



Patients' homes in Madras City.

Domiciliary Treatment in India

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DELEGATES to the *NAPT* Fourth Commonwealth Conference. in 1955 heard Dr. P. V. Benjamin, *Adviser in Tuberculosis to the Government of India*, describe the problem of tuberculosis in the country and the measures, preventive and therapeutic, being made to control it. He estimated that there were in the region of 2,500,000 cases of tuberculosis causing some 500,000 deaths per year. These figures may be revised as a result of the national survey of the disease now being undertaken, but it is evident that the number of available beds—some—20,000—is quite insufficient to offer in-patient treatment to the majority of cases, and that in the field of mass domiciliary chemotherapy. This method of attack upon tuberculosis in under-developed countries has been much discussed, but little experience has been obtained in practice; moreover each country presents its own peculiar problems—and it was felt that, before embarking upon a nationwide scheme, further information should be obtained relevant to its use in India.

It would first be necessary to know whether domiciliary treatment of tuberculosis under normal living conditions in India could be expected to

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produce results in any way comparable with those of standard hospital treatment, and if so, what would be the most effective and acceptable type of drug therapy. It would be important to discover what proportion of cases could be made non-infectious, what might be the rate of infection among contacts in the highly crowded conditions which prevail, and whether infection with drug resistant organisms might be a problem.

It was in the hope of providing an answer to these and other related questions that the Tuberculosis Chemotherapy Centre was established in Madras in 1956. Four bodies are concerned in this project – the Government of India (through the Indian Council of Medical Research), the Government of Madras, the World Health Organization and the British Medical Research Council. The staff of over one hundred is predominantly national, eight members being from abroad. An out-patient and domiciliary service is provided from the centre which includes a department for social welfare, facilities for full-size and miniature radiography and tomography, and a laboratory, with animal house, where much bacteriological research is proceeding, in addition to the routine techniques of sputum culture and sensitivity tests. A records and statistics section provides for analysis of the clinical studies. Most patients are treated at home, but there are facilities for admitting up to a hundred to sanatorium.

Using the Indian health visitors as interpreters, the WHO doctors and public health nurses seem to be able to communicate well and to build up a good relationship with the patients, practically none of whom speak English; and in the clinic and the home the language problem has been less than was anticipated. On the other hand it was soon evident that the most competent nurse, driver or other staff member was of limited use if unable to converse with the international members, and many months were spent in building up an English-speaking staff.

Patients are referred following diagnosis at local chest clinics and come entirely from the poorest section of the city community. The average family numbers five or six and, even when the earning member is well, have to manage on the most meagre income; all too often he is the patient and has been too ill to work for several weeks before reporting to a doctor. A life so close to the border of existence no doubt affects the attitude of these patients to disease; probably never having known perfect health, they accept a gross degree of ill health before seeking advice—and even if they realise they are ill, they may see no alternative to working until they can work no longer. As a result, the majority have on diagnosis extensive and cavitated disease.

The patients and their relatives are much more co-operative than might be expected considering their outlook upon life, the conflicting advice they may receive from neighbours, and some of their customs and beliefs—and they are usually open to persuasion. We do not object if a patient asks to delay the start or finish of his treatment to avoid an 'inauspicious' day, but we cannot accept his belief that he must not take any internal medicine

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for three or four weeks after measles or any of the other exanthemata. They seem to have little idea of time, and while it does not matter much if they cannot recall their age or when their illness started, it can be more of a disadvantage that they often do not grasp what a year of treatment and three or four years of observation entail. We feel that constant reiteration that their disease is not yet healed, and that they must go on taking medicine, is an essential part of their management and prevents many patients from stopping treatment as soon as they feel better. It has become clear that to get any domiciliary patient to take medicine regularly over many months is in itself a major problem; ways must be devised to discover irregularity, and its cause, in each patient and to correct it. Here we find a further reflection of poverty in that a patient may stop taking his medicine because he finds it increases his appetite and he cannot afford to buy more food.

A public health worker visiting India is probably impressed most by housing conditions. While some of our patients live on the pavement, which is at least well ventilated, and a few in two-roomed brick buildings, the majority occupy single-roomed mud or thatched-leaf huts without water or sanitation and usually without windows. Public taps and latrines are available within a few hundred yards of most dwellings and, although sanitary facilities are often not used and spitting is universal, the houses are remarkably clean inside with few flies. Closely packed groups of huts exist side by side with modern business and residential premises through-



“ Bed rest ” at home.

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out the city, and one has only to turn off from any main thoroughfare to arrive in the middle of such a 'village.' Overcrowding is usual and one may find six or more people of all ages sleeping in a room ten feet by six feet, so that it is almost impossible to suggest adequate segregation. In the hot season the patient may be persuaded to sleep outside, but in the cooler weather or rainy season he will join the rest of the family inside, and one can only improvise some sort of screen between the patient and contacts. Neighbours live so close together and intermingle so freely that the difficulty is not to discover who are contacts, but to decide who are not. In practice we follow up all members of the patient's household, and have been able to get a high proportion of re-attendances for three-monthly examinations. From the start we stress that we want to look after the whole family and not just the patient; they are encouraged to discuss domestic or other problems with the social worker, health visitors and doctors, and seem to welcome home visits, whether by Indian or European staff. A patient pays weekly visits to the Centre throughout the first year of treatment and is visited at home at least once a week during the first few months—less frequently thereafter.

Bearing in mind the use to which it is hoped to put the results of the work, it is important to retain a sense of proportion regarding the facilities available in a project such as this. The large staff, the comprehensive radiological and bacteriological facilities, the detailed documentation are all required for the accuracy and completeness of a controlled clinical study, and would not be available or even necessary for a mass therapy campaign. Regardless of any research going on, the regime of treatment adopted for study must be simple and capable of application on a wide scale. Nor must the standard of living of the individual patient under study be altered from what would be found in a mass campaign.

The studies are likely to continue for several years yet. No attempt has been made here to describe them in detail and it is far too early to draw conclusions; these will be reported later. The findings will be related directly to tuberculosis in India but we hope that information will emerge which will be of value to workers elsewhere.