

# LEPROSY SURVEY OF SCHOOL CHILDREN IN BRITISH GUIANA

L. H. WHARTON.

It is generally accepted that the incidence of leprosy in children gives a fairly accurate picture of the leprosy problem of that country. In presenting the first report of a general leprosy survey of school children to be made in this Colony it will be necessary to give a short account of the topographical, climatic, sanitary, economic and general health conditions of the Colony, together with racial distribution of its peoples, so that the reader be able to have a comprehensive view of the problem.

The only British possession on the continent of South America Latitude 2-8, British Guiana has an area of 89,000 sq. miles, with a mixed population of approximately 360,000, giving an area density of 3 persons to the sq. mile. About 45% of the population is East Indian, 45% African, and 10% other races consisting mainly of Portuguese, Chinese, Aboriginal Indians and Europeans. Approximately 90% of the population live on the Atlantic coast-land of the Colony, in a strip of land 5 miles wide and 280 miles long. The Colony is bordered by Venezeula, Dutch Guiana and Brazil, all countries with a high leprosy incidence, so that there can be no complacency in leprosy control.

The people are mainly agriculturalists although some mining is done. Economically the average person is poor; housing apart

from the city—Georgetown, New Amsterdam, and the larger villages is poor, and the standard of living and sanitary conditions are poor.

The climate is tropical, with two rainy seasons and two dry seasons a year. Average midday temperature is 80°F. in the shade, and the average rainfall 70" per annum. The inhabited area of the Colony is low, 4 ft. below sea level. A large section of the population suffer from secondary anaemia, probably due to malaria, hookworm, and poor diet, which is mainly carbohydrate, with protein content low.

The general School Survey covered the entire coastland, from Skeldon on the border of Dutch Guiana to the North West District on the Venezuelan border. It included all the towns, villages and estates. Several up-river districts with large communities were included. Trained personnel were used, and a special Survey Card, as recommended by Dr. E. Muir, Medical Secretary, British Empire Leprosy Relief Association, was used for records. The children all attended Government Schools, and details of the survey were recorded for each of the three counties of the Colony, and are now presented as such. The time taken for the survey was 18 months, this included school vacations when the survey had to be suspended. The children came from the poorest homes in the Colony. The ages were between one and fourteen years.

TABLE I.

District	County	<i>Cases Examined.</i>			<i>Number Cases Found.</i>		
		Boys	Girls	Total	Boys	Girls	Total
Georgetown	Demerara	4,491	4,795	9,286	11	9	20
East Bank	do.	1,063	932	1,995	8	10	18
East Coast	do.	4,857	4,264	9,121	8	4	12
West Coast	do.	1,297	1,125	2,422	3	—	3
West Bank	do.	1,138	928	2,066	1	1	2
Demerara River	do.	306	303	609	—	1	1
Tuschen—Parika	Essequibo	247	190	437	1	1	2
Supernaam—Charity	do.	1,306	1,209	2,515	6	2	8
Leguan	do.	464	354	818	—	1	1
Wakenaam	do.	356	348	704	—	—	—
Bartica	do.	167	179	346	—	1	1
New Amsterdam	Berbice	741	756	1,496	1	3	4
East Bank	do.	267	217	484	—	1	1
Canje	do.	659	591	1,250	1	2	3
Corentyne	do.	3,815	2,859	6,674	7	8	15
West Coast	do.	1,187	1,295	2,482	1	2	3
Morawhana	North West	30	35	65	—	—	—
Mabaruma	do.	21	19	40	—	—	—
TOTAL		22,412	20,399	42,811	48	46	94

The number of boys infected was 48, number of girls 46. This is unusual as the rate of male to female is in most countries

2 to 1. It will be seen that most of the cases were in the 6-10 age group. The number of Africans infected was 58 against 36 Indians.

It will be seen that of 42,811 children examined 94 cases were found. With the exception of 3 cases all the children, who had early neural lesions, were treated at clinics as outpatients, and allowed to continue at school. The 3 cases referred to, 1 lepromatous and 2 more advanced neural, were admitted to the Leprosy Hospital Children's Homes.

The incidence is shown in Table II.

TABLE II.

County	Boys	Girls	Total	Per Mille
Demerara ... ..	31	25	56	2.2
Berbice ... ..	7	5	12	2.1
Essequibo ... ..	10	16	26	2.4
North West ... ..	—	—	—	—
	48	46	94	2.2

The lower East Bank Demerara River was the area showing the largest incidence 9 per 1,000. This incidence is so high as to warrant a house to house survey from La Penitence to Meadow Bank, inclusive, if trained personnel can be made available.

An attempt has been made in Georgetown to examine contacts, by the Govt. Medical Officer of Health of Demerara. Owing to lack of trained personnel we have been unable to carry out house examinations in the homes of infected children, although child contacts from infected homes were examined at the clinics.

In the course of the survey we were able to recommend many children suffering from yaws, scabies, ringworm, hookworm; malaria, lice, and avitaminosis, to District Medical Officers for treatment.

The opportunity was used to spread information on leprosy to the general public, and literature on the subject in the form of booklets and pamphlets was freely distributed. We have made definite progress in convincing the public that the disease can be cured, and the remarkable results obtained in the children treated as outpatients has been proof of this.

We have to record that two teachers were found suffering from Neural Leprosy (N<sup>1</sup>), and reports were sent to the Director of Education.

It is proposed that the School Survey should become a permanent part of the Leprosy Public Health programme and we intend to obtain permission to examine children at secondary and denominational schools at the next survey.

## CONCLUSIONS :

- (1) It is not possible to make any definite deductions from one survey. Only by repeated surveys will we be able to make comparisons, and say whether the disease is under control or not.
- (2) It has brought to light 94 early cases which might not have been seen otherwise, until they were more advanced and difficult to cure.
- (3) It has served a most useful purpose in educating the general public in the disease, and gaining their confidence in coming early for treatment.