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LEGISLATIVE COUNCIL,
FIJI.

COUNCIL PAPER, No. 25.

Medical Department.

(ANNUAL REPORT FOR 1948.)

1—ADMINISTRATION.

(1) ESTABLISHMENT AND STAFF.

(a) MEDICAL DIRECTORATE.

Many changes occurred in the Medical Directorate during the year. Dr. J. C. R. Buchanan, Director of Medical Services for the Colony and Inspector General, South Pacific Health Service, left the Colony on the 18th February on leave prior to retirement. Dr. J. M. Cruikshank, Assistant Medical Adviser at the Colonial Office, was appointed to the post on the 24th November but did not arrive in the Colony before the end of the year.

2. Dr. R. J. Snodgrass, Deputy Director of Medical Services, returned to duty from leave on 5th February, and, on the departure of Dr. Buchanan, was appointed to act as Director of Medical Services and Inspector-General. On account of sickness Dr. Snodgrass had to leave the Colony on the 2nd August for medical treatment in England. Notification of his death in Scotland on the 24th December was received with much regret by all sections of the community.

3. Dr. K. R. Steenson continued to act as Deputy Director of Medical Services until Dr. Snodgrass returned to the Colony on the 5th February and he acted again from 18th February. On the 2nd August, the date on which Dr. Snodgrass proceeded to the United Kingdom on sick leave, Dr. Steenson was appointed to act as Director of Medical Services and Inspector-General until the end of the year, and the post of Deputy Director of Medical Services remained vacant. Dr. Steenson was promoted from his substantive post of Senior Medical Officer to be Deputy Director of Medical Services on the 25th December.

4. Mr. C. Kendrick, Chief Health Inspector left the Colony on leave prior to retirement on the 10th March. Mr. W. C. Cockell, Health Instructor, was appointed to be Chief Health Inspector on the 10th September.

5. Mr. A. L. Baker, Secretary to the Department, who had been on secondment to the Secretariat, assumed duty on the 21st January.

6. Miss Pedersen, Nursing Superintendent, proceeded on 146 days' vacation leave on the 31st January and returned to duty on the 25th June, Miss J. Sinclair, Matron of the Colonial War Memorial Hospital, acting as Nursing Superintendent during her absence, as well as carrying on the duties of her substantive post.

7. It is recorded with satisfaction that among the recipients of Birthday Honours were Dr. J. C. R. Buchanan, who was awarded the C.M.G., and Mr. C. Kendrick, who was awarded the M.B.E.

(b) MEDICAL, NURSING AND TECHNICAL STAFF.

8. The Departmental Establishment is set out in Appendix I to this report. There were five vacancies in the establishment of Medical Officers at the beginning of the year. Dr. P. E. C. Manson-Bahr was appointed to the vacant post of Physician Specialist on 15th July and he arrived in the Colony on the 23rd August.

9. During the course of the year three Medical Officers were appointed from the United Kingdom on three years' agreement, namely Dr. T. A. Doran, who was appointed as Medical Officer in Charge of the Colonial War Memorial Hospital, Dr. T. Jezierski, who was also posted to the Colonial War Memorial Hospital, and Dr. W. Wesson, who was posted as Medical Officer, Eastern, stationed at Levuka. In addition, it was possible to arrange for the temporary appointment on agreement of Dr. S. G. Ross, who was returning to Australia from Fanning Island.

10. The temporary appointments of Dr. H. S. Evans, Dr. F. Thomson and Dr. R. Branster expired during the year and Dr. J. R. Reid was seconded to the Government of Tonga. With the vacancy caused by the death of Dr. R. J. Snodgrass and the subsequent promotion to the post of Deputy Director of Medical Services of Dr. K. R. Steenson, five vacancies remained on the establishment of Medical Officers at the end of the year.

11. Dr. K. H. Black, Dr. L. G. Poole, and Dr. W. Worger proceeded on vacation leave during the year, and Dr. W. L. I. Verrier, who had proceeded on leave in 1947, resumed duty in April and was posted to Nadroga and, subsequently, as travelling Medical Officer Vanua Levu. Dr. K. R. Steenson (subsequently promoted to be Deputy Director of Medical Services), Dr. T. A. U. Clunie and Dr. R. W. D. Maxwell were promoted to be Senior Medical Officers with effect from 1st January, 1948. Dr. C. J. Austin, O.B.E., Medical Superintendent at the Fiji Leprosy Hospital, Makogai, was appointed a delegate to the International Leprosy Congress at Havana, Cuba, and was absent from the Colony from 29th March to the 22nd April.

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12. The arrangement under which trained nursing staff is recruited from New Zealand remained in force, the majority of nurses being recruited on a two year contract. Recruitment was adversely affected through the alteration in the exchange rate during the second half of the year, when salaries in Fiji compared less favourably with those in New Zealand owing to the appreciation of the New Zealand pound to parity with sterling. This Government owes a debt of gratitude to the New Zealand Health Department for ready assistance in maintaining recruitment to the Fiji Nursing Service, in spite of their difficulties and shortages of staff in New Zealand.

13. The Government bursary scheme, to enable locally trained sisters to proceed to New Zealand to undertake post-graduate courses in maternity training, remained in force and it was possible to arrange for two sisters to take advantage of this scheme during the year.

14. Two Fijian students graduated from the Central Medical School in December and the total number of Assistant Medical Practitioners on the active strength at the end of the year was 75 Fijians and 12 Indians. These figures include six Fijian Assistant Medical Practitioners on secondment to the Western Pacific High Commission territories at the end of the year.

15. At the end of 1948, 164 locally trained Assistant Nurses (Fijian and Indian) were employed. Of these, 76 were employed in hospitals and dispensaries and 88 as district nurses in the field. In addition, there were 150 Fijian and Indian pupil nurses in training at the training schools at the Suva and Lautoka Hospitals. Twenty-three pupil nurses graduated from the training schools during the year.

16. The approved departmental establishment in 1948 is set out in Appendix I to this report.

(2) LEGISLATION.

17. The following laws, regulations, etc., relating to medical and public health matters were enacted:—

Ordinances—

- No. 1 of 1948, to amend the Mental Treatment Ordinance.
- No. 9 of 1948, to amend the Public Health Ordinance.
- No. 13 of 1948, to provide for the registration of Nurses for the sick and Midwives and to regulate their practice.
- No. 31 of 1948, to repeal the Margarine Ordinance.

Proclamations—

- No. 1 of 1948, declaring the British Solomon Islands Protectorate to be a place infected with Poliomyelitis.
- No. 5 of 1948, specifying Drugs to which Part III of the Dangerous Drugs Ordinance shall apply.
- No. 18 of 1948, Registration of Dr. S. G. Ross under section 4 of the Medical Practitioners Ordinance.

Regulations—

- Regulations made under the Quarantine (Aerial Navigation) Regulations, 1946, declaring Nadi to be a Sanitary Aerodrome.
- Regulations made under the Public Health (Sanitary Services) (Amendments) Regulations, 1948, amending the Schedule of fees.
- Regulations made under the Pure Food Ordinance relating to ice cream and water ices.
- Regulations made under the Public Health Ordinances relating to slaughter houses.
- Regulations made under the Public Health Ordinance amending the Public Health (Dairies) Regulations, 1948.
- Regulations made under the Public Health Ordinance amending the Public Health (Slaughter house) Regulations, 1948.

Miscellaneous—

- Resolution of the Central Board of Health applying sections of the Public Health (Sanitary Services) Regulations to portion of the Rural Sanitary District of Tavua.

(3) FINANCE.

18. The following table shows the revenue and expenditure of the Department during 1948:—

Gross expenditure	£351,764
Revenue	21,545
Net expenditure	330,219

19. Revenue to the extent of approximately £11,500 will accrue in 1949 in respect of refunds of 1948 expenditure, incurred on behalf of other administrations at the Fiji Leprosy Hospital and the Central Medical School.

20. The total expenditure includes an allocation from the Colonial Development and Welfare funds of £12,130 for mosquito control (Anopheline prevention). Excluding this amount; and taking the revised estimate of the total expenditure of the Colony as £2,475,133, the gross cost of the medical and health services was 13.76 per cent of the total Colony expenditure or 24 shillings 4.49d. per head of the population.

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21. The following table shows the expenditure on medical services per head of the population over the past 13 years:—

COST OF MEDICAL SERVICE PER HEAD OF THE POPULATION.

Year.	Population.	Expenditure (per <i>caput</i>).	Remarks.
1936	201,086	8s. 0-77	
1939	215,030	10s. 7-42	
1942	233,895	10s. 0-78	
1944	246,485	12s. 0-81	—£30,614 free grant from C.D. and W. Funds deducted.
1945	254,676	14s. 1-67	—£26,264 free grant from C.D. and W. funds deducted.
1946	260,468	16s. 6-38	—£14,880 free grant deducted £5,000 for new X-ray plant included.
1947	269,274	20s. 7-85	—£15,762 free grant from C.D. and W. funds deducted.
1948	277,372	24s. 4-49	—£12,130 free grant from C.D. and W. funds deducted.

Increasing costs of drugs, equipment and feeding of patients, are responsible for the increase.

(4) MEDICAL STORES AND EQUIPMENT.

22. The position in regard to the supply of medical stores and equipment showed some improvement during the year and supplies of essential drugs, anaesthetics, etc., were maintained. Rising costs, however, caused a sharp increase in expenditure and precluded the possibility of building up reserves of supply against the possible occurrence of an epidemic.

23. The total value of drugs, instruments, appliances, clothing, bedding and equipment issued from the Medical Store during 1948 was £42,815. Of this total, £148 represents free issues to missions, and stores to the value of £606 were issued on a repayment basis to other private accounts. The amount expended on stores for child welfare work £3,250.

II—PUBLIC HEALTH.

(1) GENERAL REMARKS.

24. The Colony is divided up into some 48 areas, in each of which there is a district hospital, a rural hospital or a dispensary in the care of a Medical Officer or an Assistant Medical Practitioner. From each hospital and dispensary monthly morbidity returns are sent in to Administrative Headquarters and any necessary action is taken on the results of the information received. In addition to these monthly returns, each Medical Officer in charge of a district submits a telegraphic return of infectious diseases which have occurred in his district. This information is referred to the Health Department staff and immediate action taken to investigate the conditions under which diseases have occurred and to prevent their spread. Apart from an outbreak of mumps and the usual occurrence of influenza, there was no epidemic during the year which affected the health of the community in general.

(2) COMMUNICABLE DISEASES.

25. *Influenza*.—As is usual influenza was prevalent throughout the year, more than half the notified cases occurring in the months of September, October, November and December. The total of notifications for the Colony was 3,248 but it must be understood that this figure is very much short of the actual number of cases which must have occurred.

26. *Mumps*.—Of the 279 cases of mumps notified in 1948, 169 occurred at the island of Rotuma.

27. *Chickenpox*.—Sporadic cases occurred during the course of the year, and a total of 125 was reported.

28. *Dysentery*.—A total of 274 cases of dysentery was reported as having occurred during the year. This figure is only half last year's total. Of the number reported, 19 were amoebic in origin, 71 bacillary, and 184 unclassified.

29. *Infantile Diarrhoea* was responsible for 483 notifications only as compared with 780 cases in 1947. The main bulk of the notifications came from the Southern, Western and Eastern districts.

30. *Dengue Fever*.—This disease was not as prevalent in 1948 as in the previous year, 188 cases occurring. The symptoms, however, appeared to be more severe than in 1947.

31. *Trachoma*.—157 cases were reported as compared with 199 in 1947.

(3) VENEREAL DISEASE.

32. Notifications were somewhat lower than in 1947, 218 cases of gonorrhoea, 6 of ophthalmia neonatorum, 4 of soft chancre and 107 of syphilis having been reported. Of the syphilis cases reported, 41 showed primary lesions, 13 secondary and 4 tertiary, while 49 were unclassified.

(4) IMMUNIZATION AND PROPHYLAXIS.

33. Mass immunization against typhoid has been carried out in all areas where typhoid has occurred. Anti-Diphtheria and anti-Whooping Cough immunization is carried out on a voluntary basis at all Public Health Centres. Vaccination against smallpox is also carried out at the main Health Centres and travellers are supplied with the "international" vaccination certificate.

34. The racial and monthly incidence of communicable diseases is shown in Appendix II.

(5) TUBERCULOSIS.

35. The infectious diseases hospital at Tamavua continued to be fully occupied during 1948 in the treatment of tuberculosis in its many forms. The total capacity of the hospital is 278 beds, but finance and staff considerations have as yet limited the number of beds which can be occupied to 168. The tuberculosis register for the Colony, which was commenced in 1947, was kept up to date and the diagnostic and follow-up services continued. Preparatory to the commencement of the tuberculosis survey, for which a grant of £28,600 has been made from the Colonial Development and Welfare Funds, two Assistant Medical Practitioners, who had received special training in England, were engaged in mantoux testing in the field and in the follow-up of contacts. Approximately 15,000 mantoux tests have been completed. 388 cases of pulmonary tuberculosis were notified in 1948 and 58 cases of tuberculosis in other forms. It was not possible to make a start on the survey proper in 1948, as the necessary materials and personnel were not available.

(6) LEPROSY.

36. The Fiji Leprosy Hospital on the island of Makogai serves Western Samoa, Eastern (American) Samoa, the Cook Islands, Niue, Tonga and the Gilbert and Ellice Islands Colony and New Zealand, in addition to Fiji. All cases are compulsorily segregated on this island and the discharge rate, controlled by strict criteria of inactivity, remains satisfactory. There is a carefully controlled follow-up of discharged patients, and the percentage of re-admissions has been low. Notifications of leprosy in Fiji for 1948 numbered 50. A full report on the work of the Fiji Leprosy Hospital by the Medical Superintendent, Dr. C. J. Austin, O.B.E., forms Appendix III to this Report.

(7) FILARIASIS.

37. The campaign against filariasis by the elimination of the known breeding places of the vector mosquito (*Aedes scutellaris*—*pseudo scutellaris*) in the neighbourhood of towns and villages, which started in June, 1944, was continued. Thirty inspectors and three supervizing inspectors are now employed and by the end of 1949 it is planned that every province will have its team of trained inspectors, and the scheme will have been extended to the whole Colony. Apart from eliminating the breeding places of mosquitoes near Fijian towns, the general sanitation of villages has been improved through these activities, and there is evidence that the people themselves are beginning to appreciate this and to give more whole-hearted support to the scheme.

38. To the end of 1948 47,716 blood specimens had been taken by the trained teams. Of these 8,222 were proved to contain microfilariae—a percentage of 17.2. When the campaign began approximately 82 per cent of the villages inspected were unsatisfactory from the mosquito control point of view; this figure has now been reduced to 15 per cent.

(8) DENTAL HEALTH.

39. There is a Dental Clinic attached to the Colonial War Memorial Hospital which is in charge of a Dental Surgeon, Ratu I. Vosailagi, assisted by an Assistant Dental Practitioner. The Dental Surgeon was also in charge of the Dental Training School, in addition to being required to visit other centres in the Colony. A second Assistant Dental Practitioner qualified from the Dental Training School at the end of the year. Increasing attention is being paid to dental health, particularly among the school children, but the qualified staff is inadequate to deal with more than the fringe of the problem. However, during the year approval was granted to the inclusion of the post of Senior Dental Surgeon in the estimates for 1949. When appointed, this officer will take charge of the dental clinic at the Colonial War Memorial Hospital and the Dental Training School, thus enabling the Dental Surgeon to travel extensively and to perform the duties of Schools Dental Officer.

40. A total of 5,384 persons attended the dental clinic at the Colonial War Memorial Hospital during the year and 129 cases were treated at the Tamavua Hospital. Treatment was also given at the Lautoka Hospital and Wainibokasi Hospital.

(9) DIETETICS AND NUTRITION.

41. Miss J. King was appointed to the post of Dietitian to the South Pacific Health Service and assumed duty in March, 1948. In addition to visiting Western Pacific territories, Miss King travelled extensively in Fiji, in order to become acquainted with the different racial groups and their varying conditions and customs.

42. Special interest has been focussed on school dietaries and infant feeding and, with the assistance of the Health Sisters employed in district work, much investigational and educational work was carried out. It was found that discussions with school masters and mistresses resulted in wider appreciation of the necessity for good feeding of growing boys and girls. Unfortunately local shortages of foodstuffs often make it difficult to work out the best diet.

43. Visits were made to homes and villages in an endeavour to bring about an improvement in infant feeding, and discussions and talks with mothers and Fijian Assistant Nurses stimulated interest in the subject. Although there have been few signs of marked malnutrition, the high incidence of carious teeth, unhealthy mouths and skin conditions, in addition to bronchial disorders, point to diets below optimal requirements.

44. For economic reasons, and through lack of knowledge, diets chosen by the native population are normally limited to foods for bulk, particularly the carbohydrate type, to the exclusion of the important foods for growth and disease protection, as found in proteins, fats and minerals. Greater interest in and knowledge of foodstuffs, both European and native, should make for wiser spending of the family budget.

(10) VITAL STATISTICS.

45. The estimated population at the end of 1947 and 1948 is shown in Appendix IV. The same trends appear as in previous years and the relative increase in the population of the various races has been maintained. The Fijian population increased by 2,746 and the Indian population by 4,087. In connexion with the relative increases in the Fijian and Indian populations, the then Director of Medical Services pointed out in the Annual Medical Report for 1943 that the fact must be stressed "that the Fijian race still suffers from certain disabilities, both physical and psychological, which do not affect the Indian and which greatly depreciate the value of Indian vital statistics as a yardstick for the measurement of Fijian progress". It is estimated that the total population has increased by 17,734 since the 1946 census and the natural increase per thousand of the total population in 1948 was 29.91.

46. The crude birth rate per thousand for 1948 was 42.01, compared with 39.27 in 1947. The Fijian birth rate was 37.21 compared with the Indian figure of 47.84. The crude death rate in respect of the two races was 14.83 (Fijian) and 9.37 (Indian).

47. The infant mortality rate for Fijians was the lowest on record, being 59.84 per thousand, compared with 74.88 in 1947 and 68.10 in 1945, which was the lowest recorded figure to that time. The corresponding figure for Indian infants was 53.56, which is a slight increase over the average for the last three years.

48. A graph showing infant mortality, crude birth and death rates for Fijians and Indians, covering the period 1926 to 1948, forms part of Appendix IV.

(11) MALARIA CONTROL (ANOPHELINE PREVENTION).

49. In addition to the usual measures instituted in the Health Department to combat mosquito breeding, intensified anti-mosquito measures are in force at the airports in the Colony especially directed to prevent the introduction of Anopheles mosquitoes which, so far, are not present in the Fiji Islands. Nadi is the only port of entry for land planes from malarial areas, Laucala Bay, Suva for seaplanes from malarial areas, and Suva for surface craft. Interchanges of population between countries involve real danger of the introduction of malaria and the Anopheline mosquito by ship or aircraft. It has, therefore, been necessary to continue Anopheline prevention measures in and around the above air and sea ports.

50. The cost of this work has been met to date from Colonial Development and Welfare funds, from which grants amounting to £90,400 have been made. Expenditure in 1948 was approximately £11,130. It is proposed that in future the cost of anti-mosquito measures should be met from Colony funds.

51. Nadi Airport was kept, throughout the year, as free from mosquitoes as possible with the temporary system of drainage existing there. No permanent drains were constructed pending a decision as to the location of the International Airport for Fiji. Regular weekly inspections of all built up areas, drains and possible water holding areas within the perimeter were carried out. In addition, inspections are also made of all buildings in a zone half a mile deep outside the Airport boundary and breeding places of domestic mosquitoes in this area destroyed.

52. Regular check surveys were made at Laucala Bay and the Suva wharf area and remedial and maintenance work was carried out throughout the year. Inspections were maintained in the Suva town area in which 1,300 premises were inspected each month. One Assistant Mosquito Inspector continued to be stationed at the Nausori Aerodrome to keep a check on mosquito breeding and types. In October, 1948 the control of the aerodrome passed from the R.N.Z.A.F. to the N.Z. Public Works Department, and a limited amount of maintenance work on drains was carried out.

53. The Suva Town Board continued to conduct a campaign in the Suva Town area in which regular house to house inspections are carried out and notices served on the occupiers of premises in which mosquito larvae are found.

III—HYGIENE AND SANITATION.

(1) ADMINISTRATION.

54. The administration of the Public Health Ordinance is vested, by the terms of that Ordinance, in the Central Board of Health and is decentralized by the Board to local authorities. Advisory functions are shared between the Director of Medical Services and the Central Board of Health, which latter body receives regular reports from, and where necessary directs, the activities of the local authorities.

55. Port health and quarantine in Suva is in the charge of the Medical Officer of Health and all Government Medical Officers in country districts are Medical Officers of Health for the sanitary districts in their charge. There is a small group of fully trained Health Inspectors and a number of Assistant Health Inspectors who are locally trained; the co-ordination of the work of these officers is carried out by the Chief Health Inspector. A limited number of district Health Sisters is employed on district work, field inspections, and the direction of child welfare activities in the towns and districts. The work of these nurses is more fully described under Section V of the Report.

56. There were 18 local authorities actively functioning in the Colony and the minutes of 74 meetings were forwarded to the Central Board of Health. The Suva urban and rural local authorities meet regularly each month, other local authorities meet at irregular intervals.

57. The following is a summary of the work carried out by Health Inspectors and Assistant Health Inspectors during the year:—

- (a) *General Sanitary Inspection*.—55,965 inspections and re-inspections were carried out, as the result of which 17,791 sanitary defects were remedied. 3,730 written notices were issued. Action in respect of structural defects was limited by the continued shortages of building materials, but buildings in suburban areas so dilapidated as to be beyond repair received attention as follows:—

Closing Orders issued	28
Demolition Orders issued	42
Buildings demolished by owners	40
Buildings demolished by Local Authorities	2

- (b) *Food Supplies and Premises*.—The following food premises were under regular control—
- | | |
|---------------------------------------|----|
| Registered bakehouses | 47 |
| Eating houses under permits | 75 |
| Aerated water factories under permits | 16 |
| Ice factories under permits | 9 |
| Ice cream manufactories under permits | 61 |

Six thousand two hundred and fifty-five inspections were made of food premises and vehicles and 869 improvements to such premises completed during the year. Food inspection was well maintained and approximately 45½ tons of unsound food-stuffs were condemned and destroyed. Eighty-one samples of food were taken for laboratory examination (69 chemical: 12 bacteriological) and appropriate action was taken in respect of substandard goods.

- (c) *Supervision of Erection of New Buildings*.—In 18 sanitary districts, excluding the Town of Suva, Health Inspectors, who act also as Building Inspectors, dealt with 970 applications in respect of new buildings or structural alterations and repairs to a value of £450,000. At the end of the year 711 building projects were under supervision.
- (d) *Legal Proceedings*.—Legal proceedings were instituted in 43 instances for offences against Public Health and Pure Food legislation and 42 convictions were obtained.

(2) SEWAGE DISPOSAL.

58. The installation of septic tanks in suburban and rural districts was encouraged and 104 applications for permission to instal septic tanks were received. 500 reinforced concrete latrine slabs, which are manufactured at the Health Office, Suva, were supplied at cost price to applicants who wished to instal them.

(3) GARBAGE DISPOSAL.

59. In 11 sanitary districts, 4,649 premises were served by regular garbage collection services supported by garbage collection rates. One additional service was being arranged at the end of the year.

(4) RAT DESTRUCTION.

60. In six districts, 19,769 traps were set and 6,047 rats were caught. Of 140 rats submitted for laboratory examination none were found to be infected.

(5) WATER SUPPLIES.

61. Water supplies in all towns and township areas are under Government control. The Suva Water supply is chlorinated, but receives no other treatment, and after heavy rain discolouration appears. It is hoped that it will be possible to instal an efficient filtration and chlorination plant as part of the Colony's development programme. In the meantime, the typhoid inoculation campaign has been continued. 120 samples of drinking water were taken for laboratory examination during the year.

(6) SCHOOL HEALTH AND HYGIENE.

62. The inspection of school children was carried out during the year by District Medical Officers and Health Sisters. In the Suva area a Health Sister, Miss E. M. Kennedy, was fully employed on school inspections, assisted by a trained Fijian and a trained Indian nurse. The scheme of examination was similar to that followed in 1947 by Dr. F. A. Thomson, which was fully described in the Annual Report for that year. The following is a summary of the work carried out:—

- each child was weighed and measured and was given a vision test. The head was examined for lice and nits. Observations were made of signs of ill health and nutritional deficiencies from the state of teeth, mouth, skin, eyes, muscle tone and posture. The results of findings were recorded on individual medical cards;
- children suspected of suffering from a chronic or acute disease were referred to a medical officer. Those in need of dental attention were advised to visit their dentist, or arrangements were made for their attendance at the Dental Clinic. Arrangements were made for children with defective eye-sight to see the eye specialist who visited the Colony during the year;
- specimens of stools were sent for examination for parasites, and arrangements were made for treatment when this was necessary;
- careful investigations were made in the cases of children having relatives with tuberculosis, leprosy or syphilis;
- in cases of minor complaints and pediculosis, the children were treated either at the Health Office Clinic or in the schools;

- (g) home visiting was continued for the purpose of advising parents in regard to follow up methods and talks were given on general welfare matters;
- (f) standard first aid materials were supplied to the schools with instructions and demonstrations as to use;
- (h) anti-typhoid inoculations were carried out in all schools and an extensive vaccination campaign carried out.

63. Greater interest has been shown in the health talks given in the schools and children show an increasing tendency to seek advice on health matters. An analysis of the school inspections carried out in the Suva area and the findings of these inspections will be found in Appendix V.

IV—SEAPORT AND AIRPORT HEALTH AND QUARANTINE.

64. The ports of entry for overseas ships are Suva, Lautoka and Levuka. Suva is the only port of entry for ships from malarial ports. The airports are Nadi and Nausori for land planes and Laucala Bay for seaplanes. The total number of ships and aircraft arriving at these ports from overseas during the year was as follows:—

<i>Ships.</i>		<i>Aircraft.</i>	
Suva	159	Nadi	699
Lautoka	9	Nausori	48
	—	Laucala Bay	81
	168		—
			828

65. 12,976 passengers, of whom 1,635 were landing passengers, and 5,407 crew were examined at Nadi. The number of aircraft arriving at the Nadi Airport in 1946 was 320 and, in 1947, 560. A resident Medical Officer was stationed at Nadi during the year, and in the latter part of the year a Health Inspector was also stationed at the airport to assist in the fumigation of aircraft, anti-mosquito measures and general sanitary measures. The decision that the main airport for the Colony should be located at Suva was announced during the year and it is, therefore, unlikely that any improvements involving heavy capital expenditure will be carried out at Nadi. Aircraft from malarial places are not permitted to land at Nausori unless there are exceptional circumstances and such aircraft are required to land at Nadi or Laucala Bay, where strict precautions are taken. The Medical Officer of Health, Suva, is required to be in attendance in the case of aircraft arriving at Laucala Bay.

66. Twenty-eight overseas vessels and 48 local vessels were fumigated by use of cyanide during the year and 153 rats were found on these vessels.

67. The quarantine islands of Nukulau and Makuluva were maintained during the year and inspected periodically by the Medical Officer of Health and Health Inspectors. In January 1948, a case of poliomyelitis was found on R.C.S. *Kurimarau* which arrived from the Solomon Islands. The case was isolated at the Tamavua Hospital and the remainder of the native crew were isolated at Nukulau quarantine island for a period of 14 days and examined daily by the Medical Officer of Health or an Assistant Medical Practitioner. Other members of the crew were isolated on the ship and inspected each day during the period of isolation. No further signs of the disease, however, were found.

68. In view of the incidence of poliomyelitis in New Zealand, all passengers arriving from that country were, until July, required to report daily to the Health Office for inspection for a period of 14 days from the date of departure from New Zealand. During this period 826 passengers were so examined.

69. The *m.v. Orna* arrived in Suva on 27th June from Calcutta via Singapore. While *en route* from Calcutta to Singapore, one passenger developed smallpox and was landed at Singapore, where all remaining passengers and the crew were re-vaccinated. On arrival in Suva every person on board was medically inspected but no infectious disease was found and the ship was released from quarantine the same day. The vessel was subsequently fumigated.

V—MATERNITY AND CHILD WELFARE.

70. The importance of district child welfare work has continued to be stressed by the Department and good work has been done by the Health Sisters and District Nurses employed on child welfare duties and the pre- and post-natal care of mothers. The success of the child welfare campaign is reflected by the improvement in the infant mortality figures over the past years as depicted in the graph at Appendix IV.

71. Six Health Sisters, who are recruited from New Zealand, were employed during the year and the number of locally-trained nurses engaged on district work increased from 79 to 88. In addition, a Mission Sister assisted in the Island of Rotuma and a trained nurse resident in Gau Island on a part time basis. The European Health Sisters are kept extremely busy travelling in the large areas which have been assigned to them and it is necessary to rely largely on the Fijian Assistant Nurses to carry on the work. The large island of Vanua Levu is still, unfortunately without the services of a Health Sister owing to difficulties in recruitment.

72. The mobile clinic operating in the Suva and Rewa areas performed a valuable service until towards the end of the year when it was necessary to lay it up as it had become completely unserviceable. The Suva Rotary Club, which had donated the original clinic for the area, very generously undertook to sponsor the collection of funds for a mobile clinic for the Western District and, with the promise of £400 from the Central Indian Organization by the end of the year, the goal was well in view. It was also expected that it would be possible for Government funds to be provided for the replacement of the unserviceable mobile clinic in the Suva and Rewa areas.

73. Figures showing attendances at the main Child Welfare centres are set out in the following table:—

74. *Attendance at Child Welfare Centres:—*

	<i>Suva.</i>	<i>Lautoka.</i>	<i>Total.</i>
Europeans	2,242	124	2,366
Part-Europeans	1,212	179	1,391
Fijians	6,948	6,036	12,984
Indians	6,401	1,670	8,071
Others	1,335	74	1,409
Home Visits	5,840	3,925	9,765
	23,978	12,008	35,986

Rural areas were covered by Health Sisters stationed at Ba, Sigatoka and Nausori.

75. The following table shows the number of cases treated at the Maternity Annex to the Colonial War Memorial Hospital, where 24 beds are available:—

RETURN OF MATERNITY CASES IN THE COLONIAL WAR MEMORIAL HOSPITAL.

	<i>Fijians.</i>	<i>Indians.</i>	<i>Others.</i>	<i>Total.</i>
Admissions	274	493	110	877
Not in labour	16	92	8	116
In normal labour	254	369	98	721
Births—Male	142	207	45	394
Female	121	202	56	379

It is hoped that a start will be made in 1949 on the enlargement of the Colonial War Memorial Hospital Obstetric Annex, which is part of Stage I of the Suva Medical Centre proposals, a grant for which has been received from Colonial Development and Welfare funds. Considerable obstetric work is carried out in district and rural hospitals within the limit of available facilities.

VI—HOSPITALS AND DISPENSARIES.

A.—GENERAL REMARKS.

76. Hospital units in the Colony are classified as general or specialized hospitals, district hospitals, rural hospitals and rural dispensaries. The general and consulting hospital in the Colony is the Colonial War Memorial Hospital, Suva, where the services of a Surgeon Specialist and a Physician Specialist are available. Apart from being the main hospital for South East Viti Levu, patients are admitted from all over the Colony for specialized investigations and treatment. Modern facilities for the treatment of tuberculosis are provided at Tamavua Tuberculosis Hospital, located on an elevated site five miles from Suva. This hospital receives patients referred to it from all parts of the Colony. Patients from all parts of the Colony are also received at the Mental Hospital in Suva. District Hospitals are situated at Lautoka, Labasa and Levuka and are equipped to meet all emergency demands. It is planned to extend and improve facilities at these hospitals for the role they have to perform. Considerable extensions have been made to Lautoka Hospital and, when completed, the hospital, which is also a training school for Assistant Nurses, will be better able to meet the demands of the North-western districts. Rural hospitals are designed to serve as clearing stations or buffer units to district and general hospitals, while rural dispensaries are essentially out-patient units with a few sick bay beds. They are destined to develop eventually into rural health centres.

77. In addition to the Government Hospitals there are the following four small private hospitals in the Colony:—

- Nurse Morrison's Maternity Home, Suva.
- The Methodist Mission Indian Women's Hospital, Ba.
- The Cottage Hospital, Ba.
- The Waiyevo Cottage Hospital, Taveuni.

Each of these is subsidized by Government.

78. The number of attendances at Government Hospitals and Dispensaries will be found in Appendix VI. Brief notes on the activities of the larger units are recorded in the following paragraphs.

B.—THE COLONIAL WAR MEMORIAL HOSPITAL, SUVA.

79. This hospital has a capacity of 274 beds, including 24 beds in the obstetric annex. Accommodation is crowded and it has been necessary to make use of verandahs and a temporary wooden hut ward. 4,081 persons were admitted in 1948 and the average occupied bed rate was 234.59.

80. Dr. T. A. Doran, who had had previous service with the Indian Army, arrived in the Colony on 28th April and took over the duties of Medical Officer in Charge. Mr. K. J. Gilchrist was Surgeon Specialist and Dr. P. E. Manson-Bahr assumed duty as Physician Specialist in August. In addition, two Medical Officers and a Dental Surgeon were posted for duty at the Hospital. The nursing staff at the hospital, including the obstetric annex, consisted of the Matron, Miss J. Sinclair, the Assistant Matron, a Sister in Charge, 25 Sisters, 22 Nurses (locally trained) and 84 pupil nurses.

81. The accounting system at the Hospital was improved during the year and the new system came into operation on 1st September. The system of taking deposits from patients was revived, following which there was a substantial reduction in the list of arrears of revenue. Revenue collected during the year amounted to £4,340 compared with £3,668 in 1947.

82. In addition to his work in connexion with the diagnosis and treatment of cases admitted to the hospital, the Physician Specialist undertook all the medical radiology, gave a course of lectures to medical students and conducted clinical rounds in the wards. The following investigations were started by the Physician Specialist:—

- (a) the full investigation and classification of all cases of anæmia admitted, and the response to various hæmantinics studied;
- (b) the use of Dinofilarial Antigen as a skin test for filariasis and other helminth infestations;
- (c) the classification of jaundice cases admitted to the Hospital;
- (d) the effects of Hetrazan in filariasis.

83. A total of 1,269 operations were performed in the operating theatre, covering all fields of major surgery, and 1,322 minor operations in the out-patients department. 163 operations were performed by the Assistant Medical Practitioner in charge of the Eye Clinic, S. T. Uluilakeba, and 2,857 persons attended the Eye Clinic. An eye specialist from Australia, Mr. C. Blakemore, paid a visit for three months to the Colony during the year and was given facilities at the Colonial War Memorial Hospital, where he was available for consultations.

84. Radiographic examinations were carried out on 6,754 patients during the year involving the use of 9,564 films. The X-ray plant was serviced by a representative from Messrs. Watson Victor Limited, New Zealand. The number of persons treated at the out-patients department has considerably increased over recent years. During 1948 3,563 persons attended the paying out-patients department, and 31,045 persons attended the non-paying department. Existing facilities are very over-crowded but approval has been granted to the construction of a new out-patients department as part of Stage I of the new medical centre proposals, for which a grant has been received from Colonial Development and Welfare funds. In an endeavour to lessen the congestion at the Colonial War Memorial Hospital out-patients department, a new dispensary was opened at Samabula, a thickly populated suburb of Suva. This dispensary was opened in July and is available to the public for consultations from 11 a.m. to 1 p.m. each day. Attendances at the dispensary are greatly increasing although, so far, there does not appear to have been a corresponding reduction in attendances at the Colonial War Memorial Hospital out-patients' department. The dispensary, however, serves a useful purpose in providing medical facilities for the population of Samabula.

85. The work in the obstetric annex has been described in Section V above. Dr. D. J. Oldmeadow continued as honorary visiting obstetrician to the Annex and his services have been of the greatest assistance.

86. Two new ambulances were delivered during the year and these have given good service. One of the ambulances is kept at the Police Station, where a 24-hour service is maintained.

C.—TAMAVUA TUBERCULOSIS HOSPITAL.

87. Dr. P. G. Griffiths acted as Medical Officer in Charge at the Tamavua Hospital for the greater part of the year, during the absence on leave of Dr. L. G. Poole. The number of occupied beds during the year was 170, although, if all the available wards were opened, it would be possible to accommodate 278 beds. It has not yet been possible, owing to considerations of finance and staffing, to increase the number of occupied beds at the Hospital. The subordinate staff is supervised by the Matron, Miss E. E. Butt, and nine Nursing Sisters. The Medical Officer in Charge is assisted by a Steward and Clerk, a housekeeper and two Assistant Medical Practitioners.

88. The policy of limiting admissions, as far as possible, to tuberculosis cases in which quiescence or cure can be expected was continued. The following statement shows admissions, discharges, and deaths during the year:—

In patients 1948—Tuberculosis only—

Total number of patients in Hospital on 1st January, 1948	127
Admitted during 1948 for first time	212
Re-admissions of old cases (pre-1948) during 1948	53
<hr/>	
Total Tuberculosis patients, 1948	392
Discharged 1948	169
Died 1948 (either in hospital or at home)	69
Still in hospital on 31st December, 1948	154
Total admissions Tuberculosis	265
Non-Tuberculosis admissions	51
<hr/>	
Total Admissions	316

The daily average number of in-patients was 169.

89. X-rays were taken at fortnightly sessions by the Radiographer from the Colonial War Memorial Hospital until towards the end of the year when, owing to shortage of X-ray staff, X-rays were performed by the Medical Officer in charge. 656 X-rays of in-patients were taken and 371 of out-patients. In addition, 202 X-rays of the staff were performed, making a total of 1,229. All patients on artificial pulmonary relaxation therapy were subjected to regular screening at not longer than fortnightly intervals. A total of 1,512 screenings was made. By arrangement with the Medical Officer in charge at the Colonial War Memorial Hospital, all X-rays of lung fields which were considered to show abnormality were seen by the Medical Officer in Charge, Tamavua, twice a week. The total number of films on which reports were made was 938 and, of these, 275 were found to have evidence of pulmonary tuberculosis. The occupational therapy unit continued to function successfully and sales to a total value of £78 were made during the year with a gross profit of £60. A profit of £68 was also shown from sales from the hospital canteen, bringing the net profit accumulated at the end of 1948 from canteen funds to £151. It is proposed that these profits should be used for the purchase of comforts for the patients.

90. Approximately 50 acres of the 70 acres of land on which the hospital is situated have been brought under cultivation and contour planting has been undertaken with good results under the direction of the Department of Agriculture. The total value of native food stuffs grown in 1948 was £1,707. During the latter part of the year a number of English vegetable seeds were planted out as an experiment which proved very successful. The hospital is now fully self-supporting in most of the native foodstuffs and good supplies of native fruits are produced. The poultry farm produced over £43 worth of eggs during the year.

D.—MENTAL HOSPITAL, SUVA.

91. The duties of Officer in Charge at the Mental Hospital, Suva, were performed by Dr. K. R. Steenson, the Deputy Director of Medical Services. Mr. H. Leaver continued to perform the duties of resident Head Attendant, assisted by Mr. M. Fenn, as Assistant Attendant. The remaining staff consisted of seven male Samoan warders, six Samoan wardresses, two male Fijian night warders and two Indian cooks. It was necessary to employ two extra female attendants for the European female ward. The Matron from the Colonial War Memorial Hospital makes a regular weekly visit to the Mental Hospital.

92. The total number of patients treated in 1948 was 126, of which number 34 were new admissions during the year. Twenty-seven patients were discharged unconditionally and there were six deaths. At the end of the year 93 patients were in the hospital.

93. The following table shows the sex and racial distribution of patients remaining at 31st December and classification of total admissions by type of disease:—

(i) RACIAL AND SEX DISTRIBUTION.

	Male.	Female.	Total.
European	5	4	9
Fijian	11	10	21
Indian	34	20	54
Others	8	1	9
	58	35	93

(ii) DISTRIBUTION BY TYPE OF DISEASE.

	No. of cases.	No. of deaths.
1. Manic-depressive insanity	92	6
2. Paranoia and Paranoid States	12	..
3. Schizo-phrenia	4	..
4. Reactive and toxic insanities .. .. .	..	..
5. Epilepsy	6	..
6. Mental deficiency	9	..
7. Hysteria	3	..
	126	6

94. An electro-convulsive therapy apparatus was purchased during the year by a private practitioner, Dr. D. J. Oldmeadow, who carried out regular treatment at the Mental Hospital in conjunction with the Medical Superintendent and a Sister from the Colonial War Memorial Hospital. Sixteen patients were given treatment commencing from July and a total of 125 treatments had been given by the end of the year. Although too early to reach any definite conclusions, there has been an encouraging improvement in a number of the patients who received treatment.

95. A start was made during the year on the construction of a block of flats to provide new quarters for four of the staff and their families. It is hoped that this will be the start of a regular building programme and that all unsatisfactory staff quarters will be replaced.

E.—DISTRICT AND RURAL MEDICAL UNITS.

96. A complete list of these units is given in Appendix VII and the distribution of the units is shown in the outline map of the Colony at the back of this Report.

97. Figures representing admissions to, and attendances at, the three district Hospitals are shown in Appendix VIII and some indication can be obtained from them of the amount of work performed. The district Hospitals at Lautoka and Labasa are extremely busy units. Considerable improvements have been made to the Lautoka Hospital to bring it nearer to the standard required of a district Hospital. A new two-storey addition was constructed from surplus Army buildings and the ground floor portion of this section has been in use as an administrative block. Up to the end of the year it had not been possible to occupy the new ward, owing to the difficulty in obtaining plumbing materials to complete the work, but there were indications that the ward would be completed in 1949. Dr. R. W. D. Maxwell, District Medical Officer in the Western district, remained in charge of the Lautoka Hospital which, as mentioned elsewhere, is also a training school for nurses. Large numbers of patients have also been treated at the Labasa Hospital, both as in-patients and in the out-patients' department. The District Medical Officer, Northern, Dr. M. L. McCauley, is in charge of this Hospital. In the latter part of the year it was possible to station Dr. W. L. I. Verrier to Labasa as Travelling Medical Officer for the Provinces of Macuata and Bua. This relieved the District Medical Officer of some of his travelling duties and enabled him to spend more time in the supervision of the hospital and medical administration work of the district. Unfortunately, it has not yet been possible for funds to be provided for any but minor improvements to the Labasa Hospital, although it was possible to acquire an additional area of land for future extensions.

98. The diseases treated at the three district Hospitals are included in the consolidated statement in Appendix IX.

F.—AIDED HOSPITALS.

99. *The Methodist Mission Hospital for Indian Women at Ba* is under the medical charge of Dr. (Mrs.) D. Delbridge, assisted by a staff of three trained nursing sisters and eight Indian nurses in training. A grant-in-aid is made to this Hospital from Government funds. Extensions to the Hospital are planned by the Mission, who have been promised assistance in the form of a Government building grant. 927 patients were admitted to the Hospital, the daily average being 22.6. 4,713 out-patients received treatment and the number of obstetric patients admitted to the Hospital was 162, 40 more than in 1947. An Infant Welfare Clinic was established at the Hospital during the year and 90 infants were brought to the Clinic.

100. *The Cottage Hospital, Waiyevo, Tavuni*, is managed by a committee of local residents, of which the Medical Officer is Chairman, and is maintained by public subscription augmented by a Government subsidy. It is situated close to the rural hospital. Three beds are available and about 20 cases were admitted for treatment during the year.

101. *The Cottage Hospital at Ba* has five beds and is in medical charge of the Colonial Sugar Refining Company's medical officer, assisted by a resident Nursing Sister.

102. *Nurse Morrison's Maternity Home in Suva* caters for maternity cases attended by private practitioners. A Government subsidy of £400 a year is made to this home. The number of admissions during the year was 90 and there were 89 births of the following racial groups:—

Europeans	72
Part-Europeans	12
Indians	1
Chinese	3
Tongans	1
	—
	89

VII—LABORATORIES AND RESEARCH.

103. Dr. G. T. Barnes continued to perform the duties of Pathologist, assisted by Mr. J. E. Pery-Johnston as Laboratory Superintendent. In addition to the clerical staff, two Assistant Medical Practitioners were attached to the Laboratory. The Laboratory students in training also assisted in the general work of the Laboratory and this made it possible to grant leave to members of the staff who were due for it. The Laboratory is a modern unit equipped to undertake all normal requirements of clinical pathology, parasitology, bacteriology, biochemistry, forensic medicine and public health. T.A.B. and antigenous vaccines are prepared as required.

104. There was a considerable increase in the routine work of the Laboratory during the latter part of the year, since the appointment of the Physician Specialist. Tissues for histological reports were received from all parts of Fiji and from Pacific territories participating in the South Pacific Health Service. The following table gives the number of analyses and the laboratory procedures carried out during the year:—

LABORATORY PROCEDURES.

Post-mortem examinations	93
Histology preparations	375
Clinical Pathology	6,462
Parasitology	14,339
Bacteriology	5,301
Biochemistry	492
Animal inoculations	3
Rat autopsies for plague	98
Medicolegal (other than autopsies)	28
Veterinary	166
Not classified	200
	—
Total	27,557

105. During the year the Pathologist was engaged on an investigation of Rheumatic Fever in Indians and Fijians, with the object of determining the occurrence and incidence of this condition by clinical, laboratory and post-mortem investigations. It is hoped also to obtain a picture of the differential diagnosis of polyarthritis, resembling rheumatic fever, which is found in the Colony. Among research work carried out was the follow-up of Widal agglutination titres in a group of Native Nurses who received T.A.B. inoculations.

106. The small laboratory at the Lautoka Hospital remained under the charge of Assistant Medical Practitioner Peni Tuidrake, formerly the Senior Assistant Medical Practitioner in the Suva Laboratory. The work at this laboratory is still curtailed through a deficiency in apparatus caused by the fire in 1947. 2,170 laboratory procedures were carried out at Lautoka during the year.

107. Information was received towards the end of the year that the Secretary of State had approved the grant of £F4,000 from Colonial Development and Welfare funds for the establishment of a Central Medical Research Library in Suva. It is hoped that it will be possible to make a start on building up this library in 1949.

VIII—TRAINING.

A.—GENERAL.

108. A Committee was appointed during the year to consider plans for the new Central Medical School and the Central Nurses' Training School, which form part of Stage I of Suva Medical Centre proposals, for which a grant has been approved by the Secretary of State under the Colonial Development and Welfare Act. A hostel will be attached to both these institutions which will provide good accommodation for the students and nurses. Work was in progress at the end of the year on detailed drawings for both these projects. It is planned to provide accommodation for dental, health, laboratory and pharmacy students in the new Central Medical School buildings in addition to the medical students and, when these buildings have been completed, an important advance will have been made in providing adequate teaching facilities for local students.

B.—CENTRAL MEDICAL SCHOOL.

109. Dr. A. S. Frater, M.B.E., continued as Principal of the Central Medical School during the year and extracts from his Annual Report will be found at Appendix X. Mrs. Frater, B.A., Dip.Ed., was appointed temporary Assistant Principal during the year and was in charge of the teaching of chemistry, physics, botany, zoology, and part of the physiology course. It was also possible to arrange for Assistant Medical Practitioner Ram Singh, a graduate of 1947 and top student for that year, to give two hours each morning to the anatomy class, in conjunction with his duties at the Colonial War Memorial Hospital. In addition, the services of 10 honorary lecturers were available during the year and the school is very much indebted to them for this assistance.

110. The following is a summary of the students from the various Administrations attending the school during the year:—

Administration.	No. of Students.
Western Samoa	10
Tonga	3
Cook Islands	3
Gilbert and Ellice Islands	4
British Solomon Islands	2
Niue Island	2
Papua, New Guinea	2
Fiji	17
Total	43

C.—ASSISTANT DENTAL PRACTITIONERS.

111. It was not possible to make very much progress in the provision of a regular course in dentistry owing to lack of facilities in Suva. Approval was granted, however, during the year to the provisions of funds in 1949 for the appointment of a Senior Dental Surgeon and Principal of the Dental School. In the meantime, arrangements had been made for students to take the pre-medical course in preliminary sciences and elementary anatomy and physiology at the Central Medical School, and the Dental Surgeon continued with the course in dentistry. One student qualified as an Assistant Dental Practitioner at the end of the year, making a total of two such posts on the establishment.

D.—NURSES' TRAINING SCHOOLS.

112. Miss A. Storck continued to perform the duties of Principal of the Central Nursing School which is attached to the Colonial War Memorial Hospital. Nurses obtain their general and obstetric training at this school, and specialized tuberculosis training is given at the Tamavua Hospital. Mention is made above of the fact that approval has been granted to the construction of a new school and hostel.

113. At the nurses' hostel attached to the Colonial War Memorial Hospital 76 pupil nurses and six qualified nurses are accommodated. In addition, 12 pupil nurses are accommodated at the Tamavua Hospital and transported to the Colonial War Memorial Hospital each day. Thirty-eight pupil nurses were accepted for training in 1948 and 12 nurses graduated from the school.

114. Forty-seven pupil nurses and 11 qualified nurses are accommodated at the Lautoka Hospital in the Nurses' Hostel and a vacant ward which is also used, as a temporary measure, for accommodation of nurses. New quarters for the Tutor Sister were constructed at Lautoka during the year and a dormitory for 10 nurses added. Twenty-one pupil nurses were accepted for training during the year (12 Fijian, eight Indian and one Rotuman); 11 nurses graduated from the school.

115. At the Tamavua Hospital the Nursing School is used for two-monthly periods twice yearly for nurses entering the Central Nursing School and for regular lectures for the male nursing orderlies.

116. The Methodist Mission Hospital at Ba is also recognized as a training unit for nurses and is able to take, on an average, seven pupil nurses.

117. In all training schools, tuition extends over a period of three years, in accordance with a syllabus approved by, and to a standard recommended by, the South Pacific Board of Health. For many reasons no attempt has been made to train nurses to a standard which would be acceptable as qualifying for registration in the United Kingdom or the neighbouring Dominions. Every encouragement is given to local girls to go overseas to take the full nurses qualifications.

E.—ASSISTANT HEALTH INSPECTORS.

118. Two health students qualified in 1948 and were appointed as Assistant Health Inspectors and five new students commenced their training. Arrangements were also made for a student from Papua, who had been sent to Suva to take the course for Assistant Medical Practitioners but who was not up to the required standard for the Medical School, to be trained as a health student

F.—ASSISTANT LABORATORY TECHNICIANS.

119. The course for laboratory training includes instruction in physics, inorganic chemistry and mathematics, in addition to practical instruction at the laboratory benches. The four students (two Fijian and two Indian) completed 2½ years training at the end of 1948. It was hoped that these students would be passed as certificated laboratory assistants at the end of the year but examination results were not entirely satisfactory and it was decided to adhere to the original plan for a three-year course.

G.—ASSISTANT PHARMACISTS.

120. A course of training for local youths as pharmacy assistants was started recently under the supervision of the Government Pharmacist. Two students have so far qualified and additional students are to be trained in 1949. Qualified pharmacy students can be usefully employed at the larger district hospitals as well as at the Government Pharmacy in Suva and at the Colonial War Memorial Hospital.

IX—METEOROLOGY.

121. A summary of meteorological observations for the year 1948 is enclosed as Appendix XI.

J. M. CRUIKSHANK,
Director of Medical Services.

APPENDIX I.

ESTABLISHMENT—1948.

Director of Medical Services	1
Deputy Director of Medical Services	1
Secretary	1
Surgeon Specialist	1
Physician Specialist	1
Medical Officer of Health, Suva	1
Principal, Central Medical School	1
Principal, Central Nursing School and Tutor Sisters ..	4
Pathologist	1
Medical Superintendent, Central Leper Hospital ..	1
Medical Officers	20
Assistant Medical Practitioners	82
Dental Surgeon	1
Government Pharmacist and Medical Storekeeper ..	1
Assistant Pharmacist	1
Laboratory Superintendent	1
Health Inspectors and Health Assistants	33
Trained Nursing Staff—General and District Hospitals ..	74
Native Nurses (Certificated)	178
Radiographers and Assistants	6
Dietitians	2
Attendants, Mental Hospital	17
Clerical Staff	29
Nursing Staff, Central Leper Hospital	28
Orderlies, Tuberculosis Hospital	52
Subordinate Staff	373
Housekeeper	1
Laundry Supervisors	2

APPENDIX II. TABLE A.—NOTIFICATION OF INFECTIOUS DISEASES BY DISTRICTS FOR THE YEAR 1948.

Table with columns for Disease Name, Suva (Urban, Rural, Aircraft, Ships, Tavern, Rowa, Naitasiri, Serua, Kadavu), Western (Nadroga, Nadl, Lautoka, Ra, Tavua, Nadarivatu, Ra, Nadi, Aircraft, Ships, Nadi Aerodrome, Lonarivi, Lanu), Northern (Macuata, Ra), Cakaudrove (Tavuni, Savu Savu, Rabl), and Total. Rows list diseases like Acute Anterior Poliomyelitis, Cerebro-Spinal Meningitis, Chicken Pox, etc.

TABLE B.
NOTIFICATION OF INFECTIOUS DISEASES BY RACE FOR THE YEAR 1948.

Disease.	Europeans.	Part-Europeans.	Fijians.	Indians.	Others.	Total.
Acute Anterior Poliomyelitis (Infantile Paralysis) .. ..	....	....	....	....	1	1
Cerebro-Spinal Meningitis .. ..	....	....	3	3	....	6
Chicken Pox (Varicella)	1	2	47	7	68	125
Amœbic Dysentery .. ..	....	1	9	8	1	19
Bacillary Dysentery	6	2	22	41	....	71
Unclassified Dysentery	1	1	52	128	2	184
Influenza	33	100	2,012	957	146	3,248
Measles (Morbilli) .. ..	....	....	1	....	....	1
Mumps	2	1	47	56	173	279
Enteric Fever .. ..	....	1	54	36	4	95
Para-Typhoid Fevers .. ..	....	....	1	....	....	1
Whooping Cough (Pertussis)	7	....	14	2	....	23
Dengue Fever	12	13	69	92	2	188
Diphtheria	1	....	....	2	1	4
Erysipelas .. ..	....	2	1	2	1	6
Infantile Diarrhoea	9	12	331	130	1	483
Infective Hepatitis .. ..	....	....	....	1	....	1
Leprosy .. ..	....	1	26	21	2	50
Malaria .. ..	....	....	4	....	....	4
Puerperal Fever .. ..	....	1	13	40	....	54
Tetanus .. ..	....	1	17	11	2	31
Trachoma .. ..	....	....	149	7	1	157
Tuberculosis Pulmonary	6	6	226	118	32	388
Tuberculosis other forms	1	....	39	14	4	58
Gonorrhœa	13	9	79	108	9	218
Ophthalmia Neonatorum .. ..	....	....	4	2	....	6
Soft Chancre .. ..	....	....	1	3	....	4
Syphilis	5	3	....	79	20	107
Total	97	156	3,221	1,868	470	5,812

TABLE C.
NOTIFICATION OF INFECTIOUS DISEASES BY MONTHS FOR THE YEAR 1948.

Disease.	Jan.	Feb.	Mar.	Apl.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Acute Anterior Poliomyelitis (Infantile Paralysis) .. ..	..	1	..	..	..	..	..	..	..	..	..	..	1
Cerebro-Spinal Meningitis .. ..	..	..	..	..	..	..	..	..	..	1	1	2	6
Chicken Pox (Varicella)	2	4	8	7	2	5	17	19	13	2	7	39	125
Amœbic Dysentery .. ..	..	1	..	1	..	7	6	3	1	..	..	..	19
Bacillary Dysentery	3	7	6	3	3	4	7	3	8	3	9	15	71
Unclassified Dysentery	7	14	27	23	4	14	20	11	19	16	11	18	184
Influenza	182	164	162	431	135	158	162	128	519	508	395	304	3,248
Measles (Morbilli) .. ..	..	..	..	..	..	..	..	..	..	1	..	..	1
Mumps	158	58	9	17	6	6	3	6	..	2	14	..	279
Enteric Fever	4	7	2	1	16	8	8	3	4	6	17	19	95
Para-Typhoid Fevers	1	..	..	..	..	..	..	..	..	..	..	..	1
Whooping Cough (Pertussis) .. ..	..	..	1	..	..	..	1	..	..	1	1	19	23
Dengue Fever	23	29	21	24	2	5	10	11	12	22	8	21	188
Diphtheria .. ..	..	..	..	2	..	1	..	..	..	..	..	1	4
Erysipelas .. ..	..	2	..	2	..	..	..	..	..	1	1	..	6
Infantile Diarrhoea	27	28	44	27	30	20	62	29	79	35	48	54	483
Infective Hepatitis .. ..	..	..	..	1	..	..	..	..	..	..	..	..	1
Leprosy .. ..	..	2	2	2	8	5	2	3	5	10	4	7	50
Malaria .. ..	..	1	..	..	1	..	..	..	..	..	1	1	4
Puerperal Fever	7	3	4	4	1	4	7	7	3	7	3	4	54
Tetanus	1	3	5	3	1	3	2	4	2	2	3	2	31
Trachoma	3	6	55	11	5	9	9	2	9	7	16	25	157
Tuberculosis Pulmonary	22	29	31	25	47	28	42	32	42	38	23	29	388
Tuberculosis Other Forms	7	2	3	4	9	8	9	2	6	5	2	1	58
Gonorrhœa	13	22	13	21	5	19	28	13	21	20	15	28	218
Ophthalmia Neonatorum .. ..	..	2	1	..	..	1	2	..	..	..	..	..	6
Soft Chancre .. ..	..	1	1	..	..	2	..	..	..	..	..	..	4
Syphilis	10	32	11	12	..	9	9	1	5	8	7	3	107
Total	470	418	406	621	275	316	408	277	748	695	586	592	5,812

Admissions, which showed the usual two to one male-female ratio, included 23 Fijians, 10 Cook Islanders, four Samoans, 33 Indians and three part-Europeans. In view of the incomparably better prognosis in Neural ("Tuberculoid") cases, it is disappointing to note that only 54.8 per cent of the new admissions were Neural in type. This is admittedly a higher proportion than exists among our general population at Makogai, which shows only 38 per cent of Neural cases, but the latter is at least partly explained by the very much higher proportion of Neural cases among the discharged, and the consequent retention and accumulation of Lepromatous types.

TABLE II—ADMISSIONS.

	N-1.	N-2.	N-3.	L-1.	L-2.	Totals.
Euronesian .. .. .	....	1	....	....	2	3
Fijian .. .. .	....	13	....	2	8	23
Indian	3	14	....	3	13	33
Cook Islanders	4	3	....	2	1	10
Samoan .. .. .	....	1	1	....	2	4
Totals	7	32	1	7	26	73

The 58 admissions from Fiji included 23 Fijians, 33 Indians and two part-Europeans; the 15 from beyond the colony included 10 Cook Islanders, four Samoans and one part-European. Nine of the extra-Fiji admissions were Neural (60 per cent), but the Fiji rate, with 31 Neural cases out of 58 (53.4 per cent) is lower than the general admission rate already described as disappointing.

Discharges, numbering 52, included 24 patients from beyond Fiji. The 15 Cook Islanders discharged represented a far higher proportion of their numbers at Makogai than those of any other race, and this fact may be correlated with their higher proportion of Neural cases—(60 per cent) as shown in Table 3. This tendency, which may be regarded as of definitely good prognostic significance, is further illustrated by their admissions during 1948, 79 per cent of which were Neural in type.

Of the 52 discharges during the year, 49 (94.2) were classified as Neural. Three of the Indians discharged had been Lepromatous, but no other race had any lepromatous discharges.

Twenty-six (50 per cent) of the discharges were Neural-1 and 23 (44.2) Neural-2. These percentages might give the impression that there was little difference in prognosis between the two stages, but in relation to the number of patients at Makogai in each stage, the true percentages are 39.4 and 12.2 respectively, showing a marked difference in outlook, and so corroborating the statement above that many more Neural-1 than Neural-2 cases improve to the stage of quiescence of the disease.

TABLE III.

	N-1.	N-2.	N-3.	Total.	Per cent	L-1.	L-2.	L-3.	Total	Per cent	Total.
Fijian	11	49	7	67	51.5	6	43	14	63	48.5	130
Solomon Islander	1	9	1	11	(45.8)	2	7	4	13	(54.2)	24
Rotuman .. .. .	..	1	..	1	(14.3)	..	4	2	6	(85.7)	7
Samoan	3	11	..	14	25.0	7	25	10	42	75.0	56
Cook Islander	22	14	3	39	60.0	4	13	9	26	40.0	65
Niue Islander .. .. .	..	3	..	3	(37.5)	..	3	2	5	(65.5)	8
Tongan	2	15	4	21	(60.0)	1	10	3	14	(40.0)	35
Gilbert Islanders	5	14	1	20	22.7	2	38	28	68	77.3	88
Indian	20	65	3	88	32.2	23	153	9	185	67.8	273
Chinese .. .. .	..	2	..	2	(33.3)	..	3	1	4	(66.7)	6
Euronesian	2	5	..	7	(33.3)	2	10	2	14	(66.7)	21
European .. .. .	..	..	..	....	....	..	4	..	4	(100)	4
Total	66	188	19	273	38.0	47	313	84	444	62.0	717

The rainfall at Makogai during 1948 was as follows:—

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
8.02	13.61	8.97	16.08	7.05	1.70	2.93	3.10	1.58	4.86	8.36	7.91	83.17

TABLE IV.

	Arrested.	Quiescent.	Per cent inactive.	Improved.	*Per cent improved.	Stationary.	Worse.	Died.	Total.
Fijian	18	24	32.3	31	56.2	40	11	6	130
Solomon Islander ..	2	3	(20.8)	8	(54.2)	7	1	3	24
Rotuman .. ..	....	1	(14.3)	4	(71.4)	2	..	..	7
Samoan	3	2	8.9	18	41.1	27	2	4	56
Cook Islander	17	10	41.5	14	63.1	18	3	3	65
Niue Islander .. ..	....	....	....	4	(50.0)	3	1	..	8
Tongan	2	6	(22.9)	16	(68.6)	10	..	1	35
Gilbert Islander ..	6	8	15.9	19	37.5	39	7	9	88
Indian	27	61	35.9	82	65.9	72	21	10	273
Chinese .. ..	....	2	(33.3)	3	(83.3)	1	..	..	6
Euronesian	1	2	(14.3)	6	(42.9)	10	..	2	21
European .. ..	....	....	....	1	(25.0)	....	1	2	4
Total	76	119	27.2	206	55.9	229	47	40	717
Neural-1	26	26	78.8	7	89.4	7	..	..	66
Neural-2	37	56	49.5	43	72.3	42	4	6	188
Neural-3	7	4	(57.9)	5	(84.2)	1	..	2	19
Total Neural ..	70	86	57.1	55	77.3	50	4	8	273
Lepromatous-1 ..	1	9	21.3	18	59.6	17	2	..	47
Lepromatous-2 ..	5	23	8.9	117	46.3	121	33	14	313
Lepromatous-3 ..	....	1	1.2	16	20.2	41	8	18	84

* Includes those classified as "Arrested", "Quiescent" and "Improved".

Deaths during the year numbered 40, 32 of which occurred in moderately, or very advanced, Lepromatous cases. Among the races with more than 50 patients, the rate was easily highest among the Gilbert Islanders and Samoans, and it is significant that their Lepromatous rates were also the highest—77.3 per cent and 75 per cent respectively. General health and resistance among the Gilbertese at Makogai have always appeared poor, but the Samoans are usually particularly robust, so that their comparatively poor results can only be ascribed to a specially low resistance to the leprotic infection.

Tuberculosis remains a subsidiary but important complication. At the beginning of the year 13 (three female and 10 male) of our patients were also under treatment for pulmonary tuberculosis. Nine additional cases (four female and five male) were diagnosed during 1948, five died and one was discharged, leaving 16 cases of pulmonary tuberculosis at the end of the year. These latter include four each Fijians and Indians, two each Gilbert and Cook Islanders, and one each Rotuman, Tongan, Samoan and Niue Islanders. A young Cook Island girl is suffering from pleural effusion at present and four other suspects are under careful supervision.

Mantoux testing was continued during the year and in the past two years 1,010 tests have been carried out, of which 345 (34.15 per cent) gave positive reactions. Of 229 Indians tested, 95 (41.5 per cent) were positive, as also were 68 of 120 (56.6 per cent) Fijians, and 42 of 76 (54.5 per cent) Gilbert Islanders.

There were 349 X-ray examinations of the chest during 1948, mainly following up the mantoux positives. A further 127 bony lesions in connexion with trophic ulcerations of the extremities were X-rayed.

Sulphone Drugs arrived in small quantities, after many delays and disappointments, at the end of October. It would hardly seem worth while reporting on a two-months' trial of a new drug in so chronic a disease as leprosy, were it not for its outstanding and rapid effect in clearing long-standing ulceration in this disease, as well as for its marked toxicity in the advanced cases of leprosy with which we were dealing.

The only Sulphone drug available was Sulphetrone—one of the now numerous derivatives of diaminodiphenylsulphone a British drug, prepared by Burroughs Wellcome and Company. The original quantity procured was estimated as sufficient for the treatment of 30 patients for six months, but as we were assured of a further supply within three months, it was decided to extend the treatment to 60 patients. The next problem was to determine which patients out of the 11 racial groups represented here—all of whom were clamouring for the drug—should be given the first chance, and it was decided that the most advanced cases, of whatever race, should be given what might well prove to be their only opportunity. Such a selection, moreover, could be so easily checked by other patients that no question of favouritism or racial discrimination could possibly arise.

On the 30th October, Sulphetrone treatment of 62 patients was started with one tablet (0.5G.) daily, increasing where the condition appeared to justify it, to six tablets (3.0G.) within a fortnight. By the end of November we were disturbed to find that 31 of the patients had needed to stop treatment owing to the sudden onset of anaemia, severe reaction or general weakness. Although we had known of the Sulphones' reputation as hæmotoxic drugs, this result came as a surprise in view of the announced normal maximum dosage of 6-10 grams per day, but it was evident that in dealing with such advanced, mainly ulcerating, lepromatous cases, we had increased dosage much too rapidly. Only fourteen patients have been able to maintain the originally attained daily dose of 3G. throughout the two months.

Hepatex injections and the administration of iron soon restored the normal blood picture in most cases, and 19 of the 31 patients who had been taken off treatment were able to resume it again in December, but it was naturally carried out much more cautiously. It was found that some were unable to stand more than 0.5G. a day, for a week or so before increasing anaemia or other toxic manifestation necessitated a further rest from treatment. The surprising fact is that with such interrupted and limited dosage any benefits whatsoever were observed.

Most of the original 62 cases showed some degree of lepromatous ulceration—a great advantage from the point of view of objective assessment of progress. In most cases, this ulceration had been of comparatively long standing, and had proved refractory to Chaulmoogra treatment, as well as to courses of penicillin and sulpha-drugs.

During the first two or three weeks of treatment, a number of patients showed increased ulceration, but in practically every case so affected, continuation of the treatment, or resumption after a short rest, resulted in the drying of this as well as of the original ulceration. Within the two months to the end of the year, 27 of the original 62 patients became completely free from ulceration, and another 20 were recorded as much improved from that point of view. These it should be recalled, were cases of long-standing ulceration—measured in months, if not in years—which had successfully resisted all previous forms of treatment.

Apart from ulceration, there is no other factor so readily assessed from the point of view of progress, particularly over so short a period. Thirty-seven of the patients showed increases in weight, amounting in some cases to ten pounds or more, during the short period. A few of the patients gave the erroneous impression of having lost weight, evidently owing to diminution of cutaneous infiltration and after a careful survey at the end of the period 19 patients are recorded as showing "Flattening of nodules" or "Infiltrations less obvious".

Subjective evidence is even more suspect, for it is impossible to rule out the psychological factor, but the large majority under treatment state that they now feel "better" or "stronger" and have better appetites, which is confirmed from the kitchen. A number who have suffered for years from ulceration of the nasal mucosa and consequent nasal blockage report that the nose is much clearer, and nasal inspection supports this claim. Other patients refer to returning flexibility and suppleness of fingers and hands.

From the less optimistic point of view it should be pointed out that two patients who started the Sulphetrone treatment have died. This is not, of course, surprising, as they were among our most advanced cases, but it is not impossible that in one case, the Sulphetrone, given before we fully realized its intense toxicity to such patients, may have hastened his end. Two more patients, without other signs of reaction—though one has lost all her ulcerations—are still (five weeks after their last dose) running intractable temperatures up to 103 or 104. Twelve other patients have been unable so far to resume the treatment owing to failure to overcome the sulphone-provoked anaemia.

The limited but striking evidence at our disposal is, in my opinion, sufficient to make it evident that the Sulphones—at least as represented by Sulphetrone—represent a very real advance in the amelioration of the suffering of the advanced cases of lepromatous leprosy. It is said that the bacteriological improvement lags far behind the clinical, and it is still too early to speak of cure. Should cures eventuate, the rapidity with which so many of the ulcerations have cleared must not lead us to anticipate a similarly rapid absorption of the gross infiltrations of the skin, packed as they are with bacilli-laden cells which have made themselves so thoroughly at home for so many years. Even if the improvement should fail to go on to complete cure or to embrace the Neural forms of the disease, and there is no evidence that it will so fail; the lessening of the severity of the disease and the prevention or cure of the foul ulcerations that constitute so repulsive a culmination to the advance of leprosy will surely prove such a boon to the sufferers as to provide the amplest justification for the increased expenditure.

Visitors to the Hospital during 1948 included His Excellency Sir Brian Freeston, K.C.M.G., O.B.E., Governor of Fiji, Lady Freeston and Miss Freeston; Sir Henry Scott, K.C., Deputy Chairman of the Lepers Trust Board; Dr. R. J. Snodgrass, Acting Director of Medical Services; Mr. W. E. Donovan, Acting Accountant-General and Secretary Treasurer of the Lepers Trust Board; Mr. H. S. Rose, Secretary-General of the Lepers Trust Board, New Zealand; Mr. W. Hamond, Education Officer Northern; a French Commission from New Caledonia consisting of Messieurs Dr. Edmond Ragusin, Directeur de l'Institut Pasteur Bourret, Noumea; Pierre Boilot, Directeur des Travaux Publics; Pierre Pannetier, Conseiller-General, Nlle Caledonie; Paul Pascalon, Architecte Urbaniste en mission, Nlle Caledonie.

C. J. AUSTIN,
Medical Superintendent, Makogai.

TABLE V.
SUMMARY OF STATISTICS, 1911-1948.

	Fijians.	Solomon Islander.	Rotuman.	Samoa.	Cook Islander.	Niue Islander.	Tongan.	Gilbert Islander.	Indian.	Chinese.	Euronesian.	Europeans.	Maoris.	Total.
Admissions ..	821	207	98	106	254	15	55	157	1,255	25	47	20	4	3,064
Repatriations ..	..	..	..	..	..	..	..	..	435	..	..	1	..	436
Discharges ..	324	64	56	24	129	2	8	28	263	4	13	5	1	921
Deaths ..	365	122	35	29	68	5	15	53	286	15	15	12	3	1,023
Inmates 31/12/48	132	21	7	53	57	8	32	76	271	6	19	2	..	684

TABLE A.—1948
INJECTIONS.

1948.	Chaul. Oil.	Salvarsan.	Diluters.	Fluores.	Vitamin B I.	Penicillin.	O.T.	Various.	Total
January ..	1,336	7	6	9	7	42	73	189	1,669
February ..	1,273	3	3	23	6	100	77	209	1,694
March ..	1,264	2	..	25	27	145	156	168	1,787
April ..	1,101	..	3	6	34	70	187	84	1,485
May ..	1,077	3	7	21	24	105	78	159	1,474
June ..	1,065	16	13	35	43	90	239	289	1,790
July ..	759	9	4	9	27	75	....	230	1,113
August ..	1,394	8	4	25	15	48	....	325	1,819
September ..	1,393	18	10	38	32	207	....	363	2,061
October ..	1,057	17	10	26	33	122	....	343	1,608
November ..	980	24	8	25	43	135	....	263	1,478
December ..	361	16	11	55	15	50	....	295	803
Totals ..	13,060	123	79	297	306	1,189	810	2,917	18,781

TABLE B.—1948.
DRESSINGS, OPERATIONS, X-RAY AND LABORATORY INVESTIGATIONS.

1948.	Dressings.	Patients dressed.	Operations.	X-Ray.	LABORATORY EXAMINATIONS.					Visitors.
					Urine.	Bact.	Helm.	Blood.	Total.	
January ..	11,178	4,626	4	19	185	115	37	..	337	5
February ..	7,544	4,068	2	49	80	85	27	..	192	5
March ..	11,444	4,428	2	34	95	66	22	..	183	4
April ..	12,291	4,760	..	73	82	66	89	..	237	15
May ..	13,230	5,184	5	42	123	106	12	..	241	4
June ..	12,924	5,238	..	60	148	105	34	..	287	6
July ..	13,107	5,100	4	62	122	112	22	..	256	15
August ..	14,580	5,004	1	42	184	107	25	..	316	11
September ..	13,097	4,539	..	30	173	116	13	..	302	4
October ..	13,243	5,049	..	14	198	144	10	..	352	..
November ..	10,476	4,248	3	13	132	141	14	199	486	22
December ..	10,548	4,604	2	38	113	75	..	409	597	1
Totals ..	143,662	56,848	23	476	1,635	1,238	305	608	3,786	92

DAILY AVERAGE FOR THE DIFFERENT ADMINISTRATIONS FOR THE YEAR 1948.

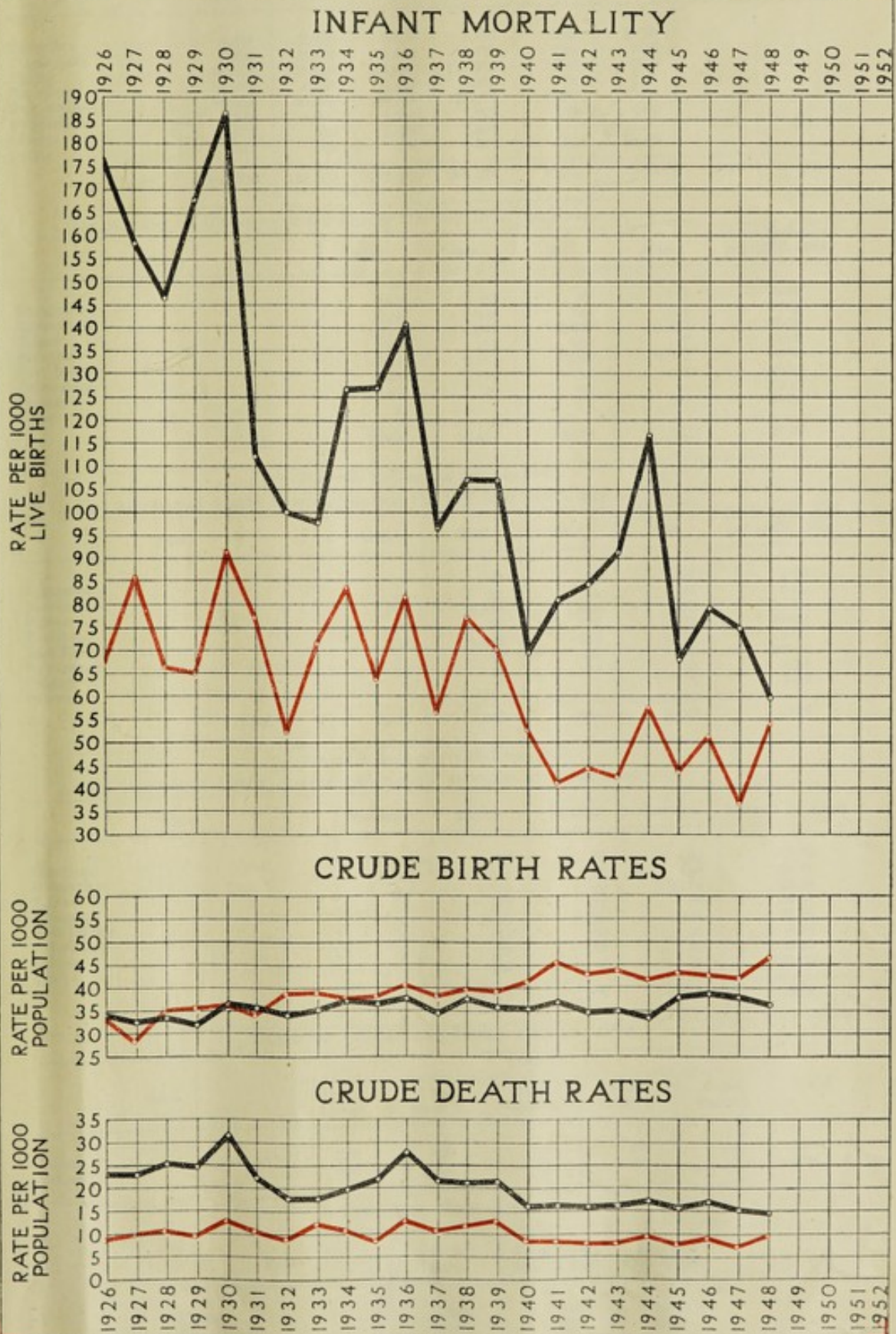
New Zealand—	
Euronesian	0-04
Niue	1-00
	— 1-04
Western Samoa—	
Euronesian	8-10
Chinese	1-00
Melanesian	1-00
Samoan	44-08
	— 54-18
American Samoa—	
Euronesian	3-90
Samoan	9-05
	— 12-95
Cook Islands—	
Euronesian	1-00
Cook Islands	56-96
Niue	7-00
	— 64-96
Tonga—	
Tongan	33-12
	— 33-12
Gilbert Islands—	
European	1-00
Euronesian	1-00
Chinese	1-00
Gilbert Islanders	84-50
	— 87-50
Fiji—	
European	1-89
Euronesian	4-60
Chinese	4-00
Rotuman	7-00
Melanesian	22-69
Fijian	125-53
Indian	260-94
	— 426-65
	— 680-40

INFANT MORTALITY, CRUDE BIRTH & DEATH RATES.

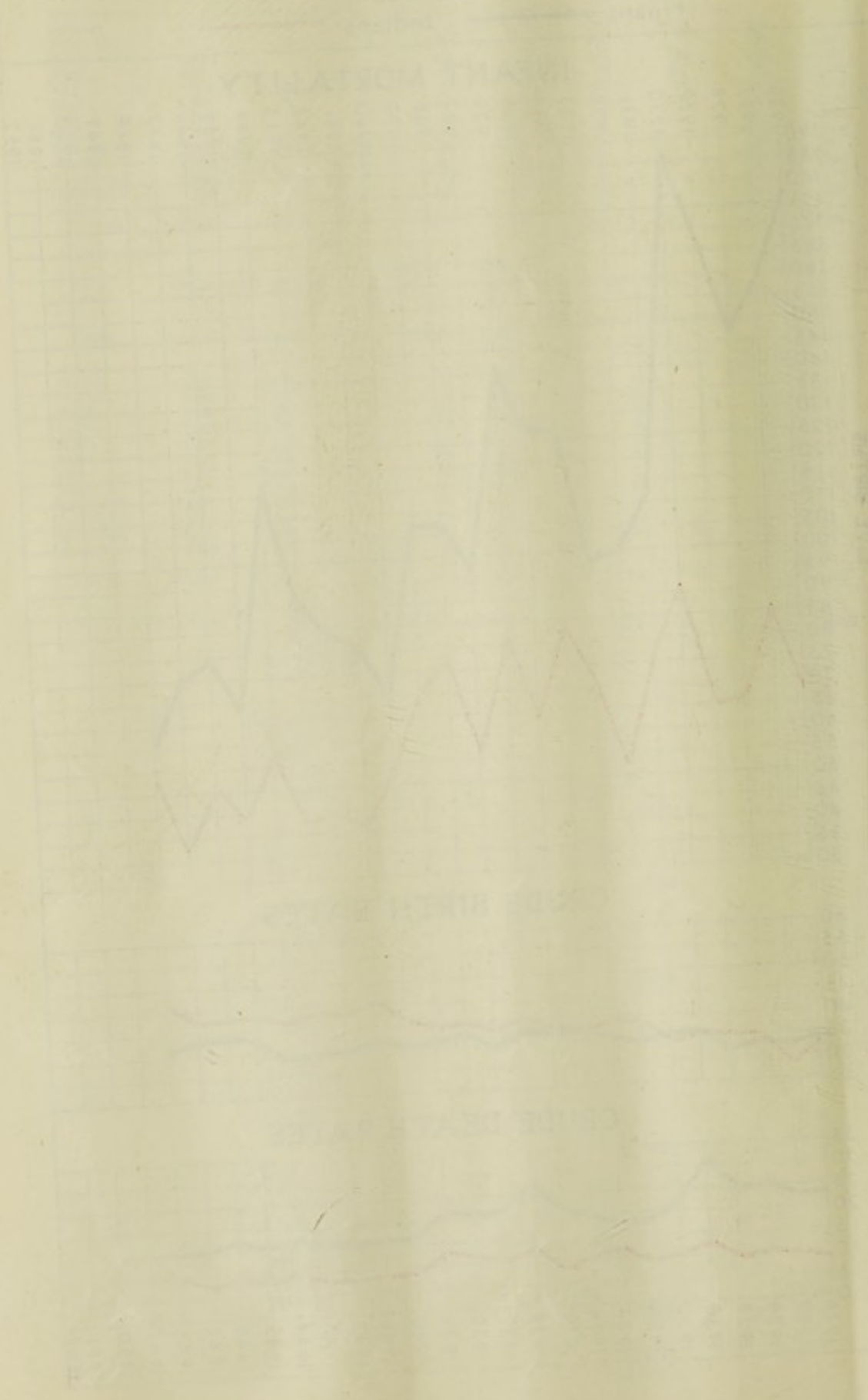
FIJIANS AND INDIANS

From 1926

Fijians — Indians —



INFANT MORTALITY - CRUDE BIRTH & DEATH RATES
ILLINOIS AND INDIANA
1910-1915



APPENDIX IV.
VITAL STATISTICS.

The estimated population at the end of 1947 and 1948 was:—

Race.	Males. 1948.	Females 1948.	Total 1948.	Total 1947.	Increase.	Increase per cent.	Decrease.	Decrease per cent.
Europeans	3,481	2,678	6,159	5,376	783	14.56	....	....
Euronesians	3,385	3,145	6,530	6,341	189	2.98	....	....
Fijians	62,875	61,120	123,995	121,249	2,746	2.26	....	....
Rotumans	1,779	1,708	3,487	3,403	84	2.47	....	....
East Indians	69,525	60,236	129,761	125,674	4,087	3.25	....	....
Polynesians	2,343	1,667	4,010	3,823	187	4.89	....	....
Chinese	1,978	826	2,804	2,891	....	....	87	3.01
Others	343	283	626	517	109	21.08	....	....
Total	145,709	131,663	277,372	269,274	8,185	3.04	87	.03

The number of births recorded during the last four years was:—

Race.	1945.	1946.	1947.	1948.	Crude birth-rate per 1,000, 1948.
Europeans	102	89	79	117	19.00
Euronesians	224	236	242	234	35.83
Fijians	4,317	4,644	4,621	4,512	36.39
Rotumans	139	161	164	157	45.02
East Indians	5,045	5,181	5,248	6,012	46.33
Polynesians	56	110	118	144	35.92
Chinese	102	90	99	35	12.48
Others	3	....	4	102	16.29
Total	9,988	10,511	10,575	11,313	40.79

The crude birth rate in 1947 was 39.27.

The number of deaths recorded during the last four years was:—

Race.	1945.	1946.	1947.	1948.	Crude death-rate per 1,000, 1948.
Europeans	21	33	32	31	5.03
Euronesians	43	52	41	45	6.89
Fijians	1,772	2,016	1,828	1,798	14.50
Rotumans	70	50	76	73	20.94
East Indians	879	1,095	856	1,178	9.08
Polynesians	41	97	61	109	27.17
Chinese	12	19	11	19	6.78
Others	2	....	.... 1	5	7.99
Total	2,840	3,362	2,906	3,258	11.75

The crude death rate in 1947 was 10.79.

The marriages, births, deaths and natural increase for 1948 were:—

Race.	Marriages.	Births.	Deaths.	Increase.	Increase per 1,000.
Europeans	44	117	31	86	15.99
Euronesians	43	234	45	189	29.81
Fijians	893	4,512	1,798	2,714	22.38
Rotumans	28	157	73	84	24.68
East Indians	1,021	6,012	1,178	4,834	38.46
Polynesians	28	144	109	35	9.16
Chinese	21	35	19	16	5.53
Others .. .. .	....	102	5	97	187.62
Total	2,078	11,313	3,258	8,055	29.91

TABLE OF INFANT AND CHILD DEATHS, 1948.

Race.	Years					Total.
	Under 1 year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	
Fijians	270	130	57	29	18	504
Indians	322	22	10	7	13	374

INFANTILE MORTALITY.

Race.	No. of births.	No of deaths under 1 year.	Rate per 1,000 births.
Fijians	4,512	270	59.84
East Indians	6,012	322	53.56

APPENDIX V.

REPORT OF SCHOOL PUBLIC HEALTH NURSE.
ANALYSIS OF FINDINGS IN EXAMINATION OF SCHOOL CHILDREN.

Race.	Total No.	No. with skin conditions.	Nits.	Dental Defects.	Nutritional Defects.	Anaemia.	Yaws.	Defective Vision.
Europeans	316	15	3	24	162	....	....	14
P/E	729	55	134	259	445	1	2	14
Fijians	1,189	191	446	327	722	2	30	8
Indians	3,139	234	1,016	1,176	2,289	10	3	16
Others	177	16	5	54	104	....	4	2
Total	5,550	511	1,604	1,840	3,722	13	39	54

No. of children found to be suffering from Tuberculosis 11

No. of children found to be suffering from Leprosy 1

EXAMINATIONS FOR INTERNAL PARASITES

One thousand six hundred and sixty-five children were examined of these 588 were found to be infested; this was 35.3 per cent:—

PERCENTAGE DISTRIBUTION.

Infection.	All Races.	Fijian.	Indian.	European and P. E.
	Per cent.	Per cent.	Per cent.	Per cent.
Hookworm	22.3	28.8	20.6	9.1
Ascaris	6.1	3.7	7.8	5.9
G. Lambia	1.7	1.4	1.4	.5
E. Histolyt	2.3	3.5	1.5	2.8
All infections	35.3	40.3	33.3	23.2

Number of children—

Inspected during routine inspections	5,550
Vaccinated during campaign	2,591
Given anti-typhoid inoculations	5,277
Given Hospital treatment for E. Hystolytica	14
Given treatment for other intestinal parasites	1,418
Treated for minor ailments	3,297
Treated for head lice and nits	1,684
Referred to eye specialist	27
Treated for nutritional deficiency	211

M. KENNEDY,

Public Health Nurse.

APPENDIX VI.

OUT-PATIENTS.

Race.	Hospitals.				Dispensaries.	
	C.W.M.H.	Three District Hospitals.	Tamavua.	Fourteen Rural Hospitals.	Thirty-six Rural Dispensaries.	Totals 1948.
Europeans and P.M.E.N.D.	5,549	1,908	210	1,236	6,342	15,245
Fijians	27,743	8,385	2,090	66,590	95,816	200,624
Indians	25,793	21,006	1,191	33,277	24,205	105,472
Chinese and Others	3,387	1,021	17	1,820	3,220	9,465
Total	62,472	32,320	3,508	102,923	129,583	330,806

APPENDIX VII.

DISPOSITION OF MEDICAL UNITS.

General Hospital—	Rural Dispensaries—
Colonial War Memorial Hospital, Suva.	Nanukuloa.
Tuberculosis Hospital, Tamavua.	Raralevu.
Forster House Obstetric Hospital, Suva.	Nausori.
District Hospitals—	Korovou.
Lautoka.	Lodoni.
Levuka.	Nayavu.
Labasa.	Lomanikoro.
Fiji Leprosy Hospital, Makogai.	Beqa.
Rural Hospitals, 14.	Viria.
Dispensaries, 36.	Namarai.
Subsidized Hospitals—	Tavua.
Methodist Mission Hospital, Ba.	Nadarivatu.
Cottage Hospital, Ba.	Nasau.
Cottage Hospital, Waiyevo.	Vatukoula.
Nurse Morrison's Maternity Hospital, Suva.	Vitogo.
Privately owned Hospital—	Naviti.
Colonial Sugar Refining Co., Rarawai, Ba.	Momi.
Rural Hospitals—	Natuatuacoko.
Waiyevo (Taveuni).	Korolevu.
Wainibokasi.	Serua.
Vunidawa.	Navua.
Penang, Ra.	Namosi.
Nailaga.	Nakasaleka.
Nadi.	Gau.
Koromumu.	Koro.
Nabouwalu.	Lekutu.
Vunisea, Kadavu.	Wainunu.
Savu Savu.	Naduri.
Loma Loma.	Dreketi.
Lakeba.	Visoqo.
Matuku.	Udu.
Rotuma.	Natewa.
	Saqani.
	Moala.
	Rabi.
	Kabara.

APPENDIX VIII.

HOSPITALS AND DISPENSARIES—BEDS, ADMISSIONS AND ATTENDANCES, 1948.

IN-PATIENTS—RACIAL DISTRIBUTION.

Hospital.	Beds.	Occupied beds, daily average.	Admissions, 1948.	Race.	C.W.M.H.	Lau-toka.	Le-vuka.	La-basa.	Tama-vua.	Total.
General Hospital, C.W.M.H., Suva	274	234.59	4,081	Europeans and P.M.E.N.D.*	416	229	11	41	13	710
Tamavua Tuberculosis Hospital, Suva	180	169	338	Fijians ..	1,186	704	739	341	226	3,196
Three District Hospitals	190	148.6	5,748	Indians ..	2,079	1,719	56	1,575	68	5,497
Fourteen Rural Hospitals	365	268.5	10,167 7,130	Chinese and Others.	400	179	87	67	31	764
Total	1,009	820.69	17,297	Total ..	4,081	2,831	893	2,024	338	10,167

* Persons of Mixed European and Native Descent.

APPENDIX IX.

Return of Diseases and Deaths for the year 1948, at the Colonial War Memorial Hospital, Labasa, Lautoka, Levuka and Tamavua Hospitals.

NOTE.—This classification is based on the International List of Causes of Death, 1929.

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.	Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
I—INFECTIOUS AND PARASITIC DISEASES.							Brought forward						
Typhoid Fever	2	44	21	7	74	17	Other Diseases due to Protozoa—	54	686	702	135	1557	169
Paratyphoid Fever		1	1		2		(a) <i>Framboesia</i> (Yaws)		77	2	3	82	
Typhus							(b) <i>Spirochaetosis Ictero-haemorrhagica</i>		2	28		30	
Relapsing Fever							Ankylostomiasis	3	11	27	4	45	
Undulant Fever							Hydatid cysts						
Smallpox (<i>Variola</i>)							Other diseases due to Helminths—						
Measles							(a) <i>Ascariasis</i>		4	30	4	38	
Scarlet Fever							(b) <i>Filariasis</i>	1	48	6	6	61	
Whooping Cough							(c) <i>Teniasis</i>		2			2	
Diphtheria							(d) <i>Oxyuris Vermicularis</i>			1		1	
Influenza	10	133	213	20	376		(e) Others	1		1		2	
Cholera							Mycoses (excluding purely dermal mycoses)—						
Dysentery—							(a) <i>Actinomycosis</i>						
(a) Amoebic	11	18	29	13	71		(b) Others including sprue						
(b) Bacillary		16	76	4	96	3	Other infectious or parasitic diseases—						
(c) Mixed			2		2		(a) <i>Vaccinia</i> (Cowpox)			1		1	
(d) Undefined or due to other causes		5	10		15	2	(b) Other sequelae of vaccination			1		1	
Plague							(c) German measles (<i>Rubella</i>)		1			1	
Erysipelas			1	3	4		(d) Chicken-pox (<i>Varicella</i>)	2	10	20	7	39	
Acute Poliomyelitis or poliomyelitis							(e) Mumps and its complications	7	4	52	1	64	1
Encephalitis Lethargica							(f) Dengue	8	20	3	3	34	
Cerebro-spinal Fever			2		2	2	(g) Glandular Fever						
Glanders							(h) Others	1	1	1		3	
Anthrax							Total	77	846	875	163	1961	170
Rabies							II—CANCER AND OTHER TUMOURS.						
Tetanus—							Cancer or other malignant diseases of the buccal cavity, pharynx and oesophagus	2	2	5	1	10	
(a) Of the new born		1			1	1	Cancer or other malignant tumours of the digestive organs and peritoneum—						
(b) Other forms		3	4	2	9	3	(a) Stomach	1	2	10		13	4
Tuberculosis of the Respiratory system	17	326	143	51	537	120	(b) Liver and biliary passages			9	1	10	4
Tuberculosis of the Central Nervous system		3	4		7	3	(c) Rectum		1	3		4	1
Tuberculosis of the Intestines or Peritoneum		6	1	1	8	4	(d) Others	1	2	4		7	5
Tuberculosis of the Vertebral column		12	5	1	18	1	Cancer or other malignant tumours of the respiratory organs			1	1	2	
Tuberculosis of other Bones and Joints		15	7	5	27	1	Cancer or other malignant tumours of the uterus	3	4	12	3	22	1
Tuberculosis of the Skin or Subcutaneous tissue (<i>Lupus</i>)		11			11		Cancer or other malignant tumours of other female genital organs	1	2	3		6	3
Tuberculosis of the Lymphatic system		9	6		15	2	Cancer or other malignant tumours of the breast			3		3	1
Tuberculosis of the Genito-urinary system		3	3	1	7	2	Cancer or other malignant tumours of the male genito-urinary organs	1		2		3	1
Tuberculosis of other organs		2	1	1	4		Cancer or other malignant tumours of the skin	13				13	
Tuberculosis disseminated		3	2		5	4	Cancer or other malignant tumours of organs not specified	3	1	13		17	5
Leprosy		9	24	3	36		Non-malignant tumours—						
Syphilis—							(a) Female genital organs	2	3	11		16	
(a) Primary	3		36	1	40		(b) Other sites	2	3	15	2	22	
(b) Secondary	3		6	2	11		Tumours of undetermined nature—						
(c) Tertiary	1	1	5		7	1	(a) Female genital organs		2			2	
(d) Congenital			1	1	2	1	(b) Other sites	1	1	2	2	6	
Other Venereal Diseases—							Total	30	23	93	10	156	25
(a) Soft Chancre		1	3		4		III—RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS AND OTHER GENERAL DISEASES.						
(b) Gonorrhoea	6	33	80	16	135		Rheumatic Fever—						
(c) Gonorrhoeal Ophthalmia			1		1		(a) With cardiac involvement	1	2	18	3	24	1
(d) Other Gonorrhoeal complications		6	9	1	16		(b) Without cardiac involvement		3	26	2	31	
(e) Granuloma Venereum							(c) Subacute Rheumatism	1	4	21		26	
(f) Tropical bubo (<i>Lymphogranuloma Inguinale</i>)							Carried forward	2	9	65	5	81	1
(g) Mixed Venereal infections		1	2		3								
Purulent Infection—													
(a) Septicæmia			1		1	1							
(b) Pyæmia		1	1	1	3	1							
(c) Gas Gangrene			1		1								
Yellow Fever													
Malaria—													
(a) Benign Tertian	1	3		1	5								
(b) Quartan													
(c) Sub-Tertian													
(d) Mixed													
Carried forward	54	686	702	135	1557	169							

APPENDIX IX—continued.

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Brought forward	2	9	65	5	81	1
Rheumatism and non-Suppurative arthritis—						
(a) Chronic Rheumatism	5	13	35	1	54	..
(b) Rheumatoid Arthritis	1	1	22	1	25	..
(c) Osteo-arthritis	1	2	1	2	6	..
Gout	1	..	..	..	1	..
Diabetes Mellitus	6	8	95	6	115	6
Scurvy .. ..	..	..	..	..	..	..
Beri-beri including epidemic dropsy .. ..	..	..	..	..	..	..
Pellagra .. ..	..	..	1	..	1	..
Rickets .. ..	..	..	..	..	..	..
Other diseases due to hypovitaminosis	1	..	7	..	8	..
Diseases of the pituitary gland .. ..	..	..	..	..	..	..
Diseases of the thyroid and parathyroid glands—						
(a) Simple goitre .. ..	..	..	5	..	5	..
(b) Exophthalmic goitre .. ..	..	1	2	..	3	..
(c) Myxœdema, cretinism .. ..	..	..	2	..	2	..
(d) Tetany .. ..	..	1	3	..	4	..
(e) Others .. ..	..	..	1	..	1	..
Diseases of the Thymus .. ..	..	..	..	..	..	..
Diseases of the adrenal glands excluding tuberculosis .. ..	..	..	..	..	..	..
Other general diseases	3	4	5	..	12	..
Total	20	39	244	15	318	8
IV—DISEASES OF BLOOD AND BLOOD-FORMING ORGANS.						
Hæmorrhagic conditions—						
(a) Purpura	1	..	1	..	2	2
(b) Hæmophilia .. ..	..	..	..	..	..	..
Anæmia—						
(a) Pernicious anæmia	1	..	2	..	3	..
(b) Splenic anæmia	1	..	1	..	2	..
(c) Chlorosis .. ..	..	..	2	..	2	1
(d) Secondary anæmia	3	4	111	3	121	13
(e) Others .. ..	..	1	21	3	25	..
Lukæmia, Aleukæmia—						
(a) Chronic myeloid leukæmia .. ..	..	..	1	..	1	..
(b) Chronic lymphatic leukæmia .. ..	..	..	..	..	..	..
(c) Acute leukæmia .. ..	..	1	1	..	2	2
(d) Multiple myeloma .. ..	..	..	1	..	1	..
(e) Aleukæmia (lymphadenoma or Hodgkin's Disease) .. ..	..	..	1	..	1	1
Diseases of the spleen not elsewhere mentioned .. ..	..	1	..	..	1	..
Other diseases of the blood and blood-forming organs .. ..	..	1	1	..	2	..
Total	6	8	143	6	163	19
V—CHRONIC POISONING.						
Alcoholism acute or chronic	1	..	..	..	1	..
Poisoning by other organic substances (not by violence)—						
(a) Opium habit .. ..	..	..	1	1	2	..
(b) Morphine habit .. ..	..	..	..	..	..	..
(c) Others	1	2	1	..	4	..
Poisoning by mineral substances (not by violence)—						
(a) Lead	2	1	5	..	8	1
(b) Others .. ..	..	..	..	..	..	..
Total	4	3	7	1	15	1
VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.						
Encephalitis (not including encephalitis lethargica)—						
(a) Cerebral abscess .. ..	..	..	..	..	..	..
(b) Others .. ..	..	1	..	..	1	..
Meningitis (not including tuberculosis or meningococcal)	7	10	2	..	19	10
Tables Dorsalis (locomotor ataxia)	1	3	3	..	7	3
Carried forward	1	11	13	2	27	13

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Brought forward	1	11	13	2	27	13
Other Diseases of the Spinal Cord—						
(a) Progressive muscular atrophy .. ..	..	1	1	..	2	..
(b) Subacute combined sclerosis .. ..	..	..	..	..	..	..
(c) Myelitis of unstated origin .. ..	..	2	1	..	3	1
(d) Others .. ..	..	1	..	..	1	..
Cerebral hæmorrhage, Apoplexy, etc.—						
(a) Cerebral hæmorrhage	1	2	23	..	26	13
(b) Cerebral embolism & thrombosis	1	1	1	2	5	4
(c) Hemiplegia and other paralysees of unstated origin	1	1	28	2	32	5
General Paralysis of the Insane .. ..	..	..	..	..	..	..
Other forms of insanity—						
(a) Dementia Præcox .. ..	..	..	..	..	..	..
(b) Others .. ..	..	..	..	..	..	..
Epilepsy—						
(a) Major .. ..	..	..	6	1	7	..
(b) Minor .. ..	..	1	..	..	1	..
Infantile convulsions (under 5 yrs.)	2	3	..	..	5	2
Other diseases of the Nervous System—						
(a) Chorea .. ..	..	..	1	1	2	..
(b) Neuritis, neuralgia	2	5	3	1	11	..
(c) Paralysis Agitans	2	..	..	..	2	..
(d) Disseminated Sclerosis .. ..	..	1	..	..	1	..
(e) Neurasthenia	6	1	2	..	9	..
(f) Hysteria	1	2	10	1	14	..
(g) Others	2	1	4	1	8	1
Diseases of the eye—						
(a) Conjunctivitis .. ..	..	28	21	4	53	..
(b) Trachoma .. ..	..	11	4	3	18	..
(c) Corneal Ulcer .. ..	..	5	18	1	24	..
(d) Cataract .. ..	..	3	4	68	3	78
(e) Iritis .. ..	..	1	3	9	2	15
(f) Glaucoma .. ..	..	..	1	..	1	..
(g) Others .. ..	..	12	23	2	37	..
Diseases of the Ear and Mastoid Sinus—						
(a) Otitis externa	5	5	7	1	18	..
(b) Otitis media	5	7	14	2	28	1
(c) Mastoiditis	2	1	8	1	12	..
(d) Others	1	3	14	1	19	1
Total	34	111	283	31	459	4
VII—DISEASES OF THE CIRCULATORY SYSTEM.						
Pericarditis .. ..	..	1	..	..	1	..
Acute endocarditis—						
(a) Malignant	1	1	..	1	3	2
(b) Others not included elsewhere .. ..	..	2	..	..	2	..
Chronic endocarditis, valvular disease (except specific cause elsewhere stated)—						
(a) Aortic valve .. ..	..	1	5	..	6	2
(b) Mitral valve .. ..	..	9	13	1	23	7
(c) Aortic and mitral valve .. ..	..	1	9	..	10	3
(d) Endocarditis not returned as acute or chronic .. ..	..	3	3	..	6	..
(e) Other or unspecified valve disease .. ..	..	1	4	..	5	1
Diseases of the myocardium (except due to specified cause stated elsewhere)—						
(a) Acute myocarditis .. ..	..	1	2	..	3	2
(b) Myocardial Degeneration	3	9	77	6	95	45
Diseases of the coronary arteries—						
(a) Angina Pectoris .. ..	..	..	2	1	3	..
(b) Coronary sclerosis and thrombosis and embolism	1	1	10	..	12	6
Other diseases of the heart (except due to specified cause stated elsewhere)—						
(a) Auricular fibrillation	1	2	2	..	5	2
(b) Heart block .. ..	..	..	1	..	1	..
(c) Disordered action of the heart .. ..	..	..	21	2	23	3
(d) Others	2	3	36	2	43	14
Carried forward	8	33	187	13	241	87

APPENDIX IX—continued.

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.	Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Brought forward	8	33	187	13	241	87	IX—DISEASES OF THE DIGESTIVE SYSTEM.						
Aneurysm (unless due to specified cause elsewhere stated)—							Diseases of the buccal cavity, pharynx, etc.—						
(a) Aneurysm of aorta							(a) Pyorrhœa and gingivitis ..	2	2	3	2	9	
(b) Of other arteries							(b) Dental caries	6	14	31	5	56	
Arteriosclerosis	2		7	1	10	2	(c) Stomatitis	1	2	3		6	
Gangrene (other than gas gangrene)	4		20	1	25	2	(d) Vincent's Angina			1		1	
Other diseases of the arteries ..			4		4		(e) Ludwig's Angina			2		2	
Diseases of the lymphatic system—							(f) Diseases of the tonsils ..	32	9	86	1	128	1
(a) Lymphangitis	1	3	3	2	9		(g) Others including coryza, acute naso-pharyngitis, etc. ..	4	30	23	2	59	
(b) Lymphadenitis	5	16	17	1	39		Diseases of the œsophagus ..						
Diseases of the Veins—							Ulcer of the stomach or duodenum—						
(a) Varicose veins	7	1	2	2	12		(a) Ulcer of the stomach ..	2	2	10	4	18	3
(b) Hæmorrhoids	1	1	19	4	25		(b) Ulcer of the duodenum ..	6	3	5	1	15	1
(c) Phlebitis	1		4		5	1	Other diseases of the stomach—						
(d) Thrombosis			4		4	1	(a) Gastritis	5	24	100	7	136	1
(e) Others	2		5		7		(b) Others, e. g. functional dyspepsia ..	8	7	30	3	48	
Abnormalities of blood pressure—							Diarrhœa and enteritis (under two years)	2	42	34	7	85	7
(a) High blood pressure	6	3	4	2	15		Diarrhœa and enteritis (two years and over)—						
(b) Low blood pressure	1				1		(a) Colitis	4	3	15	4	26	
Other diseases of the Circulatory System—							(b) Otherwise defined including gastro-enteritis ..	24	87	121	14	246	17
(a) Epistaxis		3	1	2	6		Appendicitis	20	10	91	14	135	1
(b) Others (including unexplained hæmorrhages) ..			3	3	6	1	Hernia, Intestinal Obstruction—						
Total	34	64	280	31	409	94	(a) Hernia	6	29	37	2	74	
VIII—DISEASES OF THE RESPIRATORY SYSTEM.							(b) Strangulated Hernia ..		5	3	1	9	
Diseases of the nasal Fosse and annexa—							(c) Intestinal obstruction including intussusception ..		1	5	2	8	4
(a) Diseases of the nose ..	1	1	5		7		Other diseases of the intestines—						
(b) Diseases of the accessory nasal sinuses ..	10	13	13	6	42		(a) Constipation, intestinal stasis ..	4	11	44	7	66	
Diseases of the larynx—							(b) Diverticulosis and diverticulitis ..		1			1	
(a) Laryngismus Stridulus ..							(c) Diseases of rectum or anus ..	1	6	27	5	39	1
(b) Laryngitis acute and chronic of non-specific aetiology ..	2	2			4		(d) Others, e.g. intestinal colic ..	1	8	10		19	
(c) Others			1		1		Cirrhosis of the liver (non-syphilitic)						
Bronchitis—							(a) Alcoholic						
(a) Acute	4	75	102	14	195		(b) Not returned as alcoholic ..			2		2	1
(b) Chronic		8	40	3	51		Other diseases of the liver—						
(c) Not defined as acute or chronic ..		20	17	6	43		(a) Acute Yellow Atrophy ..			3		3	2
Broncho-pneumonia	1	59	53	16	129	31	(b) Toxic Hepatitis		5	7	1	13	3
Lobar pneumonia	1	33	25	11	70	17	(c) Amœbic abscess & Hepatitis ..	1	5	4		10	3
Pneumonia (not otherwise defined)	3	33	25	6	67	9	(d) Others	4	4	5		13	
Pleurisy—							Biliary calculi or biliary colic ..	1		5	1	7	2
(a) Empyema		2	4		6	1	Other diseases of the gall-bladder and ducts—						
(b) Other pleurisy	1	12	21	2	36		(a) Cholecystitis without record of calculi ..	2	3	11	6	22	1
Congestion and hæmorrhagic infection of lung, etc.—							(b) Others, e.g. catarrhal jaundice ..	1	5	12	2	20	1
(a) Hypostatic congestion of lung			2		2		Diseases of the pancreas (excluding Diabetes Mellitus) ..			1		1	1
(b) Massive collapse							Peritonitis without stated cause—						
(c) Pulmonary embolism		1			1		(a) Acute		4	6	1	11	2
(d) Others			1	2	3		(b) Chronic			1	1	2	1
Asthma	8	16	113	7	144		Total	137	322	738	93	1290	53
Pulmonary Emphysema				1	1		X—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).						
Other diseases of the Respiratory System—							Acute Nephritis		1	10	3	14	7
(a) Chronic interstitial pneumonia (including occupational diseases of the lung) ..		1			1	1	Chronic Nephritis		4	16	4	24	2
(b) Gangrene of the lung				1	1		Nephritis (undefined as acute or chronic)		2	7	2	11	
(c) Abscess of the lung			3		3		Other diseases of the Kidney and annexa—						
(d) Bronchiectasis		2	1	1	4		(a) Pyelitis	13	15	77	3	108	
(e) Others		1	2	1	4		(b) Others	2	4	10	4	20	3
Total	31	280	429	75	815	59	Calculi of the urinary passages—						
							(a) Calculi of Kidney and ureter and renal colic ..	7		24	1	32	
							(b) Calculi of bladder and urethra ..			1		1	
							(c) Calculi of unstated site ..	1				1	
							Diseases of the Bladder—						
							(a) Cystitis	4	9	14	2	29	
							(b) Others	2	1	14		17	
							Carried forward	29	36	173	19	257	12

APPENDIX IX—continued.

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.	Diseases.	Europeans.	Fijians.	Indians.	Others.	Total.	Deaths.
Brought forward	29	36	173	19	257	12	XII—DISEASES OF THE SKIN AND CELLULAR TISSUES.						
Diseases of the urethra, urinary abscess, etc.—							Carbuncle, boil	15	35	25	5	80	..
(a) Stricture	1	1	9	..	11	1	Cellulitis, acute abscess (except due to cause given elsewhere)—						
(b) Others	2	4	17	1	24	..	(a) Cellulitis	14	70	66	9	159	..
Diseases of the prostrate	2	1	18	1	22	..	(b) Acute abscess	19	233	177	37	466	4
Diseases of the male genital organs—							Other diseases of the skin, hair and nails—						
(a) Phimosis	4	6	12	1	23	..	(a) Ulcers	6	51	33	1	91	..
(b) Epididymitis (excluding tuberculosis) .. ..	..	5	5	2	12	..	(b) Dermal mycoses	4	2	13	1	20	..
(c) Orchitis .. ..	..	9	11	2	22	1	(c) Herpes including Zoster	3	5	3	..	11	..
(d) Hydrocele	1	19	21	4	45	..	(d) Scabies .. ..	..	9	10	..	19	..
(e) Elephantiasis of the scrotum	4	..	..	..	4	..	(e) Others	12	18	46	10	86	2
(f) Others	3	7	2	2	12	..	Total	73	423	373	63	932	6
Diseases of the female genital organs—							XIII—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.						
(a) Diseases of the ovary	1	5	13	..	19	1	Acute or chronic infective osteomyelitis and periostitis except due to cause given elsewhere—						
(b) Diseases of the Fallopian tube	3	9	32	7	51	..	(a) Acute Osteomyelitis	4	9	10	2	25	..
(c) Diseases of the parametrium .. ..	..	..	2	1	3	..	(b) Chronic Osteomyelitis	1	25	8	3	37	..
(d) Diseases of the uterus including menorrhagia and dysmenorrhœa	8	12	72	14	107	..	(c) Periostitis, acute or chronic	1	8	6	1	16	..
(e) Diseases of the breast	1	5	8	1	15	..	Other diseases of the bones	1	3	6	1	11	..
(f) Others, e.g. prolapse	9	14	37	4	64	1	Diseases of the joints and other organs of locomotion—						
Total	61	133	437	60	691	16	(a) Diseases of the joints (other than elsewhere stated)	6	31	16	3	56	..
XI—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE.							(b) Diseases of the other organs of locomotion	1	4	6	1	12	..
Post-abortive sepsis .. ..	..	..	3	2	5	..	Total	14	80	52	11	157	..
Abortion not returned as septic	5	17	49	9	80	..	XIV—CONGENITAL MALFORMATIONS.						
Ectopic gestation	1	6	8	..	15	..	Congenital malformations—						
Other accidents of pregnancy	6	5	24	3	38	2	(a) Congenital hydrocephalus .. ..	..	..	2	..	2	..
Hæmorrhage connected with childbirth—							(b) Spina Bifida and Meningocele	1	6	..	..	7	3
(a) Placenta prævia .. ..	..	..	3	..	3	..	(c) Congenital malformation of the heart	1	1	..	..	2	1
(b) Others	1	1	6	2	10	2	(d) Monstrosities .. ..	..	..	..	..	..	..
Puerperal Sepsis—							(e) Congenital hypertrophic pyloric stenosis .. ..	..	..	1	..	1	..
(a) Puerperal septicæmia	4	5	..	..	9	5	(f) Cleft palate, harelip	4	13	..	..	17	..
(b) Puerperal sepsis not including septicæmia	6	22	1	..	29	3	(g) Imperforate anus	2	3	..	..	5	2
Puerperal albuminuria and convulsions—							(h) Other congenital malformations	17	16	3	..	36	5
(a) Eclampsia .. ..	..	..	8	1	9	1	Total	25	42	3	70	11	
(b) Albuminuria of pregnancy .. ..	..	..	4	2	6	..	XV—DISEASES OF EARLY INFANCY.						
(c) Pyelitis of pregnancy .. ..	..	..	..	..	..	..	Congenital debility including marasmus of unknown cause	5	10	2	..	17	5
(d) Others	1	4	..	..	5	1	Premature birth	2	12	1	..	15	11
Other Toxæmia of Pregnancy—							Injury at birth .. ..	..	4	..	..	4	3
(a) Hyperæmia Gravidarum	2	4	18	..	24	..	Other diseases peculiar to early infancy—						
(b) Others	2	4	..	..	6	..	(a) Atelectasis Pulmonum	1	..	2	..	3	2
Puerperal phlegmasia, embolism and sudden death—							(b) Icterus neonatorum—						
(a) Puerperal phlegmasia alba dolens not returned as septic .. ..	..	..	1	..	1	..	(1) Mild .. ..	..	..	1	1	2	1
(b) Puerperal embolism and sudden death .. ..	..	..	..	..	..	..	(2) Grave .. ..	..	..	..	..	..	..
Conditions associated with labour—							(c) Affections of the umbilicus	1	..	..	..	1	..
(a) Normal labour	19	59	190	23	291	..	(d) Pemphigus neonatorum .. ..	..	1	..	..	1	..
(b) Abnormal labour, e.g. needing instrumental interference	3	5	18	5	31	..	(e) Others	1	5	7	..	13	4
(c) False labour	1	3	1	..	5	..	Total	2	13	37	4	56	26
(d) Labour complicated by intercurrent disease	1	..	2	1	4	..	XVI—CONDITIONS ASSOCIATED WITH OLD AGE.						
(e) Accidents of childbirth including still-births	1	1	13	1	16	..	Old age—						
Other or unspecified conditions of the puerperal state—							(a) Senile Dementia	3	..	..	..	3	..
(a) Puerperal insanity	2	6	..	..	8	..	(b) Other forms of senile decay	5	1	6	..	12	3
(b) Puerperal diseases of the breast .. ..	..	..	1	..	1	..	Total	8	1	6	..	15	3
(c) Not in labour	2	7	34	4	47	..							
(d) Others	1	8	..	..	9	..							
Total	42	124	432	54	652	14							

APPENDIX IX—continued.

Diseases.	Europeans.	Fijians.	Indians.	Others.	Total	Deaths.	Diseases.	Europeans.	Fijians.	Indians.	Others.	Total	Deaths.
							Brought forward	43	285	392	63	781	9
XVII—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.													
Suicide or attempted suicide by poisoning (including corrosive poisoning)							Cataclysm (Tidal waves, cyclones, volcanoes, etc.)						
Suicide or attempted suicide by hanging or strangulation			2		2		Injury by animals (except bites or stings of venomous reptiles or insects)	1	9	23	1	34	
Suicide or attempted suicide by drowning							Hunger or thirst						
Suicide or attempted suicide by firearms							Excessive cold						
Suicide or attempted suicide by cutting or piercing instruments			1		1		Excessive heat			1		1	
Suicide or attempted suicide by jumping from a height							Lightning						
Suicide or attempted suicide by crushing		1			1		Electricity				1	1	
Suicide or attempted suicide by other means							Other unstated forms of violence—						
Infanticide			3		3		(a) Inattention at birth						
Assault or homicide by firearms							(b) Others, e.g. foreign body swallowed		5	4		9	
Assault or homicide by cutting or piercing instruments		6	27	2	35		Violence of an unstated nature, i.e. suicidal, accidental homicidal by poisoning or other means						
Assault or homicide by other means	1	14	25	3	43		Wounds or other injuries of war						
Attacks by venomous animals		1	2		3		Execution of civilians by belligerent armies						
Food poisoning		4			4		Execution						
Accidental absorption of irrespirable or poisonous gases							Total	44	299	420	65	826	9
Other acute accidental poisoning			3		3		XVIII—ILL-DEFINED CONDITIONS.						
Injuries due to conflagration			1		1		Sudden death, cause unknown			1		1	1
Accidental burns, conflagration excepted—							Cause of illness unstated or ill-defined	5	16	45	3	69	
(a) Burns by fire	1	8	6	2	17	1	Diseases not included in this classification elsewhere	23	44	72	15	154	2
(b) Scalds	1	8	17	2	28		Malingering				1	1	
(c) Burns by corrosive substances, external or internal							Cases admitted to hospital for observation as to mental condition	3	8	8		19	
(d) Dermatitis due to exposure to sun							Cases admitted for observation not mental	43	159	263	31	496	
(e) Dermatitis due to exposure to other forms of radiation							Persons accompanying patients	18	178	216	30	442	
Accidental mechanical suffocation			1		1		Orphans						
Accidental immersion or drowning			1		1	1	Total	92	405	605	80	1182	3
Accidental injury by firearms	1		1		2		Grand Total	710	3196	5497	764	10167	560
Accidental injury by cutting or piercing instruments	5	68	75	16	164								
Accidental injury by fall, crushing, etc.—													
(a) By falling	21	80	144	22	267	3							
(b) By machinery	5	22	8	1	36	1							
(c) By motor vehicles	4	20	21	3	48								
(d) By railway vehicles		7	7	3	17	1							
(e) By other means	5	43	47	9	104	2							
Carried forward	43	285	392	63	781	9							

APPENDIX X.

THE CENTRAL MEDICAL SCHOOL.

(ANNUAL REPORT, 1948.)

Nineteen forty-eight was the Central Medical School's twentieth year. Since 1886 the Fiji Medical School had been training Fijian Medical Practitioners. Other island administrations wished to avail themselves of its benefits, and under the auspices of the Rockefeller Foundation this was made possible. On 28th December, 1928, the old Fiji Medical School became the Central Medical School, and it had now become a training centre for students from six million square miles of the South-West Pacific. In the twenty years, 181 graduates have been given their diplomas, and these men are now practising their profession in no fewer than thirteen different island groups.

The year commenced with 49 students in residence. Of these four had returned to sit supplementary examinations in March in those subjects in which they had failed in their Finals in December. Another two were Fijian dental students. The remaining 43 medical students were distributed as follows:—

	1st. Year.	2nd. Year.	3rd Year.	4th Year.	Total.
Fiji—Fijians	4	4	..	3	11
Rotumans .. .. .	..	1	..	1	2
Indians	3	1	..	..	4
Western Samoa	3	3	..	4	10
Tonga	1	..	..	2	3
Cook Islands	1	..	..	2	3
Gilbert and Ellice Islands .. .. .	..	2	..	2	4
British Solomon Islands .. .. .	..	1	..	1	2
Niue Island .. .. .	..	2	..	..	2
Papua, New Guinea	2	..	..	..	2
	13	15	..	15	43

Mention was made in the 1947 Report of the six students from Papua-New Guinea who had entered the School, but whose standard of education was too low to allow them to keep pace with the class. Five of them were sent to the Queen Victoria School for further schooling, of whom two were re-admitted to the Central Medical School in 1948. It was hoped that the sixth student, who had been admitted as a patient to the Tuberculosis Hospital at Tamavua, would be able to return to his studies in 1949, but unfortunately another lesion, this time in the spine, precluded all thought of that.

II—CURRICULUM.

The Academic Board appointed last year, has had further meetings, and has made some modifications of the old syllabus. A course in Tuberculosis, given at Tamavua by the Medical Officer in charge of the Tuberculosis Hospital, and consisting of weekly demonstrations, was commenced. It was given to the final year students but in future will be given during the third year. It is hoped that this emphasis on Tuberculosis may be increased still further in future years. A half-year course in General Pathology, conducted by the Government Pathologist, has been instituted. It consists of weekly lectures and demonstrations, and is given to the second year students at the beginning of their clinical studies. Another short course of lectures and demonstrations on Insects and Parasites of Medical Importance is given by the Principal to the first year Zoology class. The time given to the course of Public Health has been increased. The course is taken by third year students and it is given by the Medical Officer of Health and his staff. The need for emphasis on the preventive aspects of medicine has been reiterated by the Board.

Lectures in Medicine and in Surgery, given weekly for two and a half years during which students are attached to the Hospital, were divided so that there is a junior and senior division in each subject. The junior divisions have lectures for six months only, while the senior divisions comprise all third and fourth years, and are in the charge of the Physician and Surgeon Specialists. The junior division in surgery has lectures from the Medical Officer in charge Colonial War Memorial Hospital, while the same division in medicine, has lectures from the Principal.

It has been possible this year, to put into effect the recommendation that more of the Principal's time should be spent in the Hospital wards with senior students, and it is hoped that the extra supervision at this important part of the course will be of benefit to the students in their clinical work, both now and as practitioners in the field.

It is still the hope of the Academic Board that most of the science subjects will be covered by Secondary schools, so that in the Medical School such subjects will be limited to Organic Chemistry and Zoology. General science has almost reached a stage in Fiji schools to make this possible, but it appears that it will be some years before the schools of other administrations will reach such standard. They are working for it, however, and in those island groups where the higher standard is not reached, pupils are selected at earlier age, and are coming to Fiji for a greater part of their normal schooling.

III—STAFF.

An increase in staff was advised some years ago, and it became a necessity this year when the Principal undertook duties in the Hospital. Mrs. Frater, B.A., Dip. Ed., was appointed Temporary Assistant Principal with charge of Chemistry, Physics, Botany, Zoology and (in part) Physiology, A.M.P. Ram Singh, a graduate of 1947, and top student of that year, was appointed demonstrator in Anatomy, and he is able to give two hours each morning to the Anatomy class before going over to the Hospital for further duties there.

During the year the Principal lectured in Physiology (in part), Medicine (in part), Diseases of Children (in part), Materia Medica and Bacteriology.

For the remaining subjects of the syllabus, the School is fortunate to have the services of the following honorary lecturers:—

Dr. P. E. C. Manson-Bahr, M.D.	..	..	..	..	..	Medicine.
Mr. K. J. Gilchrist, F.R.C.S.	..	..	..	..	..	Surgery.
Dr. D. J. Oldmeadow, M.B., B.S., D.G.O.	..	..	..	..	..	Obstetrics.
Dr. A. H. Sahu Khan, M.B., Ch.B.	..	..	..	..	..	Ophthalmology.
Dr. G. T. Barnes, M.B., Ch.B.	..	..	..	..	..	Medicine and General Pathology.
Dr. T. A. Doran, M.D., Ch.B.	..	..	..	..	..	Surgery.
Dr. P. G. Griffiths, B.Sc., M.B., Ch.B.	..	..	..	..	..	Tuberculosis.
Dr. P. W. J. Searle, M.B., B.S.	..	..	..	..	..	Diseases of Children.
Ratu I. L. Vosailagi, B.D.S.	..	..	..	..	..	Dentistry.
A. M. P. Vilikesa Ramaqa	..	..	..	..	..	Anæsthetics.

In addition, Drs. Upton and Hollins gave assistance with lectures and clinics, while Miss M. Maslen, M.P.S., supervised the practical side of Pharmacy, and Miss D. Tyler that of Midwifery. Medical students have much to learn in the wards, so the Matron and Sisters are important figures in their lives. To all the above, who have given so generously of their time, the thanks of the School are due.

The appointment of a clerk has relieved the Principal of much routine office work, and the management of all accounts, stores and other business has been taken over from the Steward and Clerk, Colonial War Memorial Hospital.

IV—EXAMINATION.

The four students who failed in the final examinations in December, 1947, sat supplementary examinations in March, 1948, and all passed. They were therefore given their diplomas by the Acting Director of Medical Services, and thus became Assistant Medical Practitioners. They were:—

A. N. Naqasima	..	..	..	..	..	Fiji.
M. V. Tuitokova	..	..	..	..	..	Fiji.
S. R. Vukitu	..	..	..	..	..	Fiji.
Michael Ala	..	..	..	..	..	New Hebrides.

FIRST YEAR.

This is a good class. Of 130 examinations sat during the year, there were only 15 failures (12 per cent), and of these 11 came from three persons—the two Papua, New Guinea boys and a Samoan. There was healthy competition at the top of the class, and the year finished up with the first and sixth students separated by four and a half marks. The six places were filled, in order, by an Indian, a Fijian, a Samoan, and two Indians.

SECOND YEAR.

The first half of the year was good, there being only one failure in 60 examinations. All the class thus passed in their pre-clinical subjects though one student had to sit a supplementary examination in Physiology. The Sir Henry Scott Gold Medal in Anatomy was won by Semisi Ma'ia'i, and a special Gold Medal in Physiology by Joeli Taoli. Academic work appears always to suffer when students first enter the Hospital, and this was certainly reflected in the examination in September and December, when there was almost a 25 per cent incidence of failures. One student has had to be warned, but all others should be able to give a good account of themselves.

FOURTH YEAR.

With a record of 30 per cent of failures in 1947, the prospects for the final year were not good. Work improved during the year, however, and in the final examinations the results were very gratifying—all passed in Surgery and in Obstetrics, and only four failed to secure a pass-mark of 60 per cent in Medicine. (One of them was allowed a pass by the Academic Board.) Of the top student of the year, Leopino Foliaki, a special note was made in the last quarterly report for the year:—

"Special mention must be made of Leopino Foliaki, who was Dux of the school with an average in his final examinations of 90 per cent—an outstanding achievement. In the past two years he has sat 30 examinations, came top or equal top in 24 of them and filled second place in the other six. He has won every available Gold Medal during his course, and with it all, has been Head Student, and has given a fine lead to the School in quiet industry and good behaviour."

V—HEALTH.

Apart from a minor epidemic of influenza, to which a majority of students succumbed, the health of the students was good.

VI—DISCIPLINE.

It was reported last year that a case of immorality on the part of a student was discussed by the Advisory Board, and that a decision had been made to meet any similar case in the future by recommending expulsion of the student concerned. The decision has been criticized in several quarters, mainly on the old argument that it is unreasonable to impose a foreign code of morals on a people whose tradition is far removed from that of the West. It is an argument that is easily countered, for in the Central Medical School students are being trained in the Western system of medicine, and the success of that system includes adherence to a definite code of professional ethics. A people prepared to accept one should be prepared to accept the other. Philosophical consideration apart, a school of fifty medical students (among whom more than twenty languages are spoken, and many cultural traditions represented) requires a definite understanding about behaviour, and the Board did a service to discipline when it took its stand.

It was unfortunate that the very next case to be brought to the notice of the Board was one which for various reasons, appeared not to warrant dismissal. The student in this case was not expelled. The effect of the reprieve was very noticeable, and the bolder elements took advantage of what they thought was a weakening on the part of the Advisory Board. Retribution came swiftly however, and one medical and one dental student who has been arrested by the police and fined for drunkenness were dismissed, as was also another medical student who was guilty of immoral behavior, and on whose account at least three nurses had had to be dismissed.

The foregoing is not meant to suggest that the students of the Central Medical School are depraved. On the contrary they are as fine a lot of young men as will be met with in a long day's march, and it is a privilege to be associated with them. In every community, however, there are one or two weaker members whose influence can be out of proportion to their own importance, and it is a benefit to all to know that loose behaviour cannot be tolerated.

VII—RECREATION.

Football was the only sport in which the Central Medical School entered a competition team. With a young and light team, it was not possible to win back the Cup for the Junior Competition nor to retain the Seven-aside Shield won last year. In that the football months saw large numbers attending practices, however, and much fun enjoyed, and clean exhibition of football in every game played, then it can be counted a complete success. The congratulations of the School are due to Jone Ravu, a dental student and our vice-captain, who was chosen to represent Fiji against the Maoris, and gave a very fine performance in these, his first games in senior football.

An Athletic Sports Meeting was arranged on a Saturday afternoon towards the end of the year, and proved very successful. The Central Nursing School was invited to join in the afternoon's activities, and the presence of the nurses no doubt contributed materially to the success, as it certainly did to the enjoyment of the meeting. Since this was the first athletics contest to be arranged—at least in recent years—the results of the championship events are of some interest for future record-breakers:—

100 yards won by Bolalailai of Fiji	Time	10 4/5 secs.
220 yards won by Bolalailai of Fiji	Time	25 2/5 secs.
440 yards won by Sioli Puloka of Tonga	Time	55 1/2 secs.
High Jump won by Sioli Puloka of Tonga	Height	5ft. 2 in.
Long Jump won by Sioli Puloka of Tonga	Distance	19ft. 4in.
Throwing Cricket ball John Viliua of Niue	Distance	110 yd.

Less arduous sports find expression in "deck tennis" and in table tennis, both of which are popular.

There has been less done in the way of social activities than was hoped. The mid-week services conducted by the Suva clergy were again held during the middle quarters, and these short services, from 6.45-7.30 on Wednesday evening, are appreciated by the students.

Two batches of students, numbering twenty in all, were each given a week's holiday on Makuluva during the mid-year vacation, and a very pleasant time was enjoyed by all. There are difficulties in the way of making this an annual event, but it is hoped that some arrangements will be made soon so that students can have at least one week in the year away from Suva on proper holiday.

VIII—GRADUATION.

His Excellency the Governor, accompanied by Lady Freeston, attended the Graduation Ceremony on Saturday morning, 11th December, presented the prizes and diplomas, and spoke to the students. His Excellency's speech made the occasion a memorable and impressive one for the students and friends who filled the Legislative Council Chambers. It has been printed in full in the *A.M.P. Journal*.

A. S. FRATER,
Principal, Central Medical School.

APPENDIX XI.
SUMMARY OF METEOROLOGICAL OBSERVATIONS
AT LAUCALA BAY FOR THE YEAR 1948

	MEAN AND EXTREME SCREEN TEMPERATURES F°.										RAINFALL.			WEATHER—No. of DAYS of						Bright Sunshine (Total hours)		
	Mean pressure in mb. (24 hourly values)	At 8 a.m.	Maximum.	Minimum.	Mean $\frac{1}{2}$ (Max. plus Min.)	Highest maximum.	Date.	Lowest Minimum.	Date.	Mean Relative Humidity per cent (24 hourly values)	Mean Total cloud (24 hourly values)	Total.	Maximum in 24 hrs. ending 8 a.m.	Date.	Rain 0.01" or more.	Hail.	Thunderstorms.	Lightning only.	Fog.		Dew.	Gales force 8 or more.
January	1006.9	80.3	86.1	75.1	80.6	90.9	14	70.6	8	85.3	8.1	7.09	1.25	23	24	0	13	1	0	1	0	156.3
February	1005.9	78.7	83.3	74.0	78.7	85.7	11	68.3	6	84.8	7.6	32.76	9.00	20	21	0	3	1	0	1	2	182.5
March	1010.0	78.6	84.4	73.9	78.1	88.4	8	69.8	29	86.6	6.8	14.60	3.80	26	25	0	9	2	0	2	0	175.3
April	1010.4	78.1	83.4	72.5	77.9	86.3	3-23	67.8	16	86.5	6.1	18.34	5.55	10	17	0	12	8	0	11	0	201.6
May	1012.1	76.4	81.4	71.5	76.5	86.9	21	63.7	18	84.2	7.1	7.93	2.25	12	20	0	1	2	0	11	0	167.0
June	1013.4	74.7	79.2	71.1	75.2	84.2	6	66.0	23	81.4	7.9	4.47	1.37	5	18	0	1	1	0	2	0	120.8
July	1014.5	73.2	78.2	68.9	73.6	82.3	22	59.7	5	78.0	6.7	3.17	0.75	31	21	0	1	0	4	0	0	157.3
August	1013.6	73.5	77.9	69.5	73.7	84.5	23	64.6	2	80.5	8.0	5.86	2.29	2	19	0	1	2	1	3	0	114.6
September	1013.0	75.5	81.2	69.8	75.5	88.0	30	64.0	2	80.5	6.6	1.72	0.48	7	12	0	4	1	0	6	0	195.9
October	1013.3	77.4	80.6	73.1	76.9	85.2	4.5	70.0	5	80.7	8.2	3.22	0.63	24	19	0	3	1	1	0	0	111.3
November	1009.1	78.4	82.4	72.6	77.0	86.1	21	68.9	13	85.8	8.0	5.50	0.94	26	21	0	5	7	0	0	0	141.0
December	1007.1	77.7	81.3	73.5	77.4	84.5	2	67.3	16	84.4	8.6	15.74	4.60	16	26	0	5	1	0	0	1	129.2
Year	1010.8	76.9	81.6	72.1	76.8	90.9	14/1/48	59.7	5/7/48	83.2	7.51	20.40	9.00	20/2/48	243	0	48	27	2	45	3	1822.8

WIND DIRECTION SUMMARY
(FORCE 2 OR MORE)
PERCENTAGE FREQUENCY

	N.	NNE.	ENE.	E.	ESE.	S.	SSW.	SW.	WSW.	W.	WNW.	NW.	NNW.	Prevaling Direction.	Percentage of Calms to force 1, 0-3 m.p.h.	Maximum velocity m.p.h.	From	Date
January	8.2	9.4	11.4	14.5	14.9	15.1	5.9	2.0	3.1	1.8	2.3	3.5	3.5	ESE.	33.8	36	E.	31
February	1.4	1.9	12.1	12.1	7.8	35.8	8.8	1.6	0.9	1.9	1.7	1.0	1.0	ESE.	17.0	59	ESE.	3
March	0.6	7.2	12.3	9.4	27.2	28.5	6.8	1.4	0.2	2.1	0.4	0.4	0.4	ESE.	34.2	36	ESE.	25
April	1.6	3.2	8.3	13.5	17.8	23.9	15.5	2.0	1.1	0.7	4.7	1.6	1.1	ESE.	38.3	46	ESE.	11
May	1.0	2.2	4.1	10.6	34.8	16.4	7.4	4.3	8.2	4.1	3.5	0.2	0.2	E.	31.3	36	E.	1
June	0.4	1.7	4.0	4.2	21.6	25.1	15.9	13.4	6.3	2.9	1.9	1.0	0.8	ESE.	27.5	35	ESE.	18
July	..	1.5	6.8	4.9	7.1	31.0	35.6	8.6	2.1	0.8	0.3	0.5	0.5	SE.	18.5	33	SE.	12
August	0.5	1.0	3.0	6.8	8.9	23.7	32.7	11.2	4.0	2.4	2.6	0.7	0.2	SE.	22.8	41	ESE.	5
September	0.6	3.0	2.9	11.2	11.9	24.4	15.5	8.5	5.9	4.2	3.6	4.2	2.1	SE.	28.4	28	ESE.	10
October	0.3	1.8	5.6	13.0	37.4	31.2	5.6	2.3	1.2	0.5	0.3	0.8	..	ESE.	11.7	37	SE/ESE	12
November	0.7	1.1	5.8	14.4	24.2	28.7	17.1	3.4	2.2	0.9	0.2	0.9	..	ESE.	38.0	36	SE.	5
December	..	..	0.9	4.6	13.0	25.0	27.8	6.5	4.6	7.4	..	..	..	SE.	10.2	53	SE.	7
Year	0.9	1.7	5.3	9.2	15.8	28.2	19.8	6.3	2.7	2.4	2.6	2.4	0.5	ESE.	26.4	59	ESE.	3/2/48

[Price, 2s. 6d.]