# THE INCIDENCE AND TREATMENT OF LEPROSY IN BRITISH GUIANA AND THE BRITISH WEST INDIES

By F. G. Rose, M.D.

Medical Superintendent, Mahaica Leprosy Hospital; Hon. Sec. British Guiana Branch, British Empire Leprosy Relief Association

#### INTRODUCTION

The information on leprosy in British Guiana and the British West Indies contained in this summary has been gathered chiefly from the reports of the Principal Medical Officers of the colonies concerned, and from other publications. The countries for which such reports are available are Jamaica, Trinidad, British Guiana, Barbados, St. Vincent, and St. Christopher and Nevis.

It appears that the only one of these in which regular propaganda is carried on, out-patient clinics are established, and compulsory notification is in force is British Guiana. In that colony there are included among the notifications a comparatively large number of early or only slightly affected cases. Consequently, the only just comparison of the incidence of leprosy in the countries in this region is one based upon the numbers of patients isolated in the leprosy hospital. The figures for these are given in Table 1.

Table 1 .- Incidence of leprosy in the British West Indies.

Country	Population	Cases isolated	Rate per thousand
Jamaica	1,050,667	121	0.1
Trinidad	408,187	412	1.1
British Guiana	310,933	270	0.9
Barbados	173,674	94	
St. Vincent	47,961	17	0.6
St. Kitts	35,789	84	2.3
Total	2,027,211	998	0.5

It will be noted that there is a wide variation in the apparent incidence as indicated by these figures, with on the one hand only 0.1 per 1,000 for Jamaica and 0.5 and 0.6 per 1,000 for Barbados and St. Vincent, respectively, to on the other hand 2.3 per 1,000 for St. Kitts. Excluding Jamaica the figure would be 0.9 per thousand. However, these figures are doubtless affected by the degree of attention paid the matter in the different places.

#### JAMAICA

The latest year for which statistics are available is 1931. In that year only 27 new cases were notified, but 31 were admitted to the Leper Home.

The deaths numbered 30, giving for the 121 cases isolated a death-rate of 25 per cent. This seems to indicate that most of the patients are in an advanced stage of the disease, for ordinarily the death-rate in a leprosy hospital should not exceed 10 per cent. Another indication of this is the fact that, of 128 patients remaining in the institution at the end of 1931, only 6 were children under 15; this is equivalent to 4.7 per cent of the whole. In British Guiana, where successful efforts have been made for some years to induce early cases to enter the leprosy hospital, the proportion is about double, 9.3 per cent.

Furthermore, the average stay in the hospital of those who remained at the end of 1931 was 15 years for males and 6 years for females. Experience elsewhere makes it almost certain, therefore, that there are many cases outside the leper home, whether known to the authorities or not.

The form of treatment used was, in general, antileprol and sodium gynocardate, while intramuscular injections of alepol were given in selected cases.

# TRINIDAD

The report on the Chacachacare Island Settlement of Trinidad for the year 1930 states that the average number of persons in the settlement between 1917 and 1921 was 529; in 1927 to 1929 it was 428; and in 1930 it was 412. Between 1925 and 1930 a total of 145 persons were discharged from the institution.

The drugs used in treatment were hydnocarpus oil, alepol, and occasionally potassium iodide, with trichloracetic acid for external application. Principal attention is directed to the more general aspects of therapy, such as the treatment of complicating diseases like malaria, syphilis, hookworm, etc., and the provision of occupation and exercise for the patients by means of garden plots, sea-bathing, games, etc. There is no mention of any provision for the continuation of treatment or of supervision after discharge, which would seem to be very necessary in view of the usual experience with respect to relapses.

### BRITISH GUIANA

In British Guiana the Medical Superintendent of the leprosy hospital acts in the capacity of leprosy officer, keeping discharged patients under supervision, treating "closed" cases as out-patients at four clinics in different parts of the colony, and engaging in continuous propaganda by means of lantern-lectures, cinema films, leaflets, exhibitions, etc., with the object of inducing early cases to seek treatment.

A new leprosy ordinance, passed in 1931, provides for compulsory notification. It distinguishes between "closed" and "open" cases, and only the latter are compulsorily isolated. It established a leprosy board which sees all cases after admission and again before discharge, and abolished the old procedure of admission by means of a magistrate's order or warrant from the Governor.

By these means the notifications in 1932 were greatly increased in comparison with those in preceding years, and for the first time a fairly accurate estimate can be formed of the real incidence of leprosy in the community. For these reasons the notification figures cannot fairly be compared with those of the neighboring West Indian islands, where such measures do not obtain and in consequence concealment is, in all probability, more general.

Since earlier cases are now being admitted the proportion of discharges is high. All the discharged patients are on parole, and they continue under treatment and observation at monthly intervals for many years. One group of these has now been under observation for six years continuously. Another feature of importance is that all contacts, especially children, are examined periodically.

Treatment is by hydnocarpus oil and esters, and alepol, with the usual external applications of solid carbon dioxide and trichloracetic acid. Electrical and other forms of accessory treatment are used when necessary.<sup>1</sup>

#### BARBADOS

Compulsory segregation is in force in Barbados, but for reasons already given it is likely that there are more cases at large than within the institution provided. The statistics for the leprosy hospital for 1930 to 1932, inclusive, are given in Table 2.

<sup>1</sup> A report on the treatment of leprosy in British Guiana by the author of this article, published in the *British Guiana Medical Annual* for 1932, is printed in condensed form in this issue of the JOURNAL.—EDITOR.

Alepol, moogrol, and trichloracetic acid are used in treatment. No patient is discharged unless the bacteriological examination proves negative on three occasions, made at intervals of three months. Discharged patients report for observation every two months for the first two years, and every six months thereafter.

Table 2.—Statistics of the Barbados Leprosy Hospital for 1930 to 1932, inclusive.

Number of patients	Year		
	1930	1931	1932
Resident	115	111	94
Admitted	11	8	5
Discharged	8 7	9	12

<sup>\*</sup> The figures for 1932 are for nine months only, up to September 30.

#### ST. VINCENT

The information available concerns the population of the leprosy hospital in 1931. There remained 16 patients at the beginning of the year, 2 were admitted, 1 died and none were discharged, leaving 17 on December 31. No information is available concerning the methods of treatment used.

## ST. CHRISTOPHER AND NEVIS

Out-patient treatment is practiced in St. Christopher and Nevis. In 1930 there were 30 patients being so treated, 11 of whom were open cases. As for the clinical classification, 14 were cutaneous, 1 mixed, and 15 purely neural.

The District Medical Officers' reports for 1930 showed that 63 cases were notified during that year, and that there were 2 deaths. The figures of the Home for Lepers at Sandy Point, St. Kitts, for the year 1930 were as follows: remaining from 1929, 50 patients; admitted in 1930, 10 patients; died 6; remaining 54. Assistance to the extent of nearly £64 was given to discharged patients.

Treatment appears to be entirely by means of intramuscular injections of alepol (3 per cent). A total of 434 injections were given to in-patients and 767 to out-patients during the year.

# OTHER ISLANDS

It has not been possible to obtain figures for the following: the Bahamas, the Windward Islands (St. Lucia, Grenada), and the Leeward Islands (Antigua, Montserrat and Dominica).