174 Leprosy Review

### REPORTS

## Rajah Sir Charles Brooke Memorial Settlement, Kuching, Sarawak, Annual Report for 1957.

This leprosarium has a visiting medical officer, Dr. T. M. Kraszewski; a superintendent, Mr. H. MacGregor, four hospital assistants, a dispensary attendant and a laboratory attendant; five patients assist in the work. A laboratory technician was loaned from the Pathological Laboratory, Kuching. There were 393 patients at the end of the year. The Chinese group is still the largest single group, with the Dayak second. There were 62 patients discharged throughout the year. The main treatment is by mouth twice weekly and a few receive injections of DDS in oil or aqueous sulphetrone. There were 32 patients who required treatment of the complication of tuberculosis. The leprosarium has received the benefit of an electrical supply.

# The Annual Report of the Mission to Lepers, Hong Kong Auxiliary, for 1957 is a booklet of 33 pages with 6 illustrations.

The large number of the distinguished members of the committees and staff of this organization indicates solid interest and support from the community as a whole. The leprosarium at Hay Ling Chau has been a centre of training of medical students and doctors, health workers, and nurses, and many other interested people visit the centre. It has played its part on television and radio propaganda. There were 498 inpatients at the beginning of 1957 and 133 were admitted during the year. The number discharged with negative certificates was 91 and deaths were 6. Of the lepromatous patients, over 50% have shown marked improvement. Dr. Fraser thinks that the right dose of DDS is the smallest that leads to progressive improvement, and he notes rapid response of Borderline patients. Patients who are sensitive to DDS have been treated with thiacetazone and attempt at desensitization is carried out by administration by mouth of a 1% solution of sulphetrone in very slight increase of doses. There has been an X-Ray survey of the bones of the hands and feet of all patients. There has been active surgery, physiotherapy and rehabilitation. Training of dressers and nurses goes on.

# Report of the Leprosy Investigation and Treatment Centre, Zaheerabad, Medak District, Andhra Pradesh, for the year 1957-58.

Dr. Jaipal J. Christian (Hon. Supt. Resident) sends the report. He is assisted by the following staff:—Dr. Vijjender J. Christian (Hon. Leprosy Organizing Officer, Resident); Dr. E. B. Christian (Hon. Principal Leprologist, Visiting); Dr. A. Sham Rao (Hon. Leprologist, Visiting); Dr. N. M. Jaisoorya (Hon. Director of Research, Visiting).

REPORTS 175

Believing that mass treatment would be the most effective way of controlling such a widespread disease as leprosy, the Centre at Zaheerabad was started on the principles of voluntary segregation, modest expenditure and, at least, partial self-support. Thus, twenty-one years ago, without support from the usual channels and dissatisfied with the accepted methods of dealing with leprosy, we launched this rural clinic in an attempt to bring aid to leprosy patients in their own environment. We are proud to report that the work has prospered and that we have remained self-supporting and in the year under review, have worked on a budget of over 30,000 rupees (£2,750).

#### The Work of the Clinic

During the year, 248 inpatients were treated in this Centre and of these, 109 were discharged for observation or to attend as outpatients. There were 60 supported patients, 30 self-supported and 50 private patients. There was a high proportion of the infectious type and 5% of cases were children, who are admitted even if non-lepromatous. Admissions were also given for ulcers and reactions. We adopted the practice of short term stay of six to nine months even for lepromatous cases and obtained thereby a more rapid turnover of the patients, and the avoidance of too long a separation of the patient from his home and family. In this way, we were able to double the capacity of our Centre. We did not lose sight of such discharged patients as they attended our other control clinics or the nearest Government Outpatient Department for leprosy. Paying patients were retained until the stage of definite clinical improvement (the charge for such patients being 27 rupees—39s. 6d.—per month).

The outpatient section of our Centre dealt with 425 outpatients of whom 275 were discharged. This applies to outpatients who pay 12 rupees (18s. 0d.) per month for their treatment.

## Subcentre at Zaheerabad for Propaganda, Survey, and Outpatient Treatment.

This subcentre deals with all patients who cannot afford to pay for their treatment but who pay a nominal sum of 12 Np (2d.) a week. All living more than 5 miles (8 kilom.) from the centre are strictly excluded. Our leprosy survey of the population of the twenty villages within the 5 miles radius produced the following results:—

Total population	****	28,480
Population examined		26,202
Leprosy cases detected		589
Lepromatous cases		196
Non-lepromatous cases		402
Total cases treated		368

176 Leprosy Review

During the year, 166 patients were treated at the subcentre and 50 were discharged.

A second subcentre was established this year at Chiragpalli, which is 9 miles (14.5 kilom.) from our main Centre, and occupies 10½ acres (4 sq. kilom.) and contains one thatched hut as a treatment building and three more huts for the workers. Each subcentre has three menials and one caretaker who also acts as a propaganda agent. The Chiragpalli Subcentre was inaugurated on 17th November, 1957, by the Collector of Medak District, Sri K. B. Lal. In the 5 mile (8 kilom.) radius of this subcentre, there are 15 villages and a total population of 13,832. The leprosy survey of 13,602 people revealed 221 cases of leprosy, of whom 62 were lepromatous and 153 non-lepromatous; 104 attend for treatment. The Director of the whole Centre visits the villages and makes contact with all the patients, and patients who are holding back can be persuaded to come for their treatment. All cases who suffer from reactions are given temporary admission until the emergency is over and sent again to attend as outpatients.

We plan to establish yet a third subcentre at Koheer Road, which is 10 miles (16 kilom.) from our main Centre. We tender special thanks to Sri K. B. Lal, who took an active interest and secured a grant of the land at Chiragpalli and Koheer Road. We also thank the D.P.O. Sri Mathur, the Deputy Collector, Sri Gopal Kishen Rao and the B.D.O. Sri Badrinarayan for their help and co-operation.

#### **Treatment**

- (a) Inpatients. The routine was oral DDS in dosage of 300-450 mgm. weekly, supplemented with injections once a week of aqueous sulphetrone 20%. Those who could not tolerate DDS were given thiosemicarbazone and hydnosulphone in daily doses of 50 to 75 mgm. For all neural and tuberculoid cases intradermal injections of iodized hydnocarpus oil were given. For lepra reactions, intravenous injections every second day were given of potassium antimony tartrate, calcium gluconate, and vitamin C; cortisone and chlorpromazine were used in a few cases.
- (b) Outpatients. As a routine, all patients were given 300 mgm. of DDS along with aqueous sulphetrone and intradermal injections of iodized hydnocarpus oil, and for all reactions chlorpromazine was used in daily doses of 50 mgm. for seven days in combination with intramuscular injections of stibinol 100 (sodium antimony gluconate).

Laboratory: the routine laboratory tests were carried out throughout the year on 1,758 specimens. Research: we ontinued the study of the transmission of leprosy in families both in the inpatients and in the outpatients of our subcentres. Our findings

Reports 177

tend to show that a non-lepromatous case does not infect any healthy individual, whether child or adult, and that a lepromatous case often infects a child but rarely infects an adult. We have also studied the effective action or not of indigenous and homoeopathic drugs. Some had promising results and we wish to continue and expand this study. Farming: by using modern methods of cultivation, we have been able to raise the productivity of our farming land and increase the livestock. Diet: diet as supplied to our patients is based on jawar and rice or wheat with additions of fruit and vegetables, milk powder, and cheese. All patients are expected to cook their own food except the sick. Clothing and bedding are given to all the patients, thanks to the generosity of Rani Kumudini Devi Ramdeo Rao. Children: more child patients are applying for admission and we are considering founding a separate unit for them. Future plans: we intend to carry leprosy relief wider in the region not only by increasing the inpatient accommodation but by opening up many more subcentres for outpatient treatment. We also intend to conduct an intensive house-to-house survey of all the villages within 20 miles radius (32 kilom.).

### A Short History of the Leprosy Investigation and Treatment Centre, Zaheerabad, Medak District, Andhra Pradesh from 1935–1958. Dr. E. B. Christian, Honorary Principal Leprologist.

#### Introduction

From 1927 to 1935 the author was medical officer of a large Mission leprosarium in Hyderabad State and found that about 1,500 patients came from Bider, Gulberga, and Osmanabad districts, and that these patients could have contributed to their cost of maintenance. From 1935, the author was a partner in the Gopal Clinic run by the late Major M. G. Naidu and met his son, Dr. N. M. Jaisoorya, who placed strong emphasis on the economics of medical and public health problems in India. This led to a joint determination to study and attack the leprosy problem from the village level, and they began work at Zaheerabad. They were stimulated to do this by their dissatisfaction with the accepted methods of therapeutic attack, by their wish to contribute something to the solution of the vast leprosy problem and by their belief that economic factors lay behind any public health problem and any attack on leprosy in particular must be as inexpensive and as self-sufficient as possible by means of full co-operation from the patients themselves. They also believed that the patients were best treated in their own environment.

#### The Foundation Phase

They opened outpatient clinics at Zaheerabad, Bider, and Chiragpalli, constructing thatched huts for use as clinic buildings and much aided by the village officers of nearby villages. Very soon 178 Leprosy Review

there were attendances of 100 patients once a week in each clinic and 75 per cent of these paid a fee of 1 Rupee (1s. 6d.) a month. To provide residential accommodation for infectious patients and those in lepra reaction, an area of 36 acres (242.8 sq. decam.) of land was obtained by donation of Major Naidu, and on this land, patients who applied for admission built their own huts according to a prescribed model. The first patients paid a fee of 2 Rupees (3s.) per month for their treatment and were self-supporting: at the end of the first year, there were 20 inpatients and 30 outpatients. Thereafter, there was an annual increase in admissions and discharges. Up to 1942 there was a retired English nurse who provided her own cottage and gave her services.

#### Later Phase

More huts, wells, a treatment building became possible due to aid from many sources, including local authorities, and farm work was started. By 1942 the income had risen to Rupees 2,100 (£107 10s. 0d.) from the patients. From 1942-1950 there was the difficulty of rise in cost of living and the fees from patients were increased to 4 Rupees (6s.) per month inpatient and 3 Rupees (4s. 6d.) outpatient. By 1950 the annual income was Rupees 7,220 (£541). During the years 1950--58, the outstanding social workers, Mrs. Vellodi and Mrs. Boga, became interested and the Indian Conference of Social Workers donated 40 cottages, some money, and help in developing farms and livestock. They also gave a maintenance grant to help deal with a rather sudden influx of inpatients, which then reached 120. Then the Government gave a grant of Rupees 6,429 (£482) per annum and a further single grant for one year of Rupees 3,500 (£261). The Ministry of Health gave a grant of Rupees 15,000 (£1,125) for a jeep and laboratory and surgical equipment. In this last period of 1950-58, the total number of patients treated was 1,412 inpatients and 2,430 outpatients, and the total expenditure for the same period was Rupees 187,511 (£14,063). Towards this, the sale of farm products produced Rupees 23,315 (£1,748) and fees from patients Rupees 92,288 (£6,921). In the last year, it has been possible to open two new subcentres, and two more are planned. To ensure a more rapid turnover of patients, residential patients are not kept more than six to nine months. This measure inspires morale and avoids the stagnant air of the conventional leprosarium. They consider that such centres should not be too large, not more than 125 beds, to avoid complexity and topheaviness and the danger of becoming uneconomic.