# LEPROSY IN TRINIDAD

### By E. Muir, M.D.

## From the Chacachacare Leper Settlement, Trinidad

Trinidad is the southernmost island of the British West Indies. About two-thirds of the half-million population are West Africans and of mixed races, and one-third are East Indians, most of whom —either themselves or their ancestors—came to work in the island as indentured laborers. Europeans and Chinese form small minorities. The principal agricultural products are sugar and cacao, and petroleum and asphalt are produced from local wells and deposits. Most of the population is employed in these industries. The climate is tropical and is humid in the summer months.

Leprosy cannot be considered to be a major health problem here, but still it is frequent enough to be of importance, especially as it is looked upon with much dread by the people. Under the Leper Ordinance, notification is obligatory, and only those lepers who can satisfy the authorities that they can and will provide themselves with effective isolation at home are exempt from compulsory segregation on the leper island of Chacachacare. The ordinance makes no distinction between open and closed cases. I found several cases in Chacachacare that might have been more appropriately. treated at outpatient clinics, and as mentioned later, this system is now being introduced. On the other hand the ordinance has many loopholes, and patients when admitted to the settlement are commonly in a condition which shows that they have been for years potential spreaders of infection.

The practice of exempting open cases from segregation has seldom proved satisfactory. Only intelligent patients of exceptionally good will, who are content to sacrifice their daily liberty for the safety of others, can be trusted to carry out domiciliary isolation effectively; and such patients as a rule prefer the more regular and better controlled treatment available at the leprosarium. The wealthier ones are, as a rule, the worst defaulters, partly because they have better facilities for concealment, and partly because there are not sufficient private quarters for their accommodation at the leprosarium; they naturally dread being herded together with patients of less cultured tastes. The onus of exception from segregation must rest either on the medical officer of health of the district, who is willing to ensure with the aid of sanitary inspectors

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that effective domiciliary isolation will be carried out, or on a Medical Board, once such a body has been formed.

The Chacachacare Settlement was founded some twenty years ago. The site is picturesque, the island lying between the principal "Voca" channels—the "Dragon's Mouths"—through which ships enter the Gulf of Paria. This island was chosen apparently with the object of removing as far as possible those suffering from a repulsive and dreaded disease. The site has two disadvantages: (a) communication with the mainland is difficult and expensive, and (b) the water supply is scarcely sufficient for domestic uses and quite inadequate for agriculture, the natural employment of many of the patients. In consequence, fresh food is difficult to obtain and occupational therapy, so important in treatment, is a constant problem. There is, however, the advantage of a dry climate constantly cooled by sea breezes.

The writer, who was acting as medical superintendent of the settlement, was asked to study the whole problem and devise means for controlling and finally eliminating the disease in the colony of Trinadad—an objective for which the settlement alone is certainly not sufficient. What, then, were the means to be adopted to this end? Can stricter compulsion, combing of the population for spreaders of the disease and immediate and relentless segregation, meet this? It is to be feared that, without the cooperation of the populace, this effort would lead only to greater evasion and concealment. One of the great difficulties in the control of leprosy is that infectiveness and conspicuousness of the disease do not always go side by side. Some of the most dangerous cases are, at least for a period, difficult to recognize without expert examination and bacteriological tests. Instead of stricter compulsion the writer advised the tripartite method of education, treatment, and survey.

Education—The first requirement was the training in leprosy of the medical profession itself. The medical officers of health, each in turn underwent a three-months' course of intensive study while acting as junior physicians at the settlement. Thereafter they assisted in leprosy surveys of the districts in which they themselves were responsible for public health activities. Shorter courses of practical training were arranged for other medical officers and private practitioners. These courses were well attended and much appreciated. Leprosy has so long been considered an infirmity rather than a disease that few doctors have adequate knowledge to appreciate its nature and significance. It is difficult to understand leprosy from books and journals alone; practical demonstration is necessary. Later, courses of four or five days duration were held

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for Sanitary Inspectors and Public Health Nurses, who visited the leprosarium in groups of ten or twelve. Another feature of this effort was the education of the public in general. In public meetings, which were well attended, leprosy was explained in simple language and much time spent in answering questions put forward by the audience.

Survey—Side by side with education went survey. School children were examined, and where possible, laborers in the various industries were also examined. As much as three per cent were found infected in one school. Contacts of patients in the settlement were followed up. The educational program assisted considerably in the survey as doctors brought forward cases which formerly they were unable to recognize. Sanitary inspectors called the attention of the health officers to suspected cases, and patients themselves came forward for diagnosis. No attempt, however, was made to conduct an exhaustive survey. The principle was initiated and the process of discovering cases goes on gradually, considerably assisted by the domiciliary treatment of slight, noninfectious cases.

Treatment—The majority of the cases found in the survey were slight and noninfectious ones, with one or more tuberculoid lesions. These cases were treated in their own homes either by the medical officers of health or by other physicians. This domiciliary treatment, apart from the benefit to the patient himself, has a useful educational effect on relatives and friends. Sooner or later, as the results of treatment are seen, other persons with leprosy either come forward voluntarily for examination or are pointed out by friends or neighbors. In this way the survey is gradually extended.

This triple method, when carried out thoroughly and continuously, has the effect of making the populace leprosy-conscious; and this condition, once established, is one of the most hopeful means of final control.

Such a survey can also deal concurrently with other public health problems. For example, scabies was found to be prevalent among school children. Early leprosy lesions are not infrequently connected with scabies, either the germ being inoculated by scratching or old scars determining the foci of bacilli already in the body. The general lack of cleanliness, especially in the younger children, was brought to the notice of educational and public health authorities.

Can quick results be hoped for from this method? The answer is: No. Leprosy is a disease which depends on the level of sanitation and standard of living; but just because it is so greatly dreaded it can be used in an educational campaign, not only as an agent of

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enlightenment, but also as a means of improving sanitation and public health.

The study of leprosy in Trinidad has other points of interest. Mention has been made of the two main races which constitute the population. The data on admissions to the leprosarium show that, in proportion to their numbers, leprosy is more common among the East Indian population then among the people with Negro blood; but the greater number of discharges of Indians seems to show that in the latter it is a milder and more remediable disease.

This apparent paradox needs investigation. Is it that the Negro avoids detection until the disease has reached an advanced and hopeless stage, while the East Indian comes forward earlier at a stage when he can hope for recovery? That this is the sole explanation is doubtful, but it does at least offer a partial explanation. In comparing the susceptibility to leprosy of different races, psychological and sociological factors should be given as much consideration as physiological differences.

As has been said, leprosy is not a major health problem in Trinidad; but it is of sufficient importance to call for the simple means suggested to bring it under control.

Above all it is essential that this method should be persisted in with consistence and without intermission. Too often antileprosy measures have been rendered useless by a vacillating policy.

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