

Ridding Palestine of Leprosy.

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THE population of Palestine according to the last census (1931) is 1,035,145, making a density of 54 inhabitants to every square kilometre. Some parts of the country are less densely populated than others. The districts situated to the south of Hebron and Gaza are less inhabited than most parts of the mountainous ridge and the Mediterranean plain lying to the north of Gaza.

Leprosy has been endemic in Palestine since its occupation by the Israelites. The Bible not only mentions this disease, but gives a detailed description of it. This scourge was more prevalent in olden times than it is at present. Even in the last fifty years there has been a marked decrease as may be seen from the statistics of the Leprosy Home in Jerusalem. This Home is directed and supported by the Moravian congregations and has its Board of Directors in London (32 Fetter Lane). It was founded in the year 1867; and has since continued to work without any interruption; the present building dating from 1887.

It is difficult to give the exact number of sufferers from leprosy in Palestine, for only the advanced cases come to the Home. An exact survey of the country to find all those infected is a very difficult task. The approximate number is eighty. Trans-Jordan and Syria have about another hundred cases. Only a few are at present housed in the leprosy Home (21, to be exact). There are nine in the concentration centre in Siloah, and many live undisturbed in their villages. Due to the above mentioned fact that there is only a small number of cases in Palestine, and wide experience showing that leprosy is not very contagious, the important question arises: Is it possible to rid Palestine of leprosy?

It is instructive, before answering this question, to study two points which have a direct bearing on the subject, namely, the mode of infection and the attitude of the population towards patients afflicted with this scourge.

The liability to infection with the Hansen bacilli is, according to general experience, very slight. It takes place from the disseminated germs originating from the discharges of the nose, mouth, throat, and lungs and from suppurating leprosy nodules. The leprosy Home in Jerusalem, like every other such institution, is to be regarded, from this point of view, as a highly infective centre. But facts gathered in our Home speak decidedly against any great

virulence of the bacilli. Three of our nurses who worked continually for 33, 28 and 27 years respectively in the Leprosarium, mixing daily and intimately with the patients while visiting them, dressing their wounds, giving them injections, washing their clothes and sitting with them in meetings, were not infected. A still more conclusive proof is the fact that four patients not suffering from the disease were admitted to the Leprosarium by my predecessor. This was done out of pity for their deplorable condition. These mixed quite intimately with the patients for a period of 48, 27, 17 and 14 years respectively. They lived in the same room, played, ate and worked together. Often they used the spoons, dishes, water-pitchers, etc. belonging to the patients, and during sickness they were nursed by them. But none showed any sign of infection.

These observations illustrate the very important fact, that infection with Hansen's bacilli is not so easy and simple as with other pathogenic germs. The leprosy micro-organisms are attenuated in their virulence. Children are more prone to succumb to infection, especially if they are exposed to the germs for a long period. The greater number of our patients were probably infected in childhood or in their youth.

The natives of Palestine dread this disease. Although with the former popular rules regulating the life of the sufferers are not as strict as they used to be, a leprous person is always avoided. As a rule, in the villages, he has to live in a separate room, lying at some distance from the other houses.

These data, namely, the restricted number of sufferers, the slight danger of infection, and the attitude of the population towards them make it a comparatively easy task to rid Palestine of leprosy. This conclusion is further supported by the fact that leprosy is endemic only in a few centres and in some families. The statistics of the last twenty-five years show that our Home has housed patients from 101 different villages of Palestine. Fifteen villages are more infected than the others. From each of them we had four patients or more. Esawizeh, Bet Unia and Abu Dis show the highest index of infection, with 9, 9 and 8 patients respectively, and forty per cent of these fifteen villages lie in the Jerusalem district. Of the remaining 86 villages, nine had sent three cases, 25 two, and the rest one case each.

Another important fact is that 26 per cent of all the patients accepted in the Home since December, 1896, had one

or more relatives suffering from leprosy. The percentage would certainly be higher if every member of such a family had been examined by an experienced physician. This has been hitherto impossible.

The best way to eradicate leprosy from a small country like Palestine, with such a small number of patients, is to follow the system of compulsory segregation. In countries like India and the Philippines, where the cases number thousands, the colony system with out-patient clinics is not only more human, but more practical and more effective. The expenses connected with changing the present Leprosy Home of the Moravian Mission to the colony system are not justified by the small number of cases. Even if the colony system were followed in Palestine the expected results would not be attained, due to the present official regulations. The fundamental requirements which will ultimately enable us to free Palestine from leprosy are, in my opinion :—

1. Complete and forced segregation of all infectious patients.

2. Only negative and thus non-infective cases should be allowed to leave the hospital.

3. No case should be regarded as “ clinically ” cured before he has been two and a half to three years “ negative ” in symptoms and in bacilli.

4. A non-infective and “ paroled ” case should report every three months to a Public Health Department officer, or to our Home, for a thorough physical and microscopic examination.

5. All relatives and direct neighbours of every case should be examined once every six months for a period not less than two years, to discover all hidden, latent, and early cases. Clinical examination alone is not sufficient, it must be supported in every case by laboratory work.

6. Young children and babies of leprosy patients should be removed from the infectious area.

7. A thorough disinfection of every house known to harbour a sufferer should be undertaken.

Doubtless many difficulties will confront every worker who is trying to carry out the above mentioned requirements. But the present writer believes that good-will combined with some energy will overcome all these difficulties. The following points of criticism are raised against such a method :

1. Complete and forced segregation is said to be inhuman and unpractical. It is true that it is not the ideal method, but as there is no other method which will suit the present

conditions of Palestine, this seemingly inhuman way is in reality more humane than allowing sufferers to live in the same unhygienic, small and dark rooms, with the other members of their family, thus exposing the children to infection with this terrible disease. It is at the same time more humane than the custom, followed by many inhabitants of Palestine, of throwing the afflicted out of their houses and villages, and forcing them to live quite alone, or driving them to cities where they sit in the streets, begging from passers-by. Forced segregation is only then inadvisable if the Leprosy Home in Jerusalem were to refuse to accept them all. But the Board of Directors of the Institution has offered to house as many as 80—100 patients.

2. Competent physicians of the Public Health Department have a double duty: first to re-examine "paroled" cases, who have to call from time to time on them, and to decide if the disease has reappeared or not; secondly, to examine the members of every family with a history of leprosy in order to detect any latent, early or hidden case. The experience of every leprologist demands a very thorough physical examination, combined with microscopic examination of several slides with material taken from the scrapings of nodules, ulcers or scars from the nose, mouth, throat and skin. Only a conscientious and skilled person is able to take the right material from the right spot. Our experience has shown that if a skilled person is entrusted with taking the material for the microscopic examination from "negative" cases he will find bacilli in 27% more than a non-trained physician.

As soon as a "negative" and "paroled" case becomes "positive" he should be returned to the leprosarium, for he is no longer "non-infectious."

3. The disinfection of houses costs a certain amount, not only to cover the actual cost of the disinfecting material, but also to compensate poor people for the loss they suffer in burning some of their household goods. Such expenses are, and will remain, very small in Palestine.

The prevailing conditions help in no way to rid Palestine of leprosy, for they do not fulfil any of our requirements. The Leprosy Home is a private missionary institution. It does not possess any power to hold its patients or to force the "paroled" cases to report for re-examination. The Home is thus labouring under constant difficulties. The patients can leave the institution at any time. Among the inmates are notorious agitators who continually break the fundamental regulations of the Home, and have to be



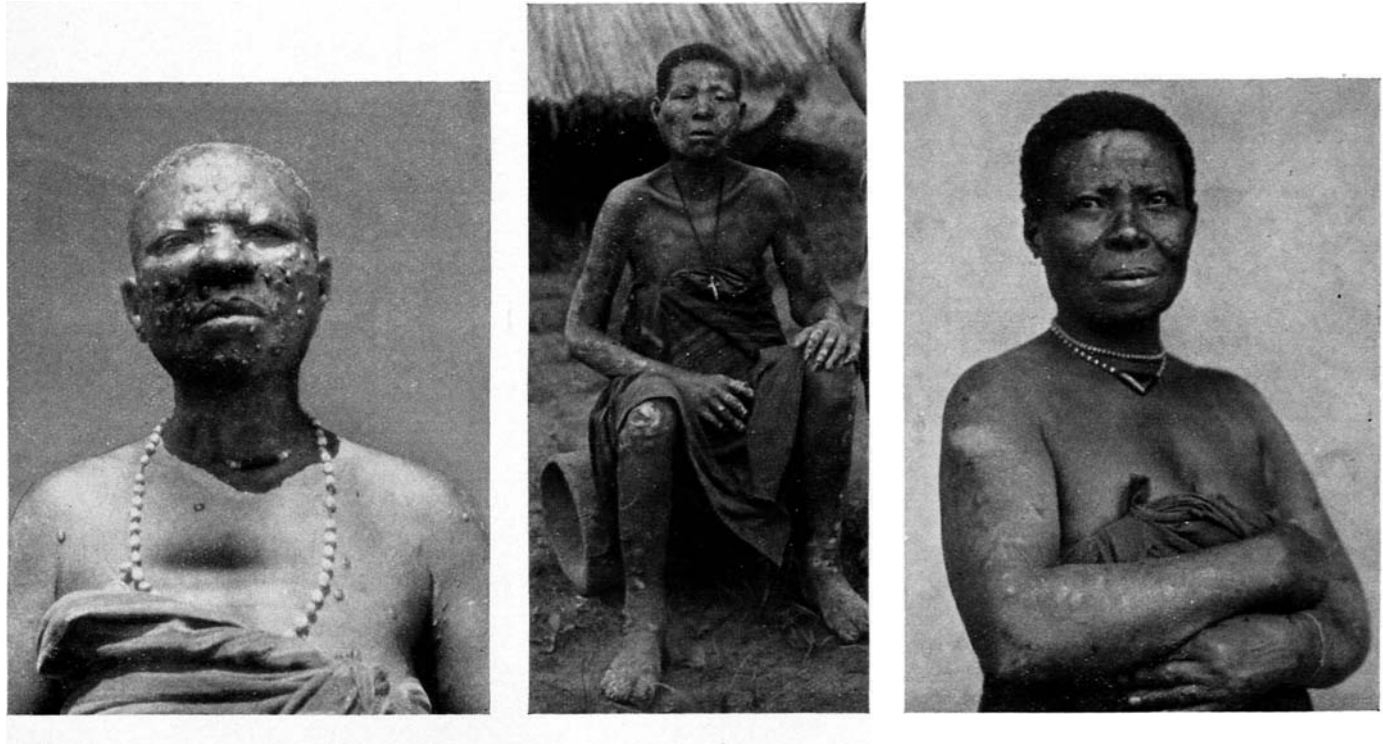
THE LEPROSY HOME AT JERUSALEM. UNDER THE AUSPICES OF THE MORAVIAN MISSIONS.



GROUP OF PATIENTS AND NURSES.

(Blocks kindly lent by Moravian Missions)

SOME NON-SPECIFIC SEROLOGICAL TESTS IN LEPROSY



TYPES OF CASES UNDER TREATMENT AT SONGEA, TANGANYIKA TERRITORY.

dismissed. The matron and the physician can in such cases only report such conduct to the Public Health authorities. Our constant advice to paroled cases to report at regular intervals is seldom followed, for once set free they will not come back unless relapses have completely weakened their health and disfigured their appearance. No Public Health ordinance forces the segregation of the patients and the reporting of released cases.

Marriage is another problem which needs more consideration. On principle it is inhuman to deprive inmates of such a natural right. But in the light of scientific experience one is forced to advocate one of the following two methods : (*a*) Prevention of marriage, or (*b*) the removal of newly born babies from their leprous parents. The last way is doubtless the better one, and the Leprosy Home has been and is always ready to take over such babies, bring them up, and arrange for their education. But no fathers or mothers in Palestine ever give away their children, and there is no official ordinance regulating this question. Lately a pregnant leprous woman was admitted. She gave birth while in our institution to a healthy boy. During all the period she was with us the child was removed from his mother. She nursed him under the strictest hygienic conditions and under the supervision of a sister. Five months later the father—who was free from leprosy—insisted upon taking his wife and son away. All our requests to keep the boy were frustrated by the stupidity of the father. Poverty of the parents, unhygienic conditions in their home, and their stupidity, have surely sealed the pitiful fate of the child.

It is a blessing that most marriages amongst sufferers remain childless or nearly so. Nevertheless, it is the duty of every physician to advise against such a step. In a small country, like Palestine, which has only few cases, such a decision is more justified than elsewhere. The Grand Mufti of Palestine has in his far-sightedness understood the situation, and has promised to issue an order preventing marriages of sufferers from leprosy among his people.

The more present conditions of Palestine are studied the more it becomes clear that the situation can be mastered. The comparatively small number of cases is no excuse for not beginning the work. A private institution like our Home, which has no legislative and executive powers whatsoever, cannot do the work alone. The help and support of the official authorities is absolutely necessary.