## INTERNATIONAL JOURNAL OF LEPROSY

OFFICIAL ORGAN OF THE INTERNATIONAL LEPROSY ASSOCIATION

PUBLISHED WITH THE AID OF THE LEONARD WOOD MEMORIAL

Publication Office: School of Medicine, Tulane University, 1430 Tulane Avenue, New Orleans 12, Louisiana Entered at the Post Office at New Orleans as second-class matter.

VOLUME 18, NUMBER 3

JULY-SEPTEMBER, 1950

## **EDITORIALS**

Editorials are written by members of the Editorial Board, and opinions expressed are those of the writers.

## CONCENTRATION OF LEPROSY-ITS DANGERS

It is accepted that in many contagious diseases concentrated or intensive exposure to the infectious agent breaks down resistance where slighter degrees of contagion fail to do so. It would be difficult to quote statistics proving this to be the case in leprosy, but there is much evidence that it is so; and most leprologists are of the opinion that the more frequently casual contacts take place with infectious cases the more likely is the disease to be acquired.

It may be objected that many leprosy workers subject themselves daily to many contacts with infectious cases over long periods of years without acquiring the disease. But the expert takes precautions; it is the casual nature of the unrecognized contact that constitutes the danger, and the total absence of the simplest precautions.

It is rightly held that the greatest danger of acquiring leprosy is in the home, and that the children are most susceptible. But this does not necessarily limit the spread to the actual family. In India there are innumerable known instances of leprosy being spread by servants, neighbors or visitors who, because of the inconspicuousness of their lesions, were not recognized as having leprosy for years after they became infectious. The danger is increased when, for want of accommodation, people are forced to crowd together. What increase in leprosy will result from

recent crowding together of refugees in India and other endemic countries, time alone can show.

It should be taken as an axiom that concentration of leprosy patients can be safe only when they live apart from healthy (nonleprous) people, when the place of isolation is sufficiently distant or cut off from healthy neighbors, and when supervision is effective enough to prevent outside contacts taking place. In planning a leprosy colony these three requirements are vital.

The writer has come across many instances in India, Africa and the West Indies where these precautions are not observed. In many instances such institutions were originally established on the outskirts, or even within the boundaries, of large towns or cities at the time when leprosy was counted a hopeless affliction, and when there was no idea of recovery and no clear idea of prevention. Sometimes to begin with a small refuge was built, in which most of the cases were of the "recovered-with-deformity" kind. If built by Government the object was chiefly to get rid of unsightly cripples from the streets; if built by a mission the purpose was a humanitarian and religious one. As effective treatment became available, the refuge increased in size and the majority of cases admitted were of the infectious type. It was then recognized that the institution was far too near to the city and was a danger to its inhabitants; in some instances the town had spread and engulfed the place.

In many institutions the supervision, both medical and general, has been inadequate and patients have wandered into the town or surrounding villages at will, sometimes supplementing their meagre rations by begging. In other instances the supervision and treatment have been of the best, and in consequence patients have been attracted from distant districts, seeking admission. For want of sufficient room many had to be refused, and some of these either settled in the neighbouring town or formed a subsidiary colony in the neighbourhood of the institution from which they could attend for treatment at its outpatient clinic. In consequence, as the years passed by this concentration of infectious cases gradually infiltrated and infected the indigenous population. In one area well known to the writer this infiltration process has taken place to such a degree that leprosy has come to be associated with the name of the principal town, so much so that it is avoided by government officials who fear the disease.

When planning a residential leprosy institution of any sort the following questions should be considered:

- 1. Is the site remote enough to prevent mixing of patients with non-patients?
- 2. Is it likely to remain remote, or will villages or towns spread to the neighbourhood in the foreseeable future?
- 3. Is the supervision sufficient to prevent mixing, and is it likely to remain so for a considerable time?
- 4. Will the institution, or the clinic connected with it, attract from distant towns or villages patients who will travel in public vehicles and be a danger to the public?
- 5. Even if the patients enrolled in the institution itself are under sufficient control, will it be possible to ensure that outside patients who come for treatment, and who cannot be admitted for want of room, will not settle in the neighbourhood and form a subsidiary leprosy concentration without any control as to their movements, and thus multiply the danger of spreading infection?

We have thus three dangers: the uncontrolled movements of inpatients, the movements of outpatients, and the movements of subsidiary patients. Each of these factors constitutes a new possible risk involved in the establishment of a leprosy settlement and the consequent concentrated movements of infectious patients.

The two chief causes of the spread of leprosy are domiciliary congestion and extradomiciliary movement. The ordinary methods applied in leprosy control, segregation institutions and outpatient clinics, do little to prevent the spread of infection in the home, and they encourage the patient to wander from his village and often to become detached from it altogether. It should be one of the primary aims of antileprosy measures to limit rather than encourage the movements of leprosy patients.

It is the custom in many places in both India and Africa to drive out those who have leprosy from the community. Unfortunately for the village which does this, those persons have often sown the seeds of disease before their expulsion. They then pass on to other places where they are unknown and unrecognized as a danger, and where they continue to spread infection.

In any scheme for leprosy control it is fundamental that villagers be taught not to expel those afflicted with leprosy, but to provide them with suitable accommodation near at hand in such a way that they will not spread infection either inside or outside the village. There are various ways by which this is being attempted, and they must necessarily vary in different places. As illustrations two methods being tried at present may be mentioned.

For some years back Cochrane, working in South India, has arranged for night segregation in certain villages, accommodation being provided for all the adult infectious cases. During the day they do their work but at night, when contact with the family is usually closest and the danger of spreading infection is greatest, they are effectively isolated. Such a method necessarily needs a considerable amount of time and work to get under way, but I understand that satisfactory results are now being obtained.

Another method is that being tried by Santra in one of the Orissa states. Having obtained a grant of free land in the centre of a highly endemic area, he is making a through leprosy survey of the surrounding villages and hopes to persuade all open cases to migrate there, where with minimal outside help they will support themselves by farming. This agricultural colony will be strictly limited to patients from the surrounding villages, and those from elsewhere will not be admitted. He hopes in this way, with repeated surveys from time to time, to recognise and remove all open cases at the earliest possible stage and thus to shut off all sources of infection from others in their villages.

To extend schemes like these widely through countries like India and Africa would indeed take much time, labor and patience, and require a type of personnel unfortunately not very common. But if they succeed, on however small a scale, there will be accomplished a definite step forward in the control of leprosy beyond the present method of attempted segregation in large institutions.

—Е. Muir.