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## Better Care in Leprosy

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Before treatment



After treatment

**Better Care  
in  
Leprosy**

- \* Do you want to know something good about leprosy ?
- \* Do you teach in a village school ?
- \* Do you serve on a village Panchayat ?
- \* Are you a health worker or a social worker ?
- \* Do you care for leprosy patients ?
- \* Do you train village workers ?

Yes ? Then this book is for you.

This book helps to answer these questions :

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## Can leprosy be cured?

Yes. This girl has leprosy. She came for treatment.



*Who*  
Who is this girl? This is the same girl after several years of regular treatment. No sign of leprosy remains.

*All*  
All leprosy can be cured.

*IT*  
IT IS NEVER TOO LATE FOR TREATMENT.

*E*  
Early treatment gives good results.





### Do many people get leprosy ?

Leprosy is infectious. In most people, the body is able to kill the germ. So few people get leprosy. Even where leprosy is common, only one or two persons in every hundred people have leprosy. —Most people do not get leprosy.

Perhaps there are some leprosy patients in a village. If other people live all their lives in the same village, very few of them will get leprosy.

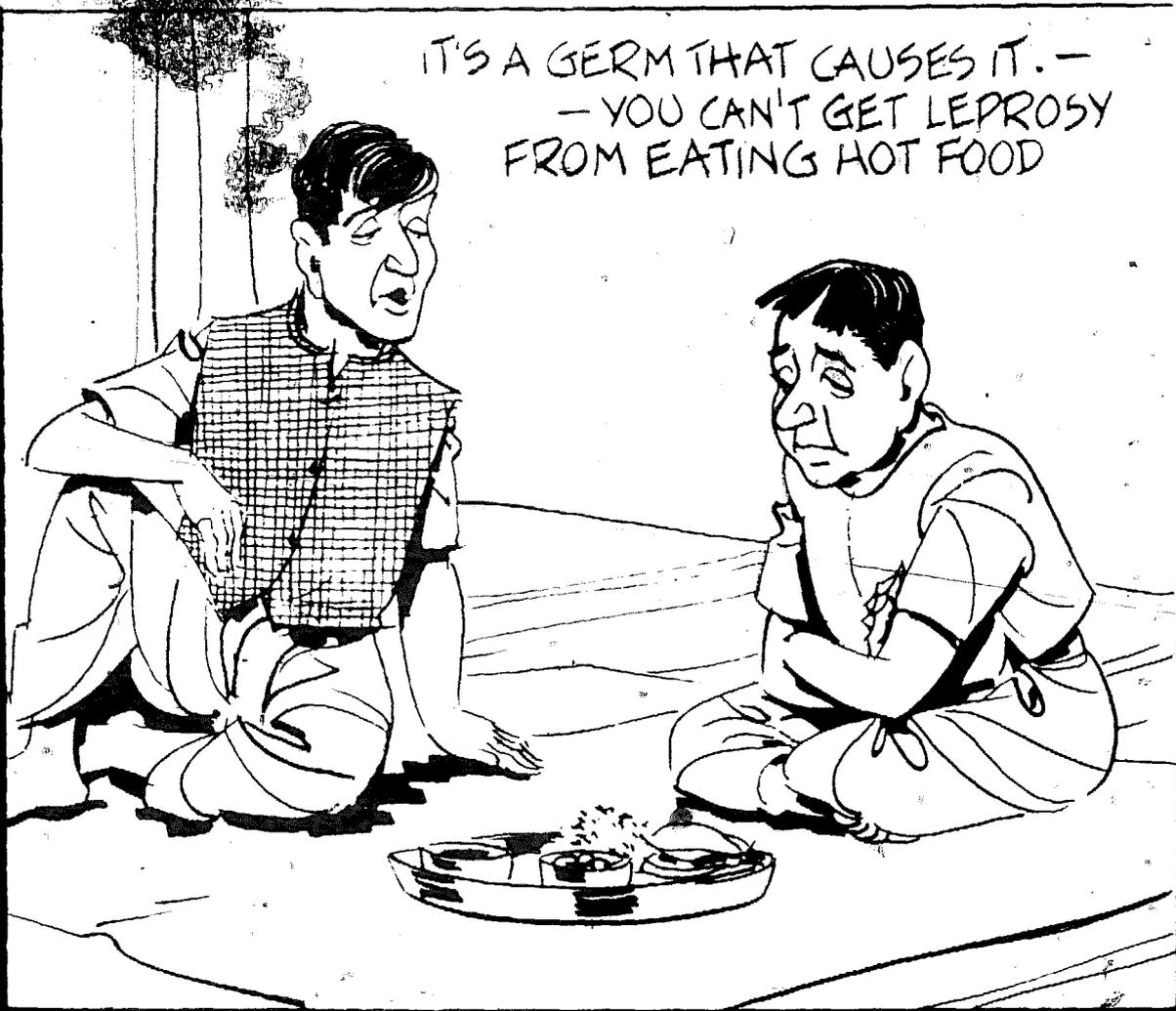
### What kinds of people get leprosy ?

- \* Rich people and poor people can get leprosy
- \* Good and bad people can get leprosy
- \* Old and young people can get leprosy
- \* High and low people can get leprosy
- \* Educated and uneducated people can get leprosy
- \* Man, woman or child can get leprosy

**BUT VERY FEW PEOPLE WILL GET IT.**

## What causes leprosy ?

Very small germs cause leprosy. We call them leprosy germs.



### These things do not cause leprosy

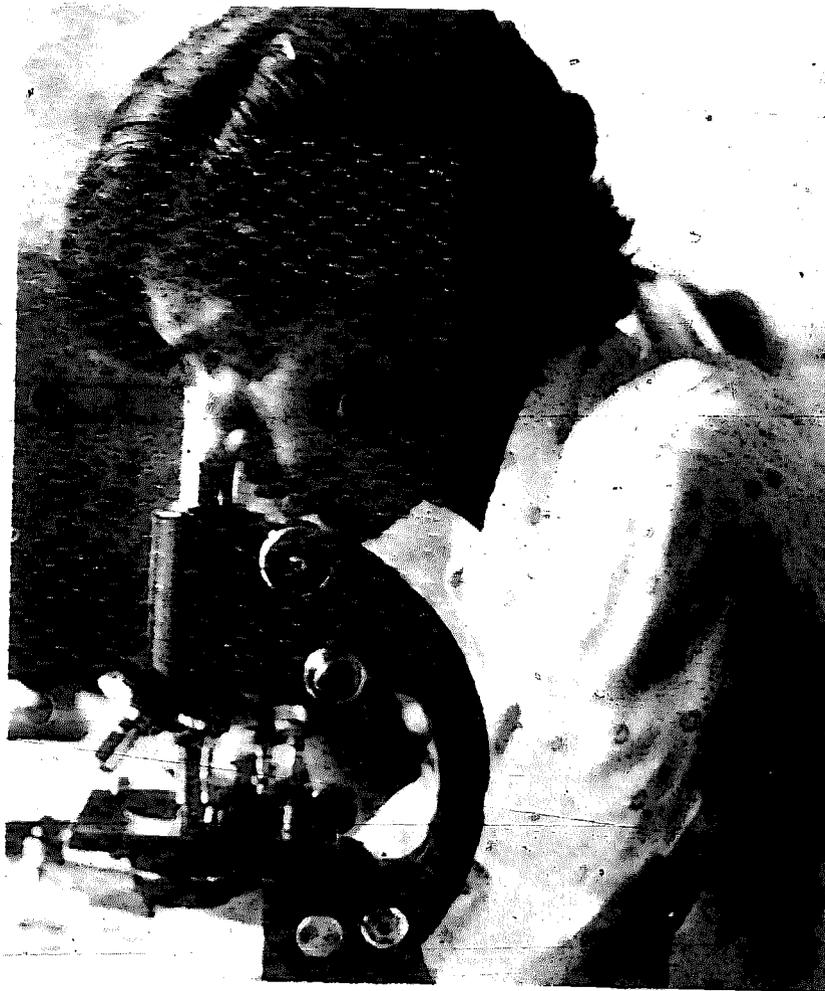
- \* hot food
- \* wrong food
- \* bad blood
- \* a vein out of place
- \* venereal diseases
- \* bad habits or past sins
- \* a curse of the Gods
- \* a bad horoscope
- \* fate
- \* evil spirits

## How does leprosy spread ?

We do not know. Doctors are still trying to find out how leprosy spreads from person to person. We know that leprosy spreads in the form of very small germs. We can see leprosy germs through a microscope. Through the microscope leprosy germs look like this :



When the leprosy germs get into a healthy person's body, the germs usually die. But in a few people, the leprosy germs can slowly multiply. After some years the germs cause leprosy in the skin, and nerves and other parts. But in most of these people few germs only are hidden in the nerves. Examination of their skin will not show any germs.



This health worker looks through the microscope at small pieces of skin from leprosy patients. He also looks at the discharge from the nose of leprosy patients. He finds that :

- \* most people with leprosy have no leprosy germs in their skin or in their nose. There are not many leprosy germs in their body. *So most people with leprosy cannot spread leprosy to others* (see pages 25,26,27)
- \* some people with leprosy before treatment have thousands of leprosy germs in their noseblow and deep in their skin. *So only some people with leprosy can spread leprosy to others.* Treatment kills germs. (see pages 37,38,39)



### **Where does leprosy come from ?**

Leprosy germs always come from some other person who has leprosy. He may not know he has it. Sometimes the leprosy has come from someone in the same house. So we ask to see everyone who lives in the same house. We examine the relatives of the patient.

Very often no relative has leprosy. If no relative has leprosy, the leprosy has come from outside the family.

### **How can we stop leprosy from spreading ?**

We can find out and treat everyone in the village who has leprosy. *A person who takes treatment regularly does not spread leprosy to others.*



If a person touches a leprosy patient, will he get leprosy?

No. Many health workers touch hundreds of leprosy patients every day, year after year. Yet these health workers do not get leprosy from the patients.

If a health worker touches a person with leprosy, he encourages that person. So don't be afraid. The health worker has to touch the patient, so he can examine him fully.



**Should a mother with leprosy breast-feed her child?**

Without mother's milk from birth, this baby will become weak and thin, and probably die.

This mother has the usual kind of leprosy which does not spread. She takes her treatment regularly. We do not think her baby will get leprosy.

*If a mother with leprosy has a young child the mother must take her treatment regularly.*

Sometimes a mother has infectious leprosy. If she does not take regular treatment and breast-feeds her baby then there is some chance he may get leprosy. So always look for leprosy in mother *and* child. We can cure leprosy in mother or child.



D. Mac Phail

### Is a child born with leprosy ?

No. This child has a red mark on his leg since birth. This mark is not leprosy. Leprosy does not start at birth. Mothers and fathers do not give leprosy to their children before birth or at birth. Even if mother and father have leprosy, their babies are born without leprosy.

If the parents do not take treatment for their leprosy, the child may get leprosy some years later. So if a mother has leprosy she should take regular treatment. If a father has leprosy he should take regular treatment.



**How can a leprosy patient protect the children and relatives from leprosy ?**

A leprosy patient can care for her children if she takes regular treatment. If a relative has leprosy, he can live with the family as he takes regular treatment. People who are taking treatment for leprosy do not spread the disease to others.



### **Does leprosy spread by food and water ?**

No. If a person gets leprosy, he may take water from the same well as before, and eat from same kitchen as before.

A woman with leprosy can cook food for her family if she takes treatment. (But if she has lost feeling in her hands she must be careful when she cooks. See page 56)



### Should people fear leprosy ?

Not when they know the true facts about leprosy.

People wrongly think :

- that leprosy is incurable — but it is curable.
- that deformities always — but deformities can be happen, in hands prevented by early and feet in leprosy treatment and proper patients, care.
- that leprosy is very — but most people with infectious. leprosy can never spread it.

So one should not hide leprosy but take treatment immediately. People should not be afraid of leprosy.



**Why does a person with leprosy sometimes become a beggar ?**

The village people may send away a person with leprosy because of lack of knowledge of true facts about leprosy. He goes to the city. If he cannot get work he becomes a beggar.

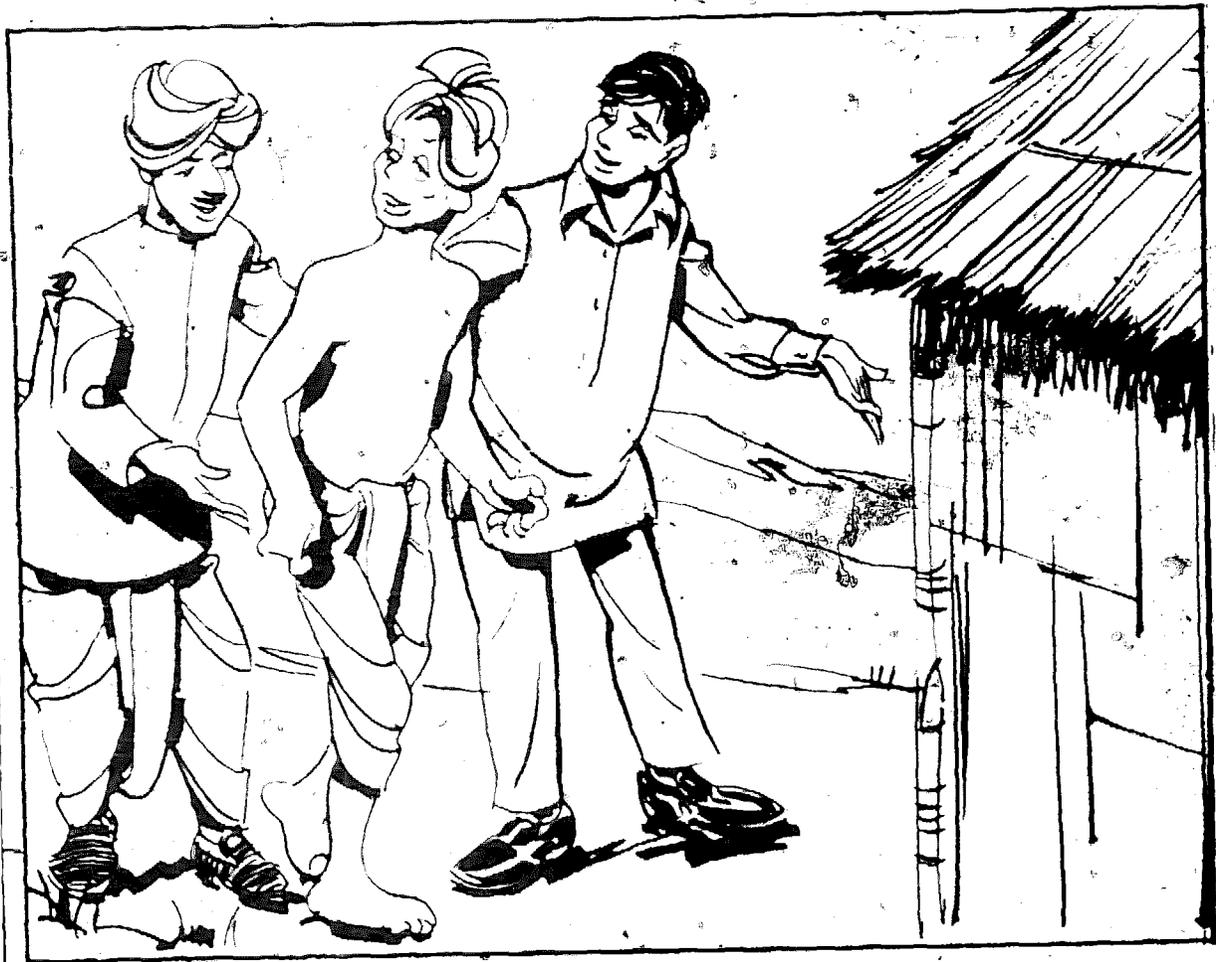
How can we stop a person with leprosy from begging ? We can persuade the village leaders to—

- \* let him stay and work in his village
- \* let him take treatment for leprosy at home



**How can village leaders lose their fear of leprosy ?**

By knowing the true facts about leprosy. If the health worker tells them all about leprosy they will lose their fear. Afterwards, perhaps the village leaders will let the health worker talk to all the village people.



**How can village leaders prove that they have lost their fear of leprosy?**

**BY NOT SENDING ANYONE WITH LEPROSY AWAY FROM THE VILLAGE. They can accept back into the village persons with obvious leprosy.**

**They can let such men work in the village. THEY CAN TELL EACH PERSON WHO HAS LEPROSY TO TAKE REGULAR TREATMENT.**



**If everyone agrees that a person with leprosy can stay and work in the village what will happen?**

- \* People will show their skin diseases to the health worker. They will not hide.
- \* People will show their skin diseases early.
- \* People with leprosy will take treatment before there is any deformity.
- \* People will be cured without deformity.



**Should the health worker spend a lot of time explaining about leprosy ?**

Yes. When the health worker talks to people, some people show interest. They invite her to their house. She shows them a poster, or this book. She tells them that leprosy often starts as a pale patch in the skin. She explains that early treatment is best for leprosy. Then she offers to check anyone for skin disease.

She sees many people who fear they may have leprosy. Explanations take time. Each family takes time. *She explains to people first, before looking at them for leprosy.*



**Why does this health worker visit the school ?**

She wants to teach the children about leprosy. When the children go home they will tell their parents about leprosy. They will know the early signs.

Also she will talk to the teachers about leprosy. The teachers will let her look at the children for leprosy. Perhaps one or two children in the school have leprosy. She will also look at the teachers for leprosy.



**Does the health worker look for leprosy all over the body ?**

The health worker looks at the skin for leprosy, outside in daylight. She asks the men and boys to remove their shirts. She looks for patches and thickened nerves of the face, head, neck, arms, legs, back, thighs, buttocks.

If the health worker is a woman, she can easily look at other women for leprosy. If a male health worker has to examine women or girls, he asks for another woman to be present.



**What does the health worker look for when she looks for leprosy ?**

She looks for—

- \* a patient with a pale or red patch on the skin. This patch does not itch.
- \* a patient who feels tingling in hands or feet.
- \* a patient who has lost feeling in any part of the skin.
- \* a patient who gets painless blisters.
- \* a patient who has had a sore for a long time.
- \* a patient who has thick nerves.

Any such patient may have leprosy. The health worker will show the patient to the doctor. The doctor will examine him and start treatment.

## Does leprosy cause itching ?

No. Itching is always due to some other disease. Often itching is due to scabies.

This is scabies. To cure scabies the health worker paints benzyl benzoate on the itchy skin of everyone in the family. For other diseases which cause itching, see pages 30, 33, 34.



## Can a person with itching have leprosy ?

Yes. Sometimes a person with itching of the skin also has a leprosy patch somewhere else on his body. Leprosy patches do not itch. *Always look for leprosy: test all patches for loss of feeling.*



## How to test for loss of feeling in the skin?

A very early leprosy patch does not show loss of feeling. *But loss of feeling in a patch probably means leprosy.* Show the patient what you are going to do. Ask her to look the other way. Touch her skin with a piece of cotton. Ask her to point to where you touched her. She points correctly.



Then touch her with cotton lower down the arm where there is a patch. Ask her to point when the cotton touches. She has not pointed this time. If she does not feel the cotton *or* feels it less in this place *or* feels it in the wrong place she may have leprosy.



Then use a pin instead of cotton wool. Prick the skin lightly. Ask her to point each time you prick her. If she cannot feel the pin she may have leprosy, so show her to an experienced health worker.



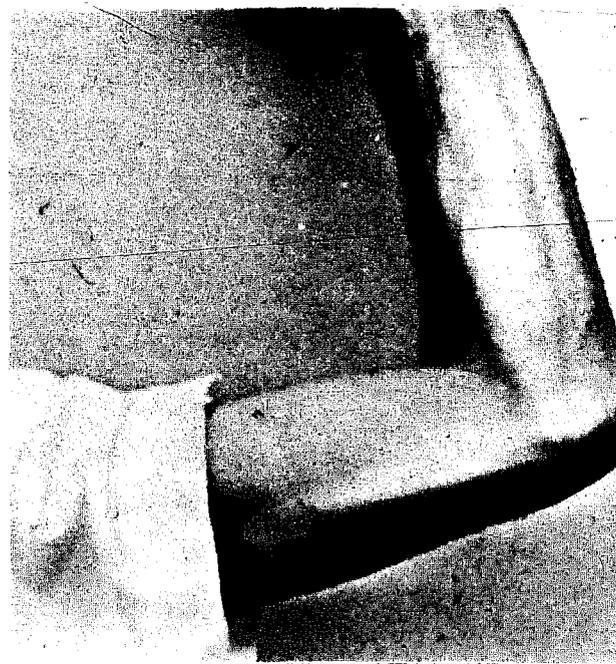
*Test all patches for loss of feeling.* Early treatment may prevent loss of feeling.

**Thick nerves are also a sign of leprosy**

Leprosy often damages the nerves. Leprosy has damaged this nerve in the skin below the ear. So it is thick and easy to see. To see this nerve ask the patient to look the other way.



This nerve, between shirt and elbow, runs on the inside of the arm. Leprosy has made this nerve thick, so that you can see it. Sometimes leprosy makes this nerve painful to touch. **IT MAY CAUSE AN ABSCESS ON THE NERVE.** The doctor may do a small operation.



*Always look and feel for thickened nerves.*



The health worker also tests the hands, feet and face. She looks for weakness. This is due to nerve damage.

**LEPROSY MAY CAUSE SUDDEN PARALYSIS OF NERVES.** The person will feel weakness of the part. Such a person should go to the doctor right away. The doctor will send him into hospital for a short time. Special treatment may cure the paralysis.

For weakness of hands, feet or face, special massage and exercises will be done. See pages 55-62.



### Is this leprosy ?

Probably it is. Sometimes a child has a pale patch on the cheek. Usually these patches go away in a few months. But sometimes the patch does not go away.

The health worker may find loss of feeling (see page 22).

The health worker looks all over the body for some other patch or thick nerve or loss of feeling which might be leprosy. The health worker examines the rest of the family. Perhaps some relative has leprosy.

If the patch does not go away after two months, the health worker should send the patient to a doctor. Perhaps it is very early leprosy.

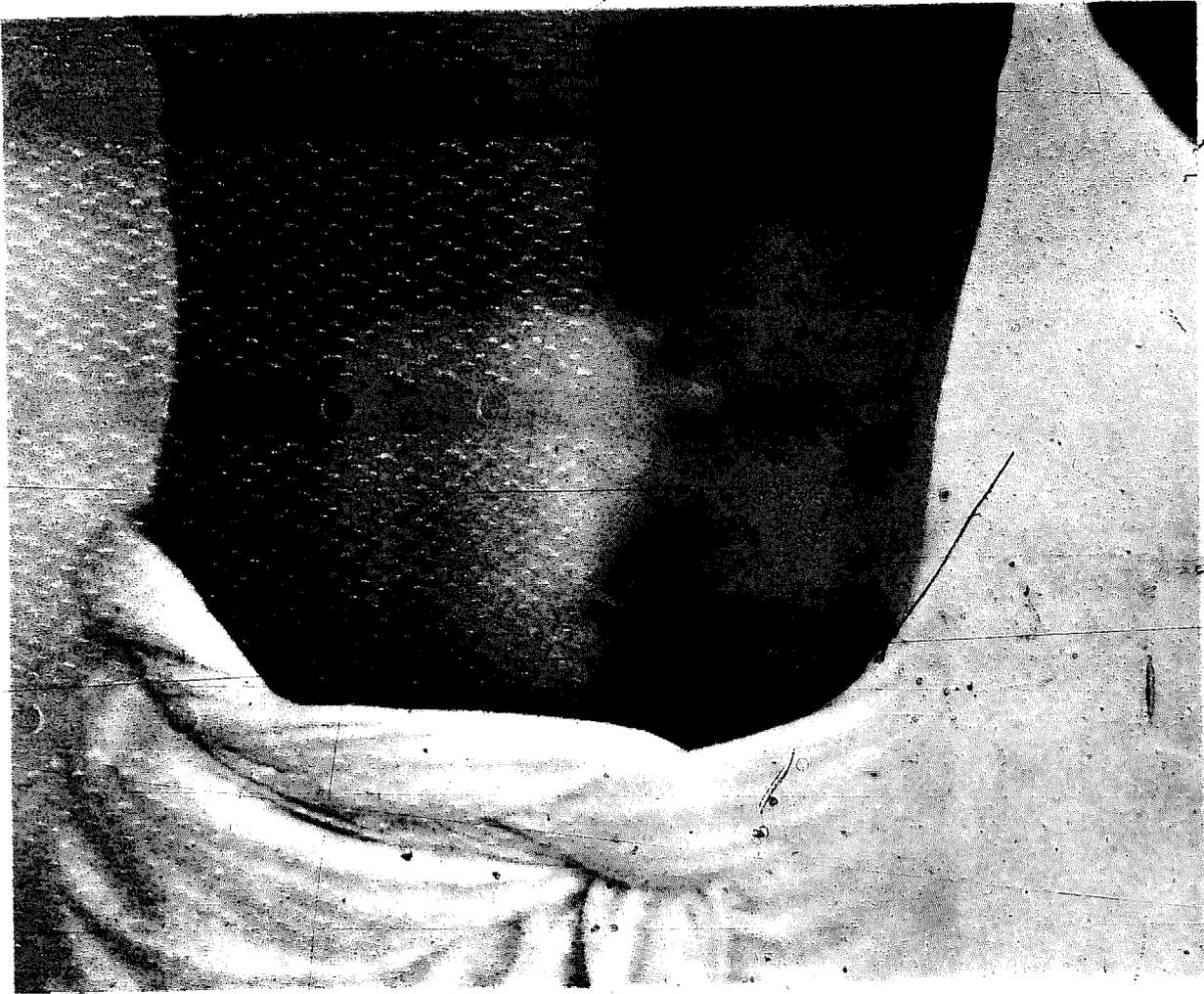


Dr. C. K. Job

Is this leprosy ?

Yes. Two pale patches have come on the skin of the face. The patches are not completely white in colour. *This is early leprosy.*

Health workers can easily treat this kind of leprosy under doctor's advice. With treatment, early leprosy will go away and leave no scar. Treatment takes several years. This kind of leprosy is not infectious. This woman can stay at work.



**This man does not spread leprosy to others.  
How can we know this ?**

Most people with leprosy do not spread the disease to others, specially when—

- \* there is only one patch or two
- \* the patch has sharp edges
- \* the skin of the face is not red or thick
- \* the health worker cannot find any leprosy germs in the nose or skin.



### Can you see the leprosy patch ?

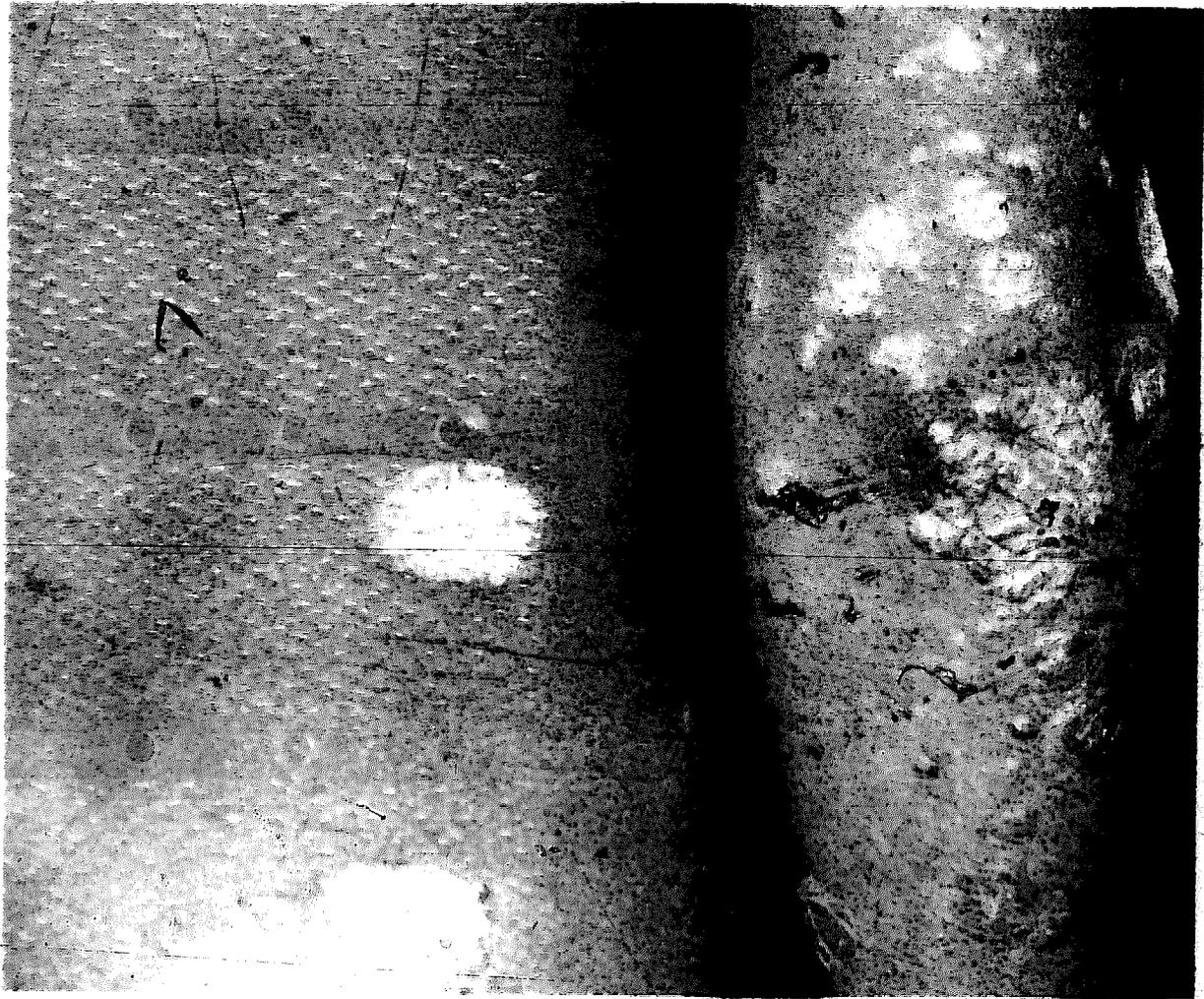
There is a large patch on the lower part of the cheek. There is no itch. This is leprosy. Also if we touch this woman with a pin in the centre of this patch, she cannot feel pain. This kind of leprosy does not easily spread to other people. If this woman takes treatment for at least 4 years, her leprosy will go away and never come back. If she takes treatment she can stay at work and look after her family.



Is this leprosy ?

No. There are many pale areas on the skin. These pale areas are flat and smooth and *do not itch*. *The patient can feel the touch of cotton and the pain of pin prick all over his skin.* This is not leprosy. We call this skin disease tinea versicolor.

Doctors can also treat this disease. Paint 25% solution of sodium thio-sulphate on the pale areas each day, and this disease will become better within two months.



Dr. J. S. Pasricha

### Is this leprosy ?

No. Leprosy does not have thick scales like this. This patient has no loss of feeling in his skin. This is not leprosy.

This person has psoriasis. Psoriasis is not an infectious disease, but it lasts for many years. It gets better sometimes and gets worse at other times. We usually see psoriasis on the back of the elbow, the front of the knee, the scalp, the back of the chest. *Psoriasis scales* are shiny white in colour. The scales *look like silver*. Sometimes the scales cause itching. Doctors can also treat this disease.



**Does this look like leprosy ?**

But it is *not* leprosy. He feels the touch of cotton and the pain of pin prick all over his skin. He has no thick nerves. If the health worker looks at this patient's skin through the microscope, he will not see any leprosy germs.

This is leishmaniasis, a disease we sometimes see in Bihar and some other parts of India. Doctors can treat this disease also.



Dr. J. S. Pasricha

### Is this leprosy ?

This patch is growing slowly. There is no itching. The skin is red and thick. Later, there is scarring of the skin. Ointments do not make it better. The patient feels the touch of cotton and pain of pin prick all over her skin. No. This is not leprosy. This is tuberculosis of the skin. Doctors can treat all kinds of tuberculosis, including this kind. Treatment often takes one year.

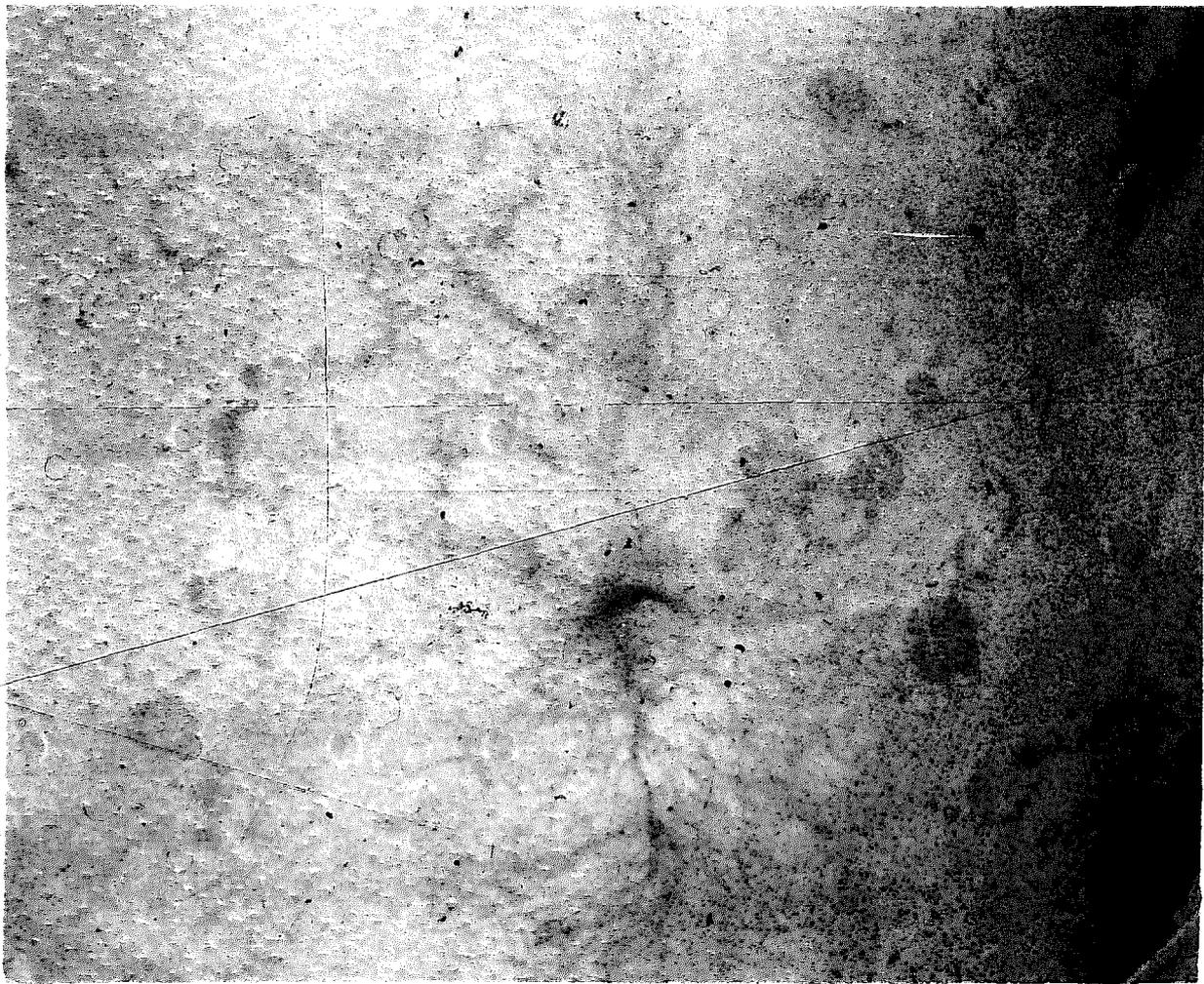


Dr. J. S. Pasricha

### Is this leprosy ?

No. The skin is red and very itchy. This disease begins where skin touches skin—in the groin, armpit or under the breast. This is not leprosy.

Fungus or yeasts cause this disease. Paint 1% Gentian Violet solution on the red skin and the itching will stop within a week.



**Is this leprosy?**

No.

- \* the skin is scaly and itchy
- \* the patient feels the touch of cotton and the pain of pin prick all over his skin
- \* when the health worker looked through the microscope, he could not see leprosy germs in the skin of this patient.

This is ringworm. Ringworm usually comes in summer or the rainy season. Rub Whitfield's ointment on the itchy skin each day and this disease gets better within a month or so.

## Is this leprosy ?

No. Some people call this white leprosy or leprosy. *This is not leprosy. This has nothing to do with leprosy. Leprosy is not completely white in colour.*

This boy can feel the touch of cotton and the pain of a pin all over his skin. This disease is leucoderma, meaning 'white skin'. This is not an infectious disease. Doctors can also treat this disease.





### **What colour are leprosy patches ?**

These patches are a different colour from healthy skin. The patches are not white. This is leprosy beginning to increase with many reddish patches. **EARLY TREATMENT WOULD HAVE PREVENTED THIS.** With treatment these patches will slowly go away and leave no scar.

Look all over the body for leprosy. Look at the skin in a good light. *Leprosy patches are always a different colour from healthy skin.* They are usually pale. Sometimes they are red. Sometimes they are dark. But they are never completely white.



Dr. P. N. Behl

**Does this person have leprosy ?**

Yes.

- \* The skin is not itchy
- \* Ointment for a month did not cure him
- \* The health worker looked through the microscope and saw leprosy germs in his skin.

**Does this person have infectious leprosy ?**

- \* There are many patches in the skin.
- \* The edges of the patches are not clear in some places
- \* There are leprosy germs in the skin
- \* The patches are growing

If he does not take treatment he may spread leprosy to a few other people. If he takes regular treatment he will not spread leprosy. After many years of treatment he will be cured.



Dr. J. S. Pasricha

This man's feet and hands are not deformed.

### **Does he have infectious leprosy ?**

- \* The skin of his face is thick, red and swollen
- \* You cannot see the edges of the thickened skin
- \* The skin of his ear is swollen
- \* He has lost the hair from his eyebrow
- \* There are many leprosy germs in his skin and in his nose

### **If he starts treatment, what will happen ?**

- \* His skin will slowly become healthy again
- \* The leprosy germs in his nose and skin will begin to die
- \* After some months he will not spread leprosy any more
- \* After many years of regular treatment, he will be cured



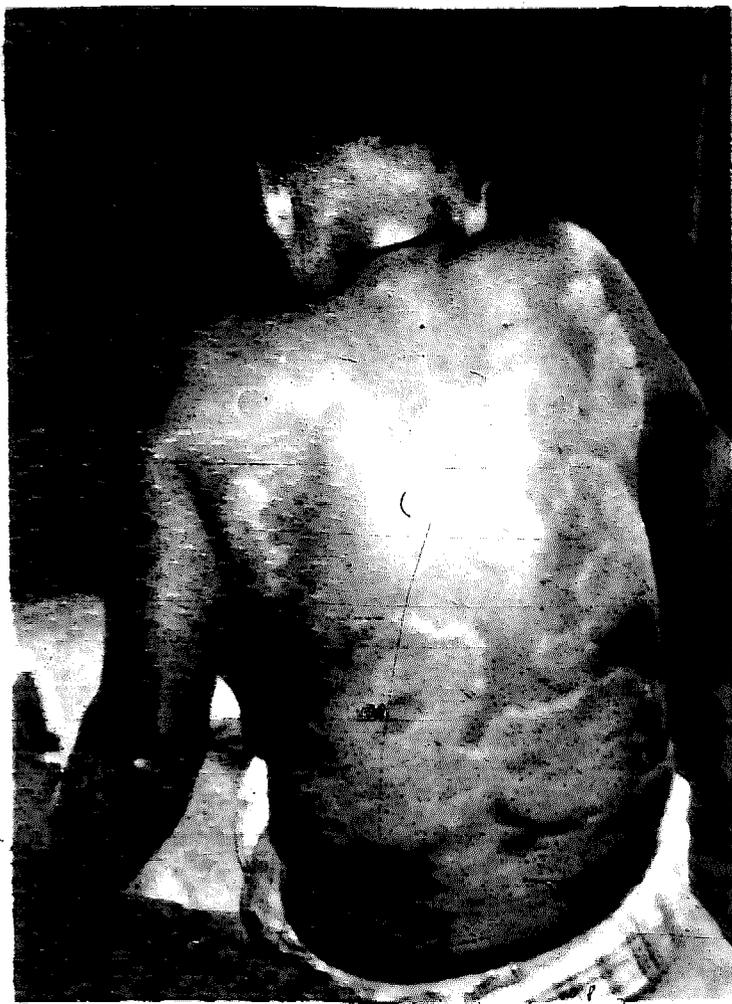
Dr. C. K. Job

### **What disease is this ?**

This is also infectious leprosy because—

- \* the skin is shiny and red
- \* the skin is swollen and thick
- \* the hair of her eyebrows is lost
- \* her ear is swollen
- \* her eyes are damaged by leprosy
- \* the health worker finds many leprosy germs in her skin and in her nose

She should start regular treatment, so that she does not spread leprosy to her family. Because of the eye damage, she will be admitted to Hospital for special treatment for some weeks. After many years of regular treatment, she will be cured.



D. Mac Phail

Do people die of leprosy? Very rarely.

Can a patient with leprosy become seriously ill?

Yes. Occasionally a person with leprosy gets fever and pain all over the body. The skin becomes red and swollen. New lumps and patches come in the skin. This often happens because the person has not taken regular treatment. The patient should rest in bed and take two aspirin tablets with a little food every four hours, until fever and pain go away. If there is—

- \* high fever
  - or \* pain in the eyes
  - or \* weakness or pain and swelling in hands and feet
  - or \* no relief from aspirin,
- the patient's condition is serious. Take him to the doctor. The doctor may admit him to hospital and use Lamprene or other powerful drugs.

## How can a leprosy patient protect his family from leprosy ?

He should take treatment regularly with DDS. Most patients do not spread leprosy to their family. But some patients are infectious. So during the first six months of treatment, the *infectious* patient should take DDS and—

- \* cover his nose and mouth while coughing or sneezing
- \* clean his nose into a pot (not on to the ground) and empty this pot on to the fire
- \* sleep on a separate bed

After six months of regular treatment, the germs of the infectious patients are dying off. But early leprosy is easily treated. So every six months, people living in the same house as a leprosy patient should go and show themselves to the health worker. **ALL LEPROSY CAN BE CURED** but it may take a long time.

## **How does a health worker tell a new patient that he has leprosy ?**

He says something like this—

“You have a skin disease ... Do you know what kind of skin disease you have ? This skin disease is very early leprosy ... If you neglect it, it may become obvious leprosy .. Leprosy is curable, and luckily, you have come early ... The treatment is simple but slow ... It takes a long time:”

## **What should the health worker tell the patient about treatment ?**

- \* if treatment starts now, you will be cured without deformity
- \* after a few months of regular treatment, the skin patches may begin to heal
- \* treatment with DDS costs only a few rupees per year
- \* treatment with DDS is safe, slow and sure
- \* treatment with DDS must be taken regularly
- \* report any new signs such as weakness of hands or feet to the health worker
- \* continue taking tablets till the doctor says stop



This young woman is cured of leprosy.<sup>a</sup> But she has some twisted fingers. Now she is taking care of her hands. She massages her hands every day. By an operation the twisted fingers will become straighter.



### **Does burning of the skin cure leprosy ?**

No. Someone tried to burn off the leprosy on this woman's face. The burn caused a dark scar. The skin around the scar is pale because of leprosy. She still has leprosy. *If we burn the skin, or put ointment on the skin, we cannot cure leprosy.* DDS tablets will cure her leprosy.



Before treatment



After treatment

**Can health workers also cure infectious leprosy ?**

Yes. This man had infectious leprosy. He took Dapsone (DDS) tablets regularly. He stayed at work. After years of treatment his face is clear. *We can cure leprosy.* DDS can cure almost everyone with leprosy. FOR VERY DIFFICULT CASES THE DOCTOR MAY ORDER OTHER SPECIAL MEDICINES. The patient with leprosy should start treatment as early as possible.

## How much DDS should a leprosy patient take ?

The doctor advises about all treatment.

A man or woman with infectious leprosy needs two 50 mg tablets of DDS daily.

A man or woman with non-infectious leprosy needs one 50 mg tablet of DDS daily.

A child of 10 Kg needs one 10 mg tablet daily.

A child of 20 Kg needs two 10 mg tablets daily.

A child of 30 Kg needs three 10 mg tablets daily.

For the first two weeks of treatment the patient should take only *half* as many tablets as this daily.

After two weeks of treatment the patient should take the full number of tablets daily as written above.

Source :  
W H O



If a person taking DDS does not take her DDS sometimes, is there any harm ?

Yes. The body may respond badly to irregular treatment as on page 40. If the patient stops and starts treatment, sometimes DDS tablets lose their effect. THIS CAN BE VERY SERIOUS. THEN ONLY VERY EXPENSIVE DRUGS WILL STOP THE DISEASE.

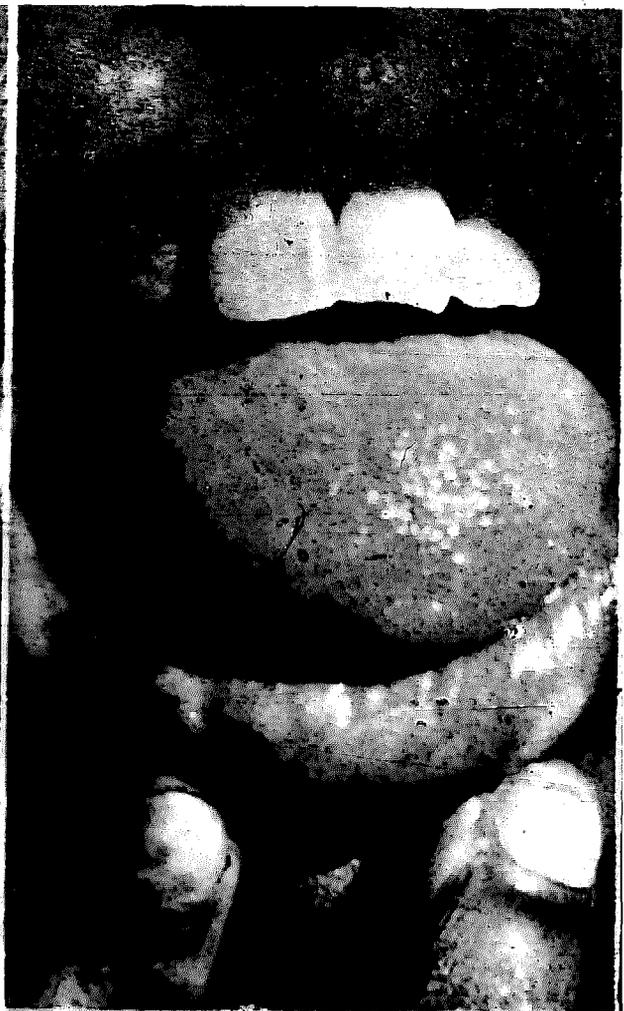
A woman with leprosy should take DDS when she is pregnant.

A leprosy patient who has some other illness should take his DDS along with other medicines.

DDS tablets are very safe. Lakhs of patients take DDS every day, without bad effect.



Pale



Healthy

**What is the correct treatment for pale lips and pale tongue ?**

Sometimes a person with leprosy has pale lips and pale tongue. Pale lips and pale tongue are not a sign of leprosy. Pale lips and pale tongue are due to anaemia. Treatment for anaemia is one iron tablet after each meal for at least one month. Iron tablets cost a few paise each and are available free from Government health centres.

If a patient with leprosy is taking treatment for anaemia he should also take his DDS.



**How can village people help a patient with leprosy, who needs work ?**

People gave this patient a few goats to care for. Now she has a little money. She can afford to send her children to school. There are a few patients like this in each village, who need work. If patients can work, they can support their families.

**Should a worker with leprosy lose his job ?**

No. If a worker has leprosy the employer should not dismiss him. The worker should begin regular treatment. He will be cured, then he will not have leprosy any more.



A. Kothari

**Most villages do not have any nurse or doctor.  
What can such villages do ?**

Each village should choose its own health worker.  
The village can ask the health centre to train her.

- \* The health worker can think "Who in my village may have leprosy ?"
- \* The health worker shows these people to the leprosy worker, or to an experienced health worker, or to the doctor.
- \* The health worker can visit all leprosy patients. She makes sure that patients take their tablets regularly. If there is no health worker, an intelligent patient makes sure all leprosy patients take their tablets.

## Care of the nose in leprosy

If a patient with leprosy has a bleeding nose or a blocked nose, or crusts inside his nose, or a bad smell from his nose, what should he do?



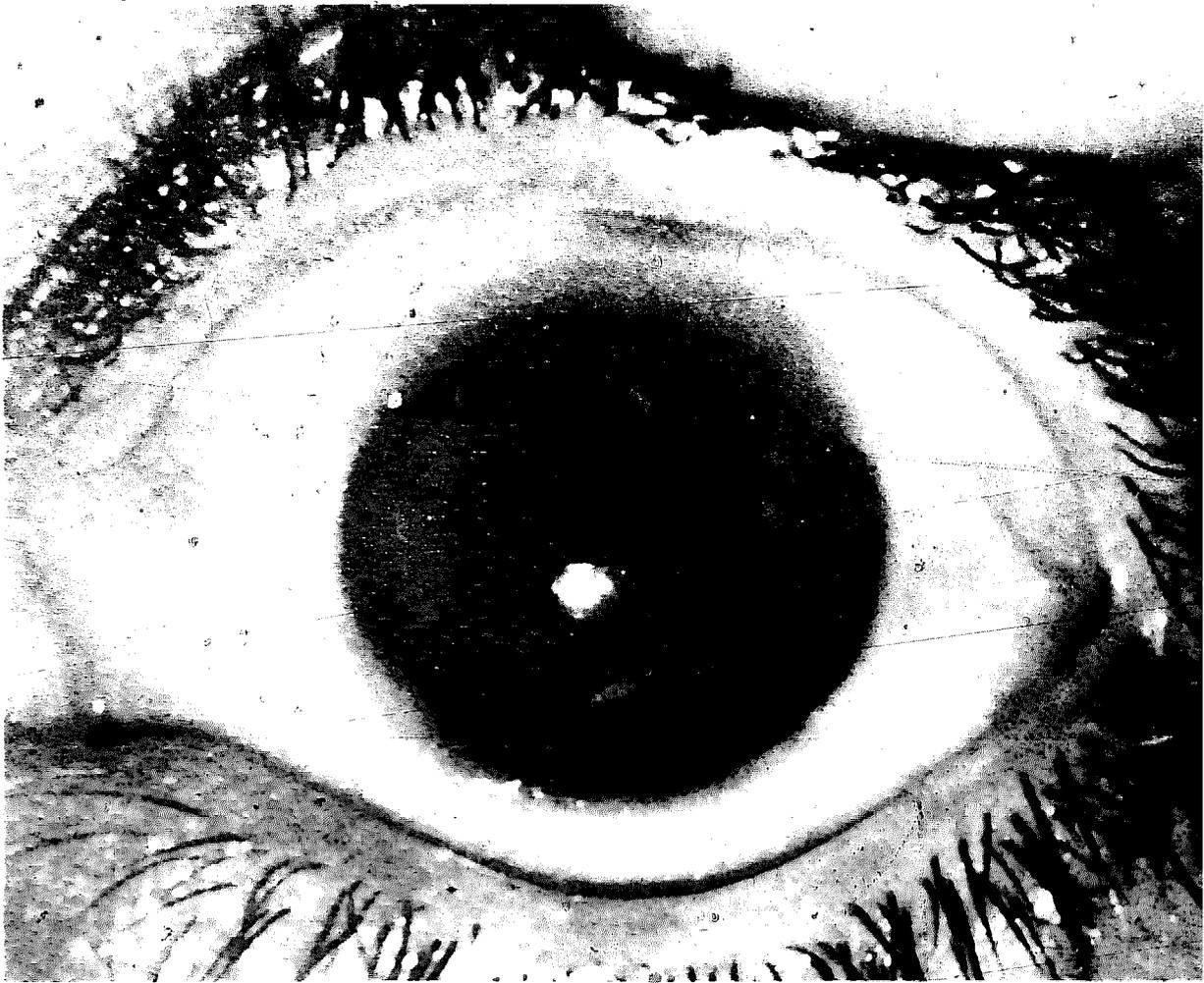
He should breathe up water mixed with a little salt into his nose each morning.



He should do this again and again. This will soften the crusts in the nose, and keep it clean. He should not clean his nose with a finger. He should not cough or sneeze over people but cover his nose and mouth with a cloth, paper or leaf. He should collect the discharge from the nose in a pot and empty it on to the fire each night.

Then at night he should dip a cloth in some clean oil, and squeeze a few drops of this oil from the cloth into each nostril.





R. P. Centre, New Delhi

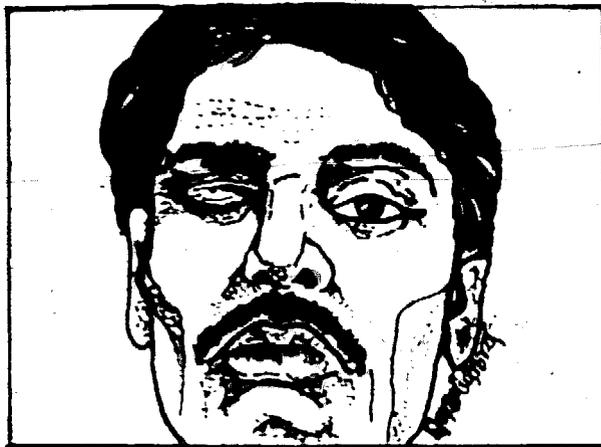
If a person with leprosy

- \* gets pain in his eye from looking at the light
- \* cannot see clearly
- \* has very watery eyes
- \* and his eye looks something like this,

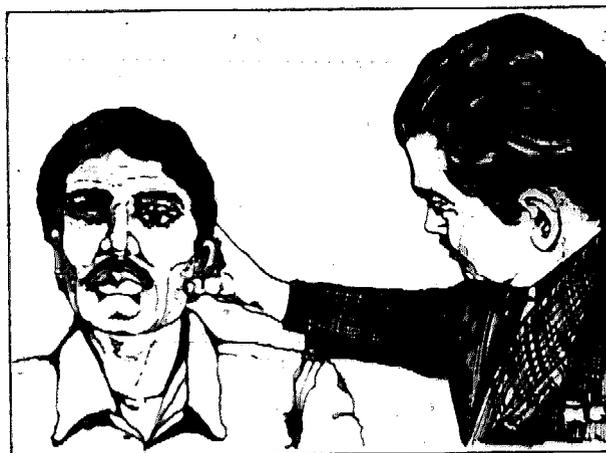
then perhaps he may lose his sight. He should take treatment as soon as possible from an eye doctor or any experienced doctor. The doctor may advise admission to hospital for a short time for special treatment.

The doctor first feels the eyeball. If the eyeball is hard he does not use atropine. If the eyeball is not hard he puts atropine eye ointment in the eye until the pupil becomes bigger. He will give other medicines also.

Leprosy sometimes damages the nerves of the face, so that the patient cannot close his eyes. Dust and dirt then easily get into the patient's eye and perhaps the patient may lose his sight.



So if a patient cannot close his eye, he should show himself to a doctor as soon as possible and take full treatment. The doctor may advise medicines or a small operation.



If the patient cannot see a doctor immediately he should put simple boric drops into his eye to keep it clean. He should put castor oil drops into his eye at bedtime. This will keep the eye moist.





When there is one patient in the village who has damaged hands or feet there probably are some other people with leprosy. Perhaps the others do not know they have leprosy. Perhaps they are not taking treatment.

People who do not take treatment will get worse and after some time their hands and feet may become deformed. *If people take treatment early before their hands and feet are damaged, they will not get damaged hands and feet.*

*Early treatment prevents deformity.*