Probably the best interests of the child are best served by arranging for the child's adoption possibly by healthy relatives, and the complete removal of the child from the neighbourhood of the institution. If this is impossible, a creche under a skilled nurse should be provided to look after such children and maintain separation from the parents and also other patients.

OCCUPATIONAL THERAPY IN LEPROSY INSTITUTIONS

Donald Dow

The institutional treatment of many chronic diseases demands not only the application of specific or empirical medical treatment, but also requires certain auxiliary measures, among which occupational therapy has a high place. It is recognised as a necessary part of the regime in a sanatorium or mental hospital, and for a considerable number of years many leprosy institutions have given prominence to the question of occupational therapy.

In a discussion of this matter in relation to leprosy institutions, there are certain considerations which cannot be overlooked. Tuberculosis sanatoria are not handicapped by an 'asylum' tradition, and the psychology of the tuberculous patient is very different from that of the victim of leprosy, whilst mental hospitals have for long been managed by doctors trained to guide work along lines which are socially acceptable, and satisfying to the patient. In leprosy work the position is very different. The modern leprosy institution has grown up within recent years, and asylum ideas—long dead in mental work—are still potent factors in leprosy work. By many enlightened folk, leprosy is still considered not so much a disease as a curse; a condition demanding ostracism rather than treatment. As a consequence of leprosy being regarded as a life-long disease requiring segregation irrespective of the clinical condition of the patient, occupations have often been governed by the interests of the institutional staff and have not been primarily regarded as therapeutic agents.

In the organisation of occupational therapy there are two things which must be kept in mind:

1. The psychology of the patient. Muir (1939) and Dow (1942) have discussed the psychological aspects of leprosy, so it is not proposed to go into that question of detail here, suffice it to say that, in our opinion, practically no patient suffering from leprosy is really healthy-minded. Crichton-Miller gives the
qualities of a healthy-minded adult as follows:

(a) He should have the will to live.
(b) He must be able to enjoy all normal biological functioning.
(c) He must have enough feeling of self-mastery to maintain adequate independence of circumstances and environment.
(d) He must be ready to face conflict, internal and external, with a minimum of recourse to evasion.
(e) He must have a scale of values whereby experiences and memories that have purpose and significance are preferred to those that lack them.
(f) His social effectiveness must be characterised by:
   A. A reasonable trust in his fellow men.
   B. A broad toleration of human idiosyncrasies.
   C. That sense of social responsibility which only manifests itself in those who recognise in social contribution a prerogative rather than a duty.

Few victims of leprosy can satisfy these conditions. Superstitious ideas regarding the cause of leprosy, social ostracism, inability to obtain work and cruel treatment at the hands of relatives and friends have all combined to produce a mentality which is anything but healthy. In any scheme of occupational therapy it is thus necessary to remove the sense of frustration and help the patient to realise that he is a member of a community to which he can and should make a contribution; he must be made to feel that he is regarded as a sick man and not as a social pariah, and that the various forms of treatment—including work—are designed to fit him to resume his place in society.

2. The background of the patient. The forms of occupation should be such that patients can appreciate their value. Tasks should not be allotted which the people are insufficiently educated to perform with understanding, for work which is beyond the understanding of the worker is likely to be dull and irksome and inefficiently performed. The aim must be to provide types of work which act as a physical and mental stimulus. This may mean the provision of specially qualified staff to guide and instruct in whatever types of activity are undertaken, but the results will fully justify any extra expenditure incurred.

It must be admitted that the organisation of occupational therapy designed to meet the postulates set forth is no easy task. It involves a consideration of the habits and customs of the people, their social background and their educational level; it must take into account religious prejudices, caste (in India), and local or national traditions.

It may be worth while trying to illustrate our thesis by indi-
OCCUPATIONAL THERAPY

Caring the lines on which occupational therapy is organised at the Victoria Leprosy Hospital, Dichpali, for while no claim to perfection is made and we are only too conscious of the need for constant improvement, we have attained some measure of success in accomplishing the end we had in view.

The following points were constantly in mind:

1. Physical well-being of patients. Outdoor work is preferred to indoor, and active labour to a sedentary occupation. For these reasons we are keen on garden and farm work.

2. Psychology of patients. Tasks which the patient can perform — or learn to perform — intelligently are chosen, and selection has been made of types of occupation in which the patient feels he is making a contribution to the communal welfare. At one time brass work was carried on but it was discontinued because (a) it was a skilled occupation beyond the intelligence of many patients; (b) there was no sale for the articles because of the prejudice against leprosy and consequently patients came to feel that their labour was not appreciated; (c) patients trained in brass work could not obtain employment at the trade when they returned to their villages as the work was confined to certain castes. An account will follow of the various forms of labour which we have found beneficial.

3. Economic factors. While the welfare of the patients is the primary consideration in any hospital, it is essential that economic considerations should not be overlooked. For that reason — and because it is a sedentary occupation — weaving is not an industry here. In some institutions it may be a paying proposition, but we can purchase from local mills at special rates with which we could not hope to compete.

There are 800 patients in residence at Dichpali, of whom 150 are children, 100 women and the remainder men. Most of the patients come from villages, only a very small minority being from urban areas. The hospital serves the whole of Hyderabad State so the patients are drawn from a wide area. The general educational level is low and most of the people are engaged in agriculture, either as labourers or as small landowners. Patients receive injections twice weekly, and apart from the days on which they receive injections, all the adult patients — unless exempt on medical grounds — must do three hours' labour daily, for which no payment is made.

All labour is based on the institutional needs as this develops a communal sense, and the tasks are graded so that they may be allocated according to physical capacity. We propose to give an outline of the work programme.
1. *Children.* The younger children are looked after in a nursery school, but all the older children—boys and girls—attend school in the morning. The afternoons are devoted to garden work in the case of the boys, and sewing and mending in the case of the girls. In neither case are great demands made, but both boys and girls are engaged in tasks which interest them and in which they feel they are contributing their quota to the institution. There are two teachers and members of staff engaged in the educational work but the rest of the teaching work is done by patients who render this service as their form of work.

2. *Women.* Female labour is divided into various sections:—
   A. A number of women are responsible for washing and mending the children's clothes. They are assisted in mending by the girls.
   B. Older women, and those with deformities or failing eyesight do light work such as a little weeding, clearing away rubbish, etc.
   C. The greater part of the women do cooking work. In this hospital all the food is supplied from a large communal kitchen. One batch of women come on duty in the early morning and prepare thin porridge which is given as a morning meal. They also cook chapatties (thin flour cakes) and vegetables, and this work is continued by a second group of women who come on duty later. It is quite a task baking 1,500 odd chapatties for the mid-day meal but the women really enjoy this work.

3. *Men.* The men, like the women, are divided into various gangs for work:—
   A. The afternoon cooking for the evening meal is done by men. They are elected by their fellows, partly on a caste basis and partly because they have expressed a preference for cooking work. They are responsible for the preparation of curry and rice.
   B. In addition to the cooks, there are several other gangs employed in the vicinity of the kitchen:—(a) Firewood Gang to split wood for the cooking work; (b) Cleaning Gang for the preparation of vegetables, grain, meat, etc., for the cooks; (c) Mill Gang to mill the rice and grind the flour.
   C. Miscellaneous Gangs. (a) Sanitary—to see that latrines and drains are clean. (b) Watering—to water plants and shrubs in the vicinity of the hospital. (c) Anti-malarial—to carry out anti-malarial measures on the instructions of the medical staff. (d) Casual Labour—to do odd jobs such as weeding, building, canteen work, road cleaning, etc.
Farm and Garden Work. The majority of the men are employed on the farm and in the gardens. This type of work demands strong physique but patients are keen to be engaged on farm work and are quick to appreciate and learn the methods which they see practised.

It will be evident that there is a great variety of tasks which the patients can undertake and all of them are of value to the whole community. Every patient on admission is given a labour classification as well as a medical one and all the jobs are catalogued so that a patient is given work suited to his particular category. Patients thus feel that their physical condition is appreciated and that they are likely to get a job which they can do and in which they can make a contribution to the institutional life. It is naturally difficult to assess in terms of cash the value of all the work done, but it may be worth while to give a more detailed description of the agricultural work as an example of the economic value of certain types of occupational therapy.

From the original 50 acres donated as a site for the colony at Ichpali, the area owned by the institution has grown—partly by gift and partly by purchase—to 450 acres. A considerable part of this land is occupied by staff quarters, hospital buildings, patients’ quarters, power house and workshops, playing fields, etc., but about 250 acres is devoted to agricultural pursuits—150 acres being given over to grazing and the remainder to cultivation. Most of the land was jungle when acquired and it has been a tremendous task to sink wells, make roads, level fields, plant orchards, etc., but year by year the work has gone on and the original chaos has given place to order and regularity. The labour for this work has been supplied by the patients.

The oversight of the agricultural work is in the hands of a graduate in agriculture who has three assistants, and his responsibilities include the allocation of work to the various gangs, keeping records of produce, consulting with medical staff as to types of vegetables, etc., required for patients’ diet.

The farm has extensive grain store accommodation and has also large cart and implement sheds and byres for the housing of the 25 bulls kept for ploughing and carting. No milk cows are now kept as milk powder has proved a more economic proposition and the defective fat content is supplied in the oil used in cooking. Goats are kept for killing for food and they supply some manure.

The success of the farm depends on three factors:

(a) Irrigation. Weather conditions in the tropics mean that for a considerable part of the year there is little rain and with the
extension of the ground under cultivation it has been necessary to increase the water supply. A small irrigation tank helps for part of the year, but in the hot weather that is dry and additional reliance had to be placed on wells as a source of supply. In recent years several large wells have been sunk and the needs of the farm are on the way to being met. In addition to the land under crops, there are several acres of gardens and orchards and they also are supplied from wells, and in the case of the garden in the boys' compound the well water is supplemented by water which is drawn from a large pit which drains all the waste water from the women's compound. This water is raised by a small Persian wheel which the boys can operate by hand. The water for the hospital and staff compound is obtained from wells by means of electric pumps, but in the farm and gardens the drawing is done by bulls as we are anxious that the methods taught should approximate to village usage.

(b) Manuring. All the waste from the kitchen, road sweepings, dead leaves, weeds, grass, cow dung, etc., are removed to the farm and are used for the manufacture of compost. There are three compost factories—one at the farm, one at the main garden and one at the boys' garden—and a number of patients is constantly employed at these centres. These people not only do useful work, but learn the value of much that is allowed to go to waste in the villages. The compost is used to good effect in enriching the soil and in a recent year no less than 833 loads were produced. In the same year there were also 200 carts of ordinary manure and 600 carts of rich black soil added to the farm land.

(c) Tillage. Year by year more land has been cleared of wild growth, levelled, laid off in plots and tilled, and there is now about 40 acres devoted to wet land crops and 60 acres used for dry land crops. As far as weather conditions permit, tilling of the soil is carried on throughout the year. Hoeing by hand and bullock, crowbar work and ploughing is diligently pursued and the work has paid a good dividend in plentiful crops and an improvement in the physical condition of the patients engaged in agriculture.

The following list gives an idea of the produce in an average year:—

<table>
<thead>
<tr>
<th>Produce</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits and Vegetables</td>
<td>83,927 lbs.</td>
</tr>
<tr>
<td>Sugar Cane</td>
<td>18,810 lbs.</td>
</tr>
<tr>
<td>Paddy (Rice)</td>
<td>39,624 lbs.</td>
</tr>
<tr>
<td>Ground Nuts</td>
<td>1,230 lbs.</td>
</tr>
</tbody>
</table>
When it is remembered that farm labour is supplied free by the patients, it will be seen that the above produce represents a considerable contribution to the hospital. Of more importance than the financial aspect, however, is the feeling of satisfaction and contentment among the patients as the result of doing interesting and productive work. It may be that weaving, handicrafts, building, etc., are possible in some institutions, and it is immaterial what types of work are provided so long as they excite whole-hearted co-operation on the part of the patients.

REFERENCES

Muir, E. Some Mental Aspects of Leprosy. Leprosy Review, 10 (1939), 114-118.