## ADEN COLONY & PROTECTORATE

Leprosy appears to be absent as an endemic disease from the Colony of Aden, only one doubtful case of infection being known within its boundaries in recent years.

The extent to which it is endemic in the Protectorate is not known at present, no survey having been made; but that it does exist is shown by the fact that a small proportion of cases in the Sheikh Othman Leper Hospital are admitted from that area.

The Leprosy Hospital. On August 5th, 1938, I visited this hospital in company with Dr. Buchanan, the Senior Medical Officer, and Dr. Napier, of the Keith Falconer Mission of the The hospital is superintended by the Church of Scotland. Mission Doctor and Nurses under a Board consisting of the Senior Medical Officer, the Mission Doctor, the Superintendent of Sheikh Othman, and a leading local Arab. The patients are housed in two buildings, a larger one with upper and lower storeys for the male patients, and a detached ward for female patients. The hospital expenditure for the last year was Rs. 5591/-, apart from the attendance of the doctor and nurses, which is given free. Of this sum Rs. 3000/- was given by the Government for upkeep, and Rs. 300/- for repairs; Rs. 1200/- by the Settlement; and the remainder by the Mission. This works out at a little less than £15 per patient, a liberal allowance as compared with Missionconducted leper hospitals in India and Africa. There is no water for cultivation. The patients are supposed to work for about 2 hours a day, chiefly at digging sand, but it is difficult to supply them otherwise with adequate exercise. I examined the patients and classified them into 5 types : open nodular  $(L_2 \text{ and } L_3)$ , slightly open  $(L_1)$ , those with tuberculoid lesions, those with flat or residual lesions, those without sign of active disease; I subclassified each group into deformed and undeformed cases :

Ŭ .		Types	Men	Women	Totals	
$L_2 - L_3$		Ď	0	0	0	
		U	II	2	13	13
L <sub>1</sub>	••••	D	2	0	2	
		U	2	I	3	5
Tuberculoid		D	0	0	0	
		U	I	0	I	I
Flat and residual lesi	D	5	0	5		
		U	2	0	2	7
No active signs	•••	D	2	0	2	
		U	I	0	I	3
			_			
			26	3		<b>2</b> 9

LEPROSY REVIEW

Compared with leprosy as found in other institutions, the proportion of open nodular or lepromatous cases is remarkably high, and the proportion of deformed and disabled cases low. There was only one case with tuberculoid lesions and these were tending to become residual.

The great majority of these patients come from Yemen, over 100 miles distant, a distance which it would be difficult for disabled cases to travel. Dr. Napier says lepers generally come because they are feeling unwell, or because they have anaesthesia of the limbs, and, as a result, tend to get blisters and injuries to the hands and feet. Few of them seem to know they have leprosy, or to be aware of what leprosy means; when questioned as to whether they have come in contact with other lepers, or whether there are other lepers in or near their homes, they do not know. It would therefore appear as if the people are not yet leprosyconscious, that is to say they are not familiar with leprosy as a disease occurring in its various forms. If the home contacts of these patients were examined it is likely that the usual proportion of less severe cases, with tuberculoid and other mild lesions, would be found.

A recent rough survey made by Dr. Storm (Leprosy Review, Vol. VIII, No. 1, Jan. 1937) in different parts of Arabia, showed that the principal foci were in Yemen and Hadramaut, especially the former. A still more recent and particular survey by Dr. Petrie in Yemen shows numerous foci in that country.

Continuation of the Leprosy Hospital. An important matter for consideration is whether, in view of the danger of spread of infection by patients coming to Aden from regions outside the Protectorate, the beneficial work of the leper hospital out-weighs this danger to the people of the Protectorate and Colony.

The considerations against continuing the Hospital are as follows :

(I) Of the 29 patients in the hospital, about half may be regarded as potential spreaders of infection. The most of them travel about once a year to and from their homes, spending at least 12 nights on the journey, and probably sleeping on hired beds which will be afterwards used by non-lepers. By a rough calculation one might expect that some 200 to 300 beds in common use are in danger of being infected every year in this way.

On the other hand, the chief danger of the spread of this infection is to young children. Statistics show that there are only 5 to 8 per cent. of conjugal infections, whereas there are 40 to 50 per cent. of child infections by leprous parents. It is unlikely that infectious lepers travelling between their homes and the hospital would come into direct or indirect contact with children. On the whole, therefore, the danger of their spreading leprosy, and especially the severe form of the disease most commonly arising from transmission to young children, is probably not very great.

However, this danger, such as it is, should be kept in mind; and all information as to present foci, and especially new foci, in the Protectorate should be carefully collected and considered. I would suggest the use of a spot map on which all the present and past cases in the leper hospital are plotted out, along with any relationship between cases. Important foci found in this way might be worthy of a special visit for the examination of contacts and the special local conditions.

(2) Against continuation there is also the comparatively unsatistactory progress made by the patients towards recovery. This is probably largely due to the difficulty in providing sufficient healthy outdoor exercise, and the fact that the patients go home again after a few months in hospital. If and when they return to the hospital they are generally found to be in a bad state of general health due to complicating diseases and malnutrition. In tact, the hospital has the great disadvantage of being far removed from the chief foci of intection.

In favour of continuing the hospital are the following considerations :---

(1) The need of supplying treatment for cases in the Protectorate. For this purpose it is impossible to suggest a more suitable place than the present hospital.

(2) The fact that in any case a certain number of lepers will come to Aden for treatment because they know they are ill, and they will come whether they know that this illness is due to leprosy or not. Also most lepers are at the same time suffering from other complicating diseases such as malaria, schistosomiasis, etc. They will continue to come for the treatment of these diseases, and they cannot be admitted to general hospitals; a leprosy hospital is necessary for their treatment.

(3) The care of the patients in the leprosy hospital, as also in the general hospitals of the Aden Colony, is having a most valuable general effect in educating and civilising the populations scattered over the distant areas of Southern Arabia, which are otherwise cut off from modern culture and civilisation.

On the whole I consider that the possible dangers in continuing the hospital are distinctly outweighed by the advantages.

An effort should be made to make the treatment more

effective. The time of the patients should be, as far as possible, organised so that they get more exercise also they should be given careful and repeated instruction in the nature of leprosy as regards both the requirements for recovery and the mode of the spread of infection. Arrangements might be made to carry out gradually a survey of the incidence of the disease as suggested above. Possibly later a more active campaign against leprosy may become possible in Yemen, which appears to be the chief focus of the disease in Southern Arabia.

I consider that the Government are very fortunate in being able to entrust this difficult and often disappointing work to the Keith Falconer Mission, and that the duty of caring for these unfortunate people could not be entrusted to more willing and devoted hands.

Acknowledgments. I wish to thank the Senior Medical Officer for his kindness and for the facilities he has given me in making this brief study of leprosy as found in this area.

