

INTEGRATION OF LEPROSY INTO A BASIC HEALTH CARE SERVICE

Sir,

In the former Belgian Congo (now Zaire), following successful campaigns against trypanosomiasis and yaws, the charismatic personality and vision of Dr (now Sir) Clement Chesterman has full scope under the government policy to respond to appeals from chiefs

and notables to inaugurate a community health service based on dispensaries established in the chief towns of each agglomeration. The area concerned was the medical sector of the Baptist Mission Hospital at Yakusu, covering about 10,000 square miles with a total population of some 105,000 representing 7 tribes, each with its own language and culture. The health authorities invited Dr Chesterman to develop a public health programme covering the whole area, and such were the good relations with the local population as the result of campaigns against trypanosomiasis and yaws that the hierarchical leaders in villages and *chefferies* asked for an extension of the developing health care programme into the districts they controlled. By the early 1940's health centres had been built by the people themselves in 18 strategically-situated villages so that nine-tenths of the population were within easy walking distance of medical help. Ten of these centres were eventually supplied with a binocular microscope and the usual stains for blood, lymph, urine, dermal scrapes, lymphatic node puncture, sputum and cerebro-spinal fluid. Both the lengthy training of the *infirmiers* (5 years) and the standard of knowledge and skill expected of them exceeded the standards now being advocated in the average Primary Health Care programme, and were those of good basic health care. Each health centre was responsible for the supervision of two to four subsidiary treatment centres. For the latter, the local community chose a suitable candidate – usually a senior schoolboy who had shown some interest in health matters – and the local *infirmier* undertook to train him for a 3-months' apprenticeship at his health centre. When the trainee had given evidence of competence and suitability, he was sent back to his village to take charge of an aide-post, which the villagers had already built. He was supplied with a few medicines and some dressings. On market days, the *infirmier* would cycle in to visit him and give treatment for leprosy, etc., and examine and prescribe for patients whose trouble was beyond the competence of the local aide. The area of activity of the latter was that of a well-organized Primary Health Care worker. Doctors from 3 agricultural companies in the area subsequently developed the statutory medical services required for contracted workmen and their families, and also assumed responsibility for the medical care of the people living in adjacent villages.

In 1935, Yakusu became 1 of 2 non-government schools for Medical Auxiliaries to receive official approval for a 5-year course for the diploma of *Infirmier*.² The first 3 years were spent at the Central Hospital, in class and ward-work, with periods of practical work in the district interspersed with clinical work at the hospital. Amongst transmissible diseases in the area were trypanosomiasis, yaws, tuberculosis, onchocerciasis and leprosy – the latter far commoner than early investigations had suggested. With the help of *infirmiers diplômés* and in training, leprosy survey teams discovered all clinically diagnosable cases of leprosy, and took eight slit-smears from each patient. These were fixed on the spot, and subsequently stained and read at the central hospital. In this way a complete record of all cases of leprosy was made, and kept up-to-date by annual whole-population surveys. Biopsies were taken of typical and of doubtful cases, to be examined by Dr R G Cochrane at the Leprosy Study Centre in London.

During this period, because of its medical and social importance in the community, leprosy assumed a greater prominence in clinical teaching, in the examination of skin and peripheral nerves and in microscopy. At first, treatment consisted of chaulmoogra oil by intradermal and intramuscular injection; then sodium gynocardate and proprietary preparations of derivatives of chaulmoogra oil were used. A plantation, 2½ acres in extent, of *Hydrocarpus wightiana* was developed.

The sulphones were used initially at the central leprosarium, whose patients increased from 118 to 1,025 as news of the success of the new treatment spread. When adequate supplies of drugs became available, 5,349 leprosy patients were undergoing treatment at the all-purpose dispensaries, and 2,749 registered patients with indeterminate or minor tuberculoïd leprosy were kept under observation and did not receive treatment; their lesions were resolving spontaneously.

A decline in the numbers of new cases of leprosy infection began to be observed within a few years of the installation of treatment for everybody suffering from leprosy, and coincident with the reduction in infectivity of patients with multibacillary disease and heavily infected nasal mucosa in this area of prevalence. After 8 years of leprosy treatment completely integrated into a Primary Health Care service covering the whole district, leprosy could be considered as being controlled. In the light of modern knowledge, it may be thought that dapsone monotherapy gave a false optimism to the programme, but in a country where over 82% of the diagnosed cases of leprosy give evidence of some degree of cell-mediated immunity, such optimism is not entirely misplaced. In 1958, 2,092 patients had been discharged from treatment, 'disease arrested', and the whole attitude of the people towards leprosy and its victims had been transformed.

The main purpose of this letter is to draw attention to an example of 'Primary Health Care', in which leprosy was completely integrated long before the current wave of enthusiasm. The secret of its success was the extremely careful selection, training and supervision of auxiliary staff. Wherever leprosy is concerned, I consider that there is a need for a high level of competence in diagnosis, treatment, the recognition of reactionary states, the management of nerve damage and eye complications – and that it is a short-sighted policy to rely on less well-trained workers than those described, albeit briefly, in this communication.

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References

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