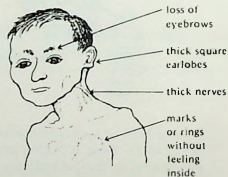
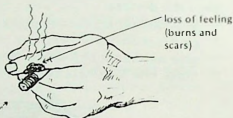
LEPROSY (HANSEN'S DISEASE)

This chronic disease develops very slowly, often over many years. It is not easily spread from one person to another, but persons who have lived for a long time in close contact with those who have leprosy sometimes get the disease.

Signs:

The signs differ greatly according to the person's natural resistance to the disease.

- Often the main sign is **loss of feeling**, usually first in the hands and feet. Persons with leprosy sometimes burn themselves without knowing it.
- Skin signs vary greatly. They include: pale spots or big ringworm-like marks that have loss of feeling in the center; swollen nerves that form thick cords or lumps under the skin; and large, chronic sores that do not hurt or itch. In one form of leprosy the skin of the face becomes thick and lumpy or the earlobes may become thick, short, and square. The eyebrows are often lost, first the outer part and then completely.
- In advanced cases, the hands and feet may become partly paralyzed and claw-like. Fingers and toes, or entire hands and feet, may gradually get shorter and become stumps.



POSSIBLE SIGNS OF LEPROSY

Treatment of leprosy:

Leprosy is usually curable, but medicine must be taken for years. The best medicines are the sulfones. For the dose, see page 405. If a "lepra reaction" (fever, a rash, pain and perhaps swelling of hands and feet, or eye damage) occurs or gets worse while taking the medicine, keep taking it but get medical help. After getting better start the medicine again.

Prevention of damage to hands and feet:

The large open sores and gradual loss of hands and feet so often seen in persons with leprosy are not caused by the disease itself and can be prevented. They result because, when feeling has been lost, a person no longer protects himself against injury.

For example, if a person with normal feeling walks a long way and begins to get blisters on his feet, these hurt, so he stops walking or limps. This protects his feet from further damage. But a person with leprosy, who feels no pain, will keep on walking, and the blister turns into an open sore. This becomes infected, and because it still does not hurt, the person does not protect it or give it a chance to heal. So the infection slowly spreads into the bones and begins to destroy them. Typical deformities result. But with care they can be prevented:



1. Protect hands and feet from things that can cut, bruise, blister, or burn them:

Do not go barefoot, especially not where there are sharp stones or thorns. Wear shoes or sandals. Put soft padding inside shoes and under straps that may rub.



When you are working with your hands, or cooking meals, wear gloves. Never pick up a pan or other object that **might** be hot without first protecting your hand with a thick glove or folded cloth. If possible, avoid work that involves handling sharp or hot objects. Do not smoke. When you are cooking sit far from the fire.

2. At the end of each day (or more often if you work hard or walk far) examine your hands and feet very carefully—or have someone else examine them. Look for cuts, bruises, or thorns. Also look for spots or areas on the hands and feet that are red, hot, swollen or show the beginnings of blisters. If you find any of these, rest the hands or feet until the skin is completely normal again. In this way the skin will become calloused and stronger, instead of blistered and raw. Sores can be prevented.

3. If you already have an open sore, or one forms, keep the part with the sore very clean and at rest until it has completely healed. Then take great care not to injure the area again.

If you do these things and begin treatment early

most deformities with leprosy can be prevented.

The book *Where There Is No Doctor* is available at Rs 29/- plus postage. Multiple copies of reprints of various chapters are also available.

Please write to:

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