The Campaign against Leprosy.

I. Is There a Cure?

Leprosy is a disease which excites the public interest in a way that no other disease does. Various contradictory reports have appeared in the press of late years with regard to the curability of leprosy and the possibility of its eradication. The object of the present article is to show what can be and is being done to deal with this terrible disease.

First with regard to "cure"-Leprosy resembles tuberculosis in being caused by an organism which has the power of hiding itself away in the tissues of the body like a seed falling into the crevice of a dry rock, ready to germinate if and when the circumstances become favourable for germination. In Europe for every person who develops tuberculosis there are many who are infected, but who live and die without showing any recognisable signs of that disease. Similarly in India, Africa and other places where leprosy is common, for everyone who becomes a leper there are many who are infected with leprosy, but in whom the disease either never developes or never reaches a stage sufficient to cause trouble or inconvenience. In both diseases this is because the causal germ has not found a congenial enough soil to grow in. There is a danger, however, that at a future time lowering of the general health of the patient may produce a suitable soil when the disease-tuberculosis or leprosy, whichever germs be lying latent -will light up and the patient will begin to suffer. It will be readily understood that when a patient suffering from either of these diseases has improved, either due to special treatment or to improvement in his health, there is always the possibility of some of the germs still lying latent in the body to cause a recrudescence should the patient's resistance be lowered once more. In neither of these maladies therefore does the wise physician pronounce a "cure." He continues treatment long after all active signs of disease have gone, and when he stops treatment he is always careful to warn the patient that the only way to be sure of continued exemption is to keep himself absolutely fit and strong. Only there is this difference between tuberculosis and leprosy, that the latter disease can be diagnosed with certainty and with much more ease at a much earlier stage than the latter, and, given equally favourable circumstances, leprosy is considerably more remediable.

In the treatment of leprosy the wholehearted, confident cooperation of the patient is necessary. There is no absolute specific which will ensure the recovery of the careless, indifferent or despairing patient. But given ordinarily favourable circumstances, a patient determined to get better and a doctor who understands his work and is willing to take trouble, there are few cases in which all active signs of leprosy cannot be stamped out. Naturally, the earlier the treatment is begun the sooner will recovery take place, and the last twelve months has given us a remedy which will search out and deal with disease foci where formerly they would have passed unnoticed.

It is important to recognise the effects the treatment now available have upon the campaign against leprosy:---

1. Instead of being an irremovable "infirmity" classified in the Indian census along with blindness, deaf-mutism and insanity, leprosy now becomes a disease within the scope of the physician. If, when leprosy remained untreated and the medical curriculum ignored it as being outside its range, this disease was more or less at a standstill in a country like India, it may surely be predicted that, with physicians everywhere diagnosing and treating it, the incidence must diminish rapidly.

2. With leprosy looked upon as hopeless, so that even in the earliest stages the leper was abhored and looked upon as unfit for human society, the unfortunate sufferer naturally concealed his disability as long as possible, fear, shame and mental depression impairing his general health and leading to the more rapid development of symptoms.

Now looked upon as remediable, he seeks the physician as soon as possible, and, in the great majority of cases, recovers completely. The enlightened employer no longer dismisses the employee in the early uninfectious stage, but has him put under treatment and asks for reports from the doctor as to his progress and fitness for work.

3. Patients in early stages hear of the treatment and attend clinics. The public generally take an interest and become able to recognise the signs. In this way it becomes known that there are many highly infectious cases employed in vocations which render them a danger to the community. Such dangerous people are forced to isolate themselves or are removed to places of segregation.

4. The effect of treatment of early cases is to prevent them going on to the later and more infectious stages. When infectious cases are treated they are often rendered much less so within a comparatively short time. In this way the widespread employ. ment of treatment is being found to be a most effective method of prevention by shutting off the infection from others.

There is no infallible cure for leprosy and probably never will be, but there is something which is possibly better, for side by side with the eradication of this plague there must be sanitary and social reform, and it is the fear of such diseases that has always been, and will always be, the great lever to raise society. An infallible cure would remove the disease without changing society.

The second part of this article describes the method of dealing with leprosy through *Propaganda-Treatment-Survey* centres.

II. Propaganda-Treatment-Survey Centres.

The object of the first part of this article was to show that, although we have not in our possession an infallible specific which will cure all cases of leprosy, yet we have means at hand sufficient to cause a rapid diminuation of the incidence of this disease in endemic countries.

I hope in this section to make clear general measures which are being found effective for this object, especially in India, where they were first adopted.

It is obvious that if means are to be taken to stamp out from any area a chronic disease which has been endemic in that area for centuries, one of the first things to be done is to institute a survey.

The objects of the survey are as follows :----

1. To find out in which places and among which communities the disease is most prevalent.

2. By comparing these places and communities with those which are more exempt, and by enquiring into histories and local conditions to ascertain the reasons for greater prevalence.

It is also easily understood, bearing in mind that the victims of leprosy regard their condition with shame and try to conceal it, that to carry out such a survey it is necessary to win the confidence of the patients and their friends, enlighten their misconception about the disease and demonstrate to them that leprosy is remediable and that it is their own real interest to come forward and place themselves under examination and treatment.

We have found that all these objects can be accomplished and a survey successfully instituted by means of Propaganda-Treatment-Survey Centres, styled for convenience—P.-T.-S. Centres. These are conducted as follows:—

An area is chosen which is known to be highly endemic. In India the most convenient unit is the thana or taluka with on an average some 300 villages and a population of about 40,000 people. There are often between twenty and thirty such thanas in a district.

First of all, the information available from the decennial census returns is collected. This information, though not accurate, as it has been collected by enumerators who have no special knowledge of leprosy, is useful as a starting-off ground. Villages are visited, and with the aid of the Union Presidents and Village Watchmen known cases of leprosy are looked up and members of their families are examined for early signs of leprosy. By conversation, demonstration of charts and lantern lectures, the villagers are taught about leprosy—how it is contracted, how it may be prevented and how remedied. An out-patient clinic is opened at the headquarters of the thana and patients are treated there once or twice a week, while on the remaining days of the week other villages are visited.

Alongside of treatment and propaganda the survey proceeds. With the help of grateful and willing patients more and more cases of leprosy are found. The history of the invasion of villages, classes of the community and families is traced, written down and plotted out on maps and charts. In this way much useful information is collected which again is used in propaganda work.

The sufferers from leprosy are generally found to be eager for treatment. Within three or four weeks of starting such a centre as many as two or three hundred patients have been found to attend for treatment. Villagers are taught to isolate infectious cases in huts outside the village, and to discern the earliest signs of disease and bring their patients in the first stage in which leprosy is so remediable.

Often some other disease is found to be prevalent in a village which, by lowering the general health of the people, predisposes them to leprosy and which will tend to disappear once this predisposing cause has been removed. Many of these predisposing causes are easily preventable; to give one example, a village in the Satara district was an endemic leprosy centre and was also infested with guinea-worm due to the use of step wells. The digging of a new well at the top of the village and the laying on of a pipe water supply was followed by the rapid disappearance of guinea-worm and thereafter gradual disappearance of leprosy till there were only three of four cases at the time of my visit.

It is therefore apparent that if leprosy is to be stamped out, there must be a study of local conditions through the formation of P.-T.-S. cen res, or in some similar way. The Indian Council of The British Empire Leprosy Relief Association is at present initiating these centres in the various provinces of India. Model surveys have been conducted in Bihar, Bengal and Burma, and arrangements have been made for them in the Central Provinces and Bombay. It is hoped that each province will itself appoint a band of suitable medical men who, after thorough training in leprosy work, will continue the survey in two or three thanas of every district where leprosy is highly endemic. Thereafter it can be continued by district authorities till it is complete.

Wherever the survey has been conducted, clinics for the treatment of leprosy have been established which are attended by hundreds of patients, and are carried on by locally trained doctors after the survey officers pass on to a new area. It has been found also that large numbers of doctors attend the clinics and learn the diagnosing, treating and preventing leprosy. In Bengal a doctor appointed for this work trained over 200 doctors in various district centres during the last six months of 1927.

At the same time a large amount of valuable information has been gained concerning leprosy and the factors which have led to its high incidence in certain areas and among certain classes of the community.

The results of this survey have not yet been published in full, but a few of the more important items may be mentioned here. It has been conclusively shown:—

1. That leprosy is a disease which flourishes among certain castes of the people of India, especially semi-aboriginals who have left their primitive state but have not yet adopted the more settled and comparatively sanitary habits of the more advanced communities.

2. That it is specially rife in areas which from geographical, geological and climatic conditions are subject to frequent years of famine, such conditions lowering the resistance of the body to the disease.

3. That leprosy in areas where the soil is more fertile and famine conditions seldom obtain is frequently traceable to the immigration of infected persons from the more endemic, famine-stricken parts, who leave their homes in search of work. It is therefore useless to try to stamp out leprosy from large towns and less leprous areas while this immigration continues or while effective means are not taken to eliminate the disease from the chief endemic areas.

4. The disease is chiefly transmitted from friends, relations and household servants, by close and prolonged contact, to healthy

people; the transmission from begging lepers in towns is probably of very rare occurrence.

7

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