

Leprosy in Ceylon

Being a summary of the Report of a visit of investigation submitted to the Ceylon Government in December, 1935.

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It was gratifying to return to Ceylon and witness the amount of progress which has been made since my last visit. The position in Ceylon up to the issue of my report was summarised in "Leprosy Review", Vol. V, No. 2, p. 64. It is impossible in an article of this nature exhaustively to review the work done in Ceylon during my last visit. The main object of the present visit was to examine the situation with a view to determining whether the recommendations then made were justified, and to suggest lines along which an anti-leprosy campaign could be organised.

It will be remembered that emphasis has been laid on the fact that a number of cases never progress to the more advanced stages of the disease, and that where there was little indication of activity of the disease such cases do not need to be treated, but should be kept under observation. There was evidence that this action was justified, for many of the cases examined three years before were found to have remained stationary. In a country such as Ceylon it is possible to observe such cases, and important facts concerning the progress of neural cases in adults should be elicited during the next few years.

The analysis of groups according to age, sex and type will, it is hoped, be published later. Suffice it to say that the proportion of children with early lesions was far greater under than over thirteen, and they have therefore been divided into two groups: those under thirteen and those between thirteen and eighteen. Those above eighteen have been counted as adults.

This article will summarise briefly the anti-leprosy system which has been suggested for Ceylon, as it may help authorities in countries with a limited problem and a comparatively small population to deal more effectively with leprosy.

The principles enunciated were as follows. The most efficient system possible should be organised in the areas already surveyed before a further survey is undertaken. Unless a survey is adequately followed up with effective action, it merely results in an accumulation of figures. In so far as

leprosy is one of the endemic diseases of the island, unless a system is organised under the control of the health and medical officers of the districts, the prevention of leprosy is liable to be relegated to a special department and the whole-hearted co-operation of these authorities is not so likely to be forthcoming. Certain specialised officers should be appointed, but their duties should be of an advisory nature.

The following appointments, some of which already existed, were suggested :—

1. SUPERINTENDENT OF LEPROSY CAMPAIGN AND
SENIOR SURVEY OFFICER.

The duties of this officer would be as follows :—

(a) He would be in charge of the Central Leprosy Office and be responsible to the Director of Medical and Sanitary Services for keeping information up-to-date concerning the number and progress of cases throughout the island. All forms, quarterly and annual, would be sent through the Provincial Surgeon to the Superintendent of Leprosy Campaign, who would furnish the necessary figures for the annual report.

(b) With the assistance of the survey officer he would complete the survey of the island and organise an adequate system of control in areas when surveyed.

(c) He would supervise the work at the Colombo clinic and act with the assistance of the survey officers as an adviser on problems of leprosy, clinical and preventive, when they arise.

(d) He would be responsible for the organisation of adequate training of those organising anti-leprosy measures in areas where leprosy is an important endemic disease. This would involve courses of lectures for :—

(1) *Medical and Health Officers.*

This course would stress early diagnosis and prevention with instruction regarding types of cases suitable for intensive treatment, and lines of treatment. Methods of propaganda would also be dealt with.

(2) *Sanitary Inspectors.*

This course would cover the preventive aspects of leprosy, with special emphasis on follow-up and observation of cases and contacts. They would be taught the importance of instructing those who have leprosy, or associate with lepers, to keep healthy and organise their lives, as far as possible along hygienic lines.

(3) *Lectures to Medical Students.*

This course would be a general series of lectures and demonstrations, so that those graduating from the Medical School may be familiar with modern views concerning leprosy in its various aspects.

(e) He would be responsible for the organisation of propaganda and see that an adequate number of leaflets, etc. are available for the health officers in centres where leprosy is an important problem.

(f) He would act as consultant, with the assistance of the survey officer, in cases where it is doubtful whether a patient should receive treatment, be placed under observation, or be segregated, and in questions of diagnosis when difficulty arises.

2. ASSISTANT SUPERINTENDENT OF LEPROSY CAMPAIGN AND SURVEY OFFICER.

The duties of this officer would be as follows :—

(a) He would assist the Superintendent of Leprosy Campaign in all or any of his duties.

(b) He would devote his time more particularly to survey and the collecting and collating of figures rather than to conducting of treatment. He would see that adequate records are kept in each Province and District and see that the Medical Officers of Health, Sanitary Inspectors, are fully familiar with the routine procedure.

(c) He would act for the Superintendent of Leprosy Campaign when on leave or otherwise off duty.

3. MEDICAL OFFICER OF THE LEPROSY CLINIC (COLOMBO).

(a) This officer should preferably be the Senior Assistant Medical Officer at Hendala, as he is constantly in touch with active treatment. He should therefore be responsible, under the Superintendent of the Leprosy Campaign, for the active treatment of patients at the Colombo clinic. As his duties at Hendala would occupy his whole time, he should not be given other duties except in emergency.

Leprosy Apothecaries.

It was mentioned in the report that there are areas either where leprosy is so prevalent or where the disease is so scattered that the M.O.H. cannot give the personal attention necessary to the problem. In such areas it was suggested that leprosy apothecaries should be appointed who would assist the M.O.H. in the follow-up of cases.

With a Senior Survey Officer, Survey Officer, Medical Officer of the Leprosy Clinic and special leprosy apothecaries, it should be possible to organise an anti-leprosy campaign and maintain accurate records. These records would, after a period of years, give valuable epidemiological data. The object of any system is not only to record all cases of leprosy but to ascertain at least once a year the exact amount of leprosy and the progress or otherwise of each case.

The procedure suggested would be as follows :—

The survey having been completed, a survey card would be filled up for each case, on which would be recorded a district (D), Provincial (P) and Central (C) number.

The District number is the number which is allocated by the M.O.H. of the district who is in charge of the Leprosy Campaign and appears on the register of the sanitary inspectors whose duties are detailed elsewhere. The M.O.H. files a copy of the card in his office and sends another copy to the central office through the Provincial Surgeon. The Provincial Surgeon then allocates a Provincial Number to each case and notifies the number to the M.O.H. Thus each District Number has a corresponding Provincial Number. The chief details, namely Provincial Number, District Number, Name, Address, age, sex and type of disease, are then noted in a book kept for the purpose by the Provincial Surgeon, who forwards the Survey Card to the Central Office. The card has now the District and Provincial Number recorded. The Superintendent of Leprosy Campaign then allocates a Central Number and informs the Provincial Surgeon what this number is and this is recorded in his book. The District Number then is used by the Medical Officer of Health, the Provincial Number by the Provincial Surgeon and the Central Number by the Superintendent of Leprosy Campaign, who files his survey cards according to Provinces. The Central Office uses the Central Number because in that office will ultimately be recorded all the cases in Ceylon.

In each district the Leprosy Campaign would be headed up by the Medical Officer of Health, and he would be assisted by the District Medical Officer, Sanitary Inspectors and Leprosy Apothecaries. The duties of these officers are detailed later.

The Medical Officer of Health would examine every case of leprosy in the district once a year.

He would transmit a quarterly return giving brief details of the cases of leprosy in his district, and each year more detailed records would be compiled. In order to do this the Medical Officer of Health should examine every case of leprosy in his district once a year including any new cases or fresh lesions in cases under observation. The Medical Officer of Health would keep a register of each visit made to inspect the Sanitary Inspector's work.

The annual report would be sufficiently detailed to enable the General Office to record not only the number of cases in each district, but also the progress made, as for instance the number of early cases among children and among adults, which clear up or remain stationary. The cases which pass into the more advanced stages and the probable reason would also be recorded. It would be of value if sociological and other conditions were noted in the endemic centres, so that information might gradually be acquired which would perhaps enable the authorities to determine later the reason why certain areas remain as foci of the disease.

In this way valuable epidemiological facts would be elicited which would probably result in a better knowledge of the type of leprosy and conditions in which leprosy is likely to become a public health problem. It cannot be too strongly emphasised that the problem is too vast to be coped with in all its aspects, even in a small country such as Ceylon.

Therefore if a solution is to be found there must be an attempt to reduce the problem to such proportions that it can be dealt with, within the scope of the resources of the medical staff. Specialised investigation must be continued, but the general campaign should be part of a general health campaign throughout the country.

In certain areas where the Medical Officer of Health finds it impossible to give detailed supervision to the Leprosy Campaign, assistance should be provided by the appointment of Special Leprosy Apothecaries.

Lines along which a Provincial Leprosy Campaign might be developed were suggested in my full Report, and it was stated that before any system is perfected further instruction in prevention and methods of propaganda should be given by the Survey Officers as they undertake the work of setting up a system of control in each area where leprosy is prevalent. It was found when it was explained to the Medical Officers of Health that leprosy should be looked upon as an ordinary health problem, and that all measures of prevention and propaganda should be developed *pari passu* with those of other diseases, that these officers became keen to do what they could.

In a Provincial Campaign the following officers would be responsible for its organisation, and their duties would be as follows :—

1. *Provincial Surgeon.*

It is to this officer as head of the Provincial Medical Service that all reports would be sent. He would then transmit them to the Central Office and, if required, to the Director of Medical & Sanitary Services. His office would keep a record of all cases in the Province and allocate a serial Provincial Number to each case. He would note particulars of each case regarding name, address, classification number, and whether under treatment or observation, and then transmit the survey cards to the Central Office.

2. *Medical Officer of Health.*

In each district the Medical Officer of Health should supervise the leprosy campaign and his duties would be as follows :—

(a) He would keep a register of visits to endemic areas for the purpose of examining sanitary inspector's books; these visits should be made at least every quarter.

(b) He would file copies of all survey cards of cases in the district, forwarding the originals to the Superintendent of Leprosy Campaign through the Provincial Surgeon. He would allocate a District Number to each case and enter the Provincial Serial Number on receipt of information from the Provincial Surgeon.

(c) He would examine every new or suspected case of leprosy, completing survey card if the diagnosis is confirmed, and decide whether the case is one for observation only or for treatment or segregation. He would examine every case in which the disease has

become worse, or in which new lesions have appeared, and revise, if necessary, any previous decision. If in doubt he would consult the Superintendent of Leprosy Campaign.

(d) In large districts or those with a comparatively high incidence of leprosy a leprosy apothecary might be appointed to work under the supervision of the M.O.H. .

(e) He would arrange for the distribution of propaganda pamphlets prepared by the Superintendent of the Leprosy Campaign. He would pay particular attention to headmen, school teachers and other responsible individuals, giving if possible special instructions on leprosy, its dangers to children and the method of transmission.

3. *District Medical Officers.*

His particular duty would be the treatment of cases referred to him by the Medical Officer of Health.

He would keep a register and records of all cases suitable for treatment, and request the sanitary inspectors to visit those who are irregular in their attendance at the clinic.

In so far as the treatment of leprosy needs special care medical officers in whose districts leprosy is prevalent would acquaint themselves with the modern methods of treatment by periodic visits, if possible, to the Colombo clinic, or by attendance at lectures and demonstrations given by the Survey Officers when in the district.

The Medical Officer should pay particular attention to the investigation of the general condition of the patients attending for treatment, taking special note of any signs of dietary deficiency and the presence of chronic disease, such as malaria, dysentery, helminthic infection, etc.

4. *Leprosy Apothecaries.*

These are special appointments which would be made in districts where there is sufficient leprosy to justify such appointments. Their duties would be :—

(a) To organise anti-leprosy measures in the area to which they are appointed under the supervision of the M.O.H. and in co-operation with the sanitary inspectors.

(b) To endeavour continually to trace new cases, persuade infective cases to be isolated and active cases to be treated.

(c) To visit homes of cases and their contacts and carry on educative work among villages emphasising the nature of the disease and how to prevent it.

(d) To give attention to children especially emphasising the need of adequate diet, sufficient sleep, exercise and fresh air, and drawing attention to the special susceptibility of children to the disease.

(e) To treat cases at the clinics established in the district under supervision of the District Medical Officer, and keep records of all cases.

(f) To chart new cases and re-chart if fresh lesions appear; this to be done under the general supervision of the Medical Officer of Health.

5. *Sanitary Inspectors.*

The Sanitary Inspectors can play an increasingly valuable part in the leprosy campaign. Their duties as summarised are to :—

(a) Keep a register of cases in their areas.

(b) Visit cases quarterly and note whether their condition is worse, stationary or improved.

- (c) Visit contacts twice a year and report if new cases arise.
- (d) Report fresh cases in their areas.
- (e) Report any illness in cases or contacts.
- (f) Report pregnancy in cases or contacts.
- (g) Report change of address in cases or contacts.
- (h) Make full notes of visits in a book provided for the purpose.
- (i) Persuade cases needing treatment to go to the treatment centre.
- (j) Continually endeavour to emphasise the necessity of adequate food, fresh air and exercise, and the danger to children of contact with infectious cases.

(k) Help and assist the Medical Officer of Health and Leprosy Apothecaries in the pursuance of their duties.

(l) Although the Medical Officer of Health would ordinarily undertake bacteriological examinations, apothecaries, where they are appointed, might be permitted to make such examinations at the hospital or clinics under the supervision of the District Medical Officer.

It is hoped that such a scheme as is herein indicated will result in a substantial advance being made towards the control of leprosy in the island of Ceylon.