

HANSEN'S DISEASE (LEPROSY)

' CPHE



S. MASILA MANI,

CPHE

3-4-50

HANSEN'S DISEASE

FOREWORD

I am very glad to write about this little book on Leprosy, which, I am sure, will greatly contribute to awaken the public to their important role and responsibility in freeing our Motherland from this disease, and from the social stigma attached to it.

This little book is the effort of a common man for common men. The author, a young, enthusiastic, creative man has been won over to the cause of those suffering from Leprosy. Through his own experience he has learnt that what makes Leprosy a dreadful disease is not its causing pathogenic agent, the so-called *Mycobacterium Leprae*. It is, instead, the fear, the ignorance, the false beliefs and superstitions which surround this disease and make it something which has to be concealed, covered up, and a cause for shame.

The booklet is very simple in its language, so that everyone, even a primary school student, can understand it. It is sufficiently authoritative in its contents to enable everyone who reads it to get rid of all useless fears and superstitions and join hands in the common cause. It is also very pleasant in its presentation with its useful diagrams and beautiful photos.

I myself have been working in the Leprosy field for many years. I am convinced that whatever effort we may put into detecting all those suffering from Leprosy and giving them adequate treatment will never succeed unless the fear is dispelled from the mind of society. Only after the darkness of ignorance is banished and the light of knowledge shines out, no dark cover where people may conceal their disease will be left.

I hope that this little book will cast light into all the still existing dark corners and that new positive human attitudes may be cultivated as a result of its message.

—Sr. Dr. GIOVANNA LUSSU

PREFACE

“Health for all by the year 2000 A.D.” is the main goal of W. H. O. (World Health Organisation). Keeping in clear perspective the objectives of W. H. O., and our late Prime Minister, Mrs. Indira Gandhi, I have compiled this book.

The youth of today is responsible for creating the channels of opportunity for an India free from Hansen's Disease. (Leprosy is more correctly referred to as Hansen's Disease, after the Norwegian Scientist, who first discovered the causative bacillus.) I believe very strongly in the power of this sector of society. I have in my own personal experience seen a lot of potential, understanding, and love among them. I find that youth is the period of life where one is challenged in every form of social motivation, therefore it is mainly to our youth of today that I will speak.

I wish to share with them a little of the knowledge and experience that I have acquired in the field of my work for H.D. Patients. I hope this will abolish the prejudices that exist, and give a proper understanding of the manifestations of the disease, enabling them to teach others effectively. Then the stigma will be removed from our Society and all people afflicted by H.D. will be recognised as human beings and allowed to live normal lives.

Fired by the enthusiasm I feel, and with great optimism for the future and the above goal which we can all surely work to bring about, I propose with this booklet that (H.D.) **Hansen's Disease is everyone's concern.**

My heartfelt thanks to “AMICI DI RAOUL FOLLEREAU”, Bologna, Italy for their encouragement, support and financial help which have enabled me to bring out this booklet.

—S. MASILA MANI

Historical Background of Leprosy or Hansen's Disease

Scientists ROGERS and MUIR stated in their books that Leprosy is mentioned as 'KUSTAM' in Religious books in the year 1400 B.C.

In the year 1411 B.C. our ancestors found a China clay statue which resembled the face of a man affected by Leprosy.

The disease is supposed to have originated in Central Asia or Central Africa and then spread all over the world.

In his book "Susruta Samhita", The Indian Surgeon Susruta described the clinical manifestations of Leprosy.

When we browse through the pages of the Bible, we find that Jesus cured many people affected with leprosy.

In the year 150 A.D. GALEN and ARATOUS stated that Leprosy is a disease identified as "ELEPHANTIASIS GRECORUM".

All the above points bring us to one conclusion : that leprosy is an ancient disease, knowing no boundaries of caste, colour, creed, sex or age.

From the 11th to the 15th century A.D. the prevalence of leprosy was very high in Europe. Though it is not yet completely eradicated, most of the developed countries no longer have a leprosy problem.

The present distribution of leprosy is spread throughout Asia, Africa and the Latin-American countries.

In India it can be found in all the states, but more so in Tamil Nadu, Andhra Pradesh, West Bengal, and Orissa, and to a lesser extent in Uttar Pradesh, Madhya Pradesh, Bihar, Maharashtra, Karnataka, Kerala, Jammu-Kashmir etc. In the sub-Himalayan regions of Punjab,

Haryana, Himachal Pradesh, there may be pockets where the disease may be highly prevalent. However in the plains of the Punjab and Rajasthan, there are very few cases.

Certified records show that there are nearly 110 lakhs of leprosy patients in the world : out of which around 40 lakhs of patients are in India. In Karnataka there are about 2 lakhs of patients, and in Bangalore City alone, there may be about 15,000 to 18,000 leprosy patients.

Prevalence of Leprosy in the World

Names of Countries	Prevalent Rate per 1000
Canada, Panama, USA, Japan, Israel, Greece, Spain, USSR.	0.0 to 0.5
Mexico, Jamaica, Afghanistan, Sri Lanka Iran, Iraq, Maldiv Islands, Turkey	0.5 to 0.9
South Africa, South West Africa, UAR, Argentina, Cuba, China, Korea, Pakistan, Philppines, Figi, Tonga	1.5 to 4.9
Ethiopia, Kenya, Mauritania, Bhutan, Cambodia, India, Nepal, Vietnam	5.0 to 9.9
Angola, Nigeria, Uganda, Surinam	10.0 to 19.0
Senegal, Burma	20.0 to 29.0
Chad, Congo, Mali	30.0 to 39.0
Gaban, Zambia, Spanish, Equatorial Region	40.0 to 49.9
Central African Republics, French Guiana	above 50.0

Prevalence of Leprosy in India

Name of the States	Prevalence Rate per 1000	
Punjab, Madhya Pradesh, Haryana, Rajasthan, Assam, Meghalaya	Below	1
Jammu-Kashmir, Himachal Pradesh, Uttar Pradesh, Gujarat, Arunachal Pradesh, Mizoram, Kerala	1 to	4
Bihar, Manipur, Tripura, Maharashtra, Karnataka	5 to	8
West Bengal, Orissa, Nagaland, Sikkim	9 to	12
Tamil Nadu, Andhra Pradesh	13 and above	

Prevalence of Leprosy in Karnataka

Name of the Districts	Prevalence Rate per 1000	
Shimoga, Chikmangalur, Kodagu, Hassan	Below	1
Bangalore (Rural), Bangalore (Urban), Chitradurga, Kolar, Tumkur, Belgaum, Dharwar, Uttara Kannada, Dakshina Kannada, Mandya	1 to	4
Bijapur, Bidar, Gulbarga, Mysore	5 to	8
Bellary, Raichur	9 and above	

Definition of Disease

“State of the body or the mind which has gone out of normal function because of various reasons.”

—Dr. Nilakanta Rao

- CAUSES OF DISEASES:**
1. Hereditary
 2. Congenital
 3. Metabolic
 4. Physical & Chemical Agents
 5. Endocrinal
 6. Infection by.....
 - i) Bacteria
 - ii) Virus
 - iii) Fungus
 - iv) Protozoa
 - v) Rickettsia
 - vi) Spirocheates.

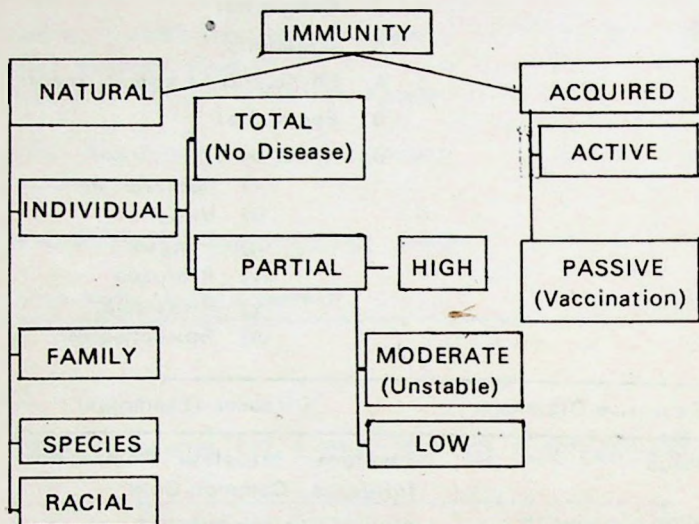
Causative Organism	Diseases (Examples)
Virus	Smallpox, Measles, Chickenpox, Influenza, Common Cold.
Protozoa	Malaria, Leishmaniasis, Amoebiasis.
Helminths	Round Worm, Hook Worm, Tape Worm, Filaria.
Bacteria	Tuberculosis, Typhoid, Leprosy, Diphtheria,
Spirocheates	Syphilis, Yaws, Venereal disease, Gonorrhea.
Mycosis	Ring worm.
Rickettsia	Typhus group of fevers.

Leprosy is just one among the many infectious diseases.

What is Immunity?

Immunity means the Resistance offered by the body against the invasion of pathogenic micro-organisms.

Immunity is also an individual's ability of resistance to a particular disease and it may be complete or partial.



A good environment, good nutritious food, a good climate and good habits are favourable to the increase of the immunity power of a person. Heredity also counts to a certain extent in measuring immunity. On the contrary, any lack in the above factors will also result in a lack of Immunity.

Nobody's immunity can be measured, as it is relative, but it can be said that if a person is not strong in immunity to a particular disease he may be affected by that disease, if there is exposure to the same. In the same way LEPROSY is also a disease which affects a person who has no immunity against it.

The human body responds to the germs or the chemicals produced by them with the production of neutralising substances. The germs and the materials produced by them are known as "ANTIGENS." The neutralising substances that the human body produces are known as "ANTIBODIES." Therefore, when a germ enters a human body by any route for the first time, the human body produces Antibodies. Later these Antibodies react with the Antigens of the germs and make them ineffective and harmless. The germs are killed in the process. Sometimes they get killed by the "defence" cells. That is usually how an early bacterial infection is overcome by a patient, without his even being conscious of it.

In some other diseases, the formation of such antibodies does not appear to be sufficient to destroy the germs. In a sense, the germs seem to be a tough lot. The Anti-bodies have to overcome the infection and prevent the development of the disease. If by chance, there is weakness in these defence cells, then the patient will develop the disease because the germs get the upper hand. Immunity can be acquired by Vaccination (passive immunity).

Is There any Vaccination against Leprosy?

Scientists in the field of leprosy think that at least another ten years will be required after the start of trials before something definite can be said about the value and utility of a vaccine for leprosy.

There are many reasons for this :

1. The tests have to be carefully planned and conducted according to the highest scientific standards.
2. The populations involved in such tests will be large, making it difficult to follow them up month after month and year after year.
- 3r Workers required to carry out such tests are not easily available.

4. Resources, especially in terms of money, are limited.
5. Leprosy has a long incubation period, which makes the research itself very difficult.

Therefore, it can be safely assumed that no vaccine for leprosy will be available for twelve to fifteen years.

We hope the day will soon dawn when scientists will discover a suitable vaccine for leprosy.

Leprosy Bacillus (or Lepra Bacilli)

The Bacterium which carries Leprosy is called MYCO-BACTERIUM LEPRAE.

Dr. G. HANSEN, a Norwegian physician, discovered this myco-bacterium leprae, and today the disease is often called "HANSEN'S DISEASE", after its discoverer.

The causative organisms were seen by him as small rods in H.D. nodules, in 1873. It was the 1st to be discovered among all germs, and is found in human beings only. It is also very difficult to grow outside the human body.

It affects the skin, nerves, mucous membranes, and internal organs.

Even though it was the first organism producing disease to be discovered, H. D. has only rather recently been treated as a normal and curable illness.

Types of Leprosy

There are two types of H.D., INFECTIOUS (OR LEPROMATOUS) and NON-INFECTIOUS (OR NON-LEPROMATOUS). Untreated infectious patients spread the disease and they are called "SOURCES" of infection.

Fortunately more than 80% of our patients are of the non-infectious type. Infectious patients, once under treatment, do not spread the infection any more.

Incubation Period

The time interval from the entry of the infectious agent to the appearance of the first symptom of the disease is referred to as the "Incubation Period."

Examples :

Diseases	Incubation period
Cholera	a few hours to 5 days
Chickenpox	14 - 15 days
Smallpox	17 - 16 days
Diphtheria	02 - 06 days
Typhoid	12 - 14 days

The Incubation period for leprosy is usually 2 - 5 years. In rare cases, it may even last upto 20 years. In other cases, especially in children, it can be a few months only.

Leprosy has often been mentioned as the LEAST INFECTIOUS OF ALL DISEASES.

Epidemiological Aspects

* Leprosy is found in all strata of society. Poverty encourages the spread of all infections, because of an overcrowded, unclean and unhealthy environment, and of malnutrition. We find more people suffering from leprosy amongst the poor.

Leprosy can occur at any age. About 55% of the cases are found below the age of 20 years, and 45% of the cases were more than 20 years old at the time of the onset of the disease.

More than 80% of the patients are non-infectious. More than 95% of healthy persons coming into contact with leprosy patients do not get leprosy, due to their natural immunity. Therefore, it is meaningless and even ridiculous to be afraid of leprosy.

Although leprosy is a very common disease in our country, the majority of people think that it is not common amongst the general public.

Workers in the leprosy field have a great deal of contact with both infectious and non-infectious patients every day, but very few of them develop leprosy.

Even though leprosy is a disease which attacks both males and females, it is proved that males are more prone than females, roughly in the proportion of 2 : 1 or 1.5 : 1. The reason for this is still under study. The same pattern is also seen among male and female children.

Transmission

As has been said, leprosy is a disease which affects human beings only, and in India no animal at all. In South America there is one animal known as an armadillo, which has been found infected with the leprosy bacillus. Infection is transmitted from an untreated, infectious patient to a healthy person who lacks immunity.

Leprosy is mainly transmitted through the air, being an airborne infection, just like tuberculosis. Untreated, infectious patients eject a large number of bacilli into the surrounding environment when they cough, sneeze or spit.

These bacilli are not only infective for the healthy community in the immediate vicinity, but can be sources of infection to people at a great distance, as the dried sputum, nasal mucus or saliva are automatically carried far away by humans or other means.

Leprosy is not caused by climate, food habits, soil conditions or environment but, nevertheless, all these may play a role in the immunity pattern of the population.

It is a common belief that beggars spread leprosy, but the majority of beggars suffering from leprosy belong to the non-infectious type, and many of them are burnt-out cases. Furthermore the public has no direct contact with them. An occasional contact with a beggar leprosy patient is not enough for transmission of infection, and besides, we keep them at a distance.

Superstitions and Prejudices Surrounding Leprosy

What Some People Say.

Leprosy is the Result of Sin !

This idea doesn't hold good, as we know that God is

loving and forgiving and he does not curse people with disease as a sign of his anger.

Leprosy is Hereditary

If it were so, every generation in a leprosy patient's family would have had leprosy. But this is not the case. Just as T.B. or typhoid or cholera are not inborn diseases, and just as they require some medium for the transmission of infection, such is the case with leprosy. Therefore, no child is ever born with leprosy.

There are families where both or one of the parents are suffering from leprosy and where all the children are healthy. In fact, a majority of cases have been detected in families where there is no previous case of leprosy.

Leprosy is due to Venereal Disease !

Veneral Diseases are now grouped together as "sexually transmitted diseases." They include (1) Venereal Syphilis, (2) Gonorrhea (3) Chancroid or soft sore (4) Lymphogranuloma Venereum (5) Granuloma inguinale or donovansosis. From the public health point of view, syphilis and gonorrhea are very important. Syphilis is a dreadful disease, which may result in neonatal deaths, mental disease and cardiovascular abnormalities, while gonorrhea may lead to salpingitis and even sterility in women. According to W.H.O., the spread of these diseases is due to the rapid environmental, social and behavioural changes that the world is undergoing. Syphilis is caused by *Tryponema pallidum*, while gonorrhea is due to *Nisseria Gonorrhea*.

Venereal diseases are mainly a social danger for teenagers because of their ignorance about sex. All these diseases are transmitted by sexual contact, while syphilis is also transmitted congenitally.

The idea that leprosy is a venereal disease has been medically proved to be wrong. The causative organism for leprosy is a bacterium called *Myco-Bacterium Leprae*.

Leprosy is due to a Snake or Rat or Monkey Bite

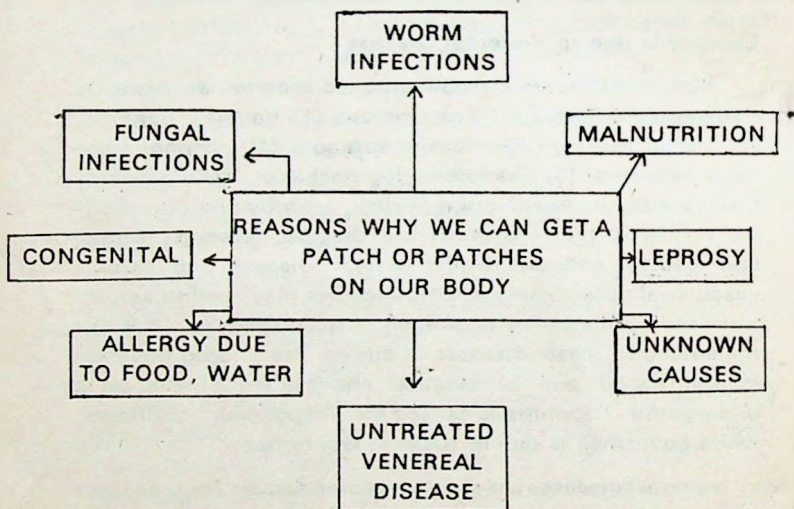
In the rural areas people bitten by snakes or rats or monkeys do not get leprosy.

Leprosy is due to Consumption of Fish !

If so all the people who consume fish would have got leprosy. But we know that it is not true.

Are All Patches Caused By Leprosy ?

Different type of patches which can appear on the skin are enumerated below :



SO ALL PATCHES ARE NOT A SIGN OF LEPROSY; AT THE SAME TIME ADEQUATE CARE SHOULD BE TAKEN THAT A LEPROSY PATCH IS NOT MISTAKEN FOR SOME OTHER KIND OF PATCH, ATTRIBUTABLE TO CAUSES SUCH AS THOSE MENTIONED.

IT IS HIGHLY ADVISABLE TO SEE A DOCTOR IMMEDIATELY WE DETECT A PATCH ON OUR BODY.

If a leprosy patch on the body is not taken care of at an early stage the nerves will be affected after some months or years, as a result, deformities will develop. Due to nerve involvement, sensation will be lost. The absence of pain makes leprosy patients prone to repeated injuries which may cause ulcers and mutilations. Besides, the nerve damage causes paralysis and contractures (Claw hands). The presence of deformities does not mean that a person is an active leprosy patient.

The cure of the disease implies the destruction of the bacteria. Deformities which have already developed may remain as scars, like the blind eye or the pock marks that remain in a person even after recovering from smallpox.

So, deformity by itself is not a sign of infectiousness.

Hence, we may find infectious and non-infectious patients both with and without deformities. Deformities will be the consequence of nerve involvement.

TREATMENT AT THE INITIAL STAGES WILL CURE THE DISEASE FASTER, AND PREVENT DEFORMITY AS WELL.

Generally speaking, the public recognise leprosy patients with deformities and think that the deformities are a sign of infectiousness. Deformities appear in the later stages of the disease, and usually such patients are non-infectious.

Leprosy is basically a disease of the nerves and skin. Nerve damage in leprosy leads to complications, such as loss of sensation and paralysis of the extremities. Deformities in leprosy can be prevented. DEFORMITY IS NOT A SIGN OF INFECTIOUSNESS. It indicates neglected treatment at the early stages, and perhaps an attempt to conceal the disease from others.

So, beggar leprosy patients are not responsible for spreading infection; besides, the problem of leprosy is not limited to beggar leprosy patients. Their severe deformities and mutilations are unsightly, thus causing great fear in public mind. Therefore it is our duty to know the signs and symptoms of leprosy.

Early Signs and Symptoms of Leprosy

It is very easy to identify leprosy in any individual by knowing the following signs and symptoms.

1. Change in colour and texture of the skin (smooth, oily shiny, reddish skin)
2. Non-itching patch or patches on the skin with loss of sensation to touch, pain, or temperature can appear in any part of the body. (See photos 4,5,6)
3. Development of loss of sensation in some part of the body.
4. The nerves of the face and limbs may become thickened, tender and painful.

If any one notices any of the above signs on his/her body it is advisable to approach any Government Centre or Private Leprosy Institution or one's family doctor, or any skin specialist.

Treatment for Leprosy

In 1254 Dr. Mouat, a British Surgeon, while working with the Indian Medical Service found an oil named "Chaulmoogra" (hydnocarpus) which was used for the treatment of leprosy.

Later, in the year 1903, Engel Bay produced a medicine called "Anti-Leprol," and it was used for the treatment of leprosy.

In 1909 a American Scientist synthesized "Diamino-Dyphenyl-Sulphone"

Different derivatives were prepared by Dr. Faget of America and others.

The successful use of the sulphone derivative (promine) was first reported in 1947 from the leprosarium in CARVILLE in the United States of America.

Soon after Dr. Cochrane and Dr. Dharmendra began to use DDS in India. It is also known as "Dapsone" and is available in the form of tablets, which are very cheap and have to be taken orally. This drug takes a long time to cure the disease (i.e. for non-infectious type it takes 3 to 5 years and for infectious types it takes more than 10 years.)

Multi-Drug Treatment Regimen (MDT - Regimen)

The Multi-drug treatment of leprosy was recently introduced under the National Leprosy Eradication Programme in India in 1982.

At present M.D.T. is being given in 50 Districts.

Thanks to the advance of medical science new drugs such as Rifampicin and Clofazimine have been introduced in the treatment of leprosy. These Drugs are more effective and give faster results. With the M.D.T. - Regimen, infectious patients take about 3 to 4 years to achieve a cure and non-infectious patients only about 6 to 12 months.

Thus the advantages of approaching a doctor in the early stages of detection are as follows :

- i. A fast and complete cure of the disease.
(See photos 9 and 10)
- ii. The prevention of deformities.
- iii. Infectious patients will become non-infectious in the shortest possible period, and the spread of the disease will be stopped.
- iv. Non-infectious patients will be stopped from becoming infectious.

ONCE A PERSON HAS CONTACTED A DOCTOR, THE CURE OF THE DISEASE DOES NOT DEPEND ONLY ON THE DOCTOR, BUT ON THE PATIENT, WHO HAS TO TAKE THE PRESCRIBED DRUGS REGULARLY OVER THE PRESCRIBED PERIOD.

A LARGE NUMBER OF CENTRES, BOTH PRIVATE AND GOVERNMENTAL, PROVIDE FREE MEDICINES FOR NEEDY PEOPLE. (See photo 8)

THE GOVERNMENT AND VOLUNTARY ORGANISATIONS CONTRIBUTION IN LEPROSY CONTROL WORK

The National Leprosy Control Programme (NLCP) was launched in our country in 1955. Thanks to our late Prime Minister Mrs. Indira Gandhi's determination to eradicate leprosy from our country and the availability of M.D.T., it was changed into a national Leprosy Eradication Programme (NLEP) in the year 1982.

Different activities carried out by NLEP are :

- i. Conducting surveys in order to detect leprosy patients and giving free treatment. (See photos 2 and 3)
- ii. As there is a greater tendency for children around the age of 15 years to get leprosy they conduct special surveys in the schools.
- iii. Giving Health Education by aids, such as Audio-Visuals posters, films, slide shows, booklets, leaflets, flash cards, exhibitions, etc. (See photo 7)
- iv. The use of the Multi-Drug Treatment (MDT) in treating the patients, so that the disease will be cured fast and the spread of infection will be stopped.
- v. Homes for deformed leprosy patients started in order to rehabilitate and train them in different trades.

The following table will give us an idea about the work done during the past years :

For Medical Practitioners

The regimens of MDT followed under the National Leprosy Eradication Programme are given here for general information and guidance.

MULTI-DRUG TREATMENT REGIMENS

1. *Multibacillary cases :*

- (i) Two weeks intensive treatment at the clinic with daily doses of :

	15 Yrs+	10-14 Yrs	6-9 Yrs
Rifampicin	600 mg	450 mg	300 mg
Clofazimine	100 mg	50 mg	50 mg
Dapsone	100 mg	50 mg	25 mg

- (ii) Continuation phase of multibacillary treatment regimen :

- (a) One dose a month for 24 months at the clinic :

Rifampicin	600 mg	450 mg	300 mg
Clofazimine	300 mg	150 mg	100 mg
Dapsone	100 mg	50 mg	25 mg

- (b) Daily domiciliary dose for 24 months :

Clofazimine	50 mg (daily)	50 mg (alternate days)	50 mg (twice weekly)
Dapsone	100 mg	50 mg	25 mg

2. *Paucibacillary cases :*

- (a) One dose a month for 6 months at the clinic :

	15 Yrs+	10-14 Yrs	6-9 Yrs	1-5 Yrs
Rifampicin	600 mg	450 mg	300 mg	150 mg
Dapsone	100 mg	50 mg	25 mg	10 mg

- (b) Daily domiciliary dose for 6 months :

Dapsone	100 mg	50 mg	25 mg	10 mg
---------	--------	-------	-------	-------

**Statistics of National Leprosy Programme, Bangalore
Urban District, from 1987-88 to 1989-90
(upto end of February)**

		1987-'88	1988-'89	1989-'90
SURVEY	Population Enumerated	459291	271742	555289
	Population Examined	271945	227240	387431
	New Cases Detected	1475	1560	1158
EDUCA- TION	Exhibitions	117	157	86
	Film Shows	274	256	350
	Group Discussions	1534	2498	2196
	Other Activities and Health Talks	935	12328	11281
	New Cases put under Treatment	1475	1560	1158
TREAT- MENT	Skin Smears Taken	625	1273	1364
	Positive cases confirmed	80	132	80
	No. of cases released from Treatment after cure	795	1319	936
	Cases under Treatment At the end of the year	3631	3433	2910
	Total No. of cases At the end of the year	4765	4053	3289

Leprosy - Society's Attitude

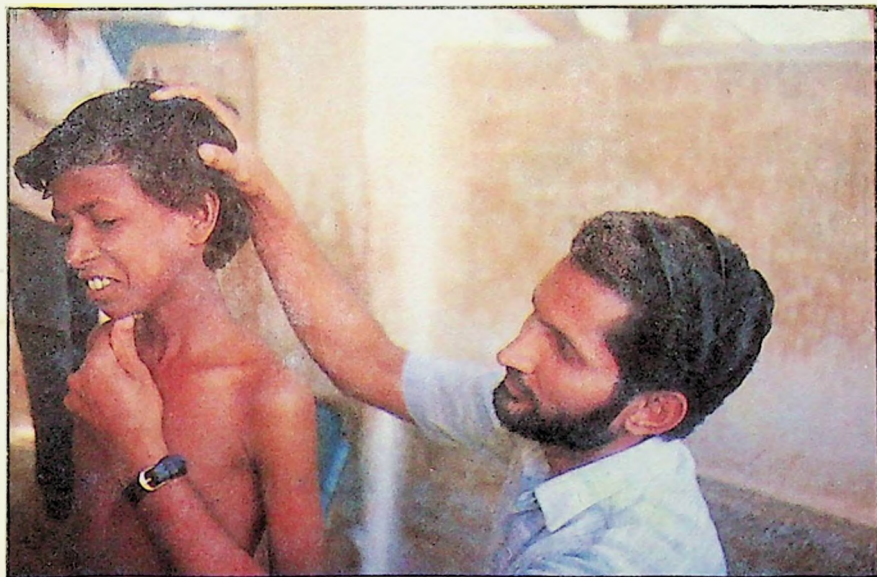
In society today people often reject leprosy patients as untouchable, thus keeping them at a distance. They are treated as social outcasts.

Many a time we see people avoiding even looking at leprosy patients. In fact, we find people condemning or scorning them. As a result of the way they are shunned, quite a few leprosy patients decide to desert their families and resort to begging.

We see all this plainly but nevertheless ignore it. Often, the patients are willing to take treatment, but the fear of rejection by society holds them back and they avoid treat-



Special Surverys are Conducted in Schools





Leprosy Starts as a Patch on any part of the Body





Health Education is the Master Key for Leprosy Eradication Work



Early Treatment Cures the Disease Faster and Prevents Deformities

ment, concealing the disease. Thus, they are unnecessarily penalised because of our ignorance.

Let us, therefore, create an atmosphere of understanding, in which leprosy patients are motivated to take treatment. Let us feel responsible for getting infected people to take treatment and for wiping out the prejudices regarding their condition.

Kindness is absolutely essential in the interest of the general public itself, since harshness to patients will lead to concealment and the consequent spread of the disease. Education is also necessary, so that people will understand the problems of leprosy patients.

Leprosy - Patients' View

As soon as a person comes to know that he is suffering from leprosy, he gets extremely depressed and hides himself away, thinking that society does not want him or will reject him as a human being.

Many people who are affected by leprosy even segregate themselves from their families for fear that it will bring disgrace to them.

A few of them resort to suicide, thinking that this is the best solution to what they see as a situation with no other way out.

As people do not allow deformed leprosy patients to move among them freely, such patients often end up sitting on the foot-paths, which ultimately become their only dwelling place.

Why does this Happen ?

It is because of our mistaken approach, our ill-treatment, our social discrimination, our lack of love and compassion, etc. We are to be blamed to some extent for their pitiable position in society.

This is due to lack of scientific knowledge about the disease or unwillingness to put this knowledge into practice.

Leprosy prevails today not only because of infected people, but on account of the uninfected majority, who take a passive role and continue to harbour misconceptions.

ON THE WHOLE, THE PROBLEMS WHICH THE LEPROSY PATIENT HAS TO FACE IN SOCIETY ARE WORSE THAN HIS DISEASE.

How to take Care of Persons Afflicted with Leprosy ?

1. As leprosy, irrespective of the stage and the type of the disease, is certainly curable, with modern treatment, which is given free of cost, encourage the patient to take the treatment regularly till the Doctor advises him or her to stop.
2. Adequate care should be taken to help leprosy patients to learn to avoid injuries. These will lead to deformity in those parts of the body where there is no sensation.
3. Special attention must be paid to infectious cases, so that none may be missed or lost.

Our Role—What we Can do

The role of the public in ERADICATING LEPROSY is of the highest importance. Since we are a part of that society where infection exists, we should wake up to our responsibilities and come to grips with them. A great Indian Leprologist, Dr. R. V. Wardekar, has rightly stated.

“LEPROSY IS EVERYONE’S CONCERN”

Here are some Effective Ways we can all Contribute to the Eradication of Leprosy

- i. We must discard the superstitious beliefs about H.D. and help others to get rid of them, too, spreading the true facts wherever and whenever and to whoever we can.
- ii. If we should happen to see patches on our body, on our friends or relations, we should immediately approach any Government Centre or private Leprosy Institution, or our family doctor, or any skin specialist.

- iii. Government and voluntary organisations do make field visits (surveys) throughout the country. On these occasions, we should entertain them and cooperate in their work as much as possible. For example, if we come across anyone with the symptoms anywhere, we should inform them. This will be a great help to them in detecting cases, and so the paramedical workers can also suggest further action at an early stage of the disease.
- iv. We must NEVER use the word "leper", which is very offensive and hurtful to these people. They are simply to be called 'leprosy patients'—as we might refer to 'polio patients' or 'T.B. patients'.—We will politely correct anyone we hear use the insulting term 'leper'.
- v. We must be kind and compassionate towards people who have leprosy, making them feel they are wanted and offering our support to them.

LET US JOIN HANDS IN THE CAMPAIGN TO ERADICATE LEPROSY FROM OUR MOTHERLAND BY THE YEAR 2000 A.D. BY CO-OPERATION, PARTICIPATION AND BROAD-MINDEDNESS.

The Answer Lies in our Hands

- * The eradication of leprosy from India is "Today's Challenge," and it lies in our hands.
- * A massive social awareness campaign is the need of the hour, and it lies in our hands.
- * The effective Multi-Drug Therapy (MDT) should be given to all who need it, and it lies in our hands.
- * The personal acceptance of a person afflicted with leprosy is the basic condition for the Eradication of leprosy and it also lies in our hands.
- * It is possible to free our motherland from this eradicable disease, provided all of us join hands.
- * It lies in our own hands to immortalise our lives by doing good to mankind.

"WHY DON'T YOU TAKE UP THIS CHALLENGE WHICH LIES IN YOUR HANDS?"



"How they look at leprosy"

Mahatma Gandhi :

Leprosy work is not merely medical relief. It is transforming frustration in life into the job of dedication: personal ambition into selfless service.

Mother Theresa :

The problem is not one of leprosy. It is one of man's inhumanity against man--

Smt. Indira Gandhi :

A major obstacle is the general public ignorance and superstition regarding leprosy. People tend to evade investigation and hesitate to admit to the disease at the early stages when a cure could be complete and easier. This sense of shame is out-dated and dangerous.

Dr. R. V. Wardkar :

In changing our attitude towards leprosy patients we will not be obliging anybody - we will be doing it only to make the environment safe for us.

Fr. Claude D'Souza, S. J.

Rector, St. Joseph's College, Bangalore-560 001.

It is a disgrace for every educated person in India that in an age of advanced technology and electronic communications we have nearly 4 million leprosy patients (15 million in the world). It shows the insensitivity of medical professionals and social workers and the lack of political will of our government. All the educated should take this deeply human problem of justice to heart and through common, concerted and planned effort force the government to evolve adequate policies and concrete action plans to wipe out this curse, affecting mostly the poor. All of us need to know more about this disease and its causes, and show our concern for these helpless victims through concrete individual and group action. We can no longer be callous without forfeiting our own humanity.

Dr. M. S. Nilakanta Rao, B.Sc., M.B.B.S.

W H O. Consultant to the Government of India

'ANUPAMA', No. 4, XI Main Road,

IV Block East, Jayanagar, Bangalore-560 011

30-10-1987

Leprosy was a much dreaded disease 50 years ago. There was no definite treatment. Society shunned the patients, and had its own ideas.

25 years ago, the National Leprosy Control Programme was already in operation for 7 years. Large numbers of patients were benefitting from treatment - specific and corrective. Programmes were being planned to remove the fear and ignorance of society.

In the last 7 years, a sea-change has come over the field of leprosy. Lakhs and lakhs of patients are being declared CURED of the disease. Very few cases, newly detected, show deformity. Society's understanding of leprosy is enhanced. It is felt that leprosy can be ERADICATED.

Leprosy has become the touch-stone or a parameter to evaluate Society's responses and the Government's response to the health problems of the people :

- i. So long as large islands of Society remain ignorant of the true nature of leprosy, it can be assumed that society has not been conscious of its health.
- ii. So long as there is deformity in a case of leprosy, especially in a young patient, it can be said that the health services are still at a considerable distance from optimum performance.

The sting of Leprosy has been removed. Leprosy is mingling into the mainstream of Medicine.

Leprosy has become an eminently and easily CURABLE DISEASE.

S. P. TARE :

DIRECTOR, GANDHI MEMORIAL LEPROSY FOUNDATION,
HINDI NAGAR, WARDHA, MAHARASHTRA.

There is no other disease, except leprosy, which has been with mankind for so long and is still so grossly misunderstood and feared. And there is no other disease which gives rise to so great physical devastation as leprosy. Finally, there is no other disease which gives rise to so much mental anguish, psychological disturbance and social dislocation as compared to so little physical discomfort in its early phase.

Leprosy is a simple disease from a medical point of view: easy to diagnose and easy to treat. But its ramifications and aftermath have been extremely severe : not because of what it really is medically, but because of what people consider it to be.

The war against leprosy has therefore to be fought medically as well as in social areas. A leprosy worker can, by his integrity and sincere dedicated work, dispel more of the fear and prejudices than by a water-fall of words and aids. A worker should use no adjective while using the term 'leprosy' and make no emotional exaggerations to compel people to listen or co-operate. Fear psychosis is the last thing we need to change society's attitude.

Fr. Cyriac Njayarkulam, C.M.F.

Director, Sumana Halli Society, Bangalore.

Jesus Christ looked at the man afflicted with leprosy with compassion, and made him experience his healing touch. When a group of people suffering from leprosy approached him, he had pity on them and cured them. Miraculous healing is not expected from each one of us. But are we not able to give to these people who belong to the lowest strata of the society in our Mother Country even what is possible on our part : human respect and love, care, treatment and follow-up, rehabilitation and job opportunities. Let us consider these brothers and sisters afflicted

with leprosy as our fellow human beings, created by God in His own image and likeness. Let us do whatever is possible on our part to alleviate their sorrows and reinstate them into society.

May I take this opportunity to congratulate Mr. Mastriani wholeheartedly for his booklet on Hansen's Disease which he is bringing out with the financial assistance of 'Amici di Raoul Follereau,' Bologna, Italy.

Sr. Dr. Giovanna Lussu

"Sisters of the Redemption", Italy.

Leprosy is a Challenge !

It is a challenge to a professional person and to the common man as well - It is a curable disease, and strategies to cure everyone suffering from Leprosy in the world are also available - So why does a minority only receive treatment, while so many do not? Because we simply do not care enough. Leprosy is not yet everyone's concern as it ought to be, so let us join hands and help to bridge the gap by making resources available to those who are in need of them.

Thomas Mathew

Administrator, Sumanahalli, L.R.T.C &
working President, K.S.A.L.C., Bangalore.

Down through the centuries the indomitable human spirit has overcome various challenges. Every challenge posed to the human race, be it in the social, political or scientific sphere, has been overcome successfully. For example, during the more recent times we have seen quite a few nations coming out of political domination and oppressive regimes.

Today our society is in need of a similar reform and awakening to bring the universally accepted principles of equality, fraternity and liberty to all citizens, including the disabled, those afflicted with leprosy and

other under privileged persons. Therefore, THE NEED OF THE MOMENT AND THE CHALLENGE OF THIS DECADE IS NOT THE REHABILITATION OF THE HANDICAPPED BUT IT IS THE REHABILITATION OF SOCIETY in the principles of equality of opportunities for work, recognition and ultimately for the right to live a decent life for the disabled as well as all the others.

Dr. K. Nagaraj Rao

No. 843, 9th 'A' Main, Sraenagara, Bangalore-50

Leprosy is just like any other disease affecting human beings. It is also caused by a germ, as any other disease and it is also curable. Early Leprosy is silent. Treatment is simple and cheap, lasting for one to three years. Like any other communicable disease, it can be treated in General Hospitals and General Practitioners' Clinics. With the introduction of the Multidrug Regimen an infectious patient can be rendered non-infectious in a very short time. The early detection of all cases and ensuring regular and adequate treatment is the main tool in the Control Programme. The greatest enemy of Leprosy Control is Social-Stigma. This can be removed by Health Education. This is a necessary component of any organised activities directed at detecting and treating Leprosy of any form in patients of any age.

M. Aschhoff, M.D.

St. Thomas Hospital & Leprosy Centre,
Chetpet, P. O., (via) Polur, 606801, N. A. Dist., Tamilnadu

When I came to India 28 years ago, I knew very little about Leprosy and much less still about the problems this disease causes to those men, women and children afflicted with it. With Dr. Hemerijck, we started an integrated project of leprosy control and general medical care. We look at leprosy as a disease like any other chronic, only mildly

infective disease. Leprosy patients are people like you and me, who wish to live like you and me, and who want to be happy. I appreciate very much the initiative, the efforts and the concern of a young man, the editor of this booklet, who devotes himself to the service of our patients. Let us all contribute according to our capacity to eradicate leprosy in our beautiful country, India.

Jayne Bunbury

C/o SKIP, 161, Brigade Road, Bangalore-560 025

I work for the rehabilitation of Leprosy patients, and I see this disease as the needless cause of terrible tragedy and suffering, not physical, as we know that with prompt treatment there will be no deformity or disfigurement of any sort, but psychological. When any of us fall ill, we generally receive loving attention and care from our near ones and dear ones, but not so in the case of Leprosy Patients who, on the contrary, are frequently driven away or abandoned-husbands by wives, wives by husbands, and even children by their parents. Shunned, ostracized, cast out by their families and friends and by society in general, what deep wounds and frightful cruelty are inflicted on these unfortunate people, as a result of unfounded fears and appalling ignorance !

In every century and continent the story has been the same - one of shocking injustice and inhumanity meted out to the innocent victims of a sickness believed to be a curse. In the 20th Century, in our so-called enlightened age, when we pride ourselves on our progress and humanity, is it not a cause for profound shame that any human being should actually be persecuted and rejected simply for having contracted a disease which is easily curable, which presents a lesser threat than many other sicknesses, and which, with good will, could be eradicated from the face of the earth ?

Sr. Mary Mascarenhas. S.J.T.

St. Joseph's Convent,

Social Worker & Placement Officer

Frazer Town, Bangalore-560 005

Health Education is the "Master Key" for Leprosy Control, and Eradication Work.

In the modern world of Science and Technology, Leprosy presents no medical problem. It has become a major social problem. Before, during and after treatment, what the leprosy patient needs is the support of the family and community. For this, both family and community need special education regarding leprosy. The aim of Health Education is to impart correct knowledge about leprosy to all types of people, in order to create a deeper awareness and to wipe out fear and ignorance from their minds.

The Social stigma attached to this disease is a long standing one. Hence, proper health education is the most important and only means which can achieve the end of wiping out unhealthy fear from people's minds.

Competent people with good knowledge of this disease can be invited to schools and colleges to clear the doubts about leprosy. This can be done through talks, film and slide shows.

The objective (slogan) set before the world community is "Health for all by 2000 A.D." Still, I am convinced that eradication of Leprosy will remain only a dream unless and until proper health education is provided for people in all walks of life.

Permit me to use this opportunity to congratulate Mr. Masila Mani, who is a selfless Health Educator, for his efforts in bringing out this booklet for the benefit of the general public. I wish the author every success.

Dr. M. H. Sreekantiah, M.B.B.S., D.V.D., D.Ac T
Retd. Deputy Surgeon, Bangalore

Equating Leprosy with deformity is the root cause of Stigma, the darkest aspect of Leprosy. To spread the message "that leprosy is curable with modern medicines in a short period of time, ranging from 6 months to 3 years, not resulting in any deformities, provided the treatment is started early and taken regularly" is the need of the hour.

Here comes the importance of health education. If health education is supported by solid, efficient services to the patient, eradication of leprosy, though a challenging task, may be achieved at least by 2025 AD, if not by 2000 A.D.

Ravi Narayan, MD., DTPH (Lond)., DIH (UK)
Community Health Cell,
47/1, St. Marks Road, Bangalore-560 001

Leprosy is more than just a communicable, disabling, disease. It is a multi-dimensional human problem, compounded by the fear complex and gross misinformation that pervades the community as well as the health services system itself.

While the detection, treatment and care of the patient, the prevention of disabilities, the providing of health education, motivation of patients and the provision of disability aids are important, they represent mainly a 'medical' response to the problem.

We are increasingly called upon today, to a larger 'societal' response, which includes economic, social and emotional rehabilitation, humanising education, and an empowering conscientization of the persons with Hansen's disease. In addition there is an urgent need for an active, awareness building and sensitization process in the larger community, so that people with this problem are accepted

primarily as human beings with their inalienable rights and human dignity.

Our present knowledge about this problem calls for a radically new understanding that moves away from the 'charitable approaches' of the past to a courageous social policy, recognising the person with this problem as a citizen in his own right. The relevant contributions of Baba Amte of Anandavan and Dr. Patwardan of Tapovan, among many others are forerunners to such efforts.

However for this process to be initiated, the starting point for reorientation and sensitization will be the health team members and the training centres where they receive their education.

Health for all people with Hansen's disease can be a reality by 2000 AD only if we are able to move beyond the orthodox 'medical paradigm' to a 'social' vision in our understanding of this disease. This is the challenge of the 1990s.

Sr. Laurent-Marie

"Daughters of Wisdom", Bangalore

"ARISE AND REST NOT TILL THE GOAL IS ACHIEVED!"

Health for all by the year 2000 !

Eradication of leprosy before the year of 2000 !

This goal is undoubtedly a great hope for the whole of humanity. Is it feasible? How? When? By whom?

The love of those affected by leprosy has awakened the greatest of dedication, but how can this dedication, the combined efforts of thousands working in the leprosy field be fully efficient

- to detect, treat and eradicate the disease,
- to rehabilitate, to restore human dignity and equality of rights to all those unjustly rejected?

A groundless, irrational fear of this "dreaded" disease has inflicted a stigma on the victims and on society. Education and knowledge have already removed a lot of

eroneous ideas and beliefs but there is still a long way to go before the goal is achieved.

"Arise and rest not" until all people become aware and educated. **LEPROSY IS CURABLE.** "Arise and Rest not" until all leprosy bearers are detected and treated, until leprosy is eradicated, until all leprosy patients have their full human dignity and respect. Every human being is responsible in some way or other for his fellow human beings. What is your contribution in this human network?

This booklet is an awakening.

"ARISE AND REST NOT TILL THE GOAL IS ACHIEVED"

N. P. Swamy,

President, Karnataka Slumdwellers Federation, Bangalore

Leprosy is curable! It is like any other illnesses which need proper care and attention. It involves regular treatment. Even in the modern world, people are still afraid of this disease and see much stigma attached to it. Even if they are arrested cases, neither the community nor the public treat them as Human Persons.

So far the approach has been one of looking at the patients as the recipients of state welfare; instead, they need to be addressed as rightful citizens of this country and treated with respect and dignity.

In one of the slum communities where I work, an arrested patient, a woman named Yashodamma, has been treated & given respect as a person, (it was never done before), and she is today one of the leaders in the forefront to take up the cause of other Leprosy patients and is working towards achieving dignity for women in the community.

We need to promote community awareness at a massive level: giving right information, providing supportive services; motivating general practitioners to treat Hansen's patients like other patients in their clinics are vital steps in ameliorating the present condition of Hansen's patients.

Mr. Alphonso J,
General Secretary,
Goodwill International Association,
72/2, Bazar Street Cross,
Neelasandra,
BANGALORE-47.

Leprosy is a common disease. In a country like India leprosy may effect any common person irrespective of social, cultural and economical status.

We hear people saying that because of one's illdoings either in the past or present "Genma" leprosy has embraced him or her. In my opinion we should give a deaf ear to such irresponsible and irrelevant statements; instead we should try to chase leprosy from everywhere and eradicate it totally.

HOW DO YOU LOOK AT LEPROSY ?

UNIVERSAL DECLARATION OF THE RIGHTS OF LEPROSY PATIENTS

By : **Raoul Follereau**
Founder of World Leprosy Day

1. Leprosy is only a disease, and those suffering from it are subject to the same laws as other people and are protected by those same laws.
2. No-one has the right to deprive them of their freedom, nor to restrict it in any way whatsoever, if they are suffering from a non-contagious form of H.D. or are in possession of a medical certificate showing that they have followed treatment and that there is now a negligible risk of contagion.
3. In general, patients are treated at home, this being the only system which shows real consideration and respect for the patients' basic human rights.
4. When the patient's condition necessitates temporary hospitalization, this should as far as possible be in a general medical institution, as would be the case for patients suffering from any other disease.

Cases who are temporarily contagious will therefore be cared for in special wards, as is customary, and the patients reassured that their segregation will not last one day longer than is deemed necessary by the doctor.

Patients should receive social assistance during their treatment, without any restriction and in accordance with the laws of their country. Should hospitalization be prolonged, and if such arrangements are provided for by the government, patients should be placed on 'lengthy sickness' leave and be eligible for the corresponding assistance and professional safeguards.

5. Any action of a discriminatory nature or tending to deprive a present or former H.D. patient of employment or residence, and more generally any form of coercion directed against them because of the present or past illness, shall be prosecuted and punished by law.

Any malicious reference to their illness, past or present, shall be considered defamatory and be dealt with as such.

BOOKS ON LEPROSY

1. Leprosy in Theory and Practice, by Dr. R. G. Cochrane and Sons Ltd., Bristol.
2. Hand book of Leprosy, Dr. W. H. Jopling, Heineman Medical Books. Ltd., London.
3. HINTS ON DIAGNOSIS & TREATMENT OF LEPROSY By Dr. R. V. Wardekar, Gandhi Memorial Leprosy Foundation Hindinagar, Warda Maharashtra 442 103
4. LEPROSY: A Text book by Dr. Dharmendra, Vol. I, 1979 The Kothari Book Dept, Acharya Donde Marg, Parel Bombay - 400 012
5. WINDOW ON LEPROSY, Ed. Dr. B. R. Chatterjee, Gandhi Memorial Leprosy Foundation, Wardhan, 443 103
6. EPIDEMIOLOGY FOR LEPROSY WORKERS by V. Ekambaram, (2nd Edition) National Leprosy Organisation, Hindinagar, Wardha, Maharashtra 442 103
7. BACTERIOLOGY OF LEPROSY, by V. Periaswami, National Leprosy Organisation, Hindinagar, Wardha, 442 103
8. The Diagnosis and Management of Early Leprosy, by Dr. Stanley G. Browne, The Leprosy Mission, 7 Bloomsbury Square, London, W.C.1.
9. Guide to Leprosy & Leprosy Control, by Dr. P. Kapoor, Poona Dist., Leprosy Committee, 16-B1 Dr. Ambbdkar Road, Poona 411 001.
10. MODERN CONCEPT by Dr. Harry L. Arnold, Charles C. Thomas, Bannerstone House 301, 327 East Lawrence Avenue Springfield, Illinois, U.S.A.
11. SOME FACTS ABOUT LEPROSY by Dr. Dharmendra, Hindu Kusht Nivaran Sangh, 1 Red Cross Road, New Delhi - 110 001
12. LEPROSY - DIAGNOSIS & MANAGEMENT by Drs. Job, Selvapandian & Kurian, HKNS, New Delhi

13. Text Book of Leprosy for Students and PMWs, by Dr. R. H. Thangaraj, Philadelphia Leprosy Hospital, Salur, Dist. Srikakulam A.P.
14. PHYSICAL THERAPY IN LEPROSY FOR PARAMEDICALS by Ellen Davis Kelly Ph. D., American Leprosy Mission 1262 Broad Street, Bloom Field, New Jersey 07003, USA.
15. THE BOOK OF OUTLINES by Shri S. Hassan, Hind Kusht Nivaran Sangh, 1 Red Cross Road, New Delhi-110 001,
16. HANDBOOK ON LEPROSY by M. K. Balakrishna Menon, Tripunitura Leprosy Welfare Committee, Tripunitura-632 301 Dist. Ernakulam, Kerala.
17. ESSENTIALS OF LEPROSY, Edited by JMH Pearson & AW Wheate, All Africa Leprosy & Rehabilitation Training Centre, (ALERT) Addis Ababa, Ethiopia, 3rd Edition, 1979.
18. A Guide to Health Education in Leprosy, by P. J. Neville, ALERT 3rd Edition 1979.
19. A Practical Guide to the Diagnosis & Treatment of Leprosy in the Basic Health Unit, by AW Wheate & JMH Pearson, ALERT 1979.
20. A FOOTWEAR MANUAL FOR LEPROSY CONTROL PROGRAMMES, Part, I P. J. Neville, ALERT, 1977, 1st Edition.
21. GANDHI LOOKS AT LEPROSY: 1971; Gandhi Memorial Leprosy Foundation, Hindinagar Wardha 442 103, Maharashtra.
22. TEACHING GUIDE FOR PMWs in Leprosy, Vol. I & II by Dr. D. S. Chaudhury, GRECALTES, 35/1/A, Old Ballygunde, 1st Lane, Calcutta-700 019.

List of Voluntary Organisations Engaged in Leprosy Work in Karnataka

Names and Address of the Voluntary Organisations :

1. Sumanahalli Society, 99, Residency Road, Bangalore-25
2. Navajeevana Nilaya, Doddanakundi Post, Bangalore-37
3. Church of South India Hospital, Col. Hill Road, Bangalore-52
4. Baptist Mission Hospital, Bellary Road, Bangalore-24
5. Katharina Kasper Leprosy Control Centre, No. 35/4, Hutchins Road, Bangalore - 560 005
6. Belgaum Leprosy Hospital, Hindalga, Belgaum.
7. Shantha Jeeva Jyothi, 24-1, M.M. Street, A. T. Halli, Shanthinagar, Bangalore-27
8. District Anti-Leprosy Committee, Bijapur
9. Gandhi Centenary Leprosy Hospital, Kondaji, Chittadurga District
10. St. Joseph Leprosy Hospital, and Asylum Kananadi, Dakshina Kannada District
11. Cheshire Home (India), Bangalore Unit, Tower's Lane, Bangalore-560 002
12. Oluvinahally Project, Iluya Post, Someshwar, Uchile - 574 156, D. K. District
13. Hind Kusht Nivaran Sangh, D.K. Dist Branch, 'Melrose' (Palnir) Mangalore -575 001
14. Hubli Hospital for Handicapped, Swiss Emmaus Organisation, Karwar Road, Hubli - 580 021, Dharwar Dist
15. Leprosy Mission Hospital, Gadag, Dharward District
16. ETCM Hospital, P.B. No. 4, Kolar - 563 101
17. CSI Hospital, Chikkaballapur, Kolar Dist.
18. Holdsworth Memorial Hospital (Mary Culvert), Mysore
19. Mysore City Hansen's Patients Welfare Association, Sarvodaya Kustha Kalyan Kitira, Nilgiris Road, Mysore
20. Gandhi Memorial Leprosy Foundation, 'T' Narasipur, Mysore Dist.
21. Janatha Trust, Yadagir, Gulbarga District
22. Bijapur Leprosy & Community Welfare Centre, Bijapur
23. Goodnews Society, Bidar

REFERENCES

1. "SOME FACTS ABOUT LEPROSY"
--by Dr. Nilakanta Rao.
1. "Outline of Leprosy"--by S. Hassan.
3. NLO Diary.
4. Leprosy : Questions & Answers--by GMLF Wandha.
5. Challenge before Youth--published by GMLF.
6. Vaccination, Drug Resistance, Culture of Leprosy
Bacilli--by Dr. M. S. Nilakanta Rao.
7. Silent Features of the Epidemiology of Leprosy
--by Dr. M. S. Nilakanta Rao.
8. Report of Katharina Kasper Leprosy Control Scheme,
Bangalore, Aug. 1980.
9. 18th Annual Statistical Report--For Year Ending
31-12-1979--Leprosy Relief Rural Centre, Chettipathi,
Salem Dt., Tamil Nadu.
10. --Lep. in India 52 (i) : 104....113.
10. A guide book for Para-Medical Staff--published by
CARE, Government of Kerala.
11. Guidelines for the Campaign against leprosy---Publish-
ed by ILEP (International Federation of Anti-
Leprosy Association).
12. Leprosy--for Medical Practitioners and Paramedical
workers--by R. H. Thangaraj and S. J. Yawalkar.

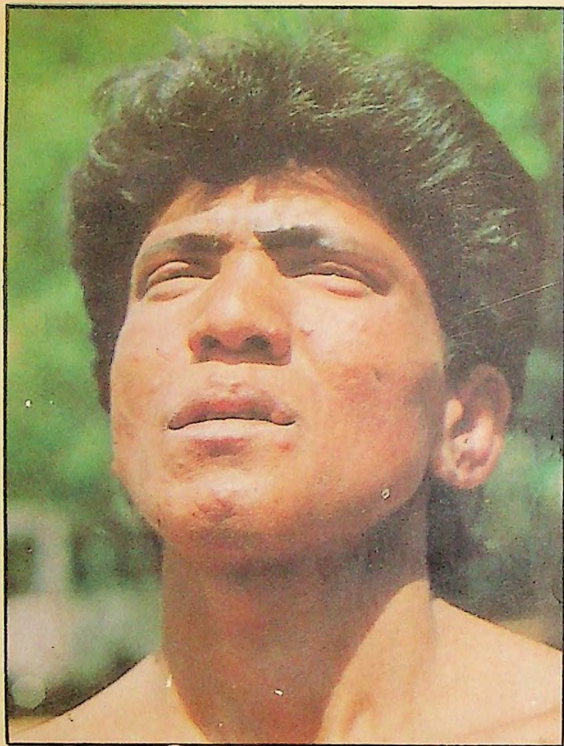
ACKNOWLEDGEMENTS

I am deeply grateful to the people who have expressed their views on :

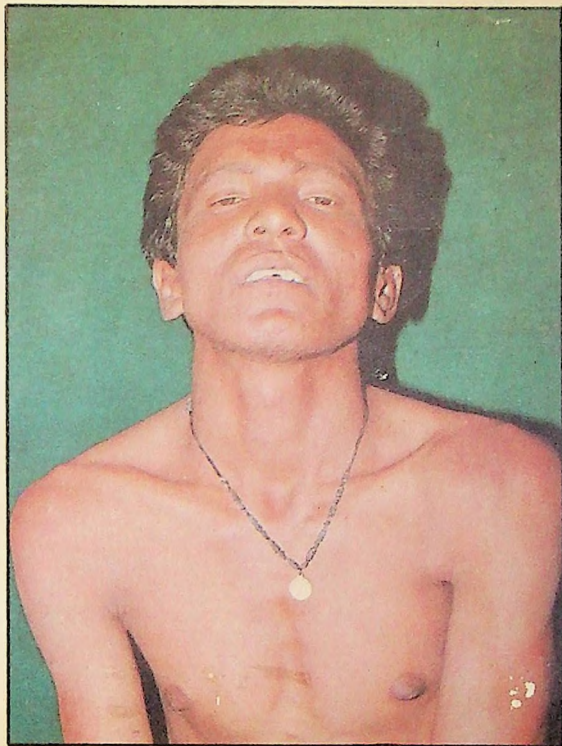
“HOW I LOOK AT LEPROSY”

and the following people who have been my inspiration and strength, ever willing to sacrifice time and energy to bring out this booklet.

- | | |
|-----------------------------|---|
| 1. Dr. Pupulin | — Ex. President, Amici Di. R. Follereau, Italy |
| 2. Prof. Fava | — Professor in Psychology Italy |
| 3. Mr. Wele | — Asst. Director (Health Education)GMLF, Wardha |
| 4. Dr. Vasant R. Hooli | — District Leprosy Officer Bangalore (urban) |
| 5. Mr. Nelson D'Souza | — Ph.D., Scholar, Tata Institute of Social Sciences, Bombay |
| 6. Miss. Barbara Naidu | — English Prof. St. Joseph's College, Bangalore |
| 7. Rev. V. Farias S. J. | — Warden, St. Joseph's College Hostel, B'lore |
| 8. Mr. Joseph Gerard Philip | — Final year M.B.B.S. Student, Bangalore |
| 9. Mr. Magi | — C.H.C., Bangalore |
| 10. Sr. Maria Recchia | |
| 11. Sr. Jean | — Daughters of Wisdom Bangalore |
| 12. Sr. Alicia | |
| 13. Dr. Ekambaram | — Leprologist, Madras |
| 14. Dr. Daisy Kandathil | — Medical Officer, Bombay |
| 15. Mr. Meermeier | — Project Officer, K.K.L.C.S., Secretary, K.S.A.L.C. |
| 16. Sr. Pillar | — F.S.I., Bangalore |



Before Treatment



After Treatment