

LEPROSY CONTROL IN THE SUDAN

To the EDITOR:

Two articles concerning the leprosy control work in the Sudan have appeared in *THE JOURNAL* [2 (1934) 193 and 3 (1935) 73]. Notes on the progress of this work are here given in the form of questions and answers. First, however, it is desirable to summarize its scope.

Efforts are now being made to deal with the disease in all parts of the Sudan, but the only areas where it is a serious public health problem are the southern districts of the Bahr el Ghazal and Mongalla Provinces. In the latter province all of the cases in the sleep-

ing sickness areas (1,039) were brought into settlements nine years ago. The population was under frequent medical inspection on account of sleeping sickness, so there was little difficulty in collecting all of them. Since then about 150 have been admitted or readmitted and nearly 500 have been discharged. In the Bahr el Ghazal as many of the cases as possible were brought into the Gambio and Tembura settlements in 1927. An average of 400 patients were in the latter settlement during 1934.

1. *What have been the results so far in the reduction of the number of active infections?*

In those areas of Mongalla Province east of the 30th parallel results have been satisfactory. Succeeding years since the lepers were brought to the settlements have shown a progressive decrease in the admission rate and it would seem, as all infectious lepers are in settlements, and in view of the proved effectiveness of the measures taken to date, that favorable prospects may be entertained for the future.

In the areas of the Southern Bahr el Ghazal and Mongalla Province west of the 30th parallel neither results nor prospects appear to be so favorable. These areas have not been administered medically over such a long period as those to the east, and the initial infection was heavier. It follows, therefore, that the process of elimination would in any case be much more prolonged. In these areas the disease appears to exist under optimum conditions, in which dietary deficiency is probably the greatest factor. Owing to the tsetse fly, there are no cattle, and the inhabitants are meat- and milk-starved. An experiment is now being carried out in introducing a large number of goats, and also some cattle that are relatively immune to the fly, in the hope that this deficiency will be made good.

Many fresh cases are still diagnosed in the outside districts and, while future prospects cannot be worse, it is yet too early to assess the probable improvement.

2. *What results have been obtained in the treatment of early cases?*

From the Yei camp it is reported that since its inception there have been 36.8 percent "apparent cures" in nervous cases. Kajo Kaji and Opari report that treatment of nervous cases has been very promising, 46.7 percent apparent cures being reported. In Li Rangu and Meridi, treatment of early cases has been very promising, especially in children and young people up to the age of 25 years. It

has been observed that there is much more hope of actual recovery at this age than in elderly people.

3. *What are the results of treatment of more advanced, infectious cases?*

Yei reports that results have not been encouraging. Kajo Kaji and Opari report that nodular and advanced cases show little response; very few have shown marked improvement, and none has been discharged as recovered or noninfectious. Reports from Meridi, Li Rangu, and Tembura are hardly more encouraging. In regard to Tembura it is to be noted that, of an average total during 1934 of 400 unsegregated lepers, 8 had to be admitted to the segregation camp owing to increase in symptoms.

4. *Have many discharged cases relapsed, and do relapsed cases respond to further treatment?*

Since the work was begun a total of 3,406 cases have been discharged as recovered, and 99 (2.9 percent) have been readmitted as relapsed. The percentages relapsed vary from 1.2 at Yei to 3.4 at Li Rangu and Meridi.

With regard to the amenability of relapsed cases to further treatment, it is considered too early to form an opinion, as it has been observed that relapsed cases reach a stage of noninfectiousness for a period of from 8 to 12 months, when all active symptoms disappear, and then there is a sudden relapse with fresh macules developing.

5. *What has been the result of the examination of family and other contacts of known lepers for early cases?*

Routine examination of contacts at the Yei camp during eight years has revealed only one case, a boy 15 years of age. At Kajo Kaji and Opari, where in the six years since the camp was established 634 cases have been dealt with, 4 children infected by their mothers have been recorded. In the settlements at Li Rangu and Tembura, in which areas it was estimated in 1934 that from 2 to 4 percent of the population was infected, somewhat over 4 percent of the relatives of lepers were found leprous (also 2.8 percent of relatives of sleeping-sickness cases) and about 1.5 percent (actually 1.9 and 1.2 percent, respectively), of the medical staff.

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