

# Efficiency of Institutional Treatment for Leprosy.

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**T**HE treatment of leprosy is very prolonged and sometimes discouraging both for the patient and the doctor. One cannot come to rapid conclusions regarding the results of treatment from the rate of discharges, but by seeing the effects of treatment in the discharged patients. Apart from the special and general leprosy treatment the doctor ought to see that the patient takes sufficient exercise, and keeps himself clean; and he should cheer up the patient if depressed, as is very often the case. Mental depression in leper patients is very common and has very bad effects on the general health of the patient, and consequently on recovery.

## OUR ROUTINE TREATMENT.

*Drugs.*—Intramuscular, subcutaneous, and intradermal injections of 4% creosoted hydnocarpus oil or its esters twice a week with maximum dosage of 6 c.c. Treatment of intercurrent diseases, if present.

*Exercise.*—Regular daily three hours' work for all the patients who are not ill—especially gardening and field work.

*Diet.*—Average Indian village diet.

*Personal Hygiene.*—We see that all the patients keep themselves clean in body and clothes.

*Entertainments.*—Games, cinema, occasionally dramas acted by the patients themselves, and gramophone music.

## DISCHARGES.

From the beginning of 1929 to the end of 1933, 621 patients were discharged on 6 months' parole either as

disease-arrested or symptom-free. The period of treatment ranged from 6 months to 10 years, the early neural cases—especially the adults—being discharged sooner. The average length of treatment in each case is about 26 months.

*Our Standard of Discharge.—*

1. Bacteriologically negative, or showing only a few short forms of acid-fast bacilli in the skin, about 1 or 2 in four or five fields of the microscope. (Method: scraping of the nasal mucosa and skin clip.)

2. No nerve or skin reactions for a period of 6 months.

3. Sedimentation Index between 10 and 20.

4. Good general health of the patient.

Out of the 621 patients who were discharged, 223 patients came back for re-examination. The major portion of them came with an idea that they had a relapse due either to some trophic ulcers or cracks in the feet, and for other skin diseases, mostly scabies. The rest came to see their old friends and to get examined to be sure that they were keeping well. What happened in the case of the other 395 patients is not known to us. A few of the educated patients write to us sometimes regarding their health saying that they are well, and about two dozen of them are working in town as mechanics, peons, and menial railway servants. Presumably these people are well and do not wish others to know that they had once been patients in a leprosy hospital! Probably the others who did not come for the re-examination are quite well, at any rate without active signs; otherwise, knowing that a discharged case, if relapsed, will always be re-admitted or advised, they would have been sure to come back for re-examination if they had had any signs of recurrence of disease.

Out of 621 patients discharged, 397 were discharged without bacilli and 222 with a few bacilli. Out of 223 patients re-examined, 111 were from those who were discharged without bacilli, 112 from those discharged with a few bacilli. Out of these 223 patients, there were 30 cases of relapse consisting of 7 children (under 14 years of age), 3 women, and 20 men.

Out of 112 who were discharged with a few bacilli, we found no bacilli on re-examination in 15, and an increase of bacilli, both in nasal and skin smears, in 5. The rest, though showing a few bacilli, were the same or better than when discharged.

Out of 111 patients who were discharged as bacteriologically negative, bacilli were found in 17, and in two of

these 17 bacilli were found in nasal and skin smears. Eight of them, though negative, still had increased anæsthesia or fresh patches, and the rest were the same or better than they were when discharged. All those that had trophic ulcers were temporarily admitted and treated surgically, if necessary.

	<i>Re-examined patients.</i>	<i>Patients relapsed.</i>
Children under 14 years of age	33	7
Women ... ..	26	3
Men ... ..	164	20
	—	—
	223	30

The relapse rate is 13.4%, being high in children. The 7 children who relapsed had had, on an average, treatment for 22 months, and along with the routine treatment they had had 60—120 grains of potassium iodide bi-weekly for a period of 6 months. All these 7 cases were negative when discharged. In two of these bacilli were found both in nasal and skin smears, in one a few bacilli were found in a skin smear, and the rest had fresh patches on re-examination. So far not a single case of relapse has been recorded in children who had been discharged after reaching the age between 16 and 20. In children leprosy treatment does not give so quick results as in adults, but when they reach adult age they improve and clear up rapidly under treatment.

As far as our out-patient clinics are concerned we encounter a great many difficulties and our results in them are not half as good as in our institution. The chief difficulties are:—

1. Irregularity in attendance; the treatment being a prolonged one the patients get discouraged in a few months and, the progress being slow, discontinue treatment and resort to "magic fortnight cure" treatments advertised in the papers.

2. An out-patient generally thinks that anti-leprotic treatment alone will save him from the disease, and neglects diet, exercise, and personal hygiene. When advised about exercise, many patients state that they get plenty of exercise in the course of discharging their daily work in their respective employments.

3. Mental Depression.—Especially in out-patient clinics where the majority are early cases, the very fact that it is leprosy they are suffering from worries them continuously, added to which are the worries of work, etc., which affect their general health and consequently their recovery.

4. Intercurrent Diseases.—A doctor in charge of our out-patient clinic sees the patients twice a week and the other days he is not in contact with them. In the meantime, if the patient gets an attack of dysentery or malaria, the doctor may not know anything about it at all till the patient reappears again at the clinic after an absence of a fortnight or a month. For instance, after an anti-leprotic injection the patient may have an attack of malaria, and after the malaria subsides he may have fresh patches or a lepra reaction. The patient blames the treatment and discontinues attendance.

5. Superstition and Social Stigma.—Very often this is the main reason for the patients in the out-patient clinic not attending regularly for treatment. This latter is very often the case among educated patients.

On the other hand a patient who has once been in a leprosy hospital, after voluntary or official discharge, and attends an out-patient clinic, is very regular in attendance and improves under treatment. This is because he lives up to the standard of institutional life. He knows a good deal about the disease, has seen many patients getting better steadily, though slowly; and so he has hope, faith, and a happy frame of mind.

#### CONCLUSIONS.

1. Patients having a few bacilli, one or two in four or five fields of the microscope after a prolonged period of anti-leprotic treatment, can quite safely be discharged as disease-arrested. The danger of these patients infecting others is very remote. Eventually, even without treatment, these bacilli may disappear if the patient keeps up his general health.

2. Children ought not to be discharged until they reach an age between 14 and 16, as before that age they are more liable to relapse.

3. Apart from the special and general anti-leprotic treatment, exercise, diet, personal hygiene, and the mental condition of the patient should be particularly looked into.

4. Leprosy treatment may be adequately tackled in an institution.

#### ACKNOWLEDGMENT.

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#### REFERENCES.

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- (2) Lowe, John.—“Re-examination of Discharged Patients.” Leprosy in India, 1933.