**Report of the Director of Medical Services / British Guiana.**

# ANNUAL REPORT

OF THE

# DIRECTOR OF MEDICAL SERVICES,

FOR THE YEAR 1944.

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# BRITISH GUIANA.

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## Annual Medical Report for the Year Ended 31st December, 1944.

### I.—REVENUE AND EXPENDITURE.

1. The following is a statement of Revenue for the year 1944 :—

| | |
|---|---|
| Hospitals and Dispensaries .... .... .... .... | $ 99,635.48 |
| Sale of Milk Badges .... .... .... .... | 213.12 |
| Visiting Fees, Port Health .... .... .... .... | 1,420.00 |
| Auction Duty .... .... .... .... .... | .12 |
| Affidavit Fees .... .... .... .... .... | 6.22 |
| Sale of Quinine .... .... .... .... .... | 17,867.47 |
| Sale of Official Publications .... .... .... .... | .72 |
| Houses (including Colony lands) .... .... .... | 2,569.95 |
| Interest—General .... .... .... .... .... | Nil. |
| Sale of Opium .... .... .... .... .... | 2,254.15 |
| Malariological Survey .... .... .... .... | 5,387.41 |
| Sundry Reimbursements .... .... .... .... | 556.72 |
| Chemist & Druggist Examinations .... .... .... | 331.00 |
| Miscellaneous .... .... .... .... .... | 1,653.05 |



2. The following is a comparative statement of expenditure for the past three years :

| 1942. | 1943. | 1944. |
|---|---|---|
| $ 1,099,775.00 | $ 1,220,373.08 | $ 1,390,160.04 |

3. The percentage of expenditure of Medical and Public Health Services to revenue of the Colony was :—

| 1942. | 1943. | 1944. |
|---|---|---|
| 9.7 per cent. | 9.8 per cent. | 9.2 per cent. |

## II.—VITAL STATISTICS.

4. The population on the 31st December, 1944, as estimated by the Registrar-General was 367,204 (males 183,949; females 183,255).

5. There were 10,512 births and 8,060 deaths. The natural increase of population was 2,452.

6. The number of immigrants exceeded the number of emigrants by 58.

7. The actual increase in the population for the year was 2,510 as compared with 2,940 in 1943.

8. BIRTHS.—10,512 births (5,373 males and 5,139 females) were registered. This is equivalent to a birth-rate of 28.6 per 1,000 of the population, as compared with 33.5 in 1943 and 38.2 in 1942.

9. The number of still-births registered was 589, a ratio of 5.6 per 100 children born alive. The corresponding figure for 1943 was 5.3.

10. DEATHS.—8,060 deaths (4,090 males and 3,970 females) were registered, giving a crude death rate of 21.9 per 1,000 of the population as compared with 24.7 in 1943 and 17.2 in 1942. 76.9 per cent. of the deaths were medically certified, as compared with 76.5 per cent. in 1943.

11. INFANT MORTALITY.—The number of deaths under one year of age was 1,427, a rate of 136 per 1,000 registered births as compared with 141 per 1,000 in 1943 and 97 in 1942.

## III.—GENERAL REMARKS.

(a) PUBLIC HEALTH.

(b) MISCELLANEOUS.

### *PUBLIC HEALTH.*

12. The effects of the abnormal rainfall of 1943 continued to be felt during 1944. Though the death rate and infant mortality rate were lower than in 1943, these were higher than in 1942 and most of the other vital statistics, *e.g.*, birth rate, malaria deaths, still births, etc., compared unfavourably with those of the previous year.

### *MISCELLANEOUS.*

13. STAFF.—Dr. O. M. Francis acted as Deputy Director of Medical Services until 7th October when he was appointed to the post.

14. Dr. C. C. Nicholson, School Medical Officer, returned to the Colony in January. The School Medical Service was inaugurated at the end of that month.

15. Dr. S. R. Maraj was appointed Government Medical Officer and assumed duty on 21st July.

16. Dr. A. Romiti was appointed acting Government Medical Officer as from 1st January.

17. Mrs. E. Challoner, Sister-Tutor, selected by the Secretary of State for the Colonies for temporary appointment for a period of five years, arrived in the Colony on 13th September, 1944, and assumed duty. She is engaged in revising the system of training of probationer-nurses with a view to bringing the training school into line with modern standards.

18. INFANT WELFARE AND MATERNITY.—The Infant Welfare and Maternity League continued to play its important part in the care of mothers, expectant mothers and infants in the rural areas of the Colony. The number of clinics held throughout the year was 1,358, with 19,045 attendances of children and 7,618 of expectant mothers. The various local Committees displayed their usual activity in the raising of funds for the needs of clinic infants and mothers, and have thereby maintained a lively interest in the work.

19. Owing to the difficulty of obtaining building materials, no new health centres were erected during the year. The two inspectors of midwives and the health visitors attached to the seven existing health centres are members of the staff of the Medical Department. There is close collaboration between the Department and the League.

20. TUBERCULOSIS SOCIETY. The British Guiana Society for the Prevention and Treatment of Tuberculosis continued its im-

portant activities during the year. There were a few more notifications of this disease than in the previous year (284 compared with 257) but the death rate, *viz.*, 0.56 per 1,000 of the population in 1944, is the lowest on record in this Colony. A fluoroscope installed at the principal dispensary in Georgetown with the object of examining every patient completely at the dispensary without any necessity of his making another visit to the hospital to be X-rayed, unfortunately proved to be relatively unsuitable for the type of work done at the dispensary. Apparently a satisfactory installation will not be obtainable before the end of the war, when such equipment will become available.

21. During the year the Public Health Ordinance was amended to provide for the compulsory detention in hospital of cases of infectious diseases in which the patients are not so housed as to prevent the spread of the disease. This amendment will be of special value in the prevention of Tuberculosis, although it must be emphasised that persuasion and propaganda are used to the fullest possible extent.

22. With the exception of a ten-bed ward at the Public Hospital, Berbice, hospitalisation of patients suffering from tuberculosis is now restricted to the Best Hospital. No patients are admitted for the treatment of tuberculosis to the Public Hospital, Georgetown, except in emergency. The accommodation at the Best Hospital has been increased, and close liaison is maintained between the Hospital and the Georgetown Dispensary, the Medical Superintendent being the chief physician at the Dispensary, where treatment and observation are continued after discharge from hospital.

23. The following are the schemes for which grants have been approved under the Colonial Development and Welfare Act :—

(a) Medical Service for Aboriginal Indian population.

(b) Extension of Yellow Fever Control Service.

(c) Malaria Investigation.

(d) Propaganda material for Health Centres.

(e) Equipment for extension of Venereal Disease work at country hospitals.

(f) Fluoroscope for Tuberculosis Dispensary.

(g) Lady Health Officer.

(h) Training of Sanitary Inspectors.

(i) Demonstrations *re* Rural Housing.

(j) Model houses for Health Centre Staff, Anna Regina.

(k) Sister-Tutor for nurses' training.

(l) School Medical Officer.

It has been found practicable to implement all schemes except (a), (g) and (j) during the year.

24. NUTRITION.—The activities of the Nutrition Committee were somewhat restricted for the greater portion of the year owing to the lack of the services of a medical officer or competent full-time investigator, but through the assistance of the School Medical Officer, some clinical surveys were carried out. An educational and propaganda campaign was launched with the idea of bringing the essential facts of nutrition to the knowledge of the public, and broadcast addresses were given by members of the Committee. These appeared to have been well received by the public, as shown by the large number of interesting questions addressed to the Committee.

25. Dr. B. S. Platt, Director of the Human Nutrition Unit of the Medical Research Council, visited the Colony in November, and spent two weeks studying local conditions. During his visit, he had discussions with the Nutrition Committee, the Central Board of Health and Heads of Departments concerned with nutritional problems.

26. He also carried out limited surveys in Georgetown, Berbice, and in representative rural areas. His general conclusion was that there is no evidence of gross malnutrition in British Guiana, that signs of minor and specific deficiencies exist, and that optimal standards of nutrition are not met.

27. The signs of malnutrition found by Dr. Platt in the surveys were principally those due to riboflavin and nicotinic acid deficiency. He advised that these deficiencies could be made good by adding either skimmed milk or food yeast to the dietary.

28. Dr. Platt's advice has been most helpful and his visit has been much appreciated. It has stimulated interest in the nutritional problems of the Colony and has added much to the practical knowledge of nutrition in general.

29. In August, the Chairman of the Nutrition Committee was appointed to be a member of the Advisory Committee on Food Supplies and of the Local Food Production Committee.

## IV.—HYGIENE AND SANITATION.

30. The Central Board of Health held twelve meetings during the year. Under Section 95, Public Health Ordinance, 1934, twenty applications to establish the trade of coconut-oil making (or coconut-oil refining) two for soap-making, and one for leather-tanning were approved. Six applications under this section were not approved. The Board also issued certificates of approval to one hundred and eighty-five rice factories (under the Rice Factories Ordinance, No. 26 of 1933), and granted permission for the establishment of seven schools (Section 60 (1), Public Health Ordinance, 1934). Extension to or rebuilding of ten other schools was also approved. In addition, a number of miscellaneous matters were dealt with.

31. HOUSING AND DISTRICT PLANNING. The Board dealt with 941 building applications, approved of 39 plans for the lay-out of land for building purposes under Section 135 (1), Public Health Ordinance, 1934, and issued 65 certificates under Section 135 (4).

32. In August, the Board again found it necessary to extend the operation of its policy of relaxation with respect to buildings in rural areas for another year. Every case of relaxation was dealt with on its merits.

33. EXERCISE OF POWERS, FUNCTIONS AND DUTIES OF LOCAL SANITARY AUTHORITIES. The Board, exercising the powers, functions and duties of the Local Sanitary Authority of the Sheet Anchor Village District, under Section 17 of the Ordinance, undertook 8 prosecutions for violation of the Ordinance in this district.

34. In September, the Board relinquished the powers, functions and duties of the Local Sanitary Authority of the Christianburg and Wismar Country District, which it had assumed under the provisions of the Public Health Ordinance, 1934, on 17th June, 1942.

35. The Town Planning and Architectural Adviser to the Comptroller for Development and Welfare in the West Indies visited the Colony "to study the housing problems and to make recommendations on town planning." He met the Board and the urban authorities and advised on the steps to be taken if the Colony was to be equipped properly for a really effective programme of long-term planning. These include—

(a) legislation to give Government power to acquire sufficient land to carry out wholesale improvements, and to purchase that land at non-speculative prices;

(b) legislation to set up a Central Planning and Housing Authority, whose duties would be to create decent living conditions in town and country by uniting the problem of housing with the closely related problems of education, employment and recreation; this co-ordinating authority to be the Technical Advisory Committee to Government, and to be composed of experts in all essential fields, *e.g.*, Health, Agriculture, Drainage and Irrigation, Public Works, Education and Social Welfare Services, etc.;

(c) Town Councils and other Local Authorities to take care of the details of planning schemes in their districts, and to make their own proposals to the Central Authority.

As a result of the collaboration between the Central Board of Health and the Sugar Producers' Association, satisfactory attention was given to housing on Sugar Estates, though wartime conditions again greatly hampered the execution of approved building programmes. With respect to District Planning, the survey and apportioning into house lots of the residential areas of Nos. 57, 58, 59 and 60 Corentyne, Berbice, was completed under provisions of the District Lands Partition and Re-allotment Ordinance, Chapter 169, and the final

steps taken with respect to the transports for the front and back lands of Lot No. 64 Village

36. SCHOOL MEDICAL SERVICE.—A School Medical Service was inaugurated on 31st January under the immediate direction of Dr. C. C. Nicholson, School Medical Officer, who had received special training at the Toronto University, Canada. This officer is assisted by a staff of six health visitors. Preliminary surveys of schools were carried out during the year and the Service received increasing co-operation from both teachers and parents, and has already achieved considerable success.

37. A Health Nurse was sent to Trinidad for special training under Dr. E. Muir, Medical Superintendent of the Leprosarium in Trinidad. She left the Colony on 1st May, and returned on 17th June. Since her return to the Colony she has been engaged in carrying out school surveys and assisting the Medical Superintendent, Leprosy Hospital, Mahaica, in his work at the clinics in Georgetown. The importance of this survey may be judged from the fact that at the end of the year, 6,830 children had been examined, among whom 22 cases of early leprosy were discovered.

38. In October His Excellency the Governor appointed the Deputy Director of Medical Services to be a member of the Committee appointed for the purpose of advising the Controller of Milk.

39. PUBLIC HEALTH LEGISLATION. During the year the Public Health Ordinance, 1934, was amended by the enactment of Ordinance No. 19 of 1944, to enable the compulsory detention in hospital of cases of infectious disease in which the patients are not so housed as to prevent the spread of the disease. The amendment will be of special value in the prevention of tuberculosis.

40. The Mayor and Town Council, as Local Sanitary Authority of Georgetown, made Regulations under the provisions of Sections 18 and 98 of the Public Health Ordinance, 1934, for governing the conditions and places in which offensive trades lawfully established may be carried on. The Regulations have been approved by the Board and the Governor in Council.

## V.—PUBLIC HEALTH EDUCATION.

41. Caravan tours were not undertaken during the year owing to petrol and tyre shortage. Complete courses of instruction were given by the Health Department in collaboration with the Municipal Health Department, Georgetown, to candidates for the examinations of the Royal Sanitary Institute, for Sanitary Inspectors and for Health Visitors and School Nurses.

42. On 31st October ten sanitary inspector students (local) satisfactorily completed a two-year course of study. During the year a course of theoretical and practical training was also given to ten sanitary inspectors from the Windward and Leeward Islands (4 from St. Vincent, 2 from St. Lucia, 2 from Dominica and 2 from Grenada) and to thirty-four health visitor students, (30 from British Guiana, 1 from St. Lucia and 3 from Dominica). All these students sat for the Royal Sanitary Institute Examinations held in this Colony in November.

43. A two-year course for local student Sanitary Inspectors financed under the Development and Welfare Act was commenced at the end of the year.

## VI.—MEDICAL MISSION TO THE INTERIOR.

44. In early January a special medical mission under the charge of Dr. P. G. Barrow, Health Officer, was sent to the Mazaruni District and in addition to a general survey of the health conditions among aboriginees, a vaccination campaign was successfully carried out. The members of the mission spent approximately three months in this survey. A special report was submitted.

## VII.—GENERAL DISEASES.

45. NEPHRITIS.—The total number of deaths was 599, a rate of 1.6 per 1,000 in 1944, as compared with 692 deaths, a rate of 1.9 per 1,000 in 1943.

46. DISEASES OF THE HEART.—There were 604 deaths registered in the Colony from all forms of heart disease as compared with 613 in 1943.

47. INTERNAL DISEASES (excluding enterics and dysenteries). The number of deaths registered in 1944 was 497 compared with 572 in 1943.

48. CANCER AND OTHER MALIGNANT TUMOURS. The total number of deaths was 135 as compared with 144 in 1943. 81 cases of malignant disease with one death were treated in Public Hospitals.

## VIII. COMMUNICABLE DISEASES.

49. There were 911 deaths recorded from malaria during the year as compared with 785 in 1943. The epidemic reported in the latter months of 1943 continued during the early months of 1944 until normal endemic conditions were reached. The following returns of cases treated in public hospitals and dispensaries indicate the course of the disease and also show the seasonal rise which occurred during the late summer months.

| *Month.* | *Total Cases.* | *Deaths.* |
|---|---|---|
| January .... .... .... | 4,852 | 48 |
| February .... .... .... | 3,387 | 60 |
| March .. .... .... .... | 2,801 | 34 |
| April .. .... .... .... | 2,146 | 21 |
| May .... .... .... .... | 2,368 | 40 |
| June .... .... .... .... | 3,166 | 45 |
| July .... .... .... .... | 4,056 | 41 |
| August .... .... .... | 4,396 | 43 |
| September .... .... .... | 3,804 | 50 |
| October .... .... .... | 3,598 | 41 |
| November .... .... .... | 2,660 | 26 |
| December .... .... .... | 2,239 | 30 |
| Total .... .... .... | 39,473 | 479 |

50. A report of the work of the Malarial Investigation Service has been submitted. The objective of the Unit is the systematic investigation of the malaria and anopheline problem of the Colony for the purpose of working out the most effective means of control. Investigations were begun by studying the biology of the coastal anophelines, and this work has now been extended to the city of Georgetown and its suburbs. Parasite and spleen surveys of school children have been carried out in the city with the object of studying the range of penetration of malaria and of its carrier from the periphery towards the centre of the city.

51. RESPIRATORY DISEASES. Pneumonia was responsible for 409 deaths throughout the Colony, with a rate of 1.1 per 1,000 as compared with 469 deaths, a rate of 1.3 per 1,000 in 1943.

52. Bronchitis and broncho-pneumonia caused 710 deaths, a rate of 1.9 per 1,000. During 1943 the number of deaths was 764, a rate of 2.1 per 1,000.

53. INFLUENZA. Mild influenza was epidemic in the Colony during the first quarter of the year. 444 cases were treated in the Public Hospital, with 9 deaths. The deaths registered as due to this disease throughout the Colony were 80.

54. TUBERCULOSIS (all forms). This disease caused 206 deaths in the Colony, with a death rate of 0.56 per 1,000 as against 253 deaths and a death rate of 0.70 per 1,000 for 1943 and 0.64 per 1,000 in 1942. Notifications which numbered 284 were slightly higher than in the previous year.

55. ENTERIC FEVER (INCLUDING TYPHOID AND PARATYPHOID). There was a marked increase in the incidence of Enteric Fever, there being 674 cases, with 118 deaths as compared with 407 cases and 84 deaths in 1943. Typhoid is always endemic in the country areas. Most of the cases are children, and in British Guiana typhoid fever must almost be regarded as a disease of childhood. Fairly wide fluctuations occur from year to year. The distribution of cases was general throughout the Colony, and no epidemic occurred. Admissions to public and estate hospitals by months were as follows :—

| *Month.* | *Cases.* |
|---|---|
| January .... .... .... | 32 |
| February .... .... .... | 39 |
| March .... .... .... | 53 |
| April .... .... .... | 43 |
| May .. .... .... .... | 68 |
| June .... .... .... | 77 |
| July .. .... .... .... | 70 |
| August .... .... .... | 51 |
| September .... .... .... | 58 |
| October .... .... .... | 63 |
| November .... .... .... | 60 |
| December .... .... .... | 66 |

56. CHICKEN POX. There were 48 cases as compared with 94 cases in 1943.

57. DIPHTHERIA. There were 87 cases, with 16 deaths, as compared with 73 cases and 15 deaths in 1943.

58. PUERPERAL FEVER. There were 12 cases during the year with 4 deaths, against 22 cases with 15 deaths in 1943.

59. SMALL POX. There was no case of Small Pox reported in the Colony during the year. During the year 7,758 persons were successfully vaccinated. Infant vaccination is now required by law.

60. TRACHOMA. There were 9 cases notified, as compared with 7 in 1943.

61. TETANUS. 35 cases were treated in Public Hospitals with 19 deaths, compared with 29 cases and 19 deaths in 1943.

62. YAWS. 14 cases were treated in Public Hospitals, as against 6 in 1943. There were no deaths. 110 cases were treated in the Out-Patient Departments as against 9 in 1943. This increased figure is due to a campaign conducted among the aboriginal Indians in the North-West District.

63. ANKYLOSTOMIASIS. 264 cases were treated in Public Hospitals with 2 deaths compared with 155 cases and 4 deaths in 1943. The deaths registered as due to this disease throughout the Colony were 8 as compared with 7 in 1943.

64. YELLOW FEVER. No case of Yellow Fever has been known to occur in the Colony during the year.

65. The Anti-Aedes (Yellow Fever Control) Service is operated in co-operation with the Rockefeller Foundation, which contributes the services and travelling expenses of a staff member who acts as chief officer and $4,500 for office expenses, clerical assistance and emergency supplies. A detailed report of the work of this Service has been submitted as a separate report.

66. LEPROSY. There were 35 new admissions to the Leprosy Hospital. 591 out-patients attended the various clinics. (Please see also Appendix III).

67. FILARIASIS. 34 deaths were registered from this disease.

68. ERYSIPELAS. There were 2 cases notified.

69. OPHTHALMIA NEONATORUM. 26 cases were notified, as compared with 34 cases in the previous year.

70. MEASLES. There were 7 cases treated as in-patients at Public Hospitals during the year, with no deaths.

71. VENEREAL DISEASES. The following table gives the number of cases of venereal diseases treated as in-patients in Public Hospitals for the last two years :—

| | SYPHILIS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year. | Primary. | Secondary. | Tertiary. | Hereditary. | Stage not indicated. | Soft Chancroid. | Gonorrhea. | Granuloma venereum. |
| 1943 | 190 | 21 | 318 | 23 | 2 | 48 | 733 | 69 |
| 1944 | 181 | 28 | 248 | 8 | 21 | 23 | 429 | 13 |

The number of Novarsenobillon and other injections given for syphilis at the Public Hospitals was 18,225 as compared with 23,877 in 1943.

72. The following shows the number of cases of Venereal Diseases treated on Sugar Estates for the past two years :—

| | 1943 | 1944 |
|---|---|---|
| Gonorrhoea .... .... .... .... | 88 | 114 |
| Chancroid .... .... .... .... | 3 | 2 |
| Syphilis .... .... .... .... | 13 | 47 |
| Granuloma Venereum .... .... .... | — | — |

*Venereal Diseases Clinic, Public Hospital, Georgetown.*

73. SYPHILIS.—890 new ceses were admitted for treatment as compared with 799 in 1943.

74. GONORRHOEA.—There were 1,226 new admissions as against 974 in 1943.

75. DEFAULTING.—There was the usual high incidence of defaulting.

76. ATTENDANCE.—4,960 patients attended the clinic during the year, as against 4,106 in 1943.

77. Leaflets were distributed at the clinics and talks were given to individual new cases. (Please see also Appendix II).

78. The following table shows the diseases treated in the seven general hospitals during 1944 :—

| No. | *Corresponding number in International Lists.* | *Disease.* | IN-PATIENT. *Total Cases.* | *Total Deaths.* | OUT-PATIENTS. *Total Cases.* |
|---|---|---|---|---|---|
| 1 | 1 | (a) Typhoid Fever .... .... | 341 | 70 | — |
| | 2 | (b) Paratyphoid Fever .... .... | 3 | — | — |
| 2 | 3 | Typhus Fever .... .... .... | — | — | — |
| 3 | 4 | Relapsing Fever .... .... .... | — | — | — |
| 4 | 5 | Undulant Fever .... .... .... | — | — | — |
| 5 | 6 | Small Pox .... .... .... .... | — | — | — |
| 6 | 7 | Measles .... .... .... .... | 7 | — | 4 |
| 7 | 8 | Scarlet Fever .... .... .... | — | — | — |
| 8 | 9 | Whooping Cough .... .... .... | 6 | — | 182 |
| 9 | 10 | Diphtheria .... .... .... .... | 67 | 15 | — |
| 10 | 11 | Influenza .... .... .... .... | | | |
| | 11 (a) | (a) with respiratory complications .. | 7 | 1 | 4 |
| | 11 (b) | (b) without respiratory complications | 437 | 8 | 3,837 |
| 11 | 12 | Cholera .... .... .... .... | — | — | — |
| 12 | 13 | Dysentery .... .... .... .... | | | |
| | 13 (a) | (a) Amoebic .... .... .... | 77 | 8 | 60 |
| | 13 (b) | (b) Bacillary .... .... .... | 24 | 5 | — |
| | 13 (c) | (c) Unclassified .... .... .... | 90 | 16 | 35 |
| 13 | 14 | Plague .... .... .... .... | | | |
| | 14 (a) | (a) Bubonic .... .... .... | — | — | — |
| | 14 (b) | (b) Pneumonic .... .... .... | — | — | — |
| | 14 (c) | (c) Septicaemia .... .... .... | — | — | — |
| 14 | 16 | Acute poliomyelitis .. .... .... | — | — | — |
| 15 | 17 | Encephalitis lethargica .... .... | — | — | — |
| 16 | 18 | Cerebospinal fever .... .... .... | — | — | — |
| 17 | 21 | Rabies .... .... .... .... | — | — | — |
| 18 | 22 | Tetanus .... .... .... .... | 35 | 19 | — |
| 19 | 23 | Tuberculosis of the respiratory system | 126 | 26 | 50 |
| 20 | 24—32 | Other Tuberculous Diseases .... | 12 | 4 | 3 |
| 21 | 33 | Leprosy .... .... .... .... | 19 | 2 | — |
| 22 | 34—35 | Venereal Diseases .... .... .... | | | |
| | 34 (a)–34 (b) | (a) Syphilis .... .... .... | 486 | 14 | 1,030 |

| No. | Corresponding number in International Lists. | Disease. | IN-PATIENT. Total Cases. | IN-PATIENT. Total Deaths. | OUT-PATIENTS. Total Cases. |
|---|---|---|---|---|---|
| | 35 | (b) Gonorrhoea .. .... .... | 429 | 1 | 1,395 |
| | 36 | (c) Other V.D. .. .... .... | 197 | 8 | 1,461 |
| 23 | 37 | Yellow Fever .... .... .... | — | — | — |
| 24 | 38 | Malaria | | | |
| | | (a) Benign Tertian .... .... | 819 | 18 | 706 |
| | | (b) Subtertian .... .... .... | 842 | 32 | 151 |
| | | (c) Quartan .... .... .... | 9 | — | 103 |
| | | (d) Unclassified .. .... .... | 1,983 | 118 | 6,466 |
| 25 | 44–46 | Blackwater Fever .... .... .... | 5 | 3 | — |
| 26 | 39 | Kala-azar .... .... .... .... | — | — | — |
| 27 | 39 | Trypanosomiasis .... .... .... | — | — | — |
| 28 | 39 | Yaws .... .... .... .... | 14 | — | 110 |
| 29 | 39 | Other protozoal diseases .... .... | 193 | — | — |
| 30 | 40 | Ankylostomiasis .... .... .... | 264 | 2 | 210 |
| 31 | 42 | Schistosomiasis .... .... .... | — | — | — |
| 32 | 41, 42 | Other helminthic diseases .... .... | 98 | — | 708 |
| 33 | 15, 19, 20 36, 43, 44 | Other infectious and/or Parasitic diseases | 39 | 8 | 453 |
| 34 | 44–53 | Cancer and other tumours | | | |
| | 45–53 | (a) Malignant .... .... .... | 81 | 1 | — |
| | 54 | (b) Non-malignant .... .... | 162 | 22 | — |
| | 55 | (c) Undetermined .... .... | 18 | 1 | 39 |
| 35 | 36–57 | Rheumatic conditions .... .... | 92 | — | 639 |
| 36 | 59 | Diabetes .... .... .... .... | 91 | 11 | 67 |
| 37 | 60 | Scurvy .... .... .... .... | — | — | — |
| 38 | 61 | Beriberi .... .... .... .... | 3 | — | — |
| 39 | 62 | Pellagra .... .... .... .... | 1 | 1 | — |
| 40 | 58, 63, 64 | Other diseases— | | | |
| | | (a) Nutritional .. .... .... | 342 | 45 | 2,288 |
| | | (b) Endocrine glands and general | 43 | — | 266 |
| 41 | 70–74 | Diseases of the blood and blood-forming organs .. .... .... .... | 599 | 89 | 162 |
| 42 | 75–77 | Acute and Chronic Poisoning .... | 55 | — | — |
| 43 | 82 | Cerebral Haemorrhage .... .... | 127 | 39 | 2 |
| 44 | 78–81, 83–87 | Other diseases of the nervous system.... | 596 | 55 | 756 |
| 45 | 88 | Trachoma .... .... .... .... | 1 | — | 5 |
| 46 | 88 | Other diseases of the eye and annexe .. | 525 | 3 | 2,815 |
| 47 | 89 | Disease of the ear and mastoid sinus.... | 122 | 2 | 1,011 |
| 48 | 90–103 | Diseases of the circulatory system— | | | |
| | 90–95 | (a) Heart Disease .... .... | 595 | 155 | 539 |
| | 96–103 | (b) Other circulatory diseases .... | 245 | 35 | 601 |
| 49 | 106 | Bronchitis .... .... .... .... | 481 | 25 | 2,889 |
| 50 | 107–109 | Pneumonia— | | | |
| | 107 | (a) Broncho-Pneumonia .... | 60 | 26 | 7 |
| | 108 | (b) Lobar-Pneumonia .... .... | 249 | 57 | 4 |
| | 109 | (c) Otherwise defined .... .... | 68 | 14 | 58 |
| 51 | 104, 105, 110–114 | Other diseases of the respiratory system | 611 | 35 | 1,958 |
| 52 | 119–120 | Diarrhoea and enteritis— | | | |
| | | (a) Under 2 years of age .... | 21 | 10 | 127 |
| | | (b) Over 2 years of age .... | 296 | 22 | 661 |
| 53 | 121 | Appendicitis .... .... .... | 112 | 1 | 4 |
| 54 | 122 | Hernia, Intestinal obstruction .... | 465 | 18 | 124 |

| No. | Corresponding number in International Lists. | Disease. | IN-PATIENT Total Cases. | IN-PATIENT Total Deaths. | OUT-PATIENT. Total Cases. |
|---|---|---|---|---|---|
| 55 | 124 | Cirrhosis of the liver .... .... | 32 | 9 | 44 |
| 56 | 125–127 | Other diseases of the liver and biliary passage .. .... .... .... | 218 | 23 | 1,052 |
| 57 | 115, 118, 123 128–129 | Other diseases of the digestive system | 896 | 29 | 1,671 |
| 58 | 130–132 | Nephritis (all forms)— | | | |
| | 130 | (a) Acute .... .... .... | 18 | 10 | 109 |
| | 131 | (b) Chronic .... .... .... | 265 | 54 | 189 |
| 59 | 133–139 | Other non-venereal diseases of the genito-urinary system .. .... .... | 1,606 | 63 | 775 |
| 60 | 140–150 | Diseases of pregnancy, childbirth and the puerperal state— | | | |
| | 140, 141 | (a) Abortion .... .... .... | 224 | — | 16 |
| | 142 | (b) Ectopic gestation .... .... | 9 | — | — |
| | 145–146 | (c) Toxaemias of pregnancy .... | 45 | 12 | — |
| | 148–150 | (d) Other conditions of the puerperal state .... .... .... | 113 | 33 | 227 |
| 61 | 151–156 | Diseases of the skin, cellular tissue, bones, and organs of locomotion | 3,102 | 48 | 3,251 |
| 62 | 157–161 | Congenital malformations and diseases of early infancy— | | | |
| | 158 | (a) Congenital debility (Children under 1 year) .... .... | 82 | 54 | — |
| | 159 | (b) Premature Birth .... .... | 112 | 75 | — |
| | 160 | (c) Injury at birth .... .... | 11 | 4 | — |
| 63 | 162 | Senility .... .... .... .... | 306 | 60 | 882 |
| 64 | 163–198 | External causes— | | | |
| | 163–171 | (a) Suicide .... .... .... | — | — | — |
| | 172–198 | (b) Other forms of violence .... | 1,666 | 29 | 4,865 |
| 65 | 199–200 | Ill-defined causes .... .... .... | 375 | 20 | 858 |
| | | Pregnancy (non-delivery) .... .... | 455 | 2 | 530 |
| | | Normal labour .... .... .... | 1,926 | 3 | — |
| | | Not sick .... .... .... .... | 420 | — | 87 |
| | | | 25,777 | 1,573 | 46,546 |

## IX.—THE BOARD OF EXAMINERS, CHEMISTS AND DRUGGISTS.

79. Lectures in Elementary Chemistry and Pharmaceutical Chemistry were given during the year to candidates intending to sit the First Professional and Final Examinations for Chemists and Druggists. No examinations were held by the Board during the year.

## APPENDIX I.

### SUMMARY OF THE ANNUAL REPORT OF THE CENTRAL MEDICAL LABORATORY, PUBLIC HOSPITAL, GEORGETOWN.

| | | TOTAL |
|---|---|---|
| **BLOOD :** | | |
| A. *Parasitological* | | |
| | Positive—1,081; Negative—2,129; .... .... .... .... | 3,210 |
| B. *Haematological* | | |
| | Complete Blood Count .... .... .... .... .... | 451 |
| | Blood Sedimentation Rate .... .... .... .... .... | 131 |
| | Differential White Cell Count .... .... .... .... | 67 |
| | Blood Grouping and Direct Matching .. ... .... .... | 501 |
| C. *Cultural (Enteric Group)* | | |
| | Positive—111; Negative—363; .... .... .... .... | 474 |
| D. *Serological* | | |
| | (a) *Widal Agglutination (Enteric Group)* | |
| | Positive—369; Negative—534; Contaminated—13; .... .... | 916 |
| | (b) *Kahn Test* | |
| | Positive—2,650; Negative—6,799; Contaminated—109 .... | 9,558 |
| | (c) *Laughlen Test* | |
| | Positive—3,252; Negative—7,428; .... .... .... .... | 10,680 |
| E. *Chemical* | | |
| | Miscellaneous .... .... .... .... .... .... | 528 |
| F. *Other Groups* | | |
| | Blood for Streptococci & Staphylococci .... .... .... | 21 |
| **FAECES :** | | |
| A. *Microscopical* | | |
| | Positive—144; Negative—401; Faeces—for undigested Fats, Starch Granules, etc.—7 .... .... .... .... .... | 552 |
| B. *Cultural* | | |
| | (a) Enteric Group—Positive—16; Negative—1,050 .... .... | 1,066 |
| | (b) Dysentery Group—Positive—3; Negative—26 .... .... | 29 |
| C. *Chemical (Occult Blood)* | | |
| | Positive—20; Negative—40; .... .... .... .... | 60 |
| **SPUTUM** *(for Tubercle Bacilli).* | | |
| A. *Microscopical* | | |
| | Positive—16; Negative—197; .... .... .... .... | 213 |
| B. *Cultural* .... Negative—11; | .... .... .... .... | 11 |
| C. *Sputum* .... Miscellaneous | .... .... .... .... | 34 |
| **URINE :** | | |
| A. *Microscopical* .... .... .... .... .... .... | | 554 |
| B. *Chemical* .... .... .... .... .... .... .... | | 248 |
| C. *Complete Analysis* .... .... .... .... .... .... | | 110 |
| D. *Kidney Function Tests* | | |
| | (i) Urea Concentration Test .... .... .... .... | 17 |
| | (ii) Volhardt's Test .... .... .... .... .... | 9 |
| E. *Cultural* .... .... .... .... .... .... .... | | 189 |
| **TRANSUDATES & EXUDATES** | | |
| A. *Cerebro-Spinal Fluid* | | |
| | Microscopical .... .... .... .... .... .... | 45 |
| | Chemical .... .... .... .... .... .... .... | 31 |
| | Cultural .... .... .... .... .... .... .... | 8 |
| | Kahn Test .... .... .... .... .... .... | 24 |

| | |
|---|---|
| B. *Urethral, Prostatic, Cervical & Vaginal Secretions.* | |
| 1. *Microscopical* | |
| Positive—39; Negative—132; .... .... .... .... | 171 |
| 2. *Cultural* | |
| Positive—7; Negative—161; | 168 |
| 3. *Vaginal Washings for Trichimonas*—Vaginalis .... .... | 14 |
| C. *Conjunctival Secretions* | |
| 1. *Microscopical* | |
| Positive—97; Negative—166; .... .... .... .... | 263 |
| 2. *Cultural* | |
| Positive—7; Negative—4; .... .... .... .... | 11 |
| D. *Throat Swabs* | |
| 1. *K.L.B. (Microscopical).* | |
| Positive—11; Negative—482; .... .... .... .... | 493 |
| 2. *K.L.B. (Cultural)* | |
| Positive—131; Negative—363; .... | 494 |
| 3. *Miscellaneous Swabs (Nasal & Post-Nasal)* | |
| Culture .... .... .... .... .... .... .... | 37 |
| PUS & FLUIDS (*Pleural, Ascetic, Synovial, etc.*) | |
| A. *Microscopical* | |
| Negative—40; Positive—3; .... .... .... .... | 43 |
| B. *Cultural* | |
| Negative—40; Positive—28; .... .... .... .... | 68 |
| GASTRIC CONTENTS | |
| A. *Fractional Test Meals* .... .... .... .... .... | 97 |
| B. *Vomitus & Gastric Juice* .... .... .... .... .... | 17 |
| MISCELLANEOUS | |
| 1. Allergic Skin Tests .... .... .... .... .... .... | 77 |
| 2. Filaria Skin Tests .... .... .... .... .... .... | |
| Positive—275; Negative—35; Undetermined—4; .... .... | 314 |
| 3. Guinea Pig inoculation .... .... .... .... .... | 8 |
| 4. Appraisal of Semen (for Mobility) .... .... .... .... | 1 |
| NASAL SMEARS & SKIN SCRAPINGS FOR B. LEPRAE. | |
| Positive—6; Negative—62; Miscellaneous Examinations of Scrapings (other than for B. Leprae)—33 .... .... .... | 101 |
| P.M. SMEARS & CULTURES .... .... .... .... .... | 56 |
| HISTOLOGICAL EXAMINATIONS .... .... .... .... | 127 |
| BACTERIOLOGICAL EXAMINATIONS OF : | |
| a. Water .... .... .... .... .... .... .... | 147 |
| b. Milk .... .... .... .... .... .... .... | 196 |
| c. Food Yeast .... .... .... .... .... .... .... | 3 |
| d. Food Yeast—Wort .... .... .... .... .... .... | 6 |
| MEDICO-LEGAL EXAMINATIONS .... .... .... .... | 19 |
| SMEARS FROM RATS FOR B. PESTIS .... .... .... .... | 1,610 |
| OTHER EXAMINATIONS—Miscellaneous .... .... .... .... | 113 |
| | 34,391 |

121 Post-Mortem Examinations with dissection were performed.

23 Post-Mortem Examinations with dissection were performed at the request of the Coroner.

## TRAINING OF TECHNICIANS.

Technicians were trained for British Honduras and for Montserrat and the training of candidates for other Islands mentioned in last year's Report completed. The candidate from Grenada became ill shortly after arrival and had to return home. Three candidates were trained for work in our own laboratories.

## ROUTINE.

The total number of routine examinations performed in the Central Laboratory was 34,391 and in the Hospital Laboratory 16,944 making a total of 51,335 as compared with 18,049 in 1938.

The enteric infections still demand a fair proportion of the time of Serological Division. Of 903 sera examined, positive reactions were given by 369. Analysed in the same manner as last year, the results were as follows :—

| | |
|---|---|
| Bact. typhosum .... .... .... | 336 |
| Bact. paratyphosum A. .... .... | 6 |
| Bact. paratyphosum B. .... .... | 11 |
| Bact. paratyphosum C. .... .... | 3 |
| Ambiguous results .... .... | 13 |

It will thus be seen that Bact. typhosum accounted for the vast majority of enteric infections followed by Bact. paratyphosum B. Bact. paratyphosum A and last in importance Bact. paratyphosum C.

Of 363 samples of blood received for culture, Bact. typhosum was isolated from 108, Bact. paratyphosum B from one and Bact. paratyphosum C from one.

Of 1,050 samples of faeces Bact. typhosum was isolated from 15 and Bact. paratyphosum variety undetermined from one. The large number of negative results from faeces culture is due to the fact that the routine practice in the Hospital is to send faeces from cases of enteric infections to the laboratory for culture before discharge of the patient.

Isolation of Bact. paratyphosum C from an empyema and from purulent arthritis of the knee-joint is noteworthy.

## BLOOD PARASITES.

A total number of 3,210 blood films were received for examination, of which parasites were present in 1,081. Many double and triple infections were recorded. The following tables show the variety and proportions of parasites observed :—

## MALARIA.

| *Plasmodium Falciparum* | *Crescents* | *Plasmodium Vivax* | *Plasmodium Malariae* | *Undetermined* |
|---|---|---|---|---|
| 540 | 180 | 496 | 3 | 6 |

The figures from the Hospital Laboratory are :

| *Plasmodium Falciparum* | *Crescents* | *Plasmodium Vivax* | *Plasmodium Malariae* | *Undetermined* |
|---|---|---|---|---|
| 1,068 | 141 | 716 | 1 | — |

## SEROLOGICAL TESTS FOR SYPHILIS

As before, the Laughlen test has been performed in parallel with the Kahn. Many thousands of Laughlen tests have been thus performed in the last few years and each year serves to confirm its reliability. It has proved to be of great service for testing donors for Blood Transfusion.

Increasing numbers of requests for tests in connection with the Venereal Diseases Services are throwing a great strain on the laboratory, and the present staff, equipment and premises are totally inadequate to serve any increase in such work such as would result from an intensification of the drive against V.D.

## APPENDIX II.

## SUMMARY OF THE ANNUAL REPORT OF THE SOCIAL DISEASES CLINIC, GEORGETOWN.

### STAFF.

The Clinic Staff consisted of the following personnel :—

The Venereal Diseases Officer,
One Female Charge Nurse,
One Male Charge Nurse,
One Staff Nurse,
One Assistant Nurse (on duty for periods of 3-6 months),
Two Male Nurses (Junior) (on duty for periods of 3-6 months),
One Female V.D. Welfare Officer (appointed March 15, 1944),
One Male V.D. Welfare Officer (appointed March 15, 1944),
One Male Clerk with effect from November 15, 1944.

The Venereal Diseases Officer was on duty throughout the year, except for a short period of Casual Leave when a member of the Hospital Staff deputized, and for the period 1st to 21st December, 1944, when he was on special duty in Trinidad with the Caribbean Medical Centre.

The visit of the V.D. Officer to Trinidad was specially arranged by the Director of Medical Services with the approval of Government in order that he might obtain first-hand knowledge of the work of the Caribbean Medical Centre, located in Port-of-Spain, Trinidad, under the direction of Col. O.C. Wenger, U.S. Adviser on V.D. Control. A special report on this visit has been submitted to the Director of Medical Services. During the absence of the V.D. Officer, Dr. C. R. Subryan, Health Officer acted as V.D. Officer.

An addition to the Staff of the Clinic by the appointment of two V.D. Welfare Officers was made with effect as from 15th March, 1944.

A Male Statistical and Recording Clerk joined the Staff of the Clinic on 15th November, 1944.

The addition of the two V.D. Welfare Officers to the Clinic Staff is highly appreciated. The necessity for the appointment of a Field Staff had been emphasised in previous annual reports and it is considered that these appointments have been fully justified by the work of these two officers.

### CLINIC ACTIVITIES.

A total of 4,525 patients received attention at the Clinic during the year. Of this number, 3,121 were new applicants of whom 2,031 were diagnosed as suffering from Venereal Disease. 1,404 persons previously seen at the Clinic also received attention and are referred to in this report as old patients. Some of these old patients consisted of persons who had attended the Clinic during the previous year and continued their unbroken attendance during the year 1944. Others, however, should be treated as re-admissions after a prolonged period of defaulting. A change in reporting is therefore foreshadowed in formulating the statistical data in subsequent annual reports, in order to describe and clarify the quality and type of applicants for treatment, etc. Apart from the number diagnosed as suffering from Venereal Disease, 495 new applicants were found to have no evidence of venereal disease and were accordingly discharged. 595 new applicants however, remained undiagnosed as a result of delinquency principally.

The Child Welfare Centre continued to send cases of latent and active syphilis and of leucorrhoea for treatment in the case of the former and for diagnosis and treatment in case of the latter. The number of applicants for latent syphilis received from the Child Welfare Centre, Georgetown, continues to be very small.

It should be of some interest to discover the reason for this drop in the number of cases during the past 6 years and especially so during the past 3 years when the incidence of syphilis has been considered to have risen. I think it is now possible to carry through a measure of mass blood testing at these clinics and possibly some arrangements may be made to this end in conjunction with the Medical Officer in charge of the clinics. This may be effected by simply taking a specimen of blood from each mother attending the centre.

Of the number of new applicants diagnosed, 172 were diagnosed as suffering from two or more concurrent infections.

I should like to draw attention once more to the sources of cases receiving attention at the V.D. Clinic, Georgetown. Roughly just under 50 per cent. of the diagnosed cases were resident in rural areas. In the case of early communicable syphilis, 125 cases out of a total of 319 cases admitted in this group were resident in rural areas. The population served is roughly 140,000. The attack rate, therefore, is roughly 0.87 per 1,000 and the prevalence rate 2.63 per 1,000. The prevalence rate for gonorrhoea was 3.98 per 1,000—derived from an attendance ratio of 558 cases per 140,000 persons. These figures are generally low compared with the rates from the City and may possibly reflect the incidence of venereal disease in the rural areas. In the absence of surveys, they should be considered presumptive only.

## SYPHILIS.

There were 890 new admissions for syphilis in all its stages and of this number, there were 319 cases of early communicable syphilis in the primary and secondary stages of the disease. This figure discloses an increase of 42 cases above those recorded for the year 1943, and a decrease of 129 cases in comparison with the year 1942 which should be regarded as the peak of all years in the group—Early Communicable Syphilis. A comparative analysis discloses a marked increase in the number of female admissions in the primary and secondary classifications. This increase in female cases is a note-worthy trend: but the number of cases of early female syphilis is still much smaller than that recorded for the male sex.

Our method of recording does not break down tertiary infections into early latency and late latency. It is now customary to consider cases of early latency—that is of two years duration or under—as communicable. It is therefore not known what proportion of these cases, diagnosed syphilis (3) are communicable.

From the known figures provided in the Statistical Tables, however, it will be seen that 35.33 per cent. of diagnosed syphilis cases attended in the early communicable stage of the disease. This percentage is practically the same as that recorded in the report for the year 1943 and slightly better than that recorded for the year 1942.

Of the number of new cases admitted for treatment who were diagnosed as suffering from syphilis, 521 cases of the 890 were resident in the City of Georgetown. Of these 521 cases, 196 were admitted in the early stage of the disease. In other words, 37.7 per cent. of all new cases of syphilis who were resident in the City, were in the early communicable stage of the disease.

From these figures, it may be recorded that in the City population (Georgetown) roughly estimated at 67,000, 196 cases of early communicable syphilis were admitted to the V.D. Clinic, Georgetown. In terms of annual attack rate per 1,000; this figure reveals an attack rate of 2.9 per 1,000 for the City of Georgetown. In my annual report for 1942, this rate was quoted as 4 per 1,000. It can be correctly assumed that a large number of patients with communicable syphilis are not being seen at the Clinic and quite possibly are going untreated. Nevertheless, there seems to be a downward trend in the attack rate for syphilis. The annual discovery rate was 7.7 per 1,000.

This figure of 2.9 per 1,000 as it is reflected from the new admissions for syphilis at the V.D. Clinic should be regarded as an extremely high incidence when compared with 0.147 per 1,000 for the year 1935 for England and Wales: even though it may be conceded that some regard should be given to the fact that the present figure refer to a period when a rise in the incidence of venereal disease may be expected to occur. It should be remembered also that the statement "Syphilis attacks 1 in 10 persons before the age of fifty" was founded on an attack rate of 2 per 1,000. (Quoted by Vonderlehr, U.S., P.H. Service).

## GONORRHOEA.

Statistics fall under two classifications,—Acute and Chronic Gonorrhoea. It may be stated that the use of the term "Chronic Gonorrhoea" is restricted to cases in which, as a general rule, the only evidence of gonorrhoea is a positive prostatic smear or a positive cervical smear from patients in whom there is no evidence of acute or recent infection. All cases are however regarded as actually or potentially infective and contagious.

A total of 1,226 cases of gonorrhoea was admitted for treatment. Of this number, 927 were recent infections. The percentage ratio of acute gonorrhoea to total number of cases was 77.5 per cent. In comparison with early in-

fections of syphilis, the ratio was 1 case of syphilis to 2.9 gonorrhoea or 1 to 3 nearly. In other words, there were 3 new cases of gonorrhoea to each new case of early syphilis diagnosed.

Attention is drawn to two interesting facts. The total number of cases of gonorrhoea is the largest so far recorded for the past 6 years. The number of female admissions —304—for acute gonorrhoea is also the largest ever recorded. It is possible and quite probable that these figures have resulted from the activities of the follow-up and epidemiological services.

## CHANCROID AND GRANULOMA PUDENDI.

The incidence of chancroid shows an increase of 3 cases above the 1943 figure and in the case of granuloma pudendi, there has been a decrease in the number recorded for 1943.

## LYMPHO-GRANULOMA INGUINALE.

The number of cases showed a decrease of 6 on that recorded for 1943.

## ATTENDANCES.

There was a definite rise in the number of attendances during Clinic sessions. All applicants recorded a total of 39,269 attendances for treatments, consultations and physical examinations. This is the highest number of attendances ever recorded. It represents an increase of 4,096 over that for 1943 and 6,072 over that for 1942, a year in which this Clinic had the highest number of admissions for venereal disease. There is a steady upward trend in attendances.

The attendances for Intermediate treatments show decline. These attendances are for irrigations, douches, and dressings. The decline is mainly due to the use of sulphanamides in treatment of gonorrhoea.

The attendances, though they reach a fairly high aggregate, are nevertheless far below what they should really be, having regard to the number of applicants for treatment. The attendances roughly reveal a rate of 8.7 per applicant and of those diagnosed venereal disease, a rate of 9.6; and for those diagnosed syphilis, a rate of 10.1 per patient and for early syphilis 9.8 per patient.

It is hoped that with further amenities for provision of treatment occupied with further educational measures, the attendance ratio will considerably improve.

## DEFAULTING OR DELINQUENCY.

Arising from the statistical data for attendances is the subject of Defaulting. The incidence of defaulting is, I think, abnormally high. Five hundred and ninety-five cases have been returned undiagnosed mainly because patients failed to attend long enough to permit a definite diagnosis to be made. Together with these cases returned with diagnosis pending must be associated the large number of repeated delinquencies which are reflected in the attendance ratio cited above.

Many reasons have previously been advanced to account for the great incidence of defaulting and it has been the object of these previous reports to suggest ways and means to surmount as many obstacles to regular attendance as possible. A follow-up scheme has been frequently emphasised in previous reports as a means to holding patients to treatment. The appointment of two Welfare Officers to work with the Clinic was implemented during the early months of the year under review. These officers have carried out their new duties capably. This evaluation of their efforts is well borne out, by the substantial number of delinquents they have returned to treatment.

They dealt with 644 delinquents in the first three months after they assumed duty and subsequently with 1,069 delinquents during the latter half of the year. It would appear from these data supplied that a monthly reduction in delinquency of 25 per cent. has been effected.

In perusing the records of these delinquencies, it is observed that "Indifference" coupled with or born of ignorance supplied the most urgent reason for defaulting.

It would appear that further educational efforts and compulsory measures may assist substantially to reduce defaulting. The use of short term intensive treatments may also help substantially in treatment of early syphilis.

## EPIDEMIOLOGICAL ACTIVITIES.

The work of the Welfare Officers includes that of "Case Finding". Their reports cover a total of 355 contacts made up of 272 female

and 83 male contacts. These contacts or sources of infection were reported by patients attending the Clinics and in a few cases by the Medical Department of the United States and the British Military Forces. Of this number of contacts identified, 237 or 66.7 reported to the Clinic. By breaking this number down to sexes, we find that 65.8 per cent. of female contacts as against 59 per cent. of male contacts reported.

## TREATMENTS.

The total number of treatments for syphilis, gonorrhoea, etc. is detailed in the tables. It will be seen that mapharsen has been used in treament of syphilis cases. The cases chosen were those of early syphilis and in the majority of cases, a twenty-week course with concurrent bismuth was attempted. I regret to state that in spite of the shortened period of treatment which this method permitted, there was yet considerable defaulting. It was also a matter for regret that supplies ran short and this method of treatment and that of shorter periods of rapid treatment had to be temporarily abandoned. It is hoped, however, to resume treatment on these lines whenever adequate supplies of mapharsen permit.

Sulphathiazole was used in the treatment of gonorrhoea. A considerable amount of sulpha resistance was discovered. Whether this resistance has been the result of self-treatment with sub-therapeutic dosage of sulpha drugs on the part of patients or to a resistant infection "ab initio" is problematical. It is curious however that, in the majority of resistant infections found, patients gave a history of having bought tablets of one or other sulpha drugs over the Drug Store counter and of having taken them in sub-therapeutic dosage. It is essential that drug store proprietors should co-operate by refusing to sell these drugs except on presentation of a doctor's prescription.

## RACIAL INCIDENCE.

Statistical data under this heading are given in the tables. The data offered disclose a prevalence of 65.8 per cent. of syphilitic infections in the African race as compared with 20.6 per cent. for the East Indian race. The rate for the East Indian race is extremely low and in the African, the rate is again very much out of proportion to its position in population ratio. In the absence of actual surveys in urban and rural areas where incidentally the East Indian population is principally resident, it is really difficult to assess the percentage incidence of infection or the prevalence rates of infection. The clinic figures disclose that in the East Indian race, infections with gonorrhoea in the male and female are almost equal.

## OCCUPATIONAL INCIDENCE.

139 females are described as "Prostitutes". The increase in the number of prostitutes applying for treatment is due to the introduction of an epidemiological service and the activities of the welfare officers therein.

## SUMMARY.

(1) The number of new applicants has shown an upward trend during the past year.

(2) The activities of the Clinic have been well maintained.

3) The Clinic schedule was amended to provide an extension of Clinic sessions.

(4) The nursing staff was given training in carrying out intravenous treatments.

(5) Two Social Welfare Officers—one female and one male, and one clerk were added to the Clinic staff.

(6) The relatively low number of cases received from the City, Ante-Natal Clinic and Child Welfare Centre has been commented on.

## ATTENDANCES — SESSIONS.

| | *Male* | *Female* | *Total* |
|---|---|---|---|
| Primary Syphilis .... .... .... | 3,472 | 1,014 | 4,486 |
| Secondary Syphilis .... .... .... | 707 | 537 | 1,244 |
| Tertiary Syphilis .... .... .... | 4,833 | 7,345 | 12,178 |
| Acute Gonorrhoea .... .... .... | 5,726 | 3,577 | 9,303 |
| Chronic Gonorrhoea .... .... .... | 1,307 | 2,180 | 3,487 |
| Chancroid .... .... .... .... | 255 | 196 | 451 |

| | | | |
|---|---|---|---|
| Granuloma Pudendi .... .... .... | 362 | 215 | 577 |
| Lympho Granuloma .... .... .... | 43 | 177 | 220 |
| Non Venereal Disease .... .... | 279 | 354 | 633 |
| Undiagnosed .... .... .... | 3,241 | 3,449 | 6,690 |
| Total .... .... .... .... | 20,225 | 19,044 | 39,269 |

## COMPARATIVE ATTENDANCES

| *Years* | *Attendances* |
|---|---|
| 1931 | 17,503 |
| 1932 | 21,983 |
| 1933 | 24,062 |
| 1934 | 23,164 |
| 1935 | 20,081 |
| 1936 | 24,161 |
| 1937 | 25,656 |
| 1938 | 24,232 |
| 1939 | 29,452 |
| 1940 | 33,118 |
| 1941 | 28,381 |
| 1942 | 33,197 |
| 1943 | 35,174 |
| 1944 | 39,269 |

## ATTENDANCES FOR INTERMEDIATE TREATMENT

| *Male* | *Female* | *Total* |
|---|---|---|
| 8,181 | 5,744 | 13,925 |

## NUMBER OF TREATMENTS GIVEN.

| *Half-Year.* | *A.B.C.* | *Mapharsen.* | *Bismuth.* | *Tartaremetic.* | *Vac.* | *Others.* |
|---|---|---|---|---|---|---|
| JUNE .... | 5,214 | 317 | 6,264 | 335 | 1,061 | 421 |
| DECEMBER .... | 6,349 | 524 | 7,049 | 453 | 912 | 380 |
| TOTAL .... | 11,563 | 841 | 13,313 | 788 | 1,973 | 801 |

## OCCUPATIONAL INCIDENCE

| *Male* | | *Female* | |
|---|---|---|---|
| General Labourers .... .... | 1,346 | Housewives .... .... .... | 619 |
| Tradesmen .... .... .... | 570 | Seamstresses .... .... .... | 103 |
| Bakers .... .... .... | 22 | Domestic Service .... .... | 601 |
| Police and Militia .... .... | 216 | Laundresses .... .... .... | 48 |
| Seamen .... .... .... | 84 | Scholars .... .... .... | 34 |
| Chauffeurs .... .... .... | 32 | Field Labourers .... .... | 321 |
| Clerks .... .... .... | 107 | Prostitutes .... .... .... | 139 |
| Teachers .... .... .... | 4 | Nil or not stated .... .... | 107 |
| Scholars .... .... .... | 34 | | |
| Nil or not stated .... .... | 61 | | |
| | 2,476 | | 1,972 |

## APPENDIX III.

## SUMMARY OF THE ANNUAL REPORT OF THE LEPROSY HOSPITAL, MAHAICA.

### STAFF.

The appointment of Dr. L. H. Wharton as Medical Superintendent was confirmed as from 1st January, 1944.

The post of Assistant Medical Officer remained vacant owing to shortage of medical personnel.

Mr. G. R. Boyd, Warden, was transferred to the Trinidad Civil Service on 30th May, 1944.

Mr. C. Murray acted as Warden from 30th May to 30th June, 1944.

Mr. W. R. Cummings, Steward, was transferred on 30th June, 1944, and Mr. Murray was appointed Acting Steward until 7th November, 1944, when Mr. Murray was transferred and Mr. V. P. Rodney appointed Steward.

Mr. J. A. Phillips relieved Mr. Murray as Acting Warden from 1st July, 1944, to 31st August, 1944, when Mr. Phillips was transferred and Mr. W. Nelson was appointed Acting Warden.

The following Nursing Sisters of Mercy proceeded on leave during the year :

Sister Marcella, Sister Margaret, Sister Wenceslaus and Sister Albert.

Sister Margaret and Sister Albert resigned at the expiration of their leave and were replaced by Sister Geraldine and Sister Elizabeth.

There were then on the staff seven Sisters of Mercy out of a complement of ten. Three female attendants were employed to fill this deficiency.

The administrative and technical staff consisted of :—

1 Steward
1 Warden
5 Hospital Clerks
1 Dispenser
1 Electrician
1 Laboratory Technician

During the year two Hospital Clerks were added to the staff, one as assistant in the Steward's Office and one as Survey Clerk.

The Subordinate Staff consisted of—

| | *Male* | *Female* |
|---|---|---|
| Senior Attendant .... .... | 1 | 2 |
| 1st Class Attendants... .... | 10 | 1 |
| 2nd Class Attendants.... .... | 10 | 5 |
| 3rd Class Attendants.... .... | 31 | 13 |
| Total .... .... .... | 52 | 21 |

### PATIENTS.

The discipline has been on the whole good and there has been a definite change in the spirit of the patients. They are more co-operative and their mental outlook has improved. This may be attributed to the patients' societies which were formed—the Men's Guild Club, the Dramatic Club, the Boys' Junior Club, the Boy Scouts, the Girl Guides, and the large quantity of educational literature which has been donated by the British Council and which is greatly appreciated by the patients.

### OCCUPATION.

Approximately 200 patients are employed monthly in the Institution. They take keen interest in their work, which is of great value as occupational therapy.

### POOR LAW DOLES.

$10,000 was distributed in $3 monthly doles to discharged needy patients, and $2,300 in $1 monthly doles to patients in the Institution who are unable to work. These doles are greatly appreciated by the patients and do much to assist them in maintaining themselves.

### SPORTS AND ENTERAINMENTS.

Outdoor games consisted of cricket, football, and tennis. The patients took the keenest interest in games and ran competitions among themselves. The female patients took a keen interest in tennis which was started this year. An athletic sports meeting was held and all sections of the patients took part.

There have been regular cinema shows, dances, vaudeville shows, Indian dances throughout the year, besides concerts, dances, and plays given by the patients' clubs themselves.

The male and female recreation rooms are much appreciated and libraries have been added to them.

## DONATIONS AND GIFTS.

Among the many generous donors, mention must be made of the Demerara Turf Club, Messrs. Wm. Fogarty, Messrs. Bookers Drug Stores, the British-American Tobacco Co., Messrs. R. G. Humphrey, C. V. Wight, A. C. O'Dowd, Hon. W. L. Heape and the U.S.O. Club, His Lordship, the Bishop of Guiana, and Messrs. Resaul Maraj and Boodhoo.

## RELIGIOUS OBSERVANCE.

Religious services were held regularly throughout the year by chaplains of all denominations and the services were well attended by the patients. Minor repairs and improvements were carried out to the churches.

## SCHOOLS.

A special school survey service was inaugurated in July. Up to the end of the year 6,830 children were examined and 22 early cases of leprosy found—11 boys and 11 girls.

## STUDY COURSES.

The Laboratory Technician was sent to the Trinidad Leprosarium for a course of study under Dr. E. Muir. The school survey Nurse was also sent to the Trinidad Leprosarium to study their methods.

## THE CANTEEN.

This was opened in April and is proving a success. It is greatly appreciated by the patients. All trading between patients has ceased and it is of the greatest public health value in preventing patients from trading with outside shops.

## VISITORS.

Among the many distinguished visitors were Hon. W. L. Heape and Mrs. Heape, Sir Rupert Briercliffe, Dr. P. J. Crawford, members of the Leprosy Medical Board, Members of the Board of Official Visitors and members of the Entertainment Committee.

## TREATMENT.

This followed the lines of the universally accepted modern treatment of leprosy which consists of intradermal and intramuscular injections of hydnocarpus oil and its esters together with external applications of trichloracetic acid and carbon dioxide snow.

Appropriate treatment was given to intercurrent diseases and electric therapy was used for nasal ulcerations. Surgical operations were performed whenever necessary; a detailed list of operations is attached.

Special leprosy treatment was given to the following:—

| *In-Patients* | *Number of Treatments* |
|---|---|
| 300 | 12,600 |

Out-patients at the various Clinics were as follows:—

| *Clinics* | *No. of Patients* | *Attendances* |
|---|---|---|
| Georgetown .... .... | 274 | 940 |
| New Amsterdam .... | 134 | 250 |
| No. 63, Corentyne .... | 59 | 200 |
| Mahaica .... .... | 88 | 52 |
| Essequebo (including Suddie, Anna Regina, Leguan, Wakenaam, Parika and Bartica) .... | 36 | 49 |

## NUMBER OF PATIENTS.

At the end of 1944, there were on record 995 patients in various stages of the disease, of whom 356 were in hospital. It is interesting to note that, of the cases in hospital, only one-half are suffering from infectious leprosy.

The following patients were seen by the Leprosy Board:—

| | *Men* | *Women* | *Boys* | *Girls* | *Total* |
|---|---|---|---|---|---|
| Admitted .... | 16 | 8 | 7 | 4 | 35 |
| Discharged on Parole .... | 10 | 7 | 3 | 3 | 23 |

The new admissions were suffering from the following type of leprosy:—

| | | | |
|---|---|---|---|
| Neural .... | N1—9 | Lepromatous .... | L1—2 |
| | N2—6 | | L2—4 |
| | N3—4 | | L3—5 |

Minor Tuberculoid—1; Major Tuberculoid—4.

Number of cases admitted to the hospital were:—

| | |
|---|---|
| New Cases .... .... .... | 35 |
| Relapses .... .... .... | 46 |
| For intercurrent disease .... | 48 |
| For economic reasons .... .... | 25 |
| Total .... .... .... | 154 |

## BIRTHS AND DEATHS.

Eight births of children of Leprosy patients occurred in the hospital—2 males; 6 females.

Thirty-four deaths of persons suffering from Leprosy occurred in the hospital, the causes of death being as follows:—

| | |
|---|---|
| Gangrene of the leg .... .... | 2 |
| Chronic Nephritis .... .... | 5 |
| Chronic Asthma .... .... | 1 |
| Diabetes Mellitus .... .... | 1 |
| Carbuncle .... .... .... | 2 |
| Senile Debility .... .... | 6 |
| Septicaemia .... .... .... | 4 |
| Hemiplegia .... .... .... | 1 |
| General Debility .... .... | 3 |
| Gangrene of Feet .... .... | 1 |
| Gangrene of Forearm.... .... | 1 |
| Chronic Myocarditis .... .... | 2 |
| Chronic Bronchitis .... .... | 1 |
| Interitis .... .... .... | 1 |
| Filariasis .... .... .... | 1 |
| Toxaemia .... .... .... | 1 |
| | 34 |

The death rate in hospital was 9.5 per cent.

## OUT-PATIENTS' CLINICS.

Fifty-two visits were made to the Lodge Clinic (Georgetown), twelve visits to New Amsterdam and No. 63 Clinic, Corentyne, and eight to Essequebo including Leguan, Wakenaam, Bartica, and Parika. Two visits were made to the Internment Camp, H.M.P.S., Mazaruni.

## LABORATORY INVESTIGATIONS.

The following laboratory investigations were made:—

| | |
|---|---|
| Nasal Smears .... .... | 442 |
| Blood films for M.P. .... | 39 |
| Faeces .... .... .... | 93 |
| Blood for Kahn .... .... | 181 |
| Skin Smears .... .... | 212 |
| Urinalysis .... .... .... | 57 |
| Sputum .... .... .... | 2 |

## CONTROL OF LEPROSY.

There has been definite progress in the control of leprosy during the year, both from the treatment and the public health aspects of the disease.

# APPENDIX IV.

# SUMMARY OF THE ANNUAL REPORT OF THE MENTAL HOSPITAL, FORT CANJE, BERBICE.

## STAFF.

Executive Officers on duty throughout the year were:—

Medical Superintendent—Dr. A. W. H. Smith.

Senior Medical Officer—Dr. J. W. D. Ferdinand.

Junior Medical Officer—Vacant.

Warden—Mr. C .S. Murray from 1st January to 22nd April, 1944.

Mr. R. F. Rodrigues, Bandmaster, acted as Warden from 23rd April, to 31st December.

## TRANSFERS.

Mr. C. S. Murray to Leprosy Hospital as from 23rd April.

Mr. I. Millington, Junior Clerk to Public Hospital, Georgetown, as from 30th June.

Mr. J. C. Peters succeeded him on 1st July.

## CHANGES AMONG ATTENDANTS.

There were three discharges, one death and three reductions among the male attendants. Among the female attendants there were three resignations and one transfer.

## VISITORS.

Sir Rupert Briercliffe visited with the Director of Medical Services—24th February, 1944.

His Excellency the Governor Sir Gordon Lethem, K.C.M.G., visited and inspected—23rd April, 1944.

Mr. F. Haworth, Music Officer, British Council on 6th May, 1944.

Mr. James Houdwiat on 22nd May.

His Honour the Chief Justice, Sir John Verity visited and inspected on 22nd July.

Director of Medical Services, Dr. H. B. Hetherington visited and inspected on 20th September.

Miss J. Charles, Matron, Public Hospital, Georgetown, on 7th November.

The Board of Official Visitors met and inspected on 7th November.

*New Works and Reconstruction.* Nil.

## ENTERTAINMENT.

The British Guiana Militia Band gave a recital on 16th August. Other entertainments were as follows:—Cinema Performances 27; Cricket Matches 36; Football Matches 20; Staff Band Performances 52; Patients' Dances 52; Stage Performances, etc., 12.

## CLINICAL PROGRESS.

The year began with a total of 531 patients remaining in the hospital. During the year there were 193 admissions as compared with 137 in the previous year, and 151 in 1942. Discharges numbered 113 and deaths 105, the number of patients remaining at the end of the year being 506. The average duration of stay of those who were discharged during the year was 20 months and of those who remained was 39 months.

Most of the deleterious factors mentioned in last year's report are still operative, but the food situation has markedly improved with the addition of a supplementary food vote for the purchase of fresh vegetables, fruit, milk, etc.

## ELECTRICAL CONVULSION THERAPY.

This was commenced in June, but owing to the small number of cases treated to date, a review of this procedure will be better left to next year's report. Very good results have been achieved so far, and this method promises well for the future.

## CARDIAZOL CONVULSION THERAPY.

Since its inception in 1939, this treatment has been used on 91 cases with good results, beneficial in 50 per cent. and with only one relapse to date from among those who have been discharged.

## SUMMARY AND ANALYSIS OF CARDIAZOL—Convulsion Therapy.

| | M. | F. | T. | Per Cent. |
|---|---|---|---|---|
| Discharged — Recovered .... .... .... | 15 | 9 | 24 | 26 |
| do. — Improved .... .... .... | 4 | 5 | 9 | 9 |
| do. — Not improved .. .... .... | | 1 | 1 | 1 |
| Much Improved—Usefully Occupied .... .... | 5 | 1 | 6 | 8 |
| Slight Improvement .... .... .... .... | 1 | 7 | 8 | 10 |
| No Improvement .... .... .... .... | 22 | 21 | 43 | 47 |
| Total .... .... .... | 47 | 44 | 91 | |

(A total of 1,045 Injections).

## TABLE A.

ANALYSIS OF RESIDUE, OR NUMBERS REMAINING FROM 31ST DECEMBER, 1943.

| *Disease.* | *Male.* | *Female.* | *Total.* |
|---|---|---|---|
| Imbecility .... .... .... .... .... .... | 15 | 10 | 25 |
| Mental Deficiency .... .... .... .... .... | 6 | 4 | 10 |
| Epilepsy .... .... .... .... .... .... | 18 | 5 | 23 |

TABLE A.—(Continued.)

| *Disease.* | *Male.* | *Female.* | *Total.* |
|---|---|---|---|
| Psychopathy .... .... .... .... .... | — | 2 | 2 |
| Acute Mania .... .... .... .... .... | 46 | 28 | 74 |
| Manic Depressive .... .... .... .... .... | 22 | 21 | 43 |
| Melancholia .... .... .... .... .... | 38 | 15 | 53 |
| Confusional .... .... .... .... .... | 34 | 33 | 67 |
| Schizophrenia .... .... .... .... .... | 25 | 19 | 44 |
| Paranoia .... .... .... .... .... .... | 1 | — | 1 |
| Delusional .. .... .... .... .... .... | 32 | 39 | 71 |
| Presenility .. .... .... .... .... .... | 1 | 1 | 2 |
| Senile Dementia .... .... .... .... .... | 28 | 6 | 34 |
| General Paralysis .... .... .... .... .... | 1 | — | 1 |
| Organic—1. With Dementia .... .... .... | 22 | 10 | 32 |
| ,, 2. With Toxic Symptoms .... .... | — | 10 | 10 |
| Secondary Dementia .... .... .... .... | 28 | 6 | 34 |
| Alcoholism .. .... .... .... .... .... | 1 | — | 1 |
| Myxoedema .... .... .... .... .... | — | 1 | 1 |
| Puerperal .... .... .... .... .... .... | — | 1 | 1 |
| Not Insane .. .... .... .... .... .... | 2 | — | 2 |
| Totals .... .... .... .... | 320 | 211 | 531 |

TABLE B.

ANALYSIS OF ADMISSIONS.

| *Disease.* | *Male.* | *Female.* | *Total.* |
|---|---|---|---|
| Imbecility .... .... .... .... .... .... | 4 | 6 | 10 |
| Mental Deficiency .... .... .... .... .... | 3 | 6 | 9 |
| Epilepsy .... .... .... .... .... .... | 6 | 4 | 10 |
| Neurosis .... .... .... .... .... .... | 2 | 1 | 3 |
| Affective Psycho-Neurosis .... .... .... .... | 1 | 2 | 3 |
| Hysteria .... .... .... .... .... .... | 1 | 1 | 2 |
| Psychopathy .... .... .... .... .... | 2 | 1 | 3 |
| Acute Mania .... .... .... .... .... | 2 | 3 | 5 |
| Manic Depressive .... .... .... .... .... | 7 | 14 | 21 |
| Melancholia .... .... .... .... .... | — | 5 | 5 |
| Confusional .... .... .... .... .... | 14 | 13 | 27 |
| Schizophrenia .... .... .... .... .... | 11 | 14 | 25 |
| Schizoid .... .... .... .... .... .... | 6 | 2 | 8 |
| Delusional .. .... .... .... .... .... | 12 | 17 | 29 |
| Presenility .. .... .... .... .... .... | — | 1 | 1 |
| Senile Dementia .... .... .... .... .... | 1 | 3 | 4 |
| General Paralysis .... .... .... .... .... | 1 | — | 1 |
| Organic—1. With Dementia .... .... .... | 13 | 4 | 17 |
| ,, 2. With toxic symptoms .... .... | 2 | — | 2 |
| Secondary Dementia .... .... .... .... | 2 | — | 2 |
| Myxoedema .... .... .... .... .... | — | 1 | 1 |
| Puerperal .... .... .... .... .... .... | — | 1 | 1 |
| Not Insane .. .... .... .... .... .... | 4 | — | 4 |
| Totals .... .... .... .... | 94 | 99 | 193 |

## TABLE C.

### Analysis of Total Number Treated.

| *Disease.* | *Male.* | *Female.* | *Total.* |
|---|---|---|---|
| Imbecility | 19 | 15 | 34 |
| Mental Deficiency | 9 | 10 | 19 |
| Epilepsy | 24 | 9 | 33 |
| Neurosis | 2 | 1 | 3 |
| Affective Psycho-Neurosis | 1 | 2 | 3 |
| Hysteria | 1 | 1 | 2 |
| Psychopathy | 2 | 3 | 5 |
| Acute Mania | 48 | 31 | 79 |
| Manic Depressive | 29 | 35 | 64 |
| Melancholia | 38 | 19 | 57 |
| Confusional | 48 | 46 | 94 |
| Schizophrenia | 36 | 33 | 69 |
| Schizoid | 6 | 2 | 8 |
| Paranoia | 1 | — | 1 |
| Delusional | 44 | 56 | 100 |
| Presenility | 1 | 2 | 3 |
| Senile Dementia | 29 | 9 | 38 |
| General Paralysis | 2 | — | 2 |
| Organic—1. With Dementia | 35 | 14 | 49 |
| ,, 2. With toxic symptoms | 2 | 10 | 12 |
| Secondary Dementia | 30 | 6 | 36 |
| Alcoholism | 1 | — | 1 |
| Myxoedema | — | 2 | 2 |
| Puerperal | — | 2 | 2 |
| Not Insane | 6 | — | 6 |
| Imbecility with Epilepsy | — | 2 | 2 |
| Totals | 414 | 310 | 724 |

Children under 12 — 1 male
3 females

Total 4

## TABLE D.

### Racial Analysis of Admissions.

| Item. | Disease. | E.I. | Afr. | Por. | Chin ese. | Abor. | Other Euro-pean. | Mixed. | Totals. | Per Cent. of Totals. | No. per 100,000 T.C.P. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Confusional .... | 6 | 17 | 1 | 1 | 1 | — | 1 | 27 | 14 | 7 |
| | per 1,000* | (.03) | (.08) | | | | | | | | |
| 2. | Organic .... | 1 | 13 | 1 | — | — | — | 4 | 19 | 9.9 | 5 |
| | per 1,000* | (.005) | (.06) | | | | | | | | |
| 3. | Manic-Depressive | 7 | 8 | 1 | — | — | — | 5 | 13 | 6.7 | 3.6 |
| | per 1,000* | (.03) | (.04) | | | | | | | | |
| 4. | Schizophrenic .... | 8 | 8 | 2 | — | — | — | 5 | 23 | 11.9 | 6.2 |
| | per 1,000* | (.04) | (.04) | | | | | | | | |
| 5. | Other Diseases | 31 | 54 | 4 | — | — | 1 | 13 | 111 | 57.5 | 29.6 |
| 6. | Totals .... | 53 | 100 | 9 | 1 | 1 | 1 | 28 | 193 | 100 | 51.4 |
| 7. | Item 6. Expressed as per cent. of Total 193 .... | 27.5 | 51.8 | 4.7 | .5 | .5 | .5 | 14.5 | 100 | — | — |
| 8. | Item 6. Expressed as Number per 1,000 in its own racial class of T.C.P. .... | .30 | .80 | .10 | 01 | .01 | .01 | .40 | — | — | — |

* i.e. Expressed as No. per 1,000 of its own racial class in Tot. Col. Pop. Figures.

### TOTAL COLONY POPULATION FIGURES.

East Indians .... .... .... 157,185 (Per Cent.—43.2
Africans .... .... .... .... 135,337 ( ,, 73.2)
(Figures to 31. 12. 42 latest available).

Total .... .... 361,754.

## TABLE E.

SUMMARY OF NUMBERS, RACES AND SEX.

| JAN.—DEC. 1944. | *Europeans other than Portuguese.* | | *Portuguese.* | | *E. I.* | | *Chinese.* | | *Africans.* | | *Blacks.* | | *Abor.* | | *Mixed Races.* | | *Totals.* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | T. |
| Remaining on 1st Jan. 1943 .... | 2 | 1 | 9 | 2 | 85 | 36 | 1 | 4 | 174 | 121 | — | — | 2 | 2 | 47 | 45 | 320 | 211 | 531 |
| Admitted during the year .... | – | 1 | 4 | 5 | 21 | 32 | – | 1 | 56 | 44 | — | — | – | 1 | 13 | 15 | 94 | 99 | 193 |
| Died during the year .... .... | – | – | 2 | – | 20 | 12 | – | – | 30 | 25 | — | — | 1 | 1 | 10 | 4 | 63 | 42 | 105 |
| Discharged during the year .... | – | 1 | 4 | 3 | 20 | 12 | – | 1 | 22 | 27 | — | — | – | – | 9 | 14 | 55 | 58 | 113 |
| Remaining on 31st Dec., 1944 .... | 2 | 1 | 7 | 4 | 68 | 44 | 1 | 4 | 176 | 113 | — | — | 1 | 2 | 41 | 42 | 296 | 210 | 506 |

TRANSFERS AND ABSCONDINGS — NIL.

The Maintenance Rate for the year 1944 per caput per diem

Calculated on the Diet Scales only—18.9 cents.
Calculated on the Total Votes 60.9 cents.

## TABLE F.
### ANALYSIS OF DISCHARGES.

| DISEASE. | MALE. | FEMALE. | TOTAL. |
|---|---|---|---|
| Imbecility | 2 | 0 | 2 |
| Mental Deficiency | — | 1 | 1 |
| Epilepsy | 2 | — | 2 |
| Neurosis | 2 | — | 2 |
| Hysteria | 1 | 1 | 2 |
| Acute Mania | 1 | 3 | 4 |
| Manic Depressive | 5 | 13 | 18 |
| Melancholia | — | 2 | 2 |
| Confusional | 17 | 16 | 33 |
| Schozophrenia | 12 | 10 | 22 |
| Schizoid | — | 1 | 1 |
| Delusional | 5 | 7 | 12 |
| Senile Dementia | — | 1 | 1 |
| General Paralysis | 1 | — | 1 |
| Organic—with Dementia | 7 | 2 | 9 |
| Myxoedema | — | 1 | 1 |
| Totals | 55 | 58 | 113 |

N.B.—58 per cent. of above (41 M., 25 F.) were discharged within 12 months of admission.
Discharges under Section 19 ("Not Relieved")—1 male (stay 213 days).
Children under 12 included in the above figures—NIL.
Voluntary Admissions (under Section 14) included in above figures—M. 16; F. 13.

## TABLE G.
### ANALYSIS OF DEATHS.

| DISEASE. | MALE. | FEMALE. | TOTAL. |
|---|---|---|---|
| Cerebral Haemorrhage | 1 | 2 | 3 |
| Thrombosis | — | 1 | 1 |
| Pulmonary Tuberculosis | 4 | 5 | 9 |
| Lobar Pneumonia | 2 | 3 | 5 |
| Bronchitis | 1 | — | 1 |
| Bronchiectasis | 1 | — | 1 |
| Acute Congestion | — | 1 | 1 |
| Hypostatic Congestion | 1 | — | 1 |
| Myocarditis | 10 | 8 | 18 |
| Pericarditis | 2 | — | 2 |
| Cardio-Vascular Degeneration | 13 | 10 | 23 |
| Acute Nephritis | 2 | 2 | 4 |
| Arterio-Sclerosis | 2 | — | 2 |
| Cardio-Renal Disease | 1 | — | 1 |
| Dysentery | 8 | 1 | 9 |
| Syphilis | 3 | 2 | 5 |
| Influenza | 1 | — | 1 |
| Status Epilepticus | 3 | 2 | 5 |
| Toxaemia | 2 | 2 | 4 |
| Senility | 2 | — | 2 |
| Anaemia | 2 | — | 2 |
| Carcinoma (Palate) | — | 1 | 1 |
| Uraemia | — | 1 | 1 |
| Avitaminosis | 1 | — | 1 |
| Cholelithiasis | — | 1 | 1 |
| Exhaustion | 1 | — | 1 |
| Total | 63 | 42 | 105 |

# APPENDIX V.

## ANNUAL REPORT OF THE BEST SANATORIUM

### BUILDINGS.

No New Buildings were erected during the year 1944.

Lateral (east and west) balconies were added to the two convalescent buildings to allow for longer hours of heliotherapy than was possible with the former balconies only. The ground flat of the quarantine station, formerly used for storage purposes, was renovated and minor additions made to the building. This flat was opened as an 18-bed ward.

Work was started on a new water supply and distribution system. A tower carrying a 4,000-gallon metal tank was erected. This work was not yet finished by year's end. The refuse incinerator had to be displaced to permit the installation of the new water pipes. This occasion was seized to erect the incinerator as far leeward from the kitchen and other buildings as possible. Hard paths were laid out in the Compound and small bridges built where needed by the staff itself.

### ACCOMMODATION.

On 1st January, 1944, the accommodation was for 158 beds divided as follows: 82 beds for males, 60 beds for females, and 16 beds for children of both sexes. The number of beds for male patients has always been too small, so the ground flat of the quarantine station has been opened as an additional male ward, bringing the accommodation to 176 beds, divided as follows: 100 beds for male patients, 60 beds for female patients, 16 beds for children.

### STAFF.

On 31st December, 1944, the staff consisted of:— Medical Staff—the Medical Superintendent; Office Staff—1 steward and 1 clerk issuer; Technical Staff—1 laboratory technician and 1 dispenser—X-Ray Technician; Nursing Staff—1 nurse superintendent, 3 charge nurses, 8 staff nurses, and 14 probationers; Other members of the staff—1 electrician, 1 mechanic-lorry driver, 2 gatemen, 1 carpenter, 13 porters, 3 seamstresses, 6 cooks, 6 laundresses, and 12 wardmaids.

Acting on the opinion that previous contact with tuberculosis as proved by a positive tuberculin test, combined with a satisfactory general condition and absence of radiological signs of active pulmonary tuberculosis, confers a certain degree of relative immunity to further tuberculous infection and development of disease, only tuberculin positive persons are accepted for duty in the wards.

All nurses, wardmaid, laundress, and porter candidates are tuberculin tested by the Mantoux test with 1/10 milligram of Old Tuberculin, and X-ray screened prior to admission to service at the Best Sanatorium. Nurses are also screened on leaving the hospital.

### STATISTICAL DATA.

| | *Male.* | *Female.* | *Total.* |
|---|---|---|---|
| Remaining on 31. 12. 43 .... .... | 76 | 56 | 132 |
| Admitted during the year .... .... | 148 | 99 | 247 |
| Discharged do. do. do. .... .... | 77 | 44 | 121 |
| Died do. do. do. .... .... | 58 | 53 | 111 |
| Remaining on 31. 12. 44 .... .... | 89 | 58 | 147 |

The average number of patients per diem during 1944 was 145.5.

The total number of patient days was 53,256.

### COST OF MAINTENANCE.

The total expenditure for the year was $73,568.37.

The cost of maintenance per caput per diem was $1.38. This is one cent more than the average cost of maintenance for 1943 but six cents less than the average cost of maintenance for the second half of 1943.

## DETAILED STATISTICS OF PATIENTS.

The figures given are in number of days from the date of admission.

| *Average length of stay.* | *Male.* | *Female.* | |
|---|---|---|---|
| Discharged .... .... .... .... | 136.5 (77 cases) | 187.4 (44 cases) | |
| Died .... .... .... .... .... | 131.6 (58 cases) | 149.3 (53 cases) | |
| Remaining on 31. 12. 44 .... .... | 358.4 | 286.3 | |
| Number of persons admitted and treated taking into account re-admissions .... | 213 | 151 | 364 |

## PATHOLOGICAL CLASSIFICATION OF ADMISSIONS DURING 1944.

| | |
|---|---|
| Minimal .... .... .... | 28 |
| Moderately Advanced .... .... | 46 |
| Far Advanced .. .... .... | 145 |
| Not Tuberculosis .... .... | 23 |

To be noted are 3 cases of Pott's disease and 1 case of extensive gland tuberculosis.

## TREATMENT.

All patients are put at rest, the degree of rest and the number of hours depending on the condition of the patient. A minimum of 2 hours bed rest twice daily is imposed on all patients.

Moderate suralimentation is attained by means of an ample and varied diet divided into six meals daily. Surplus vitamins A, D, and C are given in large quantities in the form of Cod-liver oil and fresh lime juice. Medication is reduced to the strict minimum. Cough sedation is restricted to unproductive cough, codein being the preferred drug. Sputum disinfectants are used only in mixed infected sputum—Sodium Benzoate, guiacol carbonate and volatile oils are used.

Neither tuberculin nor gold therapy was attempted. Ionisation therapy for laryngeal pain was attempted and appeared to be successful but could not be continued, however, because of a breakdown of the apparatus. Pneumoperitoneum was induced in three cases only as a therapy of short duration for very definite indications.

The main active therapeutic measure was artificial pneumothorax :

48 new inductions were made.

2.166 pneumothorax refills were given to 93 patients.

2 thoracoscopies and

14 thoracoscopies and pneumolyses were performed.

MINOR OPERATIONS :

31 withdrawals of pleural fluid or pus with or without subsequent lavage.
15 stomach lavages.
2 intercostal nerve blockages.
17 incisions and explorations of glands or abscesses.
1 tonsillar abscess opened.
3 bronchial lipiodol.

A number of minor interventions such as pleural punctures and lumbar puncture performed at the bedside were not recorded.

## X-RAY WORK.

X-Ray screening sessions for in-patients and out-patients take place every Monday and Thursday morning.

| | |
|---|---|
| Total number of screenings and films | 1,663 |
| Number of persons screened | 501 |
| Number of persons filmed | 207 |
| Number of females screened or filmed (including nurses) | 274 |
| Number of males screened or filmed | 278 |
| Number of out-patients screened or filmed | 73 |

## LABORATORY EXAMINATIONS.

Due to changes in staff and absences of the technician a number of examinations have not been recorded.

| | *Positive.* | *Negative.* | *Total. Examinations.* |
|---|---|---|---|
| Sputum for tuberculosis | 823 | 819 | 1,642 |
| Sputum for pneumococci | — | 1 | 1 |
| Pleural Fluid | 1 | 24 | 25 |
| Pus from miscellaneous parts of the body for tubercle bacilli | 1 | 19 | 20 |
| Nasal Smear for Leprosy Bacillus | — | 1 | 1 |
| Blood Sedimentation Rates | — | — | 337 |
| Blood Counts and Differential | — | — | 9 |
| Spinal fluid for tuberculosis | — | 2 | 2 |
| do. do. Cell Count | — | — | 1 |
| Blood for Microfilaria | 34 | 279 | 313 |
| Blood for Malaria parasites | 32 | 383 | 415 |

The conclusion should not be drawn that clinical filariasis is as frequent as malaria. The filarial slides were mainly taken to obtain a set of filaria positive slides and comparison with the malaria slides gives a false picture of the situation.

*Skin Scrapings :*
For Fungus—3 negative } 4
For Leprosy Bacillus—1 }

Scraping from Ulcer
Leishmaniasis negative—1

*Laughlen's Test :*
Weakly positive — 4
Doubtful — 1
Negative — 7

| | *Chemical.* | *Microscopic.* | *Total.* |
|---|---|---|---|
| Urine Examinations | 203 | 203 | 406 |
| Faeces | A.D. | Ova. | Dysentery. |
| | *Positive.* | *Negative.* | *Negative.* |
| | 8 | 5 | 6 |
| | | | *Total.* |
| Stomach Lavage for tubercle bacilli | 1 | 14 | 15 |

Total Number of examinations — 3,221